County of Los Angeles

THE CANYON RESIDENCES PROJECT

Draft EIR

Volume II

Sections 5.9 – 11.0

Project No. R2008-00549
Case Nos. RENVT20080042,
RCUPT200800069, RPAT200800004
SCH No. 2008061035

Prepared for:

County of Los Angeles
Department of Regional Planning
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Los Angeles, CA 90012

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September 2010

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Draft Environmental Impact Report

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5.9 EDUCATION

SUMMARY

Public school service in Rowland Heights is provided by the Rowland Heights Unified School District (RUSD). Ybarra Academy of the Arts and Technology (K–8), Alvarado Intermediate School (7–8), and Rowland High School (9–12) serve the Project site. All three schools currently operate beyond their permanent design capacities; however, most schools use portable classrooms when necessary to alleviate school overcrowding.

Development of the Project would directly generate approximately 543 new students that would be expected to attend school in the RUSD. Based on the current permanent design capacities of the three schools serving the Project site, demands on school services and permanent facilities from the Project's anticipated increase in students could not be accommodated by the RUSD. However, as discussed below, the schools are able to accommodate all students enrolled in the RUSD with the use of portables, and no permanent or portable classrooms operate in cramped conditions. Further, the Project Applicant is required to pay the current Level 1 Developer Fee for residential developments at the time building permits are issued, which would reduce Project impacts on schools to less than significant.

INTRODUCTION

This section of the EIR evaluates the impact of the proposed Project on public elementary, middle, and high schools that serve the Rowland Heights community. This section also includes a discussion of the cumulative impacts of the Project in conjunction with other related projects. Where impacts are identified, all feasible mitigation measures are recommended to reduce such impacts to acceptable levels. Information utilized in this section was obtained primarily through communication with administrative staff of the RUSD, the provider of educational service to the area encompassing the Project site and surrounding area.

EXISTING CONDITIONS

The RUSD serves the majority of students in the community of Rowland Heights, as well as students from the communities of Walnut, La Puente, City of Industry, and West Covina. As a whole, the district currently operates beyond capacity despite trending enrollment decline. The current enrollment of all RUSD schools is 17,239 students, while permanent design (e.g., classroom) capacity[1] exists for only

[1] Capacity of school sites is subject to a number of variables including regular education enrollment, special education enrollment, and specialized instructional area needs such as Physical Education, Music, Drama, Computer Labs, Libraries, etc.

12,754 students, leaving a deficit of 4,485 in permanent design capacity.[2] To alleviate this design capacity deficit in permanent classrooms and other school uses, the RUSD currently provides portable classrooms at nearly all school locations. Additional portables are used to meet the classroom needs created by excess regular student enrollment, special education enrollment, Music, and Computer Labs.[3] All students in excess of the school's permanent design capacity are placed in portables, and no permanent or portable classrooms operate in cramped conditions.[4] RUSD does not consider portables to be permanent facilities since they have a useful life expectancy of only 20 to 25 years.[5] The RUSD currently does not have the funds to replace the portable classrooms with new permanent facilities.[6]

The Project site is within the attendance boundary of three public schools: Ybarra Academy of the Arts and Technology (K–8), Alvarado Intermediate School (7–8), and Rowland High School (9–12). Students attending elementary school in the RUSD are generally enrolled in grades K–6. However, as Ybarra Academy of the Arts and Technology enrolls students in grades K–8, parents can apply to have their children sent to Alvarado Intermediate School if there is room for accommodation. Middle school-aged students new to the district would be enrolled in either Alvarado Intermediate School or Ybarra Academy; this is determined by address and willingness of the student to take advantage of Ybarra's arts and technology education.[7] **Figure 5.9-1**, **Location of Public Schools Serving the Project Site**, shows the location of each school relative to the Project site. These schools operate on a traditional 180-day school year calendar that operates from August to June, annually.

Table 5.9-1, Capacity of Schools Serving the Project Site, below, provides academic year 2008–2009 school capacity, enrollment, and available capacity for each of the three schools serving the Project site. As shown, all schools serving the Project site are operating with a deficit relative to design capacity. As discussed above, all schools within the RUSD make use of portable classrooms to provide for additional classroom space; these portables are not considered permanent classrooms.

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2 Letter from Robert D. Wertz, Deputy Superintendent, Rowland Unified School District, September 23, 2008.

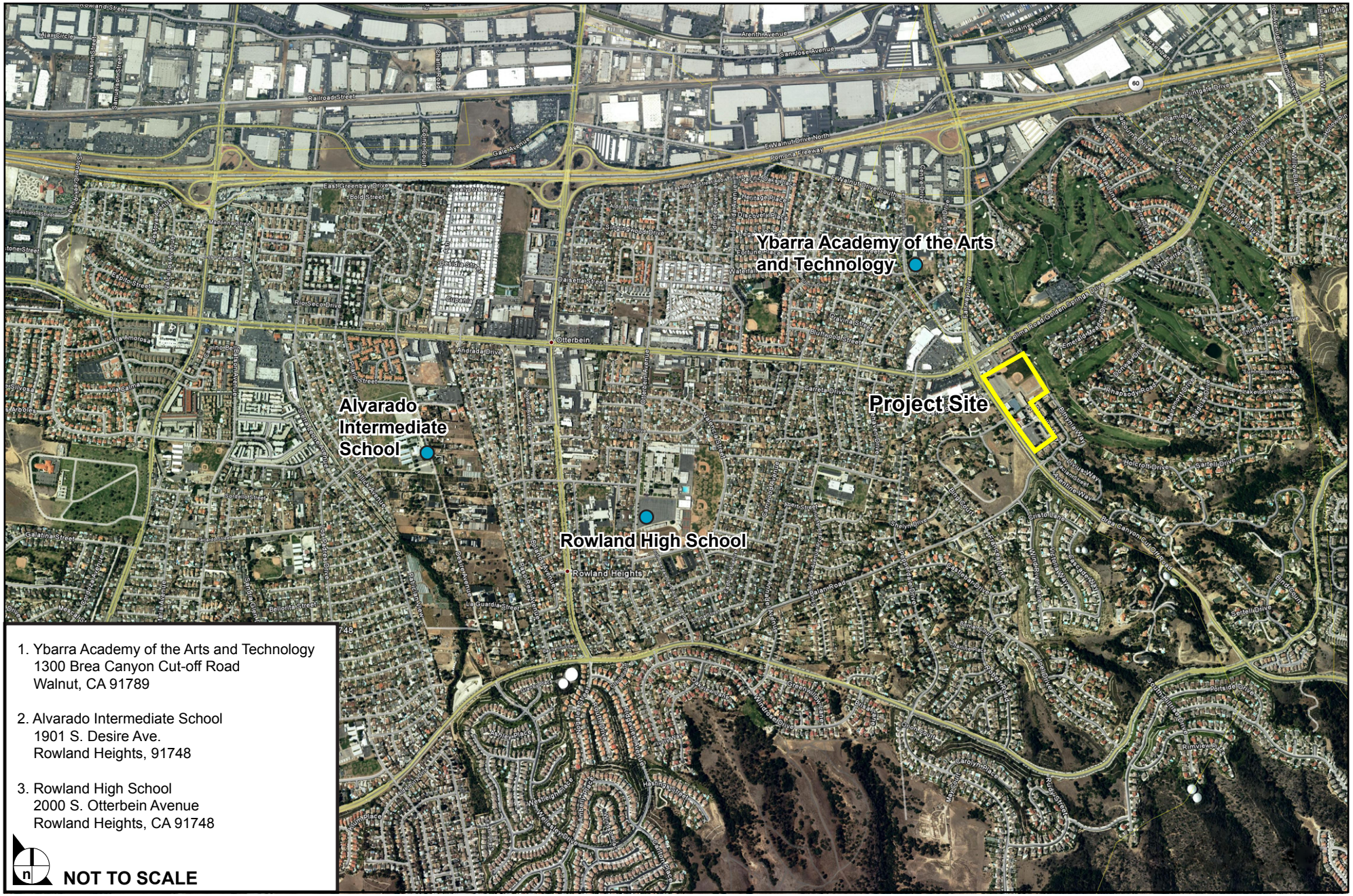
3 Letter from Robert D. Wertz, Deputy Superintendent, Rowland Unified School District, September 23, 2008.

4 Communication with Lee Cavanaugh, Rowland Unified School District, October 20, 2008.

5 Communication with Lee Cavanaugh, Rowland Unified School District, October 20, 2008.

6 Communication with Lee Cavanaugh, Rowland Unified School District, September 8, 2008.

7 Communication with Eleanor Raleigh, Rowland Unified School District, September 15, 2008.



SOURCE: Google Earth - 2008, Impact Sciences, Inc. – August 2008

FIGURE **5.9-1**

Location of Public Schools Serving the Project Site

291-006•09/08

Table 5.9-1
Capacity of Schools Serving the Project Site

Schools	Grades	School Design Capacity[1]	Enrollment[2]	Students in Portable Classrooms
Ybarra Academy of the Arts and Technology	K–8	483	582	99
Alvarado Intermediate School	7–8	812	940	128
Rowland High School	9–12	1,798	2,297	499

[1] *Permanent classroom capacity based on school design.*
[2] *Communication with Lee Cavanaugh, Rowland Heights Unified School District, September 8, 2008, for Academic Year 2008–2009.*

The Project site is currently occupied by Southlands Christian Church and Southlands Christian Schools, a pre-K through grade 12 (K–12), non-secular private school. In the 2008–2009 school year, the school enrolls approximately 413 students in grades K–12, including approximately 100 students which are part of a foreign exchange program. In addition, the school runs a 130-student pre-kindergarten program and a 300 student home school program. Approximately 60 percent of the students at Southlands Christian Schools reside within the Rowland Heights community, while 40 percent live outside of the immediate area.[8] **Table 5.9-2, Southlands Christian Schools Student Enrollment**, provides approximate enrollment counts by grade for the 2008–2009 academic year. Currently, it is estimated that 413 grade K–12 students attend the Southlands Christian Schools for the 2008–2009 school year[9]; however, for a more conservative analysis and to ensure consistency with the analysis included in **Section 5.7, Traffic, Parking, Circulation, and Access**, it is assumed that 480 students (the maximum enrollment for the school) attend Southlands Christian Schools.

8 Glenn Duncan, Administrator of Schools, Southlands Christian Schools, communication with Lee Jaffe, Impact Sciences, Inc., July 30, 2008.

9 Glenn Duncan, Administrator of Schools, Southlands Christian Schools, communication with Lee Jaffe, Impact Sciences, Inc., July 30, 2008.

Table 5.9-2
Southlands Christian Schools Student Enrollment

Grade Level	Estimated No. of Students 2008–2009	Maximum No. of Students[1]	Total Maximum No. of Students by Grade Range
Kindergarten	42	48	
1	24	28	
2	22	24	
3	20	24	
4	20	24	
5	22	24	
6	30	34	
			Total K–6: 206
7	30	34	
8	35	38	
			Total 7–8: 72
9	40	48	
10	40	48	
11	48	58	
12	40	48	
			Total 9–12: 202
Subtotal	413	480	
Total		**480**	**Total K–12: 480**

[1] *Maximum number of students at the school (480) is estimated by grade based on the percentage of students within each grade.*

Source: Glenn Duncan, Administrator of Schools, Southlands Christian Schools, conversation with Lee Jaffe, Impact Sciences, Inc., July 30, 2008.

REGULATORY SETTING

Public school services in the State of California are regulated by the California Education Code and the State Board of Education, with funding for services derived from a combination of sales tax, lottery revenue, and fees. To allow the construction or modernization of facilities to serve students generated by new development projects, the state allows school districts to collect school facilities fees from developers.

Senate Bill 50 (SB 50), also known as the Class Size Reduction Kindergarten-University Public Education Facilities Bond Act of 1998, revised the statutory funding mechanism for public schools in California to equalize school district revenue sources and reduce wealth-related disparities in general funding for school districts of similar size and type. The passage of Proposition 1A (California Government Code, Sections 65995, et seq.), a comprehensive school facilities financing and reform program, authorized a $9.2 billion school facilities bond issue for school construction and modernization. The conditions of

Proposition 1A allows school districts to impose fees against development projects within district boundaries, established a school facility fee cap for legislative actions (e.g., general plan amendments, specific plan adoption, zoning plan amendments), and prohibits local agencies from denying land use approvals on the basis that school facilities are inadequate. According to Proposition 1A, three levels of developer fees may be imposed upon new development under certain conditions by the governing board of a school district, as follows:

Level 1: Level 1 fees are the base statutory fees. As of January 2008,[10] Level 1 fees are $2.97 per square foot for new residential development and $0.47 per square foot of chargeable, covered, and enclosed floor space for new commercial/industrial development.[11] These amounts currently represent the maximum that can currently be legally imposed upon new development projects by a school district unless the district qualifies for a higher level of funding. Payment of this fee is deemed to constitute full and complete mitigation of project impacts on school facilities.

Level 2: Level 2 fees allow the school district to impose developer fees above the statutory levels, up to 50 percent of certain costs under designated circumstances. The State would match the 50 percent funding if funds are available.

Level 3: Level 3 fees apply if the State runs out of bond funds after 2006, allowing the school district to impose 100 percent of the cost of the school facility or mitigation minus any local dedicated school moneys.

The ability of a school district to impose fees is limited to the statutory and potential additional charges authorized under Section 65995 of the Government Code. The Level 1 Developer Fee Study for RUSD, published in 2006, satisfies the requirement for a school facility needs analysis and permits the imposition of fees that meets the Level 1 limits; the RUSD does not impose Level 2 fees or Level 3 fees. The current Level 1 developer fee for a residential developments established by RUSD is $2.97 per square foot of residential space.[12] Per the provisions of Government Code Section 65995, payment of these developer fees is considered full and complete mitigation for impacts on school services within the district.

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10 Level 1 fees are adjusted every two years in January by the State Allocation Board.

11 State Allocation Board, *Index Adjustment on the Assessment for Development,* January 30, 2008.

12 Ibid.

ENVIRONMENTAL IMPACTS

Project Improvements

The proposed Project involves the redevelopment of the approximately 15.7-acre property located at 1920 Brea Canyon Cut-Off Road. The existing Southlands Christian Church and Southlands Christian Schools structures, parking lots, and athletic field would be replaced with approximately 775 for-lease residential units in multiple buildings, a recreational facility for residents, attached garages, and on-grade parking containing approximately 1,544 parking spaces, and landscaping throughout the Project site. Three different types of residences are proposed: three-story Townhome-style Apartments, a four-story Podium building, and a three- and four-story Wrap-Around building.

Implementation of the proposed Project would provide approximately 775 new for-lease multi-family residential units to the community of Rowland Heights. Associated with the construction of the approximately 775 new residential units would be a population increase of approximately 2,139 residents. As described above, children from these new households would attend RUSD schools. As shown in **Table 5.9-3, Canyon Residences Project Student Generation**, the approximately 775 units associated with the Project would generate approximately 295 students in grades K–6; 85 students in grades 7–8; and 163 students in grades 9–12, for a total of approximately 543 students.

Table 5.9-3
Canyon Residences Project Student Generation

Dwelling Type	# of Units	Student Generation Factors[1]		Project Student Generation
Multi-Family	775	K–6	0.38	295
		7–8	0.11	85
		9–12	0.21	163
			Total	**543**

[1] *Generation factors are from Section 1859.2, California School Facility Program, based on a district wide student generation rate of 0.7, which is then divided based on percentage of RUSD students in each grade level.*

Thresholds of Significance

Based on the County's Initial Study Checklist and Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, projects should be evaluated for potentially significant impacts related to Education based on the following criteria:

- Would the Project create capacity problems at the district level?
- Would the Project create capacity problems at individual schools which will serve the Project site?
- Would the Project 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 or facilities (e.g., fire protection, police protection, schools, parks, roads)?
- Would the Project create student transportation problems?

Impact Analysis

Threshold 1: **Would the Project create capacity problems at the district level?**

Threshold 2: **Would the Project create capacity problems at individual schools which will serve the Project site?**

Analysis

Implementation of the proposed Project would result in the construction of approximately 775 new for-lease multi-family residential units in the community of Rowland Heights. As discussed above, associated with the construction of approximately 775 new residential units would be a population increase of approximately 2,139 residents. As described above, children from these new households would attend RUSD schools. The approximately 775 units associated with the Project would directly generate approximately 295 students in grades K–6; approximately 85 students in grades 7–8; and approximately 163 students in grades 9–12, for a total of approximately 543 students, as shown in **Table 5.9-3**.

Additionally, Project implementation would result in the removal of the existing Southlands Christian Schools, which currently enrolls a maximum of 480 students in grades K–12. Therefore, the Project could have both a direct impact (Project residents) and an indirect impact (Southlands Christian Schools students matriculating into RUSD schools) on schools within the RUSD boundary. In the event that all students currently attending the Southlands Christian Schools matriculated into RUSD schools (the most

conservative scenario), the Project would indirectly generate approximately 206 new students in grades K–6; 72 new students in grades 7–8; and 202 new students in grades 9–12, for a total of approximately 480 students, based upon the existing student generation provided in **Table 5.9-2**.

While Southlands Christian School is working to identify an alternate site, it is not assumed that all displaced students would elect to remain enrolled at the Southlands Christian Schools. For purposes of a conservative analysis, it is therefore assumed that following Project implementation, those students currently attending the Southlands Christian Schools and who reside within the attendance boundaries of RUSD would attend RUSD schools following the closure of Southlands. As discussed above, approximately 60 percent of Southlands Christian Schools students reside within the RUSD attendance area.[13] Therefore, with the closure of the school, it is assumed that the Project may indirectly contribute to the addition of approximately 288 students (60 percent of the maximum student enrollment of 480 at Southlands) to RUSD schools.

As shown in **Table 5.9-4, Canyon Residences Project Combined Direct and Indirect Student Generation**, the combined direct and indirect enrollment increases in RUSD associated with Project implementation would include 419 students in grades K–6, 128 students in grades 7–8, and 284 students in grades 9–12, with a collective overall enrollment increase of 831 students.

Table 5.9-4
Canyon Residences Project Combined Direct and Indirect Student Generation

Grade	Displaced Southlands Christian Schools Students		Canyon Residences Students	Total Student Generation[1]
	Total Enrollment	Students Residing in RUSD (60 Percent of Total Enrollment)		
K–6	206	124	295	419
7–8	72	43	85	128
9–12	202	121	163	284
Totals	**480**	**288**	**543**	**831**

[1] *Includes students directly generated by Project and 60 percent of the maximum enrollment capacity of the Southlands Christian Schools.*

Three schools currently serve the Project site: Ybarra Academy of the Arts and Technology (K–8), Alvarado Intermediate School (7–8), and Rowland High School (9–12). As described above, the current enrollment of all RUSD schools, including those that would serve the Project exceeds the district's

[13] Glenn Duncan, Administrator of Schools, Southlands Christian Schools, communication with Lee Jaffe, Impact Sciences, Inc, July 30, 2008

classroom capacity by 4,485 students district wide. The RUSD does not have any plans to build new permanent classrooms. The students in excess of the permanent design capacity are housed in portables, and no permanent or portable classrooms operate under cramped conditions. The additional 543 students directly generated by the Project would increase the current deficit in permanent capacity that exists throughout the RUSD, such that impacts to schools could be potentially significant. In order to reduce potentially significant direct impacts on the RUSD school system associated with the introduction of 543 students, the Project Applicant would pay a Developer Fee equivalent to their fair share of any improvements necessary to reduce impacts on the RUSD. Per the provisions of Government Code Section 65995, payment of these developer fees is "deemed to be full and complete mitigation."[14] As such, implementation of **Mitigation Measure 5.9-1** would reduce potentially significant direct impacts related to education to a less than significant level.

As discussed above, with the closure of the Southlands Christian Schools, the Project may indirectly contribute to the addition of up to approximately 288 students (60 percent of the maximum student enrollment of 480 at the Southlands Christian Schools) to RUSD schools. Any additional students indirectly generated by the Project would further increase the existing deficit in permanent capacity that exists throughout the RUSD, such that these indirect impacts to schools could be potentially significant. RUSD has stated that it can accommodate all Southlands Christian Schools students who choose to enroll in RUSD schools, through the provision of portable facilities. Further, the Project Applicant would pay the Developer Fee, as described above, which would be deemed full and complete mitigation for any potentially significant impacts.[15] As such, implementation of **Mitigation Measure 5.9-1** would reduce potentially significant indirect impacts related to education to a less than significant level.

Mitigation Measures

5.9-1 As authorized by Senate Bill 50, the Project Applicant shall pay school impact fees to the Rowland Unified School District (RUSD) prior to the issuance of building permits, subject to the current fee schedule for residential development in place at the time of issuance of the building permit.

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14 California Government Code Section 65995(h).

15 Communication with Lee Cavanaugh, Rowland Heights Unified School District, October 3, 2008.

Threshold 3: **Would the Project 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 or facilities (e.g., fire protection, police protection, schools, parks, roads)?**

Analysis

As discussed above, the additional 543 students directly generated by the Project would increase the current deficit in permanent capacity that exists throughout the RUSD, such that impacts to schools could be potentially significant. In order to reduce potentially significant direct impacts to the RUSD school system associated with the introduction of 543 students, the Project Applicant would pay a Developer Fee to pay their fair share of any improvements necessary to reduce impacts to the RUSD. Per the provisions of Government Code Section 65995, payment of these developer fees is "deemed to be full and complete mitigation."[16] As such, implementation of **Mitigation Measure 5.9-1** would reduce potentially significant direct impacts to a less than significant level. In addition, as discussed above, with the closure of the Southlands Christian Schools, the Project may indirectly contribute to the addition of approximately 288 students to RUSD schools. Although RUSD has stated that it can accommodate the additional 288 students indirectly generated by the Project, implementation of **Mitigation Measure 5.9-1** would reduce potentially significant indirect impacts to a less than significant level.[17] Because mitigation would reduce direct and indirect impacts to a less than significant level, no new school facilities are needed to accommodate students generated by the Project, and no impact will occur.

Mitigation Measures

No mitigation is necessary as no impact related to the need for new schools facilities will occur.

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16 California Government Code Section 65995(h).

17 California Government Code Section 65995(h).

Threshold 4: Would the Project create student transportation problems?

Analysis

The proposed Project is located within 2 miles of all schools serving the Project site: Ybarra Academy of the Arts and Technology (0.7 mile), Alvarado Intermediate School (1.9 miles), and Rowland High School (1.3 miles). Bus service is currently provided for a fee to students attending RUSD schools. However, RUSD does not provide bus service to students living within walking distance to schools. Walking distance is generally considered 0.75 mile for grades K–3, 1 mile for grades 4–6, 1.5 miles for grades 7–8, and 2 miles for grades 9–12. Because the Project site is located within 0.75 mile of Ybarra Academy, students would be expected to walk to school. Although within walking distance, RUSD has indicated that bus service would be provided to the Project site for students attending Alvarado Intermediate School and Rowland High School.[18]

As discussed in **Section 5.7, Traffic, Parking, Circulation, and Access**, Foothill Transit provides public bus service along Colima Road. The Project site, as well as Alvarado Intermediate School and Rowland High School, are located within 0.25 mile from bus stops along Colima Road, making public transportation accessible to students at the Project site. Additionally, as discussed in **Section 5.7**, the study intersections surrounding the Project site would continue to operate at acceptable levels of service during trips to and from RUSD schools.

Based on the above, impacts related to student transportation would not be significant.

Mitigation Measures

As discussed above, impacts associated with student transportation would not result in significant impacts; as such, no mitigation measures are required.

CUMULATIVE IMPACTS

As discussed in **Section 4.0**, **Cumulative Projects**, in the area surrounding the Project site, 4,058 single-family and multi-family dwelling units are either being constructed or are proposed in addition to the proposed Project. Of the identified cumulative projects, 14 dwelling units would be completely within the RUSD's administrative boundaries (11 units associated with the 19280 Colima Road project and 3 units associated with the 471 Yorbita Road project). Aera Energy's 3,600 single-family dwelling unit master planned community in the City of Diamond Bar is located within three separate

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18 Communication with Keith Moore, Sr., Director of Transportation, Rowland Unified School District, September 23, 2008.

school districts. The northern portion of the Aera Energy project site is located within the boundaries of the RUSD, while the southern portion of the site is situated in the Brea-Olinda Unified School District. The eastern part of the property is located within Walnut Valley Unified School District. The master planned community includes a possible school site, which would accept an undetermined number of students generated by the development. Although only a portion of the development is within RUSD's boundaries, an associated student enrollment increase is likely. This increase could result in a cumulatively significant impact to schools within the RUSD attendance area.

According to Government Code Section 65995, the payment of school impact fees authorized by Senate Bill 50, and the fees required for residential and commercial development by the RUSD for each project, as with the proposed Project, would mitigate the impact of the proposed Project as well as the related projects to local schools from cumulative development. Therefore, with payment of these fees, the cumulative impact of the proposed Project in combination with the identified related projects would be reduced to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGAION

With the implementation of **Mitigation Measure 5.9-1,** listed above, the proposed Project would not result in significant impacts to the provision of school services or affect the operation of existing schools. Therefore, no unavoidable significant impacts would result from implementation of the proposed Project.

5.10 PUBLIC SERVICES

INTRODUCTION

This section addresses the potential impacts of the proposed Canyon Residences Project on fire and sheriff services. Information included in this section was provided by the Los Angeles County Fire Department, County of Los Angeles Sheriff's Department (Facilities Planning Bureau) and the County of Los Angeles Fire Department (Planning Division and Forestry Division). Each section includes an introduction, methodology for the environmental impact analysis, existing conditions, regulatory setting, significance criteria, environmental impact analysis, mitigation measures (if applicable), and cumulative impact analysis.

5.10.1 Fire Service

SUMMARY

Fire protection and emergency medical response services for the Project site and the surrounding area are provided by the Los Angeles County Fire Department (County Fire Department). Los Angeles County Fire Station No. 119, located at 20480 E. Pathfinder Road, is the jurisdictional company for the Project site. Based on information from the County of Los Angeles Fire Department, current fire protection services are considered to be adequate.[1]

Payment of property taxes and special tax revenues from the Project would help fund any additional Fire Station operations, services, land acquisition, facility improvements, or new equipment needed in Rowland Heights. The Project would be required to meet Los Angeles County Code requirements for the provision of adequate fire protection services to the Project site during both the construction and operational stages of the Project. Also, prior to Project approval, the County Fire Department must review and approve all Project plans to ensure adequate access and compliance with all fire code requirements as defined in the Los Angeles County Code. As described in more detail below, the Project would not diminish the staffing or the response times of the existing fire station in Rowland Heights and fire stations in the surrounding area, nor would the Project create a special fire protection requirement on the site that would result in a decline in existing service levels in the Rowland Heights area. As a result, together with the increased property tax revenues, any applicable special tax revenues, and County review of site plans, the Project would not result in significant Project-level or cumulatively considerable impacts on fire protection services in the Rowland Heights area.

INTRODUCTION

This section presents an overview of existing fire protection services in the Rowland Heights area and discusses potential impacts associated with development of the Project on fire protection services. The Project, as proposed, would include approximately 775 multi-family residential units on an approximately 15.7-acre site located at 1920 Brea Canyon Cutoff Road. The proposed Project site is located in the northeastern portion of the unincorporated Los Angeles County community of Rowland Heights, approximately 0.75 mile south of the Pomona Freeway (State Route [SR] 60). Regional access to the Project site is provided by the Pomona Freeway, while local access to the Project site is provided via Fairway Drive, Brea Canyon Cutoff Road, and Colima Road. This section also includes a discussion of the cumulative impacts of the Project in conjunction with other related projects. Where impacts are identified,

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1 John Todd, Chief, Forestry Division, County of Los Angeles Fire Department, written correspondence, August 1, 2008.

mitigation measures are recommended to reduce such impacts to acceptable levels. The following analysis of fire protection services is based on information provided by the County Fire Department.

EXISTING CONDITIONS

Los Angeles County Fire Department

The County Fire Department is the commonly used name for the Consolidated Fire Protection District of Los Angeles County. The County Fire Department provides fire protection services in Rowland Heights.

The County Fire Department provides fire prevention, fire protection, and emergency services to more than 4.1 million people who reside in unincorporated areas of Los Angeles County and in the 58 district cities that contract with the County Fire Department for services. These services are provided as outlined in the Los Angeles County Fire Code and the General Plan Safety Elements for these various cities. The County Fire Department operates 170 fire stations in three subregions of unincorporated Los Angeles County.[2]

The normal dispatch to a first alarm structure fire in a commercial or multi-story residential building is five engine companies, a paramedic squad, two truck companies, and two battalion chiefs. Units from the closest available fire station usually provide emergency response. Should a significant incident occur, the County Fire Department is able to dispatch units from any station in the entire County Fire Department system, not just the station(s) closest to the site. As shown on **Figure 5.10.1-1, Fire Station Location**, the closest fire station to the Project site is Fire Station No. 119, located at 20480 E. Pathfinder Road. As Fire Station No. 119 is the closest to the Project site, it would provide initial fire protection and paramedic response to service calls from the Project site. Fire Station No. 119 is located approximately 1 mile (approximately 3.3 minutes) from the Project site.[3,4] Fire Station No. 119 is equipped with a three-person fire engine company and a two-person paramedic squad. County of Los Angeles Fire Station No. 145 is located at 1525 S. Nogales Avenue and is the second closest station to the Project site. Fire Station No. 145

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2 John Todd, Chief, Forestry Division, County of Los Angeles Fire Department, written correspondence to Anthony Curzi, September 17, 2009.

3 John Todd, Forestry Division, written correspondence, August 1, 2008.

4 Approximate response times are based on actual experience, which averages approximately 18 miles per hour from the time a call is received to the arrival of fire personnel. (Debbie Aguirre, Chief, Planning Division, Los Angeles County Fire Department, written correspondence, October 31, 2008.)

SOURCE: Google Earth - 2008, Impact Sciences, Inc. – October 2008

FIGURE **5.10.1-1**

Fire Station Location

291-006•10/08

is located approximately 1.25 miles (approximately 4 minutes) from the Project site.[5] Fire Station No. 145 is equipped with a three-person fire engine company and a two-person emergency support team.[6] There are currently no planned expansions or upgrades to Fire Station No. 119 or Fire Station No. 145.[7]

The nearest station equipped with a fire truck company is Station No. 118, located at 17056 Gale Avenue in the City of Industry (approximately 5 miles away).[8,9] This station, which serves the Rowland Heights area, would dispatch this fire truck to the Project site in the event an incident requires a ladder truck.[10]

The County Fire Department includes a Hazardous Materials Division that responds to accidental releases and improper handling, storage, transportation and disposal of hazardous materials and wastes. The nearest hazardous materials squad is in Fire Station No. 43, located at 921 South Stimson Avenue, in the City of Industry. Fire Station No. 43 is located approximately 6.5 miles from the Project site. This station is equipped with a four-person engine and a five-person hazardous materials squad. There are no planned expansions or upgrades to this station.[11]

Fire Codes

The Los Angeles County Fire Code establishes standards for the distribution, design, construction, and location of fire protection facilities, including systems incorporated into private development projects. These standards specify fire-flow criteria, minimum distances to fire stations, public and private specifications and the location criteria and access provisions for fire-fighting vehicles and personnel.

The Project site is located within Fire Zone 4, Very High Fire Hazard Severity Zone (VHFHSZ).[12] As such, buildings located within the VHFHSZ are required to maintain the defensible space necessary for effective fire protection and create a fuel modification zone. A fuel modification zone is a strip of land where combustible native or ornamental vegetation has been modified and/or partially or totally replaced

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5 John Todd, Forestry Division, written communication, August 1, 2008.

6 John Todd, Forestry Division, written correspondence, August 1, 2008.

7 John Todd, Forestry Division, written correspondence, August 1, 2008.

8 Debbie Aguirre, Chief, Planning Division, Los Angeles County Fire Department, personal communication, November 7, 2008.

9 Fire engines are typically equipped with 3 ladders (an attic ladder, a 12-foot ladder, and a 24-foot extension ladder) and have the ability to pump up to 300 gallons of water, which is contained on the fire engine. Fire trucks have wooden ground ladders (one 20-foot straight ladder, and two 20-foot extension ladders) and a 100 foot aerial ladder. Fire trucks do not carry water. (Inspector Ron Harlson, Los Angeles County Fire Department, personal correspondence, January 30, 2009.)

10 Debbie Aguirre, Chief, Planning Division, written correspondence, September 17, 2009.

11 Debbie Aguirre, Chief, Planning Division, written correspondence, October 31, 2008.

14 John Todd, Chief, Forestry Division, written correspondence, July 23, 2008.

with drought-tolerant, low-fuel-volume plants. Fuel modification reduces the radiant and convective heat, and provides defensible space for firefighters to take an effective position against an approaching fire. Fuel modification zones are strategically placed as a buffer to open space, or areas of natural vegetation and generally occur around the perimeter of a subdivision, commercial development, or isolated development of a single-family dwelling.[13]

Service Standards

County Fire Department service standards are associated with the County Fire Department's Capital Resources Plans. Adequacy of fire protection services for a given area are based on a combination of assessment factors including: (1) fire-flow requirements; (2) response distance from available fire service facilities; and (3) the County Fire Department's judgment for anticipated frequency and nature of occurrences or needs in an area.

The County of Los Angeles Fire Department uses the national guideline of a 5-minute response time for the first arriving unit for Fire and Emergency Medical Service (EMS) responses and 8 minutes for the advanced life support (paramedic) unit in urban areas. Response times for Fire Station No. 119 are within these guidelines, as the typical response time to the project site would be 3.3 minutes. Fire protection service in the Project area is considered adequate for existing development/land uses.[14]

Fire Flow: The availability of sufficient on-site water pressure is a basic requirement of the County Fire Department. The County Fire Department requires sufficient capacity for fire flows of 5,000 gpm (gallons per minute) at 20 psi (pounds per square inch) residual pressure for a 5-hour duration for high-density residential uses.[15] These rates, and rates for a project, are determined based upon the size of the buildings, their relationship to other structures, property lines, and type of construction. Final fire flow rates and durations for a project are determined by the County Fire Department during the plan check stage.

Response Distance and Time: Response distances relate directly to the linear travel distance of the circulation system (i.e., mileage between a station and the location of a service site) and the County Fire Department's ability to successfully navigate access-ways within that circulation system. The County Fire Department's required maximum response times for the first-due engine company and paramedic squad

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13 Los Angeles County Fire Department, *Forestry: Fuel Modification*, http://fire.lacounty.gov/Forestry/FuelModification.asp, February 11, 2009.

14 John Todd, Forestry Division, written correspondence, August 1, 2008.

15 John Todd, Forestry Division, written correspondence, July 23, 2008.

within urban areas are 5 minutes and 8 minutes, respectively.[16] Roadway congestion and intersection level of service along the response route can affect travel time. The County Fire Department's judgment of need is based on historic trends or comparisons from similar uses at other locations, or from past experience on the site or within the project vicinity. All these factors are interrelated and are considered collectively. Fire Station No. 119, located approximately 1 mile from the Project site, is staffed with a three-person engine company and a two-person paramedic squad. Response distances from the Project site are within County Fire Department standards.[17]

County Fire Department Funding

Funding for services provided by the County Fire Department, including Fire Station operations, land acquisition, facility improvements, and new equipment in Rowland Heights, is generated through property taxes and special tax revenues.

In 1997 voters approved a Special Tax that is billed on the Annual Property Tax Bill sent to all property owners (i.e., owners of developed single family, multi-family, commercial, and industrial properties, with vacant property excepted from the tax levy). The County Fire Department's special tax pays for essential fire suppression and emergency medical services.[18]

On August 18, 2009, the Board of Supervisors adopted a resolution modifying the 2009–10 tax levy for a single-family home rising from $49.93 to $56.17,[19] a $6.24 annual increase, with proportional increases of 12.5 percent for other property use types as described in **Table 5.10.1-1**, below. Rates are adjusted each year by 2 percent or according to the Bureau of Labor Statistics Consumer Price Index, whichever is less.

REGULATORY SETTING

The Project is required to comply with Title 24 of the California Code of Regulations. Title 24 contains the California Fire Code (Part 9), which incorporates fire codes and safety standards published by the International Fire Code Institute and supplements the Federal Uniform Fire Code. Provisions of the code that pertain to the proposed Project include minimum fire flow requirements, fire department access, sprinkler and fire alarm systems, and standpipe locations. Additionally, the proposed Project is required to comply with the California Health and Safety Code, which includes regulations for fire protection devices, such as smoke alarms and fire extinguishers and high-rise building standards.

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16 John Todd, Forestry Division, written correspondence, August 1, 2008.

17 John Todd, Forestry Division, written correspondence, August 1, 2008.

18 Los Angeles County Fire Department, "Doing Business, How We Are Funded: Voter-Approved Special Tax for the Los Angeles County Fire Department," http://fire.lacounty.gov/DoingBusiness/DoHowFunded.asp. 2009.

19 County of Los Angeles, Board of Supervisors, "Tuesday, August 18, 2009 Agenda: Item 45," (2009).

The proposed Project is also required to comply with the Title 32 of the County of Los Angeles Code, known as the Los Angeles County Fire Code.

The County of Los Angeles Fire Department uses the national guideline of a 5-minute response time for the first arriving unit for Fire and EMS responses and 8 minutes for the advanced life support (paramedic) unit in urban areas.[20]

Table 5.10.1-1
Summary of Special Tax Rates for Fiscal Year 2009–10

Land Use	Special Tax Rate	Special Tax Rate W/Sprinkler Credit
Single Family Residential	$56.17	Not Applicable
Mobile Home in Park	$28.08	Not Applicable
Multiple Family Residential 2 or more units less than 4 stories	$70.95 + $.0072 per sf over 1,555 sf	$70.95 + $.0069 per sf over 1,555 sf
Non-Residential, Commercial/Industrial less than 4 stories	$67.98 + $.0458 per sf over 1,555 sf*	$67.98 + $.0440 per sf over 1,555 sf*
High Rise, 4 stories or more	$82.78 + $.0558 per sf over 1,555 sf	$82.78 + $.0534 per sf over 1,555 sf.*
Special Use, such as refineries and major chemical handlers	$103.46 + $.0698 per sf over 1,555 sf*	$103.46 + $.0666 per sf over 1,555 sf*
Vacant Land — 2 acres or less	$14.04	Not Applicable
Vacant Land — more than 2 acres and less than or equal to 10 acres	$18.54	Not Applicable
Vacant Land — more than 10 acres and less than or equal to 50 acres	$37.06	Not Applicable
Vacant land — more than 50 acres	$56.17	Not Applicable

Source: Los Angeles County Fire Department, "Doing Business, How We Are Funded: Voter-Approved Special Tax for the Los Angeles County Fire Department," http://fire.lacounty.gov/DoingBusiness/DoHowFunded.asp. 2009.
**Capped at 100,000 square feet per parcel.*
sf = square feet

20 John Todd, Forestry Division, written correspondence, August 1, 2008.

ENVIRONMENTAL IMPACTS

Project Improvements

Implementation of the proposed Project would result in the construction of approximately 775 for-lease residential units in multiple buildings, a recreational facility for residents, parking structures and surface parking containing approximately 1,544 parking spaces, and landscaping throughout the Project site. The multiple buildings would be up to four stories and a maximum of 69 feet in height. The for-lease residential units would be incorporated into three different types of buildings, including Podium buildings, Townhome-style apartments, and Wrap-Around buildings. Parking would include 872 spaces in the parking structure beneath the Podium building, 243 garage spaces associated with the Townhome-style apartments, and 429 spaces in the above-grade structure incorporated into the Wrap-Around building.

The Project site would be accessed by three driveways off Brea Canyon Cutoff Road, which runs along the western side of the Project site. The three driveways include a primary driveway accessing the center of the Project site and two secondary driveways at the northern and southern ends of the Project site. At-grade internal driveway widths would be at a minimum of 28 feet to allow access to the Project site for fire trucks and emergency vehicles. Smaller emergency vehicles, such as police cars and ambulances, would be able to access the subterranean parking structure as necessary.

During construction, the electrical, plumbing, ventilation, communications, and mechanical systems for the development would be properly installed during framing operations and would be subject to County Code requirements and inspection by County personnel prior to installation of drywall. In addition, the construction site would incorporate fencing, private security services, use flagmen, standard construction practices (such as traffic detour plans, haul routes, hours of operation, protective devices, warning signs and access to abutting properties during construction), and would be subject to County requirements relative to water availability and accessibility to fire fighting equipment.

Additionally, an on-site water distribution network would be constructed to the standards of the County of Los Angeles Department of Public Works and the Walnut Valley Water District. This system would connect to the existing 14-inch water line located west of the Project site along Brea Canyon Cutoff Road. The development of this Project would comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants.

THRESHOLD OF SIGNIFICANCE

Based on the County's Initial Study Checklist and Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, projects should be evaluated for potentially significant impacts related to Fire Service based on the following criteria:

- The Project would create staffing or response time problems at the fire station(s) serving the Project site; or
- There is any special fire enforcement problems associated with the Project or the general area.

The following significance thresholds, through preparation of the Initial Study, were found not to be applicable for the proposed Project and are discussed further in **Section 7.0, Effects Found Not to be Significant**.

- Is the Project site in a high fire hazard area and served by inadequate access due to lengths, widths, surface materials, turnarounds or grade?
- Does the Project site have more than 75 dwelling units on a single access in a high fire hazard area?
- Is the Project site located in close proximity to potential dangerous fire hazard conditions/uses (such as refineries, flammables, explosives manufacturing)?
- Does the proposed use constitute a potentially dangerous fire hazard?

Impact Analysis

Threshold 1: **Would the Project create staffing or response time problems at the fire station serving the Project site?**

Analysis

Construction Impacts: During construction, wood framing and other flammable construction materials would be present on the Project site. Although rare, the potential exists for fires to occur at construction sites. However, as discussed above, construction of the proposed Project would be subject to County codes and inspection by County personnel prior to installation of drywall. Also discussed above, the construction site would be subject to County requirements relative to water availability and accessibility to fire fighting equipment. Based on the proposed Project improvements and adherence to County Code, potential construction-related fire hazards impacts would be less than significant.

In addition, construction traffic would occur on and near the Project site during working hours due to commuting construction workers, trucks and other large construction vehicles that would increase traffic

volumes during the PM peak hour. Slow-moving, construction-related traffic on local adjacent roadways may temporarily reduce optimal traffic flows on local roadways and could conceivably incrementally increase response times and increase vehicle accident potential. This impact is not considered significant given the temporary nature of construction-related traffic and Project design features designed to aid response time, such as the use of flagmen, traffic detour plans, haul routes, hours of operation, protective devices, warning signs, and access to abutting properties during construction. Therefore, impacts during construction would be less than significant.

Operation Impacts and Response Time: As discussed above, the national guidelines for a 5-minute response time to a fire in urban areas used by the Fire Department refers to the first arriving unit. All Fire Department fire apparatus are capable of providing rapid intervention to begin initial attack and continue fire suppression activities until other units arrive.

The Project site is within an existing County Fire Department service area that is considered to have adequate response times. As previously mentioned, the County Fire Department's required maximum response times for urban areas are 5 minutes for an engine and 8 minutes for a paramedic squad. County Fire Station No. 119, equipped with a three-person engine and a two-person paramedic squad, is located approximately 1 mile (approximately 3.3 minutes) from the Project site. The initial attack is a crucial factor in determining any impact; therefore, the estimated 3.3-minute response time for the first arriving unit to the Project site would not exceed the threshold for response times nor would it have any impact on emergency operations. Additionally, the Project would comply with all County Code regulations regarding access requirements for residential areas and design standards for fire prevention (e.g., emergency plans and evacuation routes).

As stated in **Section 5.7, Traffic, Parking, Circulation, and Access**, after implementation of the required mitigation measures, the local roadway network would continue to operate at levels consistent with County Department of Public Works standards. Project impacts at three intersections would be potentially significant, but would be mitigated to less than significant impacts. With implementation of the required mitigation measures for traffic, proposed Project would not substantially impact emergency response times to the Project site or throughout the area served by the Fire Department, especially since emergency vehicles respond to calls from their locations at any given time and not necessarily directly from their assigned fire stations to respond to a call on the Project site. Accordingly, Project impacts on fire station response times are considered less than significant.

County Fire Department Funding/Fiscal Impact: The Project would add approximately 2,139 new residents to Rowland Heights and therefore would likely increase the frequency of calls for Fire Department services. The Fire Department has indicated that the proposed Project is not expected to

create a need for additional staffing or resources.[21] Moreover, revenues collected through property taxes and special tax revenues would adequately fund any required land acquisitions, facility improvements, or new equipment that is needed in Rowland Heights.[22] The Project would also be required to meet County Code standards related to providing adequate fire protection services to the Project site during both the construction and operational stages of the Project. With compliance with these requirements, Project operation would have a less than significant impact related to the creation of any special fire protection problems on the Project site or diminished response times for existing fire stations that could result in a decline of existing service levels in the Project area.

Mitigation Measures

Given that all impacts would remain less than significant, no mitigation is required.

Threshold 2: Are there any special fire enforcement problems associated with the Project or the general area?

Analysis

Implementation of the proposed Project would develop approximately 775 for-lease multi-family residential units. As the Project site is bordered to the south and east by multi-family residential units, the proposed Project would not introduce a new or unique use to the Project area. According to the County Fire Department, the proposed Project would not introduce new or unique types of fire protection requirements that, in turn, would cause special on- or off-site fire protection or enforcement problems.[23] Additionally, according to the County Fire Department, the Project is expected to have a less than significant impact since the existing response times, distance to the Project site, and existing infrastructure are adequate to support the existing population and development, as well as the proposed Project.[24]

Although the Project site is located within a designated Very High Fire Hazard Severity Zone, the site is surrounded on three sides by established developed land uses, including commercial and institutional uses to the north and residential uses to the south and west, with the Royal Vista Golf Course to the east, and does not directly border undeveloped wildlands. The Project would comply with all applicable fire codes and ordinance requirements for construction, access, water mains, fire hydrants, fire flows, brush clearance, and fuel modification plans, which are addressed during the building permit stage. Given that

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21 John Todd, Forestry Division, written correspondence, July 23, 2008.

22 John Todd, Forestry Division, written correspondence, August 1, 2008.

23 John Todd, Forestry Division, written correspondence, August 1, 2008.

24 John Todd, Forestry Division, written correspondence, August 1, 2008.

the Project would comply with the applicable fire codes and ordinances, in addition to the County Fire Department's recommendation for construction, access, water mains, fire hydrants, fire flows, brush clearance, and fuel modification plans, the proposed Project would not create a special fire enforcement problem. Therefore, Project impacts would be less than significant.

Fire-Flow: Preliminary review of the Project by the County Fire Department indicates that the required fire flow would be 5,000 gpm at 20 psi residual pressure for a 5-hour duration from public fire hydrants at the Project site.[25] Existing fire flow levels are provided to the County Fire Department by the local water purveyor. The County Fire Department's requirements for access, fire flows, and hydrants are addressed during the building permit stage. As discussed above, the Applicant would comply with the recommendations of the County Fire Department. If the Project requires upgrades to the surrounding water pipes to meet fire flow requirements, the Walnut Valley Water District would design and make the necessary upgrades at the Applicant's expense.[26] As the Applicant would comply with the requirements of the Fire Department and would pay for any necessary water system upgrades, impacts would be less than significant.

Mitigation Measures

Given that all impacts would remain less than significant, no mitigation measures are required.

CUMULATIVE IMPACTS

According to the County Fire Department, each new development generates increased demands on existing resources, and as such, implementation of the proposed Project and other related projects would result in greater demands on existing resources.[27] Accordingly, the proposed Project in combination with the related projects could create a significant impact on the current level of fire protection services throughout the Rowland Heights area. As with the proposed Project, each project within the County would be subject to County requirements relative to water availability and accessibility to fire fighting equipment and would be required to comply with all applicable code and ordinance requirements for access, water mains, fire flows, fire sprinkler systems, and fire hydrants. Therefore, increased revenues from property tax, sales tax, and special tax revenue could fund necessary increases in staffing and equipment. As such, the level of fire protection services would be increased to keep pace with increased demands. In addition, each project is reviewed for compliance with all applicable fire codes and regulations. Therefore, with the funding associated with the proposed Project and all related projects,

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25 John Todd, Forestry Division, written correspondence, July 23, 2008.

26 Michael Burns, Walnut Valley Water District, September 24, 2008.

31 John Todd, Forestry Division, written correspondence, August 1, 2008.

increased cumulative development demands would be met by increases in staffing and equipment and thus cumulative impacts would be less than significant.

Additional development in the Project site vicinity, including the Project and other related projects, could result in an increase in the average response time for fire protection services, particularly for non-emergency calls. The potential exists for cumulatively significant impacts on fire services if the proposed Project and other related projects failed to implement appropriate fire prevention project features and/or mitigation measures reducing impacts.[28] However, all new development is required to comply with applicable State, City, and County fire codes, standards and guidelines in addition to the County Fire Department's recommendations. Additionally, according to the County Fire Department the effects of new development are evaluated on a case-by-case basis and mitigation measures are imposed as needed.[29] Moreover, increased cumulative development demands would be met by increases in staffing and equipment, which would be funded by property tax, sales tax, and special tax revenues paid by new development. Therefore, cumulative development demands and associated impacts would be less than significant.

As stated in **Section 5.7, Traffic, Parking, Circulation, and Access**, and as previously stated in this section, after implementation of the required mitigation measures, the local roadway network would continue to operate at levels consistent with County Department of Public Works standards. Accordingly, Project impacts on fire station response times are considered less than significant.

Based on the above information, implementation of the proposed Project and other related projects would not result in cumulatively considerable adverse physical impacts associated with the provision of new or physically altered governmental facilities and/or the 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.

Impacts would be less than significant. No further mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Development of the Project would not result in Project-specific or cumulatively considerable significant impacts upon fire protection services for the Project site during construction or operation. With development of the Project, the demand for fire protection services would increase; however, with fire protection features associated with the proposed Project, all impacts would be less than significant.

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28 John Todd, Forestry Division, written correspondence, August 1, 2008.

29 John Todd, Forestry Division, written correspondence, August 1, 2008.

SUMMARY

Primary law enforcement services for the Project site and the surrounding unincorporated Rowland Heights area is provided by the County of Los Angeles Sheriff's Department (County Sheriff's Department) Walnut/Diamond Bar Station. In terms of personnel and equipment, implementation of the Project would increase demand for sheriff's services on the Project site and the local vicinity. However, the level of sheriff's department protection service in the Rowland Heights area is currently considered adequate, and with Project implementation, the level of service would still be considered adequate. Accordingly, no significant impacts would occur upon implementation of the proposed Project.

INTRODUCTION

This section of the EIR addresses existing sheriff services in the Rowland Heights area and potential impacts to sheriff services as a result of development of the proposed Project. The Project, as proposed, would develop 775 for-lease residential units in multiple buildings; a recreational facility for residents; parking structures and surface parking totaling 1,544 parking spaces; and landscaping throughout the Project site in the unincorporated Los Angeles County community of Rowland Heights. The Project site would be accessed by three driveways off of Brea Canyon Cutoff Road, which runs along the western side of the Project site. The three driveways include a primary driveway accessing the center of the Project site and two secondary driveways at the northern and southern ends of the Project site. At-grade internal driveway widths would be a minimum of 28 feet to allow access to the Project site for fire trucks and emergency vehicles. Smaller emergency vehicles, such as sheriff cars and ambulances, would be able to access the subterranean parking structure as necessary. This section also includes a discussion of the cumulative impacts of the Project in conjunction with other related projects, as identified in **Section 4.0, Cumulative Projects**. Information for this section was obtained from the County Sheriff's Department and the Rowland Heights Community General Plan.[1]

EXISTING CONDITIONS

Los Angeles County Sheriff's Department

Law enforcement within Rowland Heights is provided by the County Sheriff's Department, in conjunction with the California Highway Patrol (CHP). The primary responsibility of the CHP is to patrol state highways and County roadways in the previously identified service area, enforce traffic regulations,

[1] Written communication with Gary T. K. Tse, Director of Facilities Planning Bureau, County of Los Angeles Sheriff's Department, July 28, 2008. (Letter included in **Appendix 5.10.2**.)

respond to traffic accidents, and to provide service and assistance for disabled vehicles. The County Sheriff's Department provides assistance to the CHP and provides all other law enforcement services (i.e., responses to misdemeanors and felony situations). In the vicinity of Rowland Heights, the County Sheriff's Department also provides services by contract for the Cities of Industry, Diamond Bar, and Walnut, which means these cities pay for the County Sheriff's Department services based on their respective demand.[2] The Project site is located within Reporting District 2938,[3] a part of the Walnut/Diamond Bar Sheriff's Station service area, which is bound on the north by Walnut Drive, the south by Pathfinder Road, the west by Brea Canyon Cutoff Road and the City of Diamond Bar on the east. The Walnut/Diamond Bar Sheriff's Station has a total of 126 sworn officers and 45 civilian staff and serves approximately 154,601 people in its service area, which includes Reporting District 2938.

As shown on **Figure 5.10.2-1, Sheriff and CHP Stations Locations**, the County Sheriff's Department stations that would respond to service calls at the Project site are as follows: the primary response station would be the Walnut/Diamond Bar station, the secondary response station would be the City of Industry station, and the tertiary response station would be the San Dimas station. The Walnut/Diamond Bar station is located at 21695 Valley Boulevard, approximately 4.4 miles northeast of the Project site. The Walnut/Diamond Bar Sheriff's Station provides a 24-hour public counter for service, information and dispatching, 911 emergency operators, patrol, custodial operations, detective services and complete law enforcement services. The station presently has 126 sworn officers assigned to the Walnut/Diamond Bar Sheriff's Station service area (50 sworn officers are allocated to unincorporated areas and 76 sworn officers are allocated to incorporated areas) and 45 civilian/administrative staff members (18 civilian/administrative staff are allocated to unincorporated areas and 27 civilian/administrative staff are allocated to incorporated areas).[4]

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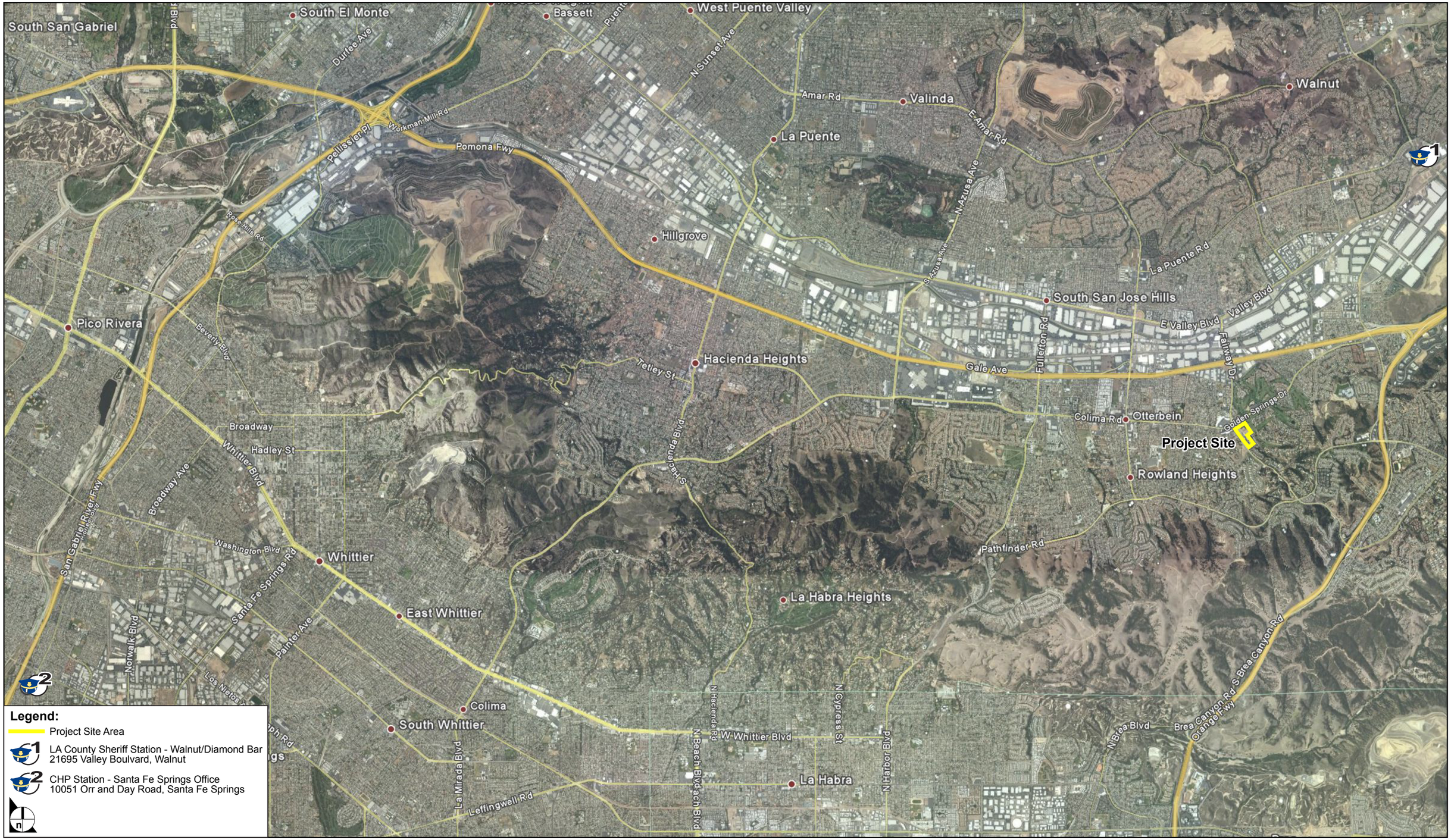
2 County of Los Angeles Sheriff's Department, *Patrol Stations*, http://www.lasd.org/stations/station_index.html. 2008.

3 A reporting District (RD) is the smallest geographical area used to report crime and arrest data. Each patrol station has a unique set of RDs that define the incorporated and unincorporated areas policed. County of Los Angeles Sheriff's Department, "Annual Crime and Arrest Statistics," http://app1.lasd.org/mis/rdweb/index.htm. 2008.

4 Gary T. K. Tse, Director of Facilities Planning Bureau, County of Los Angeles Sheriff's Department, written communication with Impact Sciences, Inc. July 28, 2008. (Letter included in **Appendix 5.10.2**.)



SOURCE: Google Earth - 2008, Impact Sciences, Inc. – August 2008

FIGURE **5.10.2-1**

Sheriff and CHP Stations Locations

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There are approximately 9 to 12 sworn personnel in the field at any time depending on the shift.[5] The City of Industry station, located at 150 North Hudson Avenue in the City of Industry, is the secondary station that would respond to service calls to the Project site and the San Dimas Station, located at 270 South Walnut Avenue in San Dimas, would be the tertiary responding station.

Level of Service Standards

Deployment of deputies within the County is based on an "appropriate level of service" standard. Factors used to determine the appropriate level of service for a particular area include consideration of residential population, types of crimes, statistical reports, size of area, type of land uses, actual and expected service calls, transient and visitor population, and response time.

The County Sheriff's Department commonly considers an officer-to-resident ratio of one officer for every 1,000 residents as a desired level of service within a service area. Presently, the officer-to-resident ratio in the Walnut/Diamond Bar Sheriff's Station service area, which includes Rowland Heights, is one officer for every 1,227 residents (i.e., 126 sworn officers for a population of 154,601); however, according to the Sheriff's Department and for reasons described below, service in the Project area is currently considered functionally adequate.[6]

Response Times

The County Sheriff's Department has established an optimal response time goal of 5 minutes or less for emergency response incidents (a crime that is presently occurring and/or a life or death situation), 10 minutes or less for priority (immediate) incidents (a crime or incident that is currently occurring, but is not a life or death situation) and 30 minutes or less for routine (non-emergency) responses (a crime that has already occurred and is not a life or death situation).[7] These response times represent the range of time required to accommodate a service call, which is measured from the time a call is received until the time a patrol car arrives at the incident scene. Response times are generally variable, particularly because the nearest responding patrol car may be located anywhere within the station's patrol area and may not necessarily respond directly from the station itself. Based on information provided by the County of Los Angeles Sheriff's Department, average response times in the Project area, response time to the Project site

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5 County of Los Angeles Sheriff's Department, "Annual Crime and Arrest Statistics," http://app1.lasd.org /mis/rdweb/index.htm. 2008.

6 Gary T. K. Tse, Director of Facilities Planning Bureau, County of Los Angeles Sheriff's Department, personal communication with Impact Sciences, Inc., July 28, 2008. (Letter included in **Appendix 5.10.2**.)

7 Lieutenant Bill Song, Los Angeles County Sheriff's Department, written communication with Tom Bellizia, Los Angeles County Sheriff's Department, Facilities Planning Bureau, November 4, 2008. (Letter included in **Appendix 5.10.2**.)

is estimated as approximately 4 minutes for urgent response incidents, 9 minutes for priority incidents and 30 minutes for routine calls.[8] Therefore, response times are currently within the optimal response time criteria as defined by the County Sheriff's Department.

Types of Crimes in the Rowland Heights Area

During the period of January 1, 2007, through December 31, 2007, Walnut/Diamond Bar station units responded to 396 calls for service in Rowland Heights. Thirty-five percent of calls received were for theft-related incidents (i.e., bike thefts, vehicle thefts, grand-theft property, burglaries, etc.). Twenty percent of calls received were for traffic-related incidents (i.e., parking violations, racing, speeding, traffic accidents, etc.). The remaining percentages were for vandalism, assault, narcotics, liquor law violations, family disputes, child abuse, and suspicious persons or vehicles.

Sheriff's Department Operational Funding

Operational funding for the County Sheriff's Department comes entirely from tax revenues from property and sales taxes generated and deposited in the County's General Fund and the State Treasury. A portion of these revenues is then allocated to maintain staffing and equipment levels for the County Sheriff's Department, including the Walnut/Diamond Bar Sheriff's Station, in response to related demands. Overall funding for the County Sheriff's Department facilities, staff, and services is appropriated through the County's budget process in response to specific requests by the Sheriff's Department.[9]

California Highway Patrol

The CHP provides traffic regulation enforcement for unincorporated Rowland Heights and surrounding areas from its Santa Fe Springs Station (10051 Orr and Day Road in Santa Fe Springs). The Santa Fe Springs Station patrols all unincorporated areas and roadways on the east side of Los Angeles County from Long Beach to Pomona.[10] The Santa Fe Springs Station is staffed by 118 sworn officers and 12 civilian employees.[11] The station has indicated that its facilities are adequate to meet current demands in its service area.[12] CHP has indicated that recruitment levels are down and the station is currently short

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8 Gary T. K. Tse, Director of Facilities Planning Bureau, County of Los Angeles Sheriff's Department, written communication with Impact Sciences, Inc. July 28, 2008. (Letter included in **Appendix 5.10.2**.)

9 Gary T. K. Tse, Director of Facilities Planning Bureau, County of Los Angeles Sheriff's Department, written communication with Impact Sciences, Inc. April 30, 2008. (Letter included in **Appendix 5.10.2**.)

10 Public Information Officer Joe Zizi, personal communication with Impact Sciences, Inc., December 5, 2008.

11 Public Information Officer Joe Zizi, personal communication with Impact Sciences, Inc.

12 Lieutenant Robert Velasco, County of Los Angeles Sheriff's Department, personal communication with Impact Sciences, Inc., February 5, 2009.

staffed; however, funding is available to hire new graduates of the California Highway Patrol Academy. Additionally, the station has recently proposed opening a new station in the Walnut/Rowland Heights area to improve coverage of the eastern portion of the County of Los Angeles.[13]

The primary responsibility of the CHP is to patrol state highways and County roadways in the previously identified service area, enforce traffic regulations, respond to traffic accidents, and to provide service and assistance for disabled vehicles. The secondary mission of the CHP is to provide assistance to all law enforcement agencies under emergency conditions. In the Rowland Heights area, the CHP maintains a Mutual Aid Agreement with the Los Angeles County Sheriff's Department. Pursuant to this agreement, in the event of a significant event, responders from the CHP may be called upon to respond to emergencies within the County Sheriff Department service area. Similarly, County Sheriff Department units may be called upon to assist the CHP.

REGULATORY SETTING

All law enforcement agencies within the State of California are organized and operate in accordance with the applicable provisions of the California Penal Code. This code sets forth the authority, rules of conduct, and training for peace officers. Under state law, all sworn municipal and County officers are state peace officers.

The County of Los Angeles is required by state law to organize a formal mutual aid agreement with all sheriff and police departments within its jurisdiction. This agreement is set forth in the Los Angeles County Operational Area Response Plan.

The Los Angeles County Sheriff's Department is the largest provider of contract law enforcement services in the world. As of September 2000, 40 of the 88 cities in Los Angeles County contract with the Sheriff's Department for their complete municipal law enforcement services. Intergovernmental contracting in Los Angeles County has expanded to include other areas of law enforcement services as well, including transit policing, school policing, court security, and custody services. The Sheriff's Department is regularly called upon to provide training and assistance to law enforcement agencies throughout Los Angeles County.[14]

Funding for sheriff department staffing comes entirely from the County's General Fund, and funding is allocated to the Sheriff Department through the County's budget process. Occupancy and operation of

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13 Lieutenant Robert Velasco, personal communication with Impact Sciences, Inc.

14 County of Los Angeles Sheriff Department, *Contract Law Enforcement*, http://www.lasd.org/lasd_services /contract_law/index.html, September 2008.

future development projects in the County would generate revenues accrued to the County's General Fund (i.e., sales tax, property tax, etc.) that could be used to help meet the capital outlay for sheriff services. The Project is expected to contribute approximately $2.5 million dollars in annual property tax revenue to the County.

ENVIRONMENTAL IMPACTS

Project Improvements

Implementation of the proposed Project would result in the development of 775 for-lease residential units in multiple buildings; a recreational facility for residents; parking structures, attached garages and on-grade parking stalls including 1,544 parking spaces; and landscaping throughout the Project site. The for-lease residential units would be incorporated into three different types of buildings, including the Podium, Townhome-style Apartments, and Wrap-Around buildings.

The Project site would be accessed by three driveways off of Brea Canyon Cutoff Road, which runs along the western side of the Project site. The three driveways include a primary driveway accessing the center of the Project site and two secondary driveways at the northern and southern ends of the Project site. At-grade internal driveway widths would be at a minimum of 28 feet to allow access to the site for fire trucks and emergency vehicles. Smaller emergency vehicles, such as sheriffs patrol cars and ambulances, would be able to access the subterranean parking structure as necessary.

During construction, the builder and contractor would use private security at the construction site, use flagmen, practice general safekeeping of construction equipment, and other standard construction practices. During operation, the proposed Project would incorporate security features into the Project design, such as the use of appropriate landscape materials, nighttime lighting, and building orientation. The Project would illuminate entrances and provide adequate site lighting to facilitate safe and clear circulation for residents and visitors. As proposed, the Project would incorporate numerous security features and would be designed for safety and vandalism deterrence to potentially reduce the number of calls for law enforcement services.

Additionally, the County Sheriff's Department would review the site design during the planning and building plan-check process with respect to lighting, landscaping, building access and visibility, street circulation, building design and defensible space. Subsequent to Sheriff's Department review, comments and suggestions regarding safety design techniques would be incorporated into the design of the Project.

Thresholds of Significance

Based on the County's Initial Study Checklist and Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, impacts related to sheriff services are considered significant if:

- the Project could create staffing or response time problems at the sheriff's substation serving the Project site; or
- there are any special law enforcement problems associated with the Project or the general area.

Impact Analysis

Threshold 1: **Could the Project create staffing or response time problems at the sheriff's substation serving the Project site?**

Threshold 2: **Are there any special law enforcement problems associated with the Project or the general area?**

Analysis

Construction Impacts: Construction of the proposed Project would involve several phases, including demolition of asphalt paving and the existing structures, excavation of the Project site for below-grade parking, and construction of the new buildings, parking areas, and related improvements. Site development and construction would normally not require services from the County Sheriff's Department, except in the cases of trespass, theft, and/or vandalism. Such activities at a construction site are not unusual, but do not typically place undue demands on law enforcement services due to their limited occurrence. As such, impacts would be less than significant.

Construction activity would increase traffic both on and adjacent to the Project site during working hours due to commuting construction workers, trucks and other large construction vehicles that would increase traffic volumes during the PM peak hour. All construction equipment would be staged on the Project site. Additionally, the majority, if not all, construction worker parking would be accommodated on the Project site. If necessary, the construction contractor would arrange for off-site parking in close proximity to the Project site, although not in the residential neighborhoods. Nonetheless, slow-moving, construction-related traffic on local adjacent roadways may temporarily reduce optimal traffic flows on local roadways for 36 months (until Project buildout) and could conceivably delay sheriff's vehicles traveling through the area or contribute to a vehicle accident. However, as discussed in **Section 5.7, Traffic, Parking, Circulation, and Access**, the Project Applicant shall develop and implement a Construction Management Plan satisfactory to the Department of Public Works to minimize potential

conflicts between construction activity and through traffic. Furthermore, the builder and contractor would use private security at the construction site, use flagmen, practice general safekeeping of construction equipment, and other standard construction practices. The builder and contractor would also coordinate with the County Sheriff's Department to ensure that emergency access is maintained to the Project site and that traffic flow is maintained on local streets. Therefore, construction of the Project would not be expected to increase demand for the level of sheriff's services and would not reduce the current level of service, or create demand for additional stations, personnel, or equipment. With implementation of the measures described above and with continued coordination between the contractors and builders and the County Sheriff's Department, impacts during Project construction would be less than significant.

Operational Impacts: The proposed Project would not introduce any unique uses to the Project area, which is developed with commercial and single-family/multi-family residential uses. The Project proposes 775 for-lease residential units incorporated into three different types of buildings including the Podium, Townhome-style, and Wrap-Around buildings. Parking would be provided in the parking structure beneath the podium building, garages associated with the Townhome Style apartments, and an above-grade structure incorporated into the Wrap-Around building.

During Project operation, the County Sheriff's Department would provide law enforcement services to the Project site. With the introduction of 775 multi-family residential units housing approximately 2,139 residents, it is anticipated that demands for sheriff's services would increase above current levels upon buildout of the Project. Currently, Reporting District 2938, which encompasses the Project site, services a total population of approximately 154,601 residents.[15] Although the Sheriff's Department has not achieved its target officer–to-population ratio of one officer for every 1,000 residents, it has stated that current ratio of one officer for every 1,200 residents is considered functionally adequate.

The proposed Project would introduce approximately 2,139 residents to Rowland Heights, which represents a 1.4 percent increase in the population of the reporting district. This would reduce the officer-to-resident ratio from 1:1,227 to 1:1,244, a minor incremental impact. The Sheriff's Department noted that the population increase associated with Project implementation would be expected to increase the number of calls for service within the reporting district; however, the Department further stated that it had no specific concerns about the Project's impacts on staffing or other Sheriff's Department resources. Further, given the presence of security features on the Project site, this minor reduction in the officer-to-resident ratio would not noticeably affect the ability of the County Sheriff's Department to

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15 Gary T. K. Tse, Director of Facilities Planning Bureau, County of Los Angeles Sheriff's Department, written communication with Impact Sciences, Inc., July 28, 2008. (Letter included in **Appendix 5.10.2**.)

provide adequate services. For this reason, the proposed Project is expected to result in a less than significant impact on the officer–to-resident ratio and sheriff's services in Reporting District 2938.[16]

Operational Impacts; Response Times: As discussed above, the County Sheriff's Department response times in the Rowland Heights area are presently in conformance with the County Sheriff's Department optimal response time criteria. As stated in **Section 5.7, Traffic, Parking, Circulation, and Access**, after implementation of the required mitigation measures, the local roadway network would continue to operate at levels consistent with County Department of Public Works standards. Proposed Project implementation, considered together with other related projects, would not contribute to cumulatively significant and unavoidable impacts during at any of the study intersections. Accordingly, traffic increases would not substantially impact any single intersection and thus are unlikely to measurably adversely affect response times to the Project site or throughout the reporting district. The Sheriff's Department has indicated no specific concerns relating to staffing or other resources as the result of the proposed Project.[17] Accordingly, Project impacts on sheriff response times are considered less than significant.

Operational Impacts; Sheriff's Department Funding/Fiscal Impact: Occupancy of the Project would generate revenues from property and sales taxes that would be deposited in the County's General Fund and the State Treasury. A portion of these revenues would then be allocated to maintain or increase staffing and equipment levels for the Walnut/Diamond Bar Sheriff's Station in response to Project-related demands. Although the proposed Project would increase demand for sheriff's services, these service demands can be met through the allocation of revenues collected from the Project using existing sources. Therefore, impacts are considered less than significant.

Based on the above information, implementation of the proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities and/or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain adequate service, response times or other performance objectives. Therefore, impacts to the Los Angeles County Sheriff's Department would be less than significant.

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16 Gary T. K. Tse, Director of Facilities Planning Bureau, County of Los Angeles Sheriff's Department, written communication with Impact Sciences, Inc., July 28, 2008. (Letter included in **Appendix 5.10.2**.)

17 Gary T. K. Tse, Director of Facilities Planning Bureau, County of Los Angeles Sheriff's Department, written communication with Impact Sciences, Inc., July 28, 2008. (Letter included in **Appendix 5.10.2**.)

Mitigation Measures

Refer to **Section 5.7, Traffic, Parking, Circulation, and Access,** for mitigation measures designed to reduce the Project's impacts on circulation and traffic flow. As Project construction and operation would not result in significant impacts to sheriff's services, no mitigation measures are required.

CUMULATIVE IMPACTS

Implementation of the proposed Project in combination with the identified related projects is anticipated to increase the demand for Sheriff's Department services in the Project area.[18] Related projects planned in and surrounding Rowland Heights would increase the demand for services from the Walnut/Diamond Bar Sheriff's Station and a potentially significant impact on the current level of sheriff protection services throughout the Rowland Heights area could occur. However, with increased revenues from ground lease rentals, property tax and special tax revenue from the related projects, an allotted portion of the General Fund could be used for increases in staffing and equipment. Furthermore, all projects are required to submit to the County Sheriff's Department project site designs during the planning and building plan-check process. In conformance with normal County procedures, these plans shall be reviewed by the County Sheriff's Department with respect to lighting, landscaping, building access, and visibility, street circulation, building design and defensible space. Incorporation of such reviews would avoid significant cumulative impacts to governmental facilities and the provision of adequate sheriff's services. As discussed above, the County Sheriff's Department also provides law enforcement services for the contract Cities of Industry, Diamond Bar, and Walnut, which means these cities pay for the County Sheriff's Department services based on their respective demand.[19]

Increased vehicle traffic generated at buildout of the proposed Project and the related projects could adversely affect the operating condition of the local roadway network.[20] Mitigation measures for potential Project-related traffic impacts are provided in **Section 5.7**, **Traffic, Parking, Circulation, and Access**, of this EIR. The Project is not expected to result in significant impacts at any of the study intersections, and thus is not expected to significantly affect sheriff response times in the reporting district, or contribute to cumulatively significant impacts on sheriff response times when considered together with the related projects.

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18 Gary T. K. Tse, Director of Facilities Planning Bureau, County of Los Angeles Sheriff's Department, written communication with Impact Sciences, Inc., July 28, 2008. (Letter included in **Appendix 5.10.2**.)

19 County of Los Angeles Sheriff's Department, *Patrol Stations*, http://www.lasd.org/stations/station_index.html, 2008.

20 Gary T. K. Tse, Director of Facilities Planning Bureau, County of Los Angeles Sheriff's Department, written communication with Impact Sciences, Inc., July 28, 2008. (Letter included in **Appendix 5.10.2**.)

Based on the above information, the proposed Project, considered together with related projects, would not result in a cumulatively considerable contribution to cumulatively significant impacts associated with the provision of new or physically altered Sheriff's Department staffing, facilities, or other resources in order to maintain adequate service, response times, or other applicable performance objectives.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Development of the proposed Project would not, individually or in combination with other projects, significantly impact sheriff's services in the reporting district during Project construction or operation. Cumulatively, the demand for sheriff services within the reporting district are expected to increase; however, impacts would remain less than significant.

5.11 WATER SERVICE

SUMMARY

The Canyon Residences Project (Project) site is located in the Walnut Valley Water District (Water District) service area, which encompasses approximately 28 square miles in the eastern San Gabriel Valley. Upon buildout, the Project would develop 775 multi-family residential units on an approximately 15.7-acre site. The buildout year for the proposed Project is estimated to be 2012. An on-site water distribution network would be constructed to the standards of the County of Los Angeles Department of Public Works. This system would connect to the existing 14-inch water line, which currently provides water service to the Project Site, located west of the Project site along Brea Canyon Cutoff Road.

The anticipated net Project demand of approximately 165 acre-feet per year (afy) for potable water and 12 afy for recycled water would represent approximately 3.3 percent of the Water District's projected increased demand for potable water and less than 1 percent of the Water District's projected supply for recycled water in the year 2030. Therefore, the Project's water needs are accounted for within the current Urban Water Management Plan (UWMP) planning period, for which there are sufficient planned supplies under normal, single-dry, and multiple-dry year conditions. In addition, proposed Project design features for water conservation would reduce water service impacts. Given the above, impacts on water service would be less than significant.

INTRODUCTION

This EIR section presents an overview of the Walnut Valley Water District's available water supply sources at present and in the future; the anticipated potable and recycled water demands of the proposed Project; and the impact of the Project's demand on the Water District's water supplies. This analysis is based on the Water Supply Assessment (WSA) prepared for the proposed Project by the Water District and included in **Appendix 5.11** of this Draft EIR; the Water District's 2007 Water System Master Plan and 1999 Recycled Water System Master Plan; the Amended 2005 UWMP for the Water District; and communication with Water District staff.

EXISTING CONDITIONS

Walnut Valley Water District

The Water District was formed on July 10, 1952, for the purpose of importing a firm and reliable source of water from the Metropolitan Water District (MWD) to meet domestic and municipal water use needs. The primary functions of the Water District are to acquire, control, distribute, store, and conserve water for

the beneficial use of inhabitants and water users located within its service area. The Water District's service area encompasses a number of suburban residential communities located approximately 20 miles east of downtown Los Angeles. The present service area includes all of the City of Diamond Bar together with portions of the cities of Walnut, Industry, West Covina, and Pomona, and the eastern portion of the unincorporated community of Rowland Heights. The Water District provides both potable and recycled water to a service area encompassing 17,966 acres, or approximately 28 square miles, and serves approximately 100,000 residents and businesses. The Project site is within the Water District's service area. The Water District operates and maintains several facilities, including two large imported potable water pipelines, 370 miles of distribution mains, 16 pump plants, and 27 reservoirs with a combined storage capacity of 87.4 million gallons. The Water District currently provides potable water to over 26,000 connections. The Water District also operates and maintains a recycled water distribution system consisting of 28 miles of distribution mains, 1 pump plant, 3 wells, and 2 reservoirs with a combined storage capacity of 4 million gallons. The Water District currently provides recycled water to over 210 connections.

The current water supply for the Water District's service area is derived from five sources:

1. Colorado River Water from MWD
2. State Water Project (SWP) Water from MWD
3. Groundwater from the Puente Basin
4. Groundwater from the Spadra Basin
5. Recycled Water

These sources of water supply include imported supplies from MWD, transported via the Colorado River Aqueduct and the SWP California Aqueduct, and local supplies, consisting of groundwater and recycled water.

Amended 2005 Urban Water Management Plan

A UWMP is a planning tool that generally guides the actions of water supply agencies. It provides managers and the public with a broad perspective on a number of water supply issues. California Water Code Section 10910(c)(2) provides that if the projected water demand associated with a proposed project was accounted for in the UWMP adopted by the retail water purveyor, then relevant information from that document may be incorporated into the WSA. The Water District's 2005 UWMP was adopted by its Board of Directors on December 20, 2005, and was appropriately filed with the California Department of Water Resources (DWR) within 10 days following Board approval. The Water District coordinated the

preparation of the 2005 UWMP with local and regional agencies including the City of Diamond Bar, City of Industry, City of Pomona, City of Walnut, City of West Covina, Los Angeles County Department of Regional Planning, and Three Valleys Municipal Water District.

The 2005 UWMP was amended in October 2007 to include information necessary to meet the requirements of California Water Code Division 6, Part 2.6 – Urban Water Management Planning. The Amended 2005 UWMP includes the following eight major sections: Plan Adoption and Coordination; Service Area Information; Demand Management Measure Implementation; Water Shortage Contingency Plan; Recycled Water Planning; Water Quality; Water Supply Reliability; and Adoption and Implementation. The Amended 2005 UWMP evaluates the Water District's projected water supplies and demand for the 2010 to 2030 planning period.

The Water District currently obtains its water supply from both local and imported sources. Local supplies consist of groundwater from the Puente and Spadra Groundwater Basins and recycled water, while the imported supplies are transported via the Colorado River Aqueduct and SWP by the MWD. An overview of these water supplies is provided below.

Local Water Supplies

Groundwater

The Water District obtains groundwater from the Puente Groundwater Basin, which underlies much of the San Gabriel Valley floor throughout the Water District's service area, and the Spadra Groundwater Basin, which lies along the northeasterly portion of the Water District's service area.[1] The Puente Basin has been adjudicated and is governed by the Puente Basin Watermaster, which represents local producer/provider interests, including those of the Water District, the Rowland Water District (RWD), and the City of Industry. The Spadra Basin is unadjudicated. Groundwater in both the Puente and Spadra basins is generally of poor quality, with high concentrations of total dissolved solids and nitrates, mainly due to past agricultural practices.[2] For this reason, groundwater from the two basins meets less than 1 percent of the Water District's potable water demand. Instead, this groundwater is typically used as a supplemental supply for the Water District's recycled water system, which provides water for industrial processing, landscape irrigation, agricultural irrigation, and other non-potable use.[3]

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1 Walnut Valley Water District, *2005 Urban Water Management Plan*, p. 3.

2 California Department of Water Resources. February 2004. *Bulletin 118: South Coast Hydrologic Region California's Groundwater, San Gabriel Valley Groundwater Basin*.

3 Walnut Valley Water District, *2005 Urban Water Management Plan*, p. 3.

Approximately 10 percent of the Water District's current recycled water supply is derived from local non-potable groundwater wells. In 2005, local groundwater accounted for 182 acre-feet, or 10 percent, of the approximately 1,817 acre-feet (af) of recycled water used within the Water District's service area.

Recycled Water

The Water District first began supplying recycled water in 1986, and currently provides in excess of 1,800 afy of recycled water to over 210 customer connections. The recycled water system is capable of delivering up to 3,360 afy. Recycled water is used throughout the Water District service area for landscape irrigation at local schools, parks, golf courses, street medians, and public buildings. Recycled water is also used as process water for commercial and industrial operations, and groundwater recharge through other agencies.

Currently, the Water District has three supply sources for its recycled water distribution system. The primary source is treated wastewater from the Los Angeles County Sanitation District (LACSD) Pomona Water Reclamation Plant (WRP), located near the Water District's northeasterly boundary. Impaired-quality groundwater (i.e., groundwater high in total dissolved solids) pumped from the Water District's Fairway, Industry, Lycoming, and Grand Crossing Wells in the Puente and Spadra Basins constitute a secondary source. Third, imported treated potable water from the MWD is used only in the recycled water system during extreme supply shortfalls or due to service interruptions at the Pomona WRP and the Water District's wells. The recycled water supply is typically augmented by groundwater from existing Water District wells throughout the year, while "makeup" water is supplied from the Water District's potable water system when necessary during deficiencies or outages.

Imported Water Supplies

The Water District consumer's primary source of water is from surface water imported by the MWD through its designated wholesale agency, the Three Valleys Municipal Water District (Three Valleys). MWD is the largest water wholesaler for domestic and municipal uses in Southern California. The MWD serves 26 member agencies comprised of 14 cities, 11 municipal water districts, and 1 County water authority.

The MWD imports water from the Colorado River Aqueduct and the SWP in the Sacramento–San Joaquin Delta, and distributes this water to its member agencies. Water from these two sources is blended and then processed at MWD's Weymouth Treatment Plant, in the City of La Verne. Once processed, Three Valleys purchases this blended and treated water from MWD. When surplus water is available, the Water District is also able to purchase SWP water purchased by Three Valleys from MWD; this water is

then treated by Three Valleys at its Miramar Treatment Plant, in the City of Claremont. An overview of the Colorado River Aqueduct and SWP is provided below.

All of MWD's member agencies have preferential rights to acquire water from MWD. Pursuant to Section 135 of the Metropolitan Water District Act:

> *Each member public agency shall have a preferential right to purchase from the district for distribution by such agency, or any public utility therein empowered by such agency for the purpose, for domestic and municipal uses within the agency a portion of the water served by the district which shall, from time to time, bear the same ratio to all of the water supply of the district as the total accumulation of amounts paid by such agency to the district on tax assessments and otherwise, excepting purchase of water, toward the capital cost and operating expense of the district's works shall bear to the total payments received by the district on account of tax assessments and otherwise, excepting purchase of water, toward such capital cost and operating expense.*

All of MWD's member agencies have preferential rights. MWD has a Water Surplus and Drought Management Plan that provides a means for allocating water supplies during periods of shortage as well as surplus. Three Valleys plans to work with MWD and its Water Surplus and Management Plan to purchase drought supplies from MWD in the future.

MWD has 5.3 million acre-feet (maf) of storage capacity in reservoirs and groundwater basins.[4] MWD also expects to meet its member agencies' long-term needs during shortages through a combination of actions, including water transfers, conservation measures, and development of enhanced local sources of water including recycling, brackish water desalination, and seawater desalination.[5] Based on the water supply planning requirements that are imposed on MWD member agencies, such as those found in water supply assessments, urban water management plans, and written verifications, MWD has indicated that current supplies can meet the demands of its customers through 2030.

MWD has compared total projected water demands and conservatively estimated water supplies over the next 20 years. It has determined that if its supply programs were implemented under its Integrated Resource Plan "[b]ased on water supplies that are currently available, Metropolitan already has in place the existing capability to … [m]eet 100 percent of its member agencies' projected supplemental demands (consumptive and replenishment) over the next 20 years" in studied water supply scenarios.[6] MWD

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4 Metropolitan Water District of Southern California. 2008. *Profile*, http://www.mwdh2o.com/mwdh2o/pages/news/at_a_glance/mwd_profile.pdf. April 2009.

5 Metropolitan Water District of Southern California, Water Alert: Water Reserve Levels, http://www.mwdh2o.com/mwdh2o/pages/yourwater/wateralert/levels.html, April 2009.

6 Report on Metropolitan Water Supplies: A Blueprint for Water Reliability, March 2003, (Blueprint Report), 24-25.

indicates that its additional reserve supplies provide a "'margin of safety to guard against uncertainties in demand projections and risks in fully implementing all supply programs under development."[7]

Colorado River Aqueduct

The Colorado River was the original source of water for MWD after the establishment of MWD in 1928. MWD has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. Water from the Colorado River or its tributaries is also available to other users in California, as well as users in the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, and to the country of Mexico.[8]

Water from the Colorado River is supplied to the MWD through the 242-mile-long Colorado River Aqueduct, which is owned and operated by the MWD. MWD diverts water from the Colorado River at Lake Havasu on the California/Arizona border and conveys it across the Mojave Desert to Lake Mathews near the City of Riverside. Imported Colorado River water is treated at a filtration plant prior to use. To ensure a reliable supply of water in times of drought, Diamond Valley Lake, located near Hemet, in southwest Riverside County, stores water received from the Colorado River Aqueduct.

After deducting for conveyance losses and considering maintenance requirements, up to 1.2 million afy of water may be conveyed through the Colorado River Aqueduct to MWD's member agencies, subject to availability of Colorado River water for delivery to MWD. Colorado River water delivery to MWD is dependant upon the availability of unused apportionment available to California. California is apportioned the use of 4.4 million afy of water from the Colorado River, plus half of any surplus made available for use collectively in Arizona, California, and Nevada. In addition, California has historically been allowed to use Colorado River water apportioned to, but not used by, Arizona and Nevada when such supplies have been requested for use in California. Under the 1931 priority system that formed the basis for distribution of Colorado River water to California, MWD holds the fourth priority right to 550,000 afy of water. This is the last priority within California's basic apportionment of 4.4 maf. Based on MWD's Integrated Water Resources Plan Implementation Report, MWD expects that its fourth priority right to 550,000 af per year will be available every year for the next 20 years during all year types (i.e., wet, average, single-dry, and multiple-dry years). In addition, MWD holds the fifth priority right to 662,000 af of water, which is in excess of California's basic apportionment.

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7 Ibid., p. 23.

8 Metropolitan Water District of Southern California. 2008. Appendix A, Attached to official statement dated July 10, 2008, for $79,045,000: The Metropolitan Water District of Southern California Water Revenue Refunding Bonds, 2008 Series C.

Until 2002, MWD had been able to take full advantage of (i.e., obtain) its fifth priority right as a result of the availability of surplus water and apportioned but unused water. However, Arizona and Nevada have increased their use of water from the Colorado River, leaving no unused apportionment available for California since the late 1990s. In addition, a severe drought in the Colorado River Basin has reduced storage in system reservoirs, resulting in no surplus water being available since 2002. Prior to 2002, MWD could divert over 1.2 maf in any year, but since that time, MWD deliveries of Colorado River water varied from a low of 633,000 af in 2006 to a high of 897,000 af in 2005. In 2007, MWD received approximately 713,500 af of Colorado River water.

Colorado River water apportioned to the MWD is combined with water from other sources, including from the SWP, and is provided to water customers, including Three Valleys; Three Valleys then provides water to the Walnut Valley Water District. In the year ending June 30, 2007, Three Valleys was one of the 10 largest water customers for the MWD, receiving 68,454 af of water.

MWD has taken steps to augment its share of Colorado River water through agreements with other agencies that have rights to use such water. These include (1) an agreement with the Imperial Irrigation District (IID) for additional water storage conservation; (2) an agreement with the Central Arizona Water Conservation District (CAWCD) to demonstrate the feasibility of CAWCD storing Colorado River water in central Arizona for the benefit of an entity outside the State of Arizona; (3) an agreement with the CAWCD and the Southern Nevada Water Authority (SNWA) to fund the construction of a new 8,000 af off-stream regulating reservoir near the All-American Canal in Imperial County; and (4) an agreement with the Palo Verde Irrigation District (PVID) for a Land Management, Crop Rotation, and Water Supply Program.

Environmental Concerns and Litigation

Environmental Concerns

Federal and state environmental laws protecting fish species and other wildlife species have the potential to affect Colorado River operations, thus changing certain hydropower operations and the amount of water deliveries to the Colorado River Aqueduct. A number of species that are listed as Endangered or Threatened under the state or federal endangered species acts are present in the area of the Lower Colorado River. To address environmental concerns, a broad-based state, federal, tribal, and private regional partnership that includes water hydroelectric power and wildlife management agencies in Arizona, California, and Nevada have developed a multi-species conservation program for the main stem of the Lower Colorado River, known as the Lower Colorado River Multi-Species Conservation Program (MSCP). The MSCP allows MWD to obtain federal and state permits for any incidental adverse impacts

on protected species resulting from the current and future power operations of its Colorado River facilities, and to minimize any uncertainty from additional listings of endangered species.

A second environmental issue concerning the Colorado River water supply is the presence of quagga mussels (*Dreissena rostriformis bugensis*), which were discovered for the first time in Lake Mead in January 2007. Quagga mussels, which are a non-native invasive species, can clog intakes and raw water conveyance systems, and alter or destroy fish habitats and affect lakes and beaches, if left unmanaged. MWD is currently working to enhance its ability to detect the mussels by studying mussel transport in conveyance systems, assessing the vulnerability of MWD raw water conveyance systems, studying the feasibility of boat cleaning facilities, and developing and implementing control strategies. Future quagga mussel control efforts are expected to include infrastructure upgrades and recommendations on boating practices or additional facilities to control the spread of mussels. In addition, funds have been approved for interim and permanent chlorination facilities to control the mussels. Therefore, quagga mussel infestation is not expected to impede the provision of Colorado River water to MWD.

Litigation

Several lawsuits are currently pending that generally pertain to water availability and supplies in the West. Litigation was filed in December 2007 against the Bureau of Reclamation by the non-profit organization Grand Canyon Trust, alleging that the Bureau of Reclamation's planning and operation of the Glen Canyon Dam (which allowed the creation of Lake Powell) does not comply with requirements of the National Environmental Policy Act (NEPA) and the Federal Endangered Species Act (FESA). The Grand Canyon Trust claims that the Bureau of Reclamation has failed to implement a reasonable and prudent alternative in the United States Fish and Wildlife Service's (USFWS) 1994 Biological Opinion for Glen Canyon Dam operations for the protection of endangered humpback chub and razorback sucker. Grand Canyon Trust alleges that the Bureau of Reclamation must develop and implement a water release program with steady high flows in the spring and low steady flows in the summer and fall during low water years. Grand Canyon Trust later named the USFWS as a defendant. MWD, the IID, and the CAWCD have intervened in this case.[9]

A second lawsuit in 2006 was filed against MWD by a publicly held agricultural company called Cadiz Incorporated over a potential off-stream storage and dry-year supply program. The program included facilities to store and return water from the Colorado River Aqueduct, and to transfer indigenous groundwater to MWD as a dry year supply. In October 2002, MWD decided not to proceed with the

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9 Metropolitan Water District of Southern California. 2008. Appendix A, Attached to official statement dated July 10, 2008, for $79,045,000 The Metropolitan Water District of Southern California Water Revenue Refunding Bonds, 2008 Series C.

Cadiz program. In January 2006, Cadiz served MWD with an action alleging that MWD breached agreements to complete the environmental review of the program and to accept the pipeline right-of-way that could have been used by Cadiz with other potential project partners. The parties are currently engaged in court-ordered settlement negotiations.

The Quantification Settlement Agreement (QSA) (the 2003 agreement between MWD, Coachella Valley Water District (CVWD), and IID establishing water use limits) includes lining portions of the All-American and Coachella Canals, which is expected to conserve water that would otherwise be lost to seepage through cracks into the ground. The QSA also involves the transfer of agricultural water from areas along the Salton Sea, which would reduce the volume of agricultural run-off into the Salton Sea, in turn accelerating the trend of the Salton Sea toward hypersalinity, which impacts the quality of the Salton Sea as habitat for certain bird species listed as threatened or endangered. QSA-related litigation has been filed, but remains in early stages as of the time of preparation of the WSA and the EIR, and any adverse impact on MWD or its Colorado River supplies cannot be adequately determined at this time.[10]

Finally, the Navajo Nation has filed litigation against the Department of the Interior, specifically the Bureau of Reclamation and the Bureau of Indian Affairs, alleging that the Bureau of Reclamation has failed to determine the extent and quantity of the water rights of the Navajo Nation in the Colorado River and that the Bureau of Indian Affairs has failed to otherwise protect the interest of the Navajo Nation. Negotiations are underway, and the litigation has not delayed implementation of the QSA. Any adverse impact of this litigation on MWD or its Colorado River supplies, if settlement negotiations are not successful, cannot be adequately determined at this time.[11]

The outcome of this litigation is not expected to affect MWD's Colorado River Aqueduct allocations to Three Valleys, or, in turn, Three Valleys' ability to meet the water demand of the Water District, since future supply at the wholesale member agency and district levels is also affected by the wholesaler's access to alternative water supplies, implementation of and participation in conservation programs, and increasing use of reclaimed water, among other variables.

State Water Project

In addition to Colorado River water, the other major source of water for the MWD, and therefore Three Valleys and the Water District, is water from Northern California transported via the SWP. The SWP is a water storage and delivery system of reservoirs, aqueducts, power plants, and pumping plants that extends for more than 600 miles. Its main purpose is to divert and store surplus water during wet periods

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10 Ibid.

11 Ibid.

and distribute it to service areas in Northern California, the San Francisco Bay area, the San Joaquin Valley, the Central Coast, and Southern California. Other Project purposes include flood control, power generation, recreation, fish and wildlife protection, and water quality management in the Sacramento-San Joaquin Delta.[12]

The keystone of the SWP is Lake Oroville, which conserves water from the Feather River watershed. Lake Oroville is the SWP's largest storage facility with a capacity of about 3.5 maf. Releases from Lake Oroville flow down the Feather River into the Sacramento River, which drains the northern portion of California's Central Valley. The Sacramento River flows into the Sacramento-San Joaquin Delta, comprised of 738,000 acres of land interlaced with channels that receive runoff from about 40 percent of the State's land area. The SWP and the Central Valley Project (CVP) rely upon Delta channels as a conduit to move water from the Sacramento River inflow to the points of diversion in the south Delta. Thus, the Delta is actually part of the SWP conveyance system, making the Delta a key component in SWP deliveries. The significance of the Delta to SWP deliveries is described in more detail below.

From the northern Delta, Barker Slough Pumping Plant diverts water for delivery to Napa and Solano Counties through the North Bay Aqueduct. In the southern Delta, the SWP diverts water into Clifton Court Forebay for delivery south of the Delta. Banks Pumping Plant lifts water from Clifton Court Forebay into the California Aqueduct, which channels the water to Bethany Reservoir. The water delivered to Bethany Reservoir from Banks Pumping Plant is either delivered into the South Bay Aqueduct for use in the San Francisco Bay area or continues down the California Aqueduct, which transports water to O'Neil Forebay, Gianelli Pumping-Generating Plant, and San Luis Reservoir.

San Luis Reservoir is jointly operated by DWR and the Bureau of Reclamation (Reclamation) and has a storage capacity of more than 2 maf. DWR's share of gross storage in the reservoir is about 1.062 maf. Generally, water is pumped into San Luis Reservoir during late fall through early spring, and is temporarily stored for release back to the California Aqueduct to meet summertime peaking demands for SWP and CVP contractors.

SWP water not stored in San Luis Reservoir, and water eventually released from San Luis, continues to flow south through the San Luis Canal, a portion of the California Aqueduct jointly owned by DWR and Reclamation. As water flows through the San Joaquin Valley, deliveries of CVP supply are made through numerous turnouts to farmlands within the service areas of the CVP. Near Kettleman City, the Coastal Branch Aqueduct splits off from the California Aqueduct for water delivery to agricultural areas to the

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[12] State of California, The Resources Agency, Department of Water Resources. August 2008. *The State Water Project Delivery Reliability Report*, (2007), 20–23.

west and municipal and industrial water users in San Luis Obispo and Santa Barbara Counties. The remaining water conveyed by the California Aqueduct travels further in the San Joaquin Valley to agriculture users such as Kern County Water Agency before reaching Edmonston Pumping Plant, which raises the water up high enough to travel across the Tehachapi Mountains and into Antelope Valley. In Antelope Valley, the Aqueduct divides into the East and West Branches. The East Branch carries water into Silverwood Lake and Lake Perris. Water in the West Branch flows to Quail Lake, Pyramid Lake, and Castaic Lake.

Long-term water supply contracts with DWR have been signed by 29 SWP contractors for a total of 4,173 thousand acre-feet (taf) per year. MWD is one of the 29 contractors. Signed in the 1960s, all contracts are in effect until at least 2035 and are essentially uniform. Each contract contains a schedule of the maximum amount of water the contractor may receive annually. This schedule is contained in a table referred to as Table A. The annual amount was designed to increase each year, with most SWP Contractors reaching their ultimate maximum amount in 1990. In most cases, SWP water is an important component of local water supplies. Five SWP Contractors use SWP water primarily for agricultural purposes and the remaining 24 SWP Contractors use SWP water primarily for municipal purposes. All available water is allocated annually in proportion to each contractor's annual Table A amount. Imported water from Northern California is treated at a filtration plant prior to use. Diamond Valley Lake also stores water received from the California Aqueduct for use in times of drought. SWP deliveries of water are based on Table A and Article 21 contract provisions, which are described below.

The Sacramento-San Joaquin Delta. The Sacramento-San Joaquin Delta is a network of natural and artificial channels and reclaimed islands at the confluence of the Sacramento and San Joaquin Rivers. The Delta forms the eastern portion of the San Francisco estuary, receiving runoff from over 40 percent of the state's land area. It is a low-lying region where sediment from the Sacramento, San Joaquin, Mokelumne, Cosumnes, and Calaveras Rivers commingles with organic matter deposited by marsh plants. Covering 738,000 acres interlaced with hundreds of miles of waterways, much of the land is below sea level and relies on more than 1,100 miles of fragile levees for protection against flooding.

Because the SWP and the CVP use Delta channels to convey water to the southern Delta for diversion, the Delta is the focal point for water distribution throughout the state. In fact, the Delta is one of the few estuaries in the world that is used as a major source of drinking water supply: about one-quarter of California's drinking water comes from the Delta, and two-thirds of Californians get some portion of their drinking water from the Delta. The Delta also provides a unique estuarine habitat for many resident and migratory fish and birds, some of which are listed as threatened or endangered. Most of the native fish either migrate through the Delta or move into it for spawning. Resident native fish are mainly present in areas strongly influenced by the Sacramento River inflows.

The CVP pumps at Jones Pumping Plant have a capacity of 4,600 cubic feet per second (cfs) and divert water directly from Old River. The CVP has contracts to divert 3.3 maf annually from the Delta for primarily agricultural use south of the Delta. The SWP pumps at Banks Pumping Plant have a combined pumping capacity of 10,300 cfs; however, diversions into the buffering Clifton Court Forebay are restricted to 13,870 af daily and 13,250 af per day over a three-day average. A rate of 13,250 af per day equates to an average pumping of 6,680 cfs.

CVP and SWP reservoir releases and Delta exports are coordinated according to the Coordinated Operating Agreement (COA), which sets guidelines for the sharing of supply and responsibility for meeting water quality standards in the Delta. The majority of the water exported by the SWP is dependent upon water rights derived from Lake Oroville storage; however, the SWP can also divert water considered in excess in the Delta. These excess conditions in the Delta usually result when there is sufficient inflow to meet all beneficial needs and the SWP is not required to make supporting releases from Lake Oroville. Diversions during excess Delta conditions are still governed by various determinations and rules.

In addition to the state and federal projects' diversions, irrigation water for use in the Delta is taken from channels and sloughs through approximately 1,800 diversions, which can total over 5,000 cfs in July and August.

Delta water quality is primarily governed by the 1995 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta (1995 Bay-Delta Plan). This plan established beneficial uses, associated water quality objectives, and an implementation program. The State Water Resources Control Board (SWRCB) in Water Rights Decision 1641 assigned primary responsibility for meeting many of the Delta water quality objectives to the SWP and CVP. Key factors in determining water quality in the western Delta are the quality of important Delta inflows and the intrusion of ocean-derived salts associated with daily tides. The extent of this intrusion is primarily determined by the magnitude of Delta inflows, export pumping rates, and operation of the Delta Cross Channel. Delta inflows are normally at least partially regulated by upstream reservoir operations.

The water flowing in Delta channels are constrained by an extensive levee system that protects Delta islands from flooding. This protection is critical because land subsidence in the Delta, primarily due to the consuming oxidation of aerated peat soils, has placed most of the land in the Delta below sea level. In fact, the elevation of Delta islands can be more than 20 feet below sea level. The resulting difference between the elevations of Delta lands and the water surface in adjacent channels makes Delta levees vulnerable to failure. Land subsidence in the Delta is expected to continue in the future, which will increase the vulnerability of levees to failure and subsequent island flooding.

Table A

The SWP contractual Table A amount is the maximum amount of water a SWP contractor may request each year from the SWP. Table A is used by the Department of Water Resources (DWR) in determining each contractor's proportionate share, or allocation, of the total SWP water supply DWR determines to be available each year. The reliability of SWP supplies is subject to annual hydrology, environmental and legal constraints, and planned improvements to the system. The Table A amount is not equivalent to actual deliveries of water in any given year. The total planned annual delivery capability of the SWP and the sum of all SWP contractors' maximum Table A amounts, as specified in the water supply contracts, is approximately 4.2 million afy, 4.1 million afy of which is deliverable in certain wet years. Of this 4.2 million afy, the MWD has an annual Table A contract amount from the SWP of 1.91 million afy, which is approximately 46 percent of the total Table A entitlement contracts in the state. This Table A amount is the maximum and does not reflect the actual amount of water available to the MWD from the SWP, which varies from year to year based on climate, environmental, and legal considerations. Water received from the SWP by MWD over the past six years (2002 through 2007) varied from a low of 1.4 maf in 2002 to a high of 1.8 maf in 2004.

Article 21

Article 21 refers to a provision in the contract for delivering water that is available in addition to SWP Table A amounts. Article 21 water is surplus water available from a California banking program in which state and regional water agencies can buy and sell surplus water. Article 21 water allocations are only available during wet years or years in which the supply of water is greater than the demand.

SWP Water Delivery Reliability

In the *Draft State Water Project Delivery Reliability Report 2007*, DWR presents its method for calculating SWP delivery reliability, the factors affecting SWP delivery reliability, and the limitations to estimating future water delivery reliability. In the report, "water delivery reliability" is defined as the annual amount of water that can be expected to be delivered with a certain numeric frequency. SWP delivery reliability is calculated using CALSIM II, a computer model jointly developed by DWR and Reclamation, which simulates operation of the CVP/SWP system based upon 82 years of historic data. The annual amounts of SWP water deliveries are ranked from smallest to largest and a probability is calculated for each amount. These results are then displayed graphically as an exceedance plot, and presented in tabular format.

The amount of SWP water supply delivered to the SWP Contractors in a given year depends on the demand for the supply, the amount of rainfall, snowpack, runoff, water in storage, pumping capacity from the Delta, and legal constraints on SWP operation. According to DWR, more generally, water

delivery reliability depends on three general factors: (1) the availability of water at the source; (2) the ability to convey water from the source to the desired point of delivery; and (3) the magnitude of demand for the water.

Availability of Source Water. As to availability of source water, the factors of uncertainty include the inherent annual variable location, timing, amount, and form of precipitation in California. The second source of uncertainty is due to global climate change. Current literature suggests that global warming is likely to significantly impact the hydrological cycle, changing California's precipitation pattern and amount from that shown by the historical record (climate change is discussed in greater detail below). According to DWR, there is evidence that some changes have already occurred, such as an earlier beginning of snowmelt in the Sierras, an increase in water runoff as a fraction of the total runoff, and an increase in winter flooding frequency. More variability in rainfall, wetter at times and drier at times, would place more stress on the reliability of existing flood management and water supply systems, such as the SWP.

SWP supplies are calculated by multiplying MWD's Table A amount of 1.91 million af by percentages of average deliveries projected to be available (63.45 percent in 2010, 64.20 percent in 2015, 64.95 percent in 2020, 65.70 percent in 2025, and 66 percent in 2030), derived from DWR's Final State Water Project Delivery Reliability Report, 2007 (August 2008). SWP supplies projected to be available in a single-dry year (1977 is used as an example of the worst-case single-dry year) are 6.15 percent in 2010, 6.40 percent in 2015, 6.65 percent in 2020, 6.90 percent in 2025, and 7.0 percent in 2030. Deliveries projected to be available in the event of a worst case four-year drought (similar to the hydrologic conditions of 1931-1934) are 34.55 percent in 2010, 33.80 percent in 2015, 33.05 percent in 2020, 32.30 percent in 2025, and 32.00 percent in 2030.

Ability to Convey Source Water. As to the ability to convey source water to the desired point of availability, DWR reports that an uncertainty factor exists with respect to SWP operations, because they are closely regulated by Delta water quality standards established by the State Water Resources Control Board and set forth in Water Rights Decision 1641. DWR also reports other factors of uncertainty due to the continuing unexplained decline in many pelagic (open water) fish species, including the Delta smelt since the early 2000s, and the legal challenges to SWP operation and ongoing planning activities related to the Delta. Other uncertainties include future sea level rise associated with global climate change, which could increase salinity in the Delta and the risk of interruptions in SWP diversions from the Delta due to levee failures. The referenced litigation challenges are described in more detail below.

Demand for System Water. As to estimating future demand for SWP water, DWR has identified uncertainty factors, including population growth, water conservation, recycling efforts, other supply

sources, and global climate change. In addition to the above-identified factors affecting water delivery reliability, DWR has reported other limitations and assumptions, such as changes in the way water is conveyed from the Delta, or operating rules to protect the delta smelt, or present weather conditions compared to those between 1922 and 2003,[13] all of which are explained in the *State Water Project Delivery Reliability Report 2007*. This report has also identified the status of four major concurrent Delta planning efforts that are underway with objectives related to providing a sustainable Delta over the long-term: the Delta Vision, Delta Risk Management Strategy, CALFED Ecosystem Restoration Program Conservation Strategy, and Bay-Delta Conservation Plan. According to DWR, each planning effort could affect SWP and CVP operations in the Delta, which could, in turn, affect water delivery reliability. Each is explained in detail in the *Final State Water Project Delivery Reliability Report 2007*.

Environmental Concerns and Litigation

Future SWP deliveries are expected to be impacted by two significant factors. The first is climate change, which is altering hydrologic conditions in California. The second is significant restrictions on SWP operations (e.g., pumping), which would be carried out in accordance with federal and state court actions such as those intended to protect Delta smelt (*Hypomesus transpacificus*), a state-listed and federally listed threatened fish species.

Climate Change

A topic of growing concern for water planners and managers is global climate change and the potential impacts it could have on California's future water supplies. DWR's *2005 California Water Plan Update* contains the first-ever assessment of such potential impacts in a California Water Plan. This plan lists the potential impacts of global climate change, based on more than a decade of scientific studies on the subject.

Changes in Sierra snowpack patterns (the source of the SWP's water supply in Lake Oroville), hydrologic patterns, sea level, rainfall intensity, and statewide water demands are all possible should global climate change prove to be increasing through time. The California Climate Action Team, made up of representatives from several state agencies including the California Environmental Protection Agency and the Resources Agency, issued a *Report to Governor Schwarzenegger and the Legislature* in March 2006 that evaluated the impacts of climate change on the state and examined adaptation strategies that would best prepare the state to respond to the adverse consequences of climate change. The report indicated that water supply would be primarily affected by decreased snowpack in the Sierra Nevada and changing

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13 State of California, The Resources Agency, Department of Water Resources. August 2008. The State Water Project Delivery Reliability Report 2007, p. 20-23.

melt patterns. The Sierra Nevada provides natural water storage roughly equal to half the storage capacity in the state's man-made reservoirs. By the 2035 through 2064 period, snowpack in the Sierra Nevada could decrease by 10 to 40 percent. By the end of the century, the loss could be as much as 90 percent if temperatures rise to the upper estimated temperature range. Increasing temperatures would also cause the snowpack to melt earlier in the year. The potential storage loss would depend on whether reservoirs can be managed to capture earlier snowmelt at the risk of losing flood control capacity.

Computer models (such as CALVIN) have been developed to show water planners what types of effect climate change could have on the water supply. DWR has committed to continue to update and refine these models based on ongoing scientific data collection, and to incorporate this information into future California Water Plans, so that agencies like the Walnut Valley Water District and MWD can plan accordingly.

DWR's *2007 Final State Water Project Delivery Reliability Report* also addresses global climate change, noting that until the impacts of climate change on precipitation and runoff are better quantified, future weather patterns are usually assumed to be similar to those of the past. DWR has also acknowledged that this assumption has an inherent uncertainty, especially given the evolving information on the potential effects of global climate change, and has indicated that as information regarding global climate change becomes better defined, it will be helpful in guiding the development of statewide strategies for the future management and development of water resources facilities, including the SWP. The California Climate Action Team's *Report to Governor Schwarzenegger and the Legislature* states that strategic investments in measures tied to water energy intensity would substantially reduce climate change emissions. According to the Report, approximately 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute, and use water and wastewater in the state. Increasing water use efficiency or reducing demand has trickle-down benefits, by reducing the energy demand associated with the conveyance, treatment, or distribution of that water. The public review draft of the DWR 2009 Water Plan Update includes increased agricultural and urban water use efficiency as key components of the plan. Urban water use efficiency measures include water efficiency standards for appliances, irrigation and landscaping restrictions, community and public outreach, other DWR legislation, and adopting the Governor's recommendations with the goal of reducing statewide per capita water use by 20 percent by 2020.

Watershed and Wanger Decisions– Including Smelt Biological Opinion

In addition to climate change, various court actions have serious implications on imported SWP water supplies throughout California. In February 2005, the USFWS issued a Biological Opinion, determining that the operations and criteria for the CVP and SWP would not result in jeopardy to the Delta smelt. In

May 2005, the Natural Resources Defense Council (NRDC) and others filed a supplemental complaint in federal court against the Secretary of the Interior and the Director of USFWS, challenging the adequacy of the 2005 Biological Opinion. In June 2006, plaintiffs filed their motion for summary judgment. In July 2006, in light of new information, the U.S. Bureau of Reclamation (Bureau), operator of the CVP, requested that USFWS reinitiate consultation on the operations plan and criteria for the CVP. Notwithstanding the request for reinitiating consultation, the parties proceeded with briefing their cross-motions for summary judgment and, in May 2007, the U.S. District Court for the Eastern District, the Honorable Oliver W. Wanger, presiding, found that the 2005 Biological Opinion was inadequate and that the no-jeopardy determination was arbitrary, capricious, and contrary to the law.

Additionally, in October 2006, plaintiff, Watershed Enforcers, a project of the California Sportfishing Protection Alliance, filed a lawsuit in Alameda County Superior Court alleging that DWR was not in compliance with the California Endangered Species Act (CESA) and did not have the required state incidental take permit to protect the Delta smelt as part of DWR's pumping operations at the Harvey O. Banks Pumping Plant located near the town of Tracy (*Watershed Enforcers, et al. v. California Department of Water Resources, et al.* Alameda County Superior Court No. RG06292124 [*Watershed* decision]). In April 2007, the court agreed with the plaintiff and ordered a shutdown of pumping from the Delta if appropriate permits could not be obtained in 60 days. In May 2007, DWR filed an appeal of the trial court's decision, which automatically stayed the decision pending the outcome of the appeal. At the same time, DWR entered into a Memorandum of Understanding with California Department of Fish and Game (CDFG) to jointly work with the appropriate federal agencies to develop a federal Biological Opinion that complies with CESA. During preparation of the new Biological Opinion, DWR committed itself to actions related to protecting the Delta smelt and other species through adaptive management provisions. Upon completion of this effort, DWR plans to submit a request to CDFG for a consistency determination under CESA that would allow for incidental take based on the new federal Biological Opinion.

On August 31, 2007, Judge Wanger announced an initial ruling, which outlined an operational plan calling for reductions in water supplies to protect the Delta smelt. The Court specified that reduced operations would last until September 2008, while federal agencies develop a revised Biological Opinion for Delta smelt that will ensure the SWP's and CVP's compliance with the requirements of the federal ESA.

In December 2007, Judge Wanger issued a final court order, which curtailed Delta pumping to protect the Delta smelt. The range of reduced operations is consistent with earlier estimates made by DWR following the Court's initial ruling in August 2007. Following Judge Wanger's final ruling, DWR performed additional modeling and analysis of the impacts of the *Wanger* decision on Delta pumping. According to DWR, the final ruling would primarily affect export pumping between January and June of each year,

when juvenile Delta smelt are at greatest risk of entrainment in pumps. Further, DWR has stated that the actual impact on SWP water supply will depend on a number of factors, including the locations where adult smelt spawn and offspring hatch, levels of precipitation for the year, and water temperatures affecting how quickly the fish migrate.

On December 15, 2008, the final biological opinion for Delta Smelt was issued by the USFWS.[14] The 2008 opinion continues restrictions on SWP and federal CVP operations that have been in place under the 2007 court order. However, it imposes new requirements for Delta outflows under certain conditions and requires increased reservoir releases in the fall of some years to reduce salinity.[15] DWR is in the process of determining what effect the new opinion will have on SWP supplies.

The *Watershed* and *Wanger* decisions have serious implications on imported SWP/CVP water supplies throughout California. There have been short-term effects related to issues presented in the *Watershed* and *Wanger* decisions. For example, pumping operations were shut down for approximately nine days in June 2007 due to concerns over the declining number of Delta smelt. DWR then operated the pumps at limited levels for several weeks while waiting for the smelt to migrate to cooler waters, and resumed normal operations in July 2007. There is also concern that the remedy adopted by the District Court could ultimately become part of the conditions in the new incidental take permit. These concerns, if they materialize, could limit the percentage of SWP water that can be delivered to SWP Contractors. If such remedies are not ultimately part of the incidental take permit, the permit itself may contain conditions that would lower the percentage of SWP water made available for delivery to Southern California. As previously stated, DWR is presently in the process of determining what effect the new biological opinion will have on future SWP supplies.

Salmon Biological Opinion

On June 4, 2009, the National Oceanic and Atmospheric Administration (NOAA) released its final biological opinion that finds the water pumping operations in California's Central Valley by the federal Bureau of Reclamation (bureau) jeopardize the continued existence of several threatened and endangered species under the jurisdiction of NOAA's Fisheries Service. The bureau has provisionally accepted NOAA's recommended changes to its water pumping operations, and said it will begin to implement its near-term elements as it carefully evaluates the overall opinion. Federal biologists and hydrologists

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14 California Department of Water Resources. 2008. Summary: Final State Water Project Delivery Reliability Report, 2007. Bay-Delta Office of California Department of Water Resources. August 28, 2008.

15 For additional information regarding the 2008 biological opinion, see the DWR Web site (http://www.water.ca.gov/news/) and U.S. Fish and Wildlife Web site http://www.fws.gov/sacramento /delta_update.htm.

concluded that current water pumping operations in the Federal Central Valley Project and the California SWP should be changed to ensure survival of winter and spring-run Chinook salmon, Central Valley steelhead, the southern population of North American green sturgeon and Southern Resident killer whales, which rely on Chinook salmon runs for food. Two independent peer review panels were conducted to ensure the opinion is solidly grounded in the best available science. The package was peer reviewed by the CalFed Independent Science Board and the Center for Independent Experts. This is further discussed in this section, under **Demand for System Water.**

As part of the final opinion, NOAA's Fisheries Service has provided a number of ways the bureau can operate the water system to benefit the species, including increasing the cold water storage and flow rates. Such methods will enhance egg incubation and juvenile fish rearing, as well as improve the spawning habitat and the downstream migration of juvenile fish. NOAA estimates that changing water operations will impact an estimated 5 to 7 percent of the available annual water on average moved by the federal and state pumps, or about 330,000 afy. Agricultural water use in California is roughly 30 million afy. NOAA estimates that water operations will not be affected by the opinion immediately and will be tiered to water year type. The opinion includes exception procedures for drought and health and safety issues. In addition, the opinion calls for the bureau to develop a genetics management plan and an acoustic tagging program to evaluate the effectiveness of the actions and pilot passage programs at Folsom and Shasta reservoirs to reintroduce fish to historic habitat. The American Recovery and Reinvestment Act will mitigate some costs resulting from the opinion's recommended actions. The Department of the Interior identified $109 million to construct a Red Bluff Pumping Plant that will allow the old Red Bluff Diversion Dam to be operated in a "gates out" position to allow salmon and green sturgeon unimpeded passage. In addition, the Act contains $26 million to restore Battle Creek, a salmon tributary to the Sacramento River. The water projects included in the opinion are Shasta Dam at the upper headwaters of the Sacramento River, Folsom and Nimbus dams on the American River, and New Melones Dam on the Stanislaus River. The opinion also covers the state and federal export facilities in the Delta, the Nimbus hatchery on the American River, and the operations of diversion structures, including the Red Bluff Diversion Dam on the mainstem Sacramento and the Delta Cross Channel gates in the Delta. The bureau initiated the formal phase of consultation in May 2008 and then cooperated with NOAA's Fisheries Service throughout the development of the biological opinion and alternative actions in coordination with the U.S. Fish and Wildlife Service and the California Departments of Water Resources and Fish and Game. A copy of the final biological opinion and alternative actions may be found at http://swr.nmfs.noaa.gov/ocap.htm.

The Department of Water Resources (DWR) responded to this biological opinion intended to protect salmon and several other species. The "Biological Opinion on salmon reaffirms the need for a comprehensive solution to the water and environmental conflicts in the Delta," said DWR Director Lester A. Snow. "The new Opinion, which could reduce Delta export on average by about 300,000 to 500,000 af, further chips away at our ability to provide a reliable water supply for California. A multi-species approach, as envisioned in the Bay Delta Conservation Plan, is the best approach to achieve habitat and species conservation and a reliable water supply." As indicated above, NOAA Fisheries calculates that its biological opinion that addresses salmon, steelhead and green sturgeon will reduce by 5 to 7 percent combined the amount of water state and federal projects will be able to deliver from the Delta to the San Francisco Bay Area, San Joaquin Valley, Central Coast and Southern California. DWR's initial estimates show the average year impacts closer to 10 percent. That is in addition to current pumping restrictions imposed by biological opinions to protect Delta smelt and other species.

DWR is presently in the process of determining what effect the new biological opinion will have on future SWP supplies. DWR will also continue to work with the U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, NMFS, California Fish and Game and others on the BDCP steering committee to develop a collaborative habitat conservation plan under the Endangered Species Act and the California Natural Community Conservation Planning Act, with the goal of creating a long-term strategy for Delta sustainability that complies with state and federal environmental laws.

Monterey Agreement Litigation

In September 2000, the Third District Court of Appeal for the State of California issued its decision in *Planning and Conservation League; Citizens Planning Association of Santa Barbara County and Plumas County Flood Control District vs. California Department of Water Resources and Central Coast Water Authority*. This case was an appeal of (1) a challenge to the selection of the Central Coast Water Authority as Lead Agency with respect to the preparation of environmental documentation for certain amendments to the State Water Contract (the "Monterey Agreement," which reflects the settlement of disputes regarding the allocation of SWP water), (2) the adequacy of the environmental documentation prepared with respect to the Monterey Agreement, and (3) the transfer by the DWR of the Kern County Water Bank from the state to the Kern County Water Agency. The Court of Appeal agreed with the trial court that the DWR should have been the Lead Agency with respect to the preparation of environmental documentation for the amendments to the State Water Contract. However, it reversed the trial court's holding that the environmental documentation was adequate. The Court of Appeal held that the environmental documentation was defective in failing to analyze the environmental effects of the Monterey Agreement's

elimination of the permanent shortage provisions of the State Water Contract.[16] However, no SWP contracts were set aside.

MWD intervened in the case in order to fully participate in the issues before the trial court. The parties entered confidential mediation proceedings in the spring of 2001 and negotiated a settlement agreement in the fall of 2002. All parties to the litigation and all 29 agencies that have long-term contracts for water service from the DWR have executed the settlement agreement, which allows continued operation of the SWP under the Monterey Agreement principles while a new environmental impact report is being prepared. A draft EIR was issued for public review in October 2007. The public comment period has concluded and the final EIR remains in preparation as of June 2009.[17]

Water Supply Allocation Plan (WSAP)

As a result of the concerns regarding availability of SWP supplies due to legal issues and the ongoing critically dry conditions on the SWP system, MWD began a process in July 2007 to develop an approved plan and formula for allocating supplies to its member agencies. As a result of that process, MWD staff developed a proposed Water Supply Allocation Plan (WSAP), which was approved by its Board of Directors in February 2008. The WSAP provides a methodology for determining the reduction of imported water supplies to each member agency and establishes a penalty rate structure should an agency exceed its allocation. Ultimately, the WSAP will form the basis for an urban water shortage contingency analysis and will be incorporated into MWD's Regional UWMP.

Based upon DWR's SWP allocation projections at its April 14, 2009, meeting, the MWD Board of Directors declared a WSAP Level 2 Regional Shortage from July 1, 2009, through June 30, 2010, meaning at least a 10 percent reduction in demand for imported water from its member agencies.[18] As a result of this declaration, MWD adopted a Level 2 Water Supply Alert, issuing a regional call for cities, counties, member agencies, and retail water agencies to implement extraordinary conservation by adopting and enforcing drought ordinances and implementing other measures to reduce the use of storage reserves.[19] Based on MWD's WSAP, imported water supplies available to the Water District will be reduced during

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16 Metropolitan Water District of Southern California. 2008. Appendix A, Attached to official statement dated July 10, 2008, for $79,045,000 The Metropolitan Water District of Southern California Water Revenue Refunding Bonds, 2008 Series C.

17 Ibid.

18 Level 2 refers to MWD's request for "cities, counties, member agencies and retail water agencies to implement extraordinary conservation through drought ordinances and other measures to mitigate use of storage reserves." (Metropolitan Water District of Southern California, Board Meeting Bulletin 8-9 (Revised), p. 1.)

19 http://www.mwdh2o.com/mwdh2o/pages/yourwater/wateralert/levels.html

the allocation period. As a result, the Water District will be implementing an aggressive public education campaign to encourage its customers to conserve water.

Future Water Supply and Demand

Wholesale Water Supply

As shown in **Table 5.11-1, Water District Demand Projections Provided to Three Valleys**, the amount of water the Water District will purchase from Three Valleys, the wholesale provider for the Water District, will increase in future years, reaching 28,914 af by 2030. The table also shows that the Three Valleys water supply, including existing and planned sources, is expected to increase to 35,245 af by 2030.

The projected dependability of the Three Valleys water supply between 2010 and 2030, expressed as a percentage of normal water year supply quantities available to the Water District, ranges from 92 percent to 109 percent. In other words, little fluctuation in availability is projected, with only minor shortfalls (down to 92 percent of normal year supplies) or surpluses (as much as 109 percent of normal year supplies) year to year. This is because, irrespective of inconsistencies in individual supply sources, the diversity and flexibility of sources and the regional storage capacity available are expected to offset the potential for deficits. Factors potentially resulting in fluctuations in future water supply from MWD, and thus Three Valleys, include legal, environmental, climatic, and water quality factors associated with the Colorado River water supply, reliability of SWP water, and/or in-basin storage. Therefore, future water availability from Three Valleys is expected to be adequate to meet the Water District's projected demand.

Table 5.11-1
Water District Demand Projections Provided to Three Valleys (afy)

	2010	2015	2020	2025	2030
Water District Demand Projections Provided to Three Valleys	25,739	26,302	26,616	26,764	28,914
Three Valleys Supply - Existing Sources	33,400	31,983	33,810	32,166	32,845
Three Valleys Supply - Planned Sources	563	2,288	2,488	2,358	2,400
Total Three Valleys Supply	33,963	34,271	36,298	34,524	35,245

Source: Walnut Valley Water District, "Water Supply Assessment – The Canyon Residences," 2009.

Recycled Water

Recycled water will be used to offset some of the increased future water needs of the Water District. As previously stated, the Water District currently utilizes impaired groundwater from the Puente and Spadra Basins for its recycled water system. Projected groundwater amounts to be pumped from these basins are shown in **Table 5.11-2, Groundwater Projected to be Pumped for Recycled Water System**. The projected amount of groundwater to be pumped by the Water District from the Puente Basin for the recycled water system use is expected to increase to 700 afy by the year 2010. The projected amount of groundwater to be pumped from the Spadra Basin is expected to increase to 484 afy by the year 2010. From the year 2010 through the year 2030, the projected amount of groundwater pumped from the Puente and Spadra Basins is expected to remain steady at 700 afy and 484 afy, respectively.

Table 5.11-2
Groundwater Projected to be Pumped for Recycled Water System

	2010	2015	2020	2025	2030
Puente Basin	700	700	700	700	700
Spadra Basin	484	484	484	484	484
Total Groundwater	1,184	1,184	1,184	1,184	1,184
Percent of Recycled Water Supply (%)	40.6	30.7	27.7	26.0	25.2
Percent of Total Water Supply (%)	4.1	3.9	3.8	3.8	3.5

Source: Walnut Valley Water District, "Water Supply Assessment – The Canyon Residences," 2009.

This groundwater supply is expected to make up 40.6 percent of the recycled water supply in the year 2010, and decrease to 25.2 percent of the recycled water supply by the year 2030. Although the amounts projected to be pumped are constant through 2030, they represent a decreasing percentage of the recycled water supply and total water supply due to the projected increase in those supplies.

Total recycled water supplies are expected to increase by about 1,785 afy from 2,915 af in 2010 to 4,700 af in 2030. The Water District currently seeks to obtain recycled water from the LACSD's San Jose Creek WRP in the City of Whittier, approximately 10 miles west of the Water District's service area. Recycled water from this treatment plant would be suitable for groundwater replenishment, irrigation, and other non-potable uses. Recycled water from the San Jose Creek Water Reclamation Plant, together with recycled water from the Pomona WRP, is expected to virtually eliminate the need to use potable water in the recycled water system, except during an emergency outage.

Local groundwater supplies are less affected by single-year or multiple-year droughts than other water sources; therefore, potential yields during drought conditions are expected to be the same as those during normal years. Use of local groundwater supplies as a supplemental source to meet the Water District's recycled water demand is expected to offset projected average demands from proposed development in the Water District's service area through 2010.

Water Conservation

The Water District has implemented water conservation programs to reduce water demand, as well as to increase the public's awareness of water conservation. The Water District is signatory to the September 1991 Memorandum of Understanding (MOU) regarding urban water conservation in California and is also an active member of the California Urban Water Conservation Council (CUWCC). Signatories must submit annual reports to the CUWCC that outline progress towards implementing Best Management Practices (BMPs) for water conservation. The Water District submitted its first annual report to the CUWCC in September 1992 and has submitted subsequent reports. Most recently, in December 2008, the Water District submitted the 2007 and 2008 BMP Reports to the CUWCC.

Water conservation programs implemented by the Water District to reduce overall water demand and meet BMP requirements include indoor water surveys for single-family and multi-family accounts and outdoor water surveys for single-family accounts; survey programs for commercial, industrial, and institutional accounts; distribution of rebate money to commercial, industrial, and institutional accounts for replacement of inefficient fixtures; distribution of low-flow showerhead and toilet tank displacement devices; system water audits; support of a water conservation coordinator to carry out conservation programs; school education programs; and public information programs. Public information programs include newsletters, booths at public events, water bills with usage comparisons and billing inserts, display of water conservation advertisements, residential landscape and irrigation training classes; and an annual distribution of high-efficiency toilets to qualified customers.

In addition, MWD sponsors a program providing Water District customers rebates on high-efficiency washing machines, high efficiency toilets, smart irrigation controllers, rotating spray nozzles and synthetic turf. MWD also began a Public Sector Program in 2007 geared specifically towards providing funds to public agencies in order to improve water efficiency throughout their facilities. The Water District has been working with public agencies within its service area to participate in MWD's program and has also developed a similar program to match funds awarded by MWD for the purchase and installation of water-efficient devices.

Although the amount of water demanded by the proposed project is already planned and accounted for in the growth projections included in the Water District's UWMP, in light of the current water supply conditions, and the Water District's dependence on imported water, the Water District is considering a requirement that all new development assist the Water District in ensuring that sources of water are available to meet its future needs. The Water District has historically required developers to pay for the installation of facilities required to provide service to proposed projects. The Water District may also require that project applicants fund their fair shares of projects or programs to offset or reduce existing potable water demands, such as conservation measures or recycled water system expansion. The Water District is also considering the establishment of a Water Supply Acquisition charge, based on a proposed project's gross acreage and demand factors, which would provide funding for implementation of these projects and programs, or to allow the Water District to obtain other sources of water to meet demands of new development.

Normal, Single-Dry Year, and Multiple-Dry Year Planning

The following summarizes the existing and planned supplies during normal, single-dry, and multiple-dry years. A basis year for water supply data is selected for each of these scenarios to account for seasonal or climatic variation and serve as a source of data for projections. For the Water District, the average hydrologic conditions of 1922 to 1991 serve as the basis for a normal year and 1977 serves as the basis year for the single-dry year. The Water District uses the hydrologic conditions of the years 1990–1992 serve as the basis for the multiple-dry years.

Table 5.11-3, Projected Normal Year Supply and Demand summarizes local and imported water supplies available to meet demands between 2010 and 2030 under normal year conditions. As shown in the table, excess water supplies exist during each five-year increment between 2010 and 2030.

Table 5.11-3
Projected Normal Year Supply and Demand (afy)

Water Use	2010	2015	2020	2025	2030
Wholesaler Supply (MWD)	33,962	34,270	36,928	34,524	35,245
Local Supply					
Ground Water	1,184	1,184	1,184	1,184	1,184
Recycled Water	1,731	2,676	3,096	3,366	3,516
Total Supply	**36,877**	**38,130**	**40,578**	**39,074**	**39,945**
Total Demand	**28,754**	**30,264**	**30,999**	**31,417**	**33,726**
Excess Supply	**8,123**	**7,866**	**9,579**	**7,657**	**6,219**

Source: Walnut Valley Water District, "Water Supply Assessment – The Canyon Residences," 2009.

Table 5.11-4, Projected Single-Dry Year Supply and Demand, summarizes the existing and planned supplies available to meet the Water District's demands under single-dry year conditions. As shown in the table, excess water supplies exist during each five-year increment between 2010 and 2030.

Table 5.11-4
Projected Single-Dry Year Supply and Demand (afy)

Water Use	2010	2015	2020	2025	2030
Wholesaler Supply (MWD)	35,290	37,522	36,473	34,252	34,954
Local Supply					
Ground Water	1,184	1,184	1,184	1,184	1,184
Recycled Water	1,731	2,676	3,096	3,366	3,516
Total Supply	**38,205**	**41,382**	**40,753**	**38,802**	**39,654**
Total Demand	**31,629**	**33,290**	**34,099**	**34,559**	**37,099**
Excess Supply	**6,576**	**8,092**	**6,654**	**4,243**	**2,555**

Source: Walnut Valley Water District, "Water Supply Assessment – The Canyon Residences," 2009.

Table 5.11-5, Projected Multiple-Dry Year Supply and Demand, summarizes the existing and planned supplies available to meet the Water District's demands during multiple-dry years. As shown in the table, excess water supplies exist during each five-year increment between 2010 and 2030.

Table 5.11-5
Projected Multiple-Dry Year Supply and Demand (afy)

Water Use	2010	2015	2020	2025	2030
Wholesaler Supply (MWD)	31,741	31,933	32,125	32,317	32,509
Local Supply					
Ground Water	797	894	990	1,087	1,184
Recycled Water	1,306	1,412	1,519	1,625	1,731
Total Supply	**33,844**	**34,239**	**34,634**	**35,029**	**35,424**
Total Demand	**29,555**	**29,929**	**30,304**	**30,679**	**31,054**
Excess Supply	**4,289**	**4,310**	**4,330**	**4,350**	**4,370**

Source: Walnut Valley Water District, "Water Supply Assessment – The Canyon Residences," 2009.

Water Service to the Project Site

The Project Site comprises two parcels and is developed with Southlands Christian Church and the Southlands Christian Schools, which spans grades Pre-K through 12. Nine single-story buildings, two paved surface parking lots, and an athletic field currently occupy the site. Approximately 70 percent (11 acres) of the Project Site is currently developed with buildings or pavement, and approximately 30 percent (4.7 acres) is unpaved.

Based on data provided by the Water District, existing uses on the Project Site are estimated to consume approximately 574,000 cubic feet of water per year over the last 18 years (from 1990 through 2007), which equates to 4,305,000 gallons of water per year or 13.21 afy. Water service to the Project Site is presently provided by a 14-inch potable water line along Brea Canyon Cutoff Road. Several laterals presently extend from this line to the structures on the Project Site.

REGULATORY FRAMEWORK

Federal Level

Safe Drinking Water Act

The primary federal legislation concerning domestic water supply is the Safe Drinking Water Act (SDWA) of 1974. The SDWA provides the U.S. Environmental Protection Agency (EPA) with the authority to regulate the quality of water supplies. The SDWA required EPA to set interim primary drinking water regulations that establish recommended maximum contamination levels (RMCLs) for each contaminant that may have an adverse effect on human health. Since promulgation of the National Primary Drinking Water Regulations (NPDWR), EPA has developed additional drinking water quality standards for volatile organic chemicals, fluoride, surface water treatment, total coliform bacteria, lead, copper, synthetic organic contaminants, and inorganic contaminants. All domestic water supplies are required to meet these standards.

State Level

California Administrative Code

Title 20 (Sections 1604 and 1606) and Title 24 (Sections 2-5307 and 2-5352) of the California Administrative Code (CAC) establish efficiency standards (i.e., maximum flow rates) for all new showerheads, lavatory faucets, and sink faucets. These regulations also prohibit the sale of fixtures that do not comply with the efficiency standards; prohibit the installation of fixtures unless the manufacturer has certified compliance with the standards; and address requirements for the insulation of hot water pipes, which helps reduce

the quantity of water drained before hot water reaches fixtures. Other applicable state water conservation laws include the Health and Safety Codes.

Senate Bills 610 and 221

State Senate Bills (SB) 610 and 221 were adopted in 2001. SB 610 and 221 require each lead agency to obtain an assessment from its local water supplier to determine if sufficient water supply is available to serve a proposed development in addition to the existing demand. SB 610 applies at the time an EIR is prepared; SB 221 applies at the time a Tentative Tract Map or other related project actions are approved. As defined by Public Resources Code 10910, a city or county determines if the most recently adopted urban water management plan for its jurisdiction has accounted for the projected water demand of a proposed project. If the urban water management plan did not account for the water demand associated with a proposed project, the water supply assessment for the project must determine if the water supplier's total projected water supplies available during normal, single-dry and multiple-dry water years during a 20-year projection would meet the projected water demand associated with the proposed project, in addition to the water systems' existing uses.

State Executive Order S-06-08

In a recent effort to coordinate water conservation efforts at the state level, Governor Schwarzenegger signed Executive Order S-06-08. The Executive Order comes in response to two straight years of below-average rainfall and very low snowmelt runoff. [20] As a result, the Governor proclaimed a statewide drought. The Executive Order took effect on June 4, 2008 and addresses water shortages that have forced numerous local California communities to mandate water conservation or rationing programs. The lack of water has created other problems, such as extreme fire danger due to dry conditions, economic harm to urban and rural communities, loss of crops and the potential to degrade water quality in some regions.[21] The Executive Order directs the DWR to take the following actions:

- Facilitate water transfers to respond to emergency shortages across the state
- Work with local water districts and agencies to improve local coordination
- Help local water districts and agencies improve water efficiency and conservation
- Coordinate with other state and federal agencies and departments to assist water suppliers, identify risks to water supply, and help farmers suffering losses
- Expedite existing grant programs to help local water districts and agencies conserve

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20 See Office of the Governor Press Release, "Governor Schwarzenegger Proclaims Drought and Orders Immediate Action to Address Situation" (GAAS:307:08), June 4, 2008, available at http://gov.ca.gov/index.php?/print-version/press-release/9796/.

21 Governor Schwarzenegger Proclaims Drought and Orders Immediate Action to Address Situation.

The Executive Order also encourages local water districts and agencies to promote water conservation. They are encouraged to work cooperatively on the regional and state level to take aggressive, immediate action to reduce water consumption locally and regionally for the remainder of 2008 and prepare for potential worsening water conditions in 2009. As part of the Executive Order, DWR will work with locals to conduct an aggressive water conservation and outreach campaign.[22]

Furthermore, on February 27, 2009, Governor Schwarzenegger declared a state of emergency due to continued drought. The Governor's order directs various state departments to engage in activity to provide assistance to people and communities impacted by the drought. The proclamation

- requests all urban water users immediately increase their water conservation activities to reduce their individual water use by 20 percent;
- directs the DWR to expedite water transfers and related efforts by water users and suppliers;
- directs DWR to offer technical assistance to agricultural water suppliers and agricultural water users, including information on managing water supplies to minimize economic impacts and implementing efficient water management practices;
- directs DWR to implement short-term efforts to protect water quality or water supply, such as the installation of temporary barriers in the Delta or temporary water supply connections;
- directs the Labor and Workforce Development Agency to assist the labor market, including job training and financial assistance;
- directs DWR to join with other appropriate agencies to launch a statewide water conservation campaign calling for all Californians to immediately decrease their water use; and
- directs state agencies to immediately implement a water use reduction plan and take immediate water conservation actions and requests that federal and local agencies also implement water use reduction plans for facilities within their control.

According to the proclamation, if the emergency conditions have not been sufficiently mitigated, the Governor will consider additional steps. These could include the institution of mandatory water rationing and mandatory reductions in water use; reoperation of major reservoirs in the state to minimize impacts of the drought; additional regulatory relief or permit streamlining as allowed under the Emergency Services Act; and other actions necessary to prevent, remedy or mitigate the effects of the extreme drought conditions.

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22 Ibid.

Local Level

County of Los Angeles Green Building Ordinance

The County of Los Angeles adopted the Green Building Ordinance on November 18, 2008. The purpose of the ordinance is to establish green building techniques for the construction of new buildings, which are intended to conserve water, energy, and natural resources; divert waste from landfills; minimize impacts on existing infrastructure; and promote a healthier environment. Under this ordinance all residential projects obtaining a building permit on or after January 1, 2009, through January 1, 2010, must comply with the County Green Building Ordinance. After January 1, 2010, all residential projects containing five or more units must comply with the Green Building Standards and GreenPoint Rated (GPR) standards, California Green Builder (CGB) standards, or Leadership in Energy and Environmental Design Green Building Rating System (LEED) standards. All new residential projects containing five or more units must install a smart irrigation controller for any area of the lot that is either landscaped or designated for future landscaping; comply with the *Drought Tolerant Landscape Guidelines* required by the County of Los Angeles Green Building Ordinance, which establishes minimum standards for the design and installation of landscaping using drought-tolerant and native plants, and install high-efficiency toilets when tank-type toilets are installed.

ENVIRONMENTAL IMPACTS

Project Improvements

The Project would involve the construction of 775 new for-lease residential units. Buildout year for the proposed Project is estimated to be 2012. This new use would replace the nine existing stand-alone and interconnected Southlands Christian Church and Southlands Christian Schools buildings totaling approximately 63,226 square feet.

An on-site water distribution network would be constructed to the standards of the County of Los Angeles Department of Public Works. This system would connect to the existing 14-inch water line, which currently provides water service to the Project Site, located west of the Project Site along Brea Canyon Cutoff Road.

The Project would conserve water through the application of green building design techniques and compliance with the Los Angeles County Green Building Program, which is designed to improve energy and water efficiency, reduce the County's carbon footprint and increase environmental responsibility. The proposed Project would also support water conservation by incorporating environmentally sensitive and sustainable design features so that the Project may qualify for certification under the *Build It Green*

program, a collection of development standards developed by a non-profit collaborative dedicated to promoting sustainable, energy-efficient development in California.[23] These features include the reduction of water consumption through the use of drought-tolerant plants and high-efficiency irrigation systems, and the installation of 2.0-gallon-per-minute shower heads for bathrooms, flow limiters on all faucets, and high-efficiency toilets.

State of California Senate Bill (SB) 610, effective January 1, 2002, amending Sections 10910–10915 of the State Water Code, requires counties and cities to consider the availability of adequate water supplies for residential development with more than 500 dwelling units. As the Project proposes 775 units, a Water Supply Assessment was performed in accordance with SB 610 and is contained in **Appendix 5.11**.

Thresholds of Significance

Based on the County's Initial Study Checklist and Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, impacts related to water are considered significant based on the following:

- Is the project site in an area known to have an inadequate public water supply to meet domestic needs or to have an inadequate ground water supply and proposes water wells?
- Would the project require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- Is the project site in an area known to have an inadequate water supply and/or pressure to meet fire fighting needs?

Impact Analysis

Threshold 1: **Is the project site in an area known to have an inadequate public water supply to meet domestic needs or to have an inadequate ground water supply and proposes water wells?**

Threshold 2: **Would the Project require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

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23 Build It Green. *Multifamily GreenPoint Rated Checklist v1*, GreenPoint Rated Checklists and Manuals. May 2008. http://www.builditgreen.org/guidelines.

Construction Impacts

Water would be used during grading activities, primarily to reduce fugitive dust and to aid in earth compaction. Water consumption rates for construction-related activities have been developed from historical usage reports, and are estimated to be approximately 0.89 acre-foot per acre for dry grading techniques. Grading activity would occur across the entire Project Site, which is approximately 15.7 acres. Based on this information, construction watering would require a total of approximately 13.97 af of water spread over approximately three months of grading and excavation. Since construction is a relatively short-term activity, and given that the Water District has adequate supply to accommodate the anticipated water demand during construction, the impact of the Project construction on water services would be less than significant.

Operational Impacts

Public Resources Code section 15155 of the *State CEQA Guidelines* requires Lead Agency consultation with water agencies in order to determine whether or not adequate water exists to serve a proposed project in addition to all existing, planned, and future water needs within the water agency's jurisdiction. Section 15155(a)(1)(A) defines a "water-demand project" as a residential development of more than 500 dwelling units. The Project, which proposes the construction of approximately 775 new residential dwelling units, meets this definition and, therefore, constitutes a "water-demand project." In accordance with Section 15155(b), the County of Los Angeles Department of Regional Planning, which is serving as Lead Agency for the environmental review of this proposed Project, requested a WSA from the Water District, the public water supplier that will serve the Project. The WSA is included as **Appendix 5.11** of this EIR.

The proposed Project's water infrastructure improvements would be determined by the Applicant's engineer based on the County of Los Angeles Department of Building and Safety and applicable building code requirements. Where estimated water requirements for the proposed Project can be served by existing water mains in the adjacent streets, water service would be provided routinely in accordance with the Water District Rules and Regulations. The Project site is in a developed urban area, and the Project would be served by the existing 14-inch water main in Brea Canyon Cutoff Road, which would be routinely serviced by the Water District.

Potable Water Demand

As discussed in the WSA, information obtained by American Utility Management (AUM), a water metering company that has taken water measurements at multi-unit residential buildings built by the same developer and comparable to the proposed Project, the average apartment unit with one occupant

uses approximately 0.11 afy of potable water, while the average apartment unit with two occupants uses approximately 0.17 afy.[24] Based on the 2000 average household size in Census Tract 4033.04, which encompasses the Project site,[25] it is assumed that 2.76 persons on average would occupy each unit, resulting in an estimated potable water demand of approximately 0.23 afy per unit.[26] Since 775 residential units are proposed, estimated potable water demand would be approximately 178.25 afy, as indicated in **Table 5.11-6**, **Project Potable Water Demand**.

As previously discussed, the existing church and school uses on the Project site annually consume an average of 13.21 afy of water. Thus, Project implementation would result in a net increase of approximately 165.04 afy over existing conditions, based on the projected potable water demand of 178.25 afy with Project implementation less the existing 13.21 afy consumed by existing uses to be replaced on the Project Site.

Table 5.11-6
Project Potable Water Demand

Use	Units	Demand Factor	Annual Demand
Proposed			
Multifamily Units	775 du	0.23 afy/du	178.25 afy
Existing			
Southlands Christian Church and Schools	--	--	13.21 afy
Net Demand			**165.04 afy**

Source: Walnut Valley Water District, "Water Supply Assessment – The Canyon Residences," 2009.

As indicated in **Table 5.11-6**, the Project is estimated to result in a gross potable water demand of approximately 178.25 afy and a net increase in demand of approximately 165.04 afy. This number may overestimate actual future Project water demand, since the unit mix includes a high proportion of one-bedroom units (i.e., 401 one-bedroom units, 328 two-bedroom units, and 46 three-bedroom units). Furthermore, a number of design features recommended by the Water District would be incorporated to conserve potable water, as discussed in **Section 3.0, Project Description**. These include the use of reclaimed water for irrigation and drought-tolerant landscaping, and the installation of

24 American Utility Management. Personal communication between Dan Witte at American Utility Management and Kimberly Paperin at Trammell Crow Residential. September 10, 2008.

25 U.S. Census Bureau, "2000 Census, Quick Tables - American Fact Finder for Census Tract 4033.04, Los Angeles County, California," http://factfinder.census.gov. 2008.

26 The average of 0.23 afy per unit was derived by 0.17afy / 2 people = 0.085; 0.085 x 2.76 people = 0.23 afy.

2.0-gallon-per-minute shower heads for bathrooms, flow limiters on all faucets, and high efficiency toilets throughout the Project site.

As shown in **Table 5.11-3**, the Water District's water demand under normal year conditions is projected to be 28,754 af in 2010 and 33,726 af in 2030. Therefore, the Water District projects an increased water demand of 4,972 afy between 2010 and 2030. The Project's anticipated net potable water demand of approximately 165.04 afy falls within the Water District's projected demand increase of 4,972 afy, constituting 3.3 percent of the projected demand. As shown in **Table 5.11-3**, the Water District has sufficient supplies available to meet this projected demand increase. Similarly, as shown in **Tables 5.11-4** and **5.11-5**, the Project's anticipated net potable water demand falls well within the Water District's projected demand increase under single-dry and multiple-dry year conditions, and the Water District has sufficient supplies available to meet the projected demand increase under both scenarios. Project impacts on domestic potable water supply and water facilities would be less than significant.

Recycled Water Demand

Approximately 3.35 acres, or 146,274 square feet, of the Project site would be landscaped. This includes 16,896 square feet of turf grass, 106,461 square feet of landscape plantings in at-grade planters, and 22,917 square feet of landscape plantings in planters above the Podium Building parking area. Plantings would be selected in accordance with the *Drought Tolerant Landscape Guidelines* required by the County of Los Angeles Green Building Ordinance, which requires 75 percent of the plants used within the Project to be drought tolerant. All proposed landscape plants are characterized by "Medium" or "Low" water usage requirements as outlined by the Water Use Classification of Landscape Species (WUCOLS) and the County's *Drought Tolerant Landscape Guidelines*. Additionally, a high-efficiency irrigation system would be installed.

Landscaping associated with the proposed Project is projected to require approximately 11.61 afy for irrigation (9.51 afy for plantings within planters, and 2.1 afy for turf grass).[27] The proposed Project would use recycled water to irrigate on-site landscaping. The landscape water demand factor was calculated using a worksheet developed by the University of California Cooperative Extension and the California Department of Water Sources. The worksheets are provided in "Appendix I, Landscape Water Demand Calculations of the Water Supply Assessment" contained in **Appendix 5.11**.

As discussed above, recycled water supplies available to the Water District are expected to increase by approximately 1,785 afy from 2,915 afy in 2010 to 4,700 afy by 2030. The increase in annual recycled water

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[27] The landscape water demand calculations are contained in Appendix I of the Water Supply Assessment contained in **Appendix 5.11**.

demand associated with Project implementation, 11.61 afy, would represent less than 1 percent of the projected recycled water supply for 2010. Accordingly, Project-related demand for recycled water would be accommodated within the projected increase in recycled water supply by the time of Project buildout. Project impacts on recycled water supplies and recycled water facilities would be less than significant.

Threshold 3: Is the project site in an area known to have an inadequate water supply and/or pressure to meet fire fighting needs?

The on-site and off-site fire-flow demands would be determined by the County of Los Angeles Fire Department based on the applicable building code requirements after review of the final Project plans. Once a determination of the Project's domestic and fire water demands has been made, the Water District will assess the need for additional facilities. Once the fire flow demands for the proposed Project have been determined, the Water District would determine whether the water pressure in the area is sufficient to meet the demand needed for fire suppression. If the water pressure is not sufficient, upgrades to the facilities (such as infrastructure serving the Project site) would be necessary to meet the required pressure. Once a determination of the proposed Project's domestic and fire demands has been made, the Water District would assess the need for additional facilities such as fire hydrants and connections to the municipal water system. Fire service is discussed further in **Section 5.10.1, Fire Service**.

Mitigation Measures

Impacts on domestic potable and recycled water supplies and facilities would be less than significant. No mitigation is required.

CUMULATIVE IMPACTS

Only related projects within the Water District's service area are analyzed for cumulative water service impacts in combination with the proposed Project since projected water supplies and demand are planned by district. As shown in **Table 5.11-7, Cumulative Water Demand – Proposed Project Plus Related Projects**, buildout of the proposed Project and other related projects would consume an estimated 2,902 afy of water. The Water District projects an increased water demand of 4,972 afy between 2010 and 2030 under normal year conditions. As previously discussed, the Water District has sufficient supplies to accommodate this increased demand when buildout of the proposed Project and related projects is expected. Water demand for the proposed Project plus related projects within the Water District's service area would represent approximately 57 percent of the Water District's projected increase in demand for water by 2030. Therefore, the water demand of the proposed Project and related projects are accounted for within the current planning period, which projects use through the year 2030. Cumulative impacts on water service would be less than significant.

Table 5.11-7
Cumulative Water Demand – Proposed Project Plus Related Projects

Land Use	Quantity	Demand Factor[1] (gpd/acre)	Daily Demand (gal)	Annual Demand (gal)	Annual Demand (afy)
Office, Commercial, Retail, & Restaurant	32.7 acres	1,068 gal/day/acre	34,923	12,747,114	39.11
Multi-Family	332 du	0.45 afy/du	--	--	149
Adult Day Care Facility	10,755 sf	250 gal/1,000 sf	2,689	981,485	3.01
Single Family	3,700 du	0. 68 afy/du	--	--	2,516
Stadium	--	--	--	9,690,000[2]	29.7
Subtotal					**2,736.82**
Net Project Demand					165
Total Demand					**2,901.82**

Source: Impact Sciences, Inc.
[1] *Walnut Valley Water District, 2002. Water System Master Plan, Table 3-7 and Table 3-13.*
[2] *Based on 323,000 gallons of water per stadium event and 30 events per year (Source: City of Industry, Supplement to Industry Business Center Environmental Impact Report, 2008.)*
gpd = gallons per day; ksf = thousand square feet; sf = square feet

UNAVOIDABLE SIGNIFICANT IMPACTS

No unavoidable significant Project-specific or cumulative impacts on water services are anticipated.

5.12 UTILITIES

SUMMARY

The Project site is currently served with electricity and natural gas by Southern California Edison and the Southern California Gas Company, respectively. Propane is not provided to the Project site. The Project is estimated to result in a net increase of approximately 3,655 Megawatt-hours (MWh) in electricity demand when compared to the existing Southlands Christian Church and Southlands Christian Schools. This estimated Project demand would require less than 0.01 percent of Southern California Edison's total projected 2018 available supply, the closest year to Project buildout for which supply projections are available. Implementation of the Project is also estimated to result in a net increase of 35.8 million cubic feet (mcf) in natural gas demand per year or less than 0.1 mcf per day, which represents less than 0.0001 percent of the Gas Company's supply from interstate pipelines for 2030. Therefore, Southern California Edison and the Gas Company have adequate supply to serve the Project in addition to existing commitments, and the Project would not result in a substantial increase in energy demand relative to the availability of supply. As such, impacts to electricity and natural gas supply would be less than significant.

INTRODUCTION

This section of the Draft Environmental Impact Report (EIR) discusses utility service, and specifically, electricity and natural gas supply and demand within the Project area. This section analyzes the ability of Southern California Edison (SCE) and the Southern California Gas Company (the Gas Company) to meet the proposed Project's energy demands.

METHODOLOGY

Sources used to describe existing conditions include the California Energy Commission *Summer 2008 Demand and Five Year Outlook* and the *2006 California Gas Report*. Additional background information was obtained through consultation with Southern California Edison and the Southern California Gas Company.

EXISTING SETTING

The Project site is currently served with electricity and natural gas by SCE and the Gas Company, respectively. Propane is not provided to the Project site.

Electricity

Regulation

The California Public Utilities Commission (CPUC) regulates investor-owned electric power and natural gas utility companies in the State of California. Assembly Bill 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that was under the control of investor-owned utilities (e.g., Southern California Edison) was decoupled.

All new construction in the State of California is subject to the energy conservation standards set forth in Title 24, Part 6, Article 2 of the *California Administrative Code*. These are prescriptive standards that establish maximum energy consumption levels for the heating and cooling of new buildings. Additionally, many local municipalities have energy regulations (see **Regulatory Setting – Local**, below.)

Supply/Demand

SCE, a public utility company, provides electrical service to the community of Rowland Heights. SCE utilizes a system of direct production, cogeneration, and electrical purchase agreements to provide electricity to approximately 13 million customers in Coastal, Central and Southern California. SCE and their affiliated sources provide in excess of approximately 24,422 Megawatts (MW) of electricity for California. The San Onofre Nuclear Generation Station (generates approximately 2,200 MW of power at a point in time),[1,2] Big Creek hydroelectric system (generates approximately 1014.9 MW of power at a point in time or 3,179,190 MWh annually and comprises approximately 90 percent of SCE´s hydroelectric generation capacity),[3] and Mohave Generation Station (1,580 MW at one point in time) are SCE's primary energy sources.[4] Additionally, SCE's sources of electricity includes approximately 16.7 percent of alternate and renewable energy from wind, solar, biomass, small hydropower and geothermal sources.[5]

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1 Southern California Edison, San Onofre Nuclear Generation Station, http://www.sce.com /PowerandEnvironment/PowerGeneration/SanOnofreNuclearGeneratingStation/, October 20, 2008.

2 "Megawatts" (MW) refer to the amount of electricity SCE can produce at any given time (i.e., in a given second). Megawatt-hours (MWh) refer to the Megawatts that SCE can produce in one hour.

3 Southern California Edison, Amended Preliminary Draft Environmental Assessment (APDEA): Introduction, http://www.sce.com/NR/rdonlyres/20552160-E814-4030-B38E-A64B9CFCD8EF/0/APDEA_Introduction.pdf, October 20, 2008.

4 Southern California Edison, Mojave Generation Station, http://www.sce.com/PowerandEnvironment /PowerGeneration/MohaveGenerationStation/, October 20, 2008.

5 Southern California Edison, "Renewable Energy," http://www.sce.com/PowerandEnvironment/Renewables/, October 20, 2008.

Factors Impacting Supply/Demand

Southern California consumers have recently experienced rising energy costs and uncertainties regarding the supply of electricity. The causes of these conditions are under investigation and are the subject of much debate. Some of the factors involved that may have led to the energy shortages experienced in late 2000 and early 2001 in California include a lack of new major power plants, drought conditions, lack of emphasis on energy conservation, and deregulation. In addition, surrounding states that used to provide up to 20 percent of California's energy have also experienced significant growth, thereby limiting their electricity exports to California. The drought conditions experienced in the Pacific Northwest in 2000 and 2001 have also resulted in the reduction of the volume of water available for hydroelectric power generation, which otherwise could have been exported to California as it has in previous years. Furthermore, the increase in energy supplies during the 1980s caused the cost of electricity to decrease, which resulted in less emphasis being placed on energy conservation and efficiency programs. Lastly, another factor leading to the California energy situation may be the lack of cost controls as a result of deregulation. The law for deregulation went into effect in 1998 with the goal of enhancing competition and consumer choice in electricity generators. Prior to enactment of the law, local utilities provided bundled service including generation, transmission, and distribution. After the law, the investor owned utilities, such as SCE, became local Utility Distribution Companies (UDCs). Although these utilities could continue to provide distribution services, they no longer controlled transmission. Under the law, the transmission and distribution of electricity would remain a regulated monopoly, but the generation of electricity would be opened up to competition. Utilities were encouraged to sell their power plants and were required to purchase all their electricity needs from the wholesale market. However, an electricity supply/demand mismatch occurred as existing utilities sold their power plants but were not responsible for building new ones. The fact that new power plants would take at least a few years to be permitted and constructed, coupled with the economic and population growth in California, resulted in an energy shortage.

The California Energy Commission (CEC) is currently considering applications for the development of new power-generating facilities in Southern California and elsewhere in the state. These facilities could supply additional energy to the power supply grid within the next few years. Additionally, efforts are being taken to modify existing plants and re-powering existing sites to improve generation capacity. A broad-ranging effort is also undertaken by the state to reduce peak electricity demand in California, including actions to encourage voluntary load reduction by customers and to promote incentive programs for demand reducing technologies, energy efficient construction techniques, and the installation of energy efficient equipment.

Conservation

SCE offers a number of rebates on energy efficient purchases and upgrades for both homes and businesses. Such rebates are available for household appliances, heating and cooling, lighting, pool equipment, industrial refrigeration, and cooking equipment. Additionally, SCE offers incentives for solar roofing as part of California's Million Solar Roofs Program, which aims to create 3,000 MW of new solar electricity by 2017.[6]

Infrastructure

Electricity is transported to the Rowland Heights community through a series of regional transmission lines. There are three pad-mounted electric transformers on the Project site that are owned and maintained by SCE.

Natural Gas

The CPUC regulates natural gas utility service for approximately 10.5 million customers that receive natural gas from Pacific Gas and Electric Company (PG&E), the Gas Company, San Diego Gas & Electric Company (SDG&E), Southwest Gas, and several smaller natural gas utilities. Most of California's natural gas customers are residential and small commercial customers (or "core" customers) who accounted for approximately 40 percent of the natural gas delivered by California utilities in 2003. Large consumers, like electric generators and industrial customers (referred to as "non-core" customers) accounted for approximately 60 percent of the natural gas delivered by California utilities in 2003. The CPUC regulates the California utilities' natural gas rates and natural gas services, including in-state transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering, and billing.

Most of the natural gas used in California comes from out-of-state natural gas basins. In 2007, California customers received 29.8 percent of their natural gas supply from basins located in the Southwest, 49.5 percent from Canada, 4.1 percent from the Rocky Mountains, 5 percent from basins located within California, and 11.4 percent from storage withdrawals.

2001 Title 24, Part 6 California's Energy Efficiency Standards For Residential And Non Residential Buildings

The Energy Efficiency Standards for Residential and Nonresidential Buildings were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated

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6 Southern California Edison, "California Solar Initiative," http://www.sce.com/RebatesandSavings/CaliforniaSolarInitiative. October 20, 2008.

periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. New standards were adopted by the Commission in 2001 as mandated by Assembly Bill 970 to reduce California's electricity demand. The new standards went into effect on June 1, 2001. The standards (along with standards for energy efficient appliances) have saved more than $20 billion in electricity and natural gas costs. It is estimated the standards will save $57 billion by 2011.

Supply/Demand

Natural gas is currently supplied and distributed to the community of Rowland Heights by the Gas Company. The Gas Company, which serves 20.3 million residential and business customers, operates approximately 5.7 million meters of underground transmission, distribution, and service pipelines. The Gas Company serves an area encompassing 20,000 square miles, bounded by the international border to the south, San Gabriel Mountains to the east, Pacific Ocean to the west, and Visalia and San Luis Obispo to the north.[7] In addition to purchases from suppliers, the Gas Company owns underground facilities with a storage capacity of about 131.1 billion cubic feet (Bcf).[8]

Currently, the Gas Company has firm receipts capacity for its core customers to access supply from interstate pipelines of 3,875 million cubic feet per day (mcf/d) for 2030. The Gas Company expects a daily demand of 2,709 mcf in 2030.[9]

According to the CEC, the Gas Company is expected to provide 773,400 mcf of natural gas to its customers in 2008.[10] By 2016, annual natural gas deliveries to the Gas Company's customers are expected to increase to 803,800 million cubic feet per year.[11]

The Gas Company projects gas demand for all its market sectors to grow at an annual average rate of just 0.02 percent from 2008 to 2030. Demand is expected be virtually flat for the next 22 years due to modest economic growth, CPUC mandated demand-side management (DSM) goal and renewable goal, decline in commercial and industrial demand, and continued increased use of non-utility pipeline systems by Enhanced Oil Recovery (EOR) customers. From 2008 to 2030, residential demand, including wholesale residential service to San Diego Gas & Electric (SDG&E) and the City of Long Beach, is expected to remain flat due to the seesawing effect of declining use per meter offsetting new meter growth. The retail core commercial and industrial markets are expected to show some modest customer gains due to the

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7 Southern California Gas Company, "Company Profile," http://www.socalgas.com/about/profile/, October 20, 2008.

8 Southern California Gas Company, 2006 California Gas Report, 79.

9 Ibid.

10 California Energy Commission. California Energy Demand 2008-2018. Staff Revised Forecast. November 2007, 207.

11 Ibid.

growing economy; however, very aggressive energy efficiency goals and associated programs are projected to reduce this load by 9 percent or 9 Bcf by 2030. Similarly, the retail non-core commercial/industrial markets are also expected to decline for the same reason as the core market. Utility gas demand for EOR steaming operations, which have declined since the Kern/Mojave pipeline began offering direct service to California customers in 1992, are expected to continue to decline as more utility service contracts expire. The non-core non-cogeneration load as a whole is expected to decline to 131 Bcf by 2030 from 155 Bcf in 2008. Lastly, gas demand in the electric generation (EG) market is expected to drop sharply in 2009 due to the expected departure of several of Gas Company long-term EOR cogeneration customers. Non-cogeneration EG is expected to remain relative flat due to the addition of more efficient power plants, the addition of new transmission lines, and renewable electricity goals. Total electric generation load, including cogeneration and non-cogeneration EG for a normal hydro year is expected to drop from 313 Bcf in 2008 to 298 Bcf in 2030, a cumulative decrease of 5 percent.[12]

The demand for natural gas is dependent upon the physical growth rate and temperature changes within a geographic area. The availability of natural gas is based upon present conditions of gas supply and regulatory policies. As a public utility company, the Gas Company is under the jurisdiction of the California Public Utilities Commission but can also be affected by actions of federal regulatory agencies including the Federal Energy Regulatory Commission. The conditions and availability of gas supply and services are, therefore, partially dependent on the regulatory actions of these agencies.

In 2007, the Gas Company delivered approximately 2,717 mcf of natural gas each day. Deliveries to residential customers averaged 673 mcf per day, while electric generation accounted for the highest demand at 849 mcf per day.[13] The Gas Company also supplies gas to commercial, industrial, wholesale, and international customers. The Gas Company predicts that overall demands for gas within its service area will continue to grow by 0.02 percent annually through 2030.[14]

Infrastructure

Most of the natural gas is extracted from on- and off-shore sites in the western United States and Canada including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), Rocky Mountains, Western Canada, and California supplies.[15] **Figure 5.12-1, Western North American Natural Gas Pipelines**, shows natural gas pipelines in western North America along with the corresponding gas pipeline owner. It is then delivered via high-pressure transmission lines. As the gas is transported to its destination, the pressure is maintained with the assistance of compressors. The gas is then received at a

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12 Southern California Gas Company, *2006 California Gas Report*, 62–63.

13 Southern California Gas Company, *2006 California Gas Report*, 95.

14 Ibid., 62.

15 Ibid., 76.

In Operation:

1. El Paso Natural Gas
2. Gascoducto Bajanorte (GB)
3. Gas Transmission Northwest (GTN)
4. Kern River Pipeline
5. Mojave Pipeline
6. North Baja Pipeline
7. Northwest Pipeline
8. Paiute Pipeline
9. Pacific Gas Electric Company
10. Questar Southern Trail Pipeline
11. Rockies Express (REX)
12. San Diego Gas &Electric Company
13. Southern California Gas Company
14. Transportadora de Gas Natural (TGN)
15. TransCanada Pipeline
16. Transwestern Pipeline
17. Tuscarora Pipeline

Proposed:

18. Bronco Pipeline
19. Ruby Pipeline
20. Kern River Expansion

NOT TO SCALE

SOURCE: California Gas and Electric Utilities, California Gas Report, 2008.

FIGURE **5.12-1**

Western North American Natural Gas Pipelines

291-006•10/08

storage field and redistributed through another series of transmission lines. Natural gas is distributed throughout the County by a system of transmission, supply, distribution, and service lines. As the pipeline transitions from one transmission line to a supply line, the pressure of the natural gas is regulated down to the most efficient level of pressure for the customer.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The five major interstate pipelines that deliver out-of-state natural gas to California consumers are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, and Mojave Pipeline.

Most of the natural gas transported via the interstate pipelines, as well as some of the California produced natural gas, is delivered into the PG&E and the Gas Company intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" natural gas pipeline system).

Natural gas on the utilities' backbone pipeline systems is then delivered into the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large non-core customers take natural gas directly off the high-pressure backbone pipeline systems, while core customers and other non-core customers take natural gas off the utilities' distribution pipeline systems.

Much of California-produced natural gas is also delivered directly to consumers. PG&E and the Gas Company own and operate several natural gas storage fields that are located in northern and southern California. These storage fields, and two independently owned storage utilities—Lodi Gas Storage and Wild Goose Storage—help meet peak seasonal natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently.

The Project site is served by the existing 6-inch steel main beneath Brea Canyon Cutoff Road.[16]

REGULATORY SETTING

State

Electricity

Title 24 of the *California Code of Regulations*, which is known as the energy efficiency standards, regulates energy consumption in new construction. The standards regulate energy consumed in buildings for heating, cooling, ventilation, water heating, and lighting. Title 24 is implemented through the local plan check and permit process.

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16 Mel Whiteaker, Technical Services, North Region, Southern California Gas Company, Written communication with Lizbhet Nunez, August 22, 2007.

Natural Gas

As a public utility, the Gas Company is under the jurisdiction of the California Public Utilities Commission. The Gas Company provides service in accordance with the policies and extensions rules on file with the Commission.

Title 24 of the *California Code of Regulations*, which is known as the energy efficiency standards, regulates energy consumption in new construction. The standards regulate energy consumed in buildings for heating, cooling, ventilation, water heating, and lighting. Title 24 is implemented through the local plan check and permit process.

Local

The County of Los Angeles adopted the Green Building Ordinance on November 18, 2008, and it became effective on January 1, 2009. The purpose of the Ordinance is to establish green building techniques for the construction of new buildings, which are intended to conserve water, energy, and natural resources; divert waste from landfills; minimize impacts to existing infrastructure; and promote a healthier environment. Under this ordinance all residential projects obtaining a building permit on or after January 1, 2009, through January 1, 2010, must comply with the County Green Building Ordinance standards. After January 1, 2010 all residential projects containing five or more units must comply with the County of L.A. Green Building Standards and GreenPoint Rated™ (GPR), California Green Builder (CGB), or Leadership in Energy and Environmental Design Green Building Rating System™ (LEED). Under the Green Building Ordinance standards, buildings shall be designed to consume at least 15 percent less Time Dependent Valuation than the energy usage permitted by the 2005 Title 24 California Energy Efficiency Standards. Projects that are exempted from energy compliance under the provisions of Title 24, Part 6 do not need to comply with this requirement.

ENVIRONMENTAL IMPACTS

Project Improvements

The Project would involve the construction of 775 new for-lease residential units. This new use would replace the existing Southlands Christian Church and Southlands Christian Schools that occupy nine stand-alone and interconnected buildings that total approximately 63,226 square feet.

The Project would meet or exceed state and local energy-saving requirements including exceeding California Energy Title 24 by a minimum of at least 15 percent by upgrading the envelope of the buildings with enhanced insulation and upgraded windows, and diverting a minimum 65 percent of all

construction and demolition waste from land fills to recycling centers, as required by the Los Angeles County Green Building Program. Energy-efficient, long-life lighting sources would be used where possible to manage the Project's energy consumption and control systems for lighting would be used to extend lamp life and reduce power usage. Additionally, energy-saving design features of the development may include: (a) reducing the amount of water usage by specifying drought-tolerant plants and installing high-efficiency irrigation systems, 2.0-gallon per minute shower heads for bathrooms, flow limiters on all faucets, and high-efficiency toilets; and (b) reducing electrical demand by installing energy efficient refrigerators and dishwashers, and garage ventilations fans that are controlled by carbon monoxide sensors.

As discussed above, SCE provides electricity to the Project site, and the Gas Company provides natural gas to the Project site. The Project would not require propane service.

Any necessary alterations to the generation or distribution system would be determined by SCE at the time of submittal of final plans. The Applicant would then provide to the Department of Regional Planning a letter from SCE stating that electricity service would be provided to the proposed Project and that all applicable energy conservation features have been incorporated into the Project design.

With respect to natural gas service, the Gas Company has indicated that future distribution system connection, infrastructure, and alteration details would be determined upon final plan submission. The Applicant would comply with Gas Company requirements at that time. As proof of compliance, the Applicant would then be required to provide the Department of Regional Planning with a letter from the Gas Company confirming compliance with its requirements and stating that natural gas service would be provided to the proposed Project and that all applicable energy conservation features have been incorporated into the Project design.

Thresholds of Significance

Based on the County's Initial Study Checklist and Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, projects should be evaluated for potentially significant impacts related to utilities based on the following criteria:

- Could the Project create problems with providing utility services, such as electricity, gas, or propane?

Impact Analysis

Threshold 1: **Could the Project create problems with providing utility services, such as electricity, gas, or propane?**

Analysis

Electricity

The Project would involve the construction of 775 for-lease residential units. This new use would replace the existing Southlands Christian Church and Southlands Christian Schools that currently occupy nine stand-alone and interconnected structures which total approximately 63,226 square feet. As indicated in **Table 5.12-1, Electricity Demand – The Canyon Residences Project**, the Project is estimated to result in a gross electricity demand of approximately 4,360.925 MWh per year. The annual electricity demand of the Southlands Christian Church and Southlands Christian Schools is estimated to be approximately 695.486 MWh. Therefore, the Project is estimated to result in a net increase of approximately 3,665 MWh in electricity demand when compared to the existing uses on the Project site.

The California Energy Commission indicates that SCE will have an available supply of approximately 123,675,000 MWh of power in 2018 to meet a projected statewide demand of 27,112 MWh.[17] The Project would require less than 0.01 percent of the total 2018 supply. SCE will monitor the power situation within its service area and obtain firm contracts with out-of-state electrical suppliers as necessary. Additionally, the Project would be required to comply with energy efficiency standards of the County of Los Angeles' Green Building Ordinance, which require exceedance of the regulations of Title 24 of the *California Code of Regulations* by 15 percent. Since current projections forecast that electricity generation would meet statewide demand throughout the current planning horizon, and since the Project is not anticipated to result in a substantial increase in electricity demand relative to the available supply, the impact to electricity supply would be less than significant.

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17 California Energy Commission, *November 2007, California Energy Demand 2008-2018 Staff Revised Forecast*, http://www.energy.ca.gov/2007publications/CEC-200-2007-015/CEC-200-2007-015-SF2.PDF.

Table 5.12-1
Electricity Demand – The Canyon Residences Project

Land Use	Quantity	Demand Factor[1] (Megawatt-hours/year)	Annual Demand (Megawatt-hours)
Multi-family Housing	775 du	5.627[1]	4,360.925
Gross Demand			**4,360.925**
Southlands Christian Schools (School and Church)[3]	63,226 sf	0.011[2]	695.486
Net Demand			**3,665.**439

Consumption factor derived from SCAQMD CEQA Air Quality Handbook*, 1993.*
sf = square foot; du = dwelling unit
[1] *Per Unit.*
[2] *Per Square Foot.*
[3] *Rate for church and school uses.*

As shown in **Table 5.12-1**, the Project is estimated to result in a net increase of approximately 3,665 MWh per year in electricity demand. Given that the Project's anticipated electricity demand would be higher than that of the Southlands Christian Church and Southlands Christian Schools, changes to the existing electricity system may be necessary. The Project could require the installation of new facilities and equipment, such as transformers, on the Project site, and also could require minor alterations to off-site electrical transmission and distribution infrastructure in order to serve the Project. With compliance with mitigation measure **5.12-1,** which requires the applicant to consult with SCE prior to submittal of final site plans for approval by the County Department of Building and Safety, impacts related to electricity supply and transmission/distribution infrastructure would be reduced to a less than significant level.

As such, the Project could potentially require alterations to existing distribution facilities or the installation of new facilities or equipment such as transformers on the Project site. Specific infrastructure improvements will be determined based on the final construction plans of the Project. The cost of service, upgrades, etc. would be determined before the Project components are developed and implemented. However, with consultation with SCE upon submittal of final construction plans, the impact to facilities would be less than significant.

Natural Gas

As shown in **Table 5.12-2, Natural Gas Demand – The Canyon Residences Project**, the Project is estimated to result in a gross natural gas demand of approximately 37.3 mcf per year. The annual gas

demand of the Southlands Christian Church and Southlands Christian Schools is estimated to be approximately 1.5 mcf. Therefore, implementation of the Project is estimated to result in a net increase of 35.8 mcf in natural gas demand per year when compared to the Southlands Christian Church and Southlands Christian Schools.

Table 5.12-2
Natural Gas Demand – The Canyon Residences Project

Land Use	Quantity	Demand Factor[1] (cf/du or sf/month)	Monthly Demand (cf)	Annual Demand (mcf)
Multi-family Housing	775 du	4,011.5	3,108,912.5	37.3
Gross Demand			**3,108,912.5**	**37.3**
Southlands Christian School (School and Church)	63,226 sf	2.0[2]	126,452	1.5
Net Demand			**2,982,460.5**	**35.8**

Source: Impact Sciences, Inc.
[1] Consumption factors derived from SCAQMD CEQA Air Quality Handbook, 1993.
[2] Consumption factor for school and church uses.
du = dwelling units; sf = square foot; cf = standard cubic feet; mcf = million cubic feet

The *2008 California Gas Report* provides estimates of projected supply and demand within the Gas Company service area over the 2008 to 2030 planning horizon.[18] The *California Gas Report* is prepared in even-numbered years, followed by a supplemental report in odd-numbered years, in compliance with California Public Utilities Commission Decision D.95-01-039. The projections in the *California Gas Report* are intended for long-term planning. The Gas Company has sufficient gas supplies planned to accommodate the increase in gas demand by all of its market sectors, including residential, commercial, industrial, electric generation, and natural gas vehicle uses. As discussed above, the Gas Company has firm receipts capacity for its core customers to access supply from interstate pipelines of 3,875 mcf/d for 2030. As such, implementation of the Project would result in a net increase of 35.8 mcf in natural gas demand per year or 0.098 mcf/d, which represents less than 0.00003 percent of the Gas Company's supply from interstate pipelines for 2030 (0.098 mcf/3,875 mcf = 0.000025 mcf). Therefore, the Gas Company has adequate supply to serve the Project in addition to its existing commitments, and the Project would not result in a substantial increase in natural gas demand relative to the available supply. Therefore, the impact to the Gas Company's natural gas supply would be less than significant.

18 SCGC, *2008 California Gas Report*, September 18, 2008. http://www.socalgas.com/regulatory/cgr.shtml.

The Gas Company currently has infrastructure in place to service the Project site. The Project would be served by an existing 6-inch pressure main under Brea Canyon Cutoff Road.[19] Additionally, the Gas Company has indicated that gas service to the Project could be provided without any significant impact on the environment, and has not indicated that changes to existing off-site infrastructure or distribution systems would be required to meet the proposed Project's needs. However minor capacity-enhancing alterations to natural gas transmission and distribution infrastructure may be necessary to serve the Project.[20] With compliance with **Mitigation Measure 5.12-2,** which requires the applicant to consult with the Gas Company prior to submittal of final site plans for approval by the County Department of Building and Safety, impacts on natural gas infrastructure would be reduced to a less than significant level.

Given that sufficient supply exists to serve the Project and that the applicant would consult with the Gas Company prior to constructing on-site infrastructure, Project impacts on natural gas supplies and service would be less than significant.

Mitigation Measures

5.12-1: Prior to submittal of final plans for approval by the County Department of Building and Safety, the applicant shall incorporate modifications to the electricity transmission/distribution system as needed to serve the Project site, to the specifications of SCE. Upon finalizing these specifications, the applicant shall fund its fair share of the cost of infrastructure installation resulting from the project-related impact(s), as applicable.

5.12-2: Prior to submittal of final plans for approval by the County Department of Building and Safety, the applicant shall incorporate modifications to the natural gas conveyance system as needed to serve the Project site, to the specifications of the Gas Company. Upon finalizing these specifications, the applicant shall fund its fair share of the cost of infrastructure installation resulting from the Project-related impact(s), as applicable.

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19 Mel Whiteaker, Technical Services, North Region, Southern California Gas Company, August 22, 2007. (Letter included in **Appendix 5.12**.)

20 Ibid.

CUMULATIVE IMPACTS

Electricity

The potential for cumulative impacts to electricity is assessed based upon consideration of the proposed Project in combination with the list of related projects identified in **Table 4.0-1.** As shown in **Table 5.12-3**, **Annual Electrical Demands – Proposed Project and Related Projects,** the related projects, and the proposed Project would result in an electricity demand of approximately 56,600 MWh per year.

Table 5.12-3
Annual Electrical Demands – Proposed Project and Related Projects

Land Use	Quantity	Demand Factor[1] (Megawatt-hours/year)	Annual Demand (Megawatt-hours/year)
Adult Day Care Facility[2]	10,755 sf	0.01355 per square foot	146
Office	395,430 sf	0.01295 per square foot	5,121
Commercial	104,100 sf	0.01355 per square foot	1,411
Restaurant	179,500 sf	0.04745 per square foot	8,517
Retail	755,200 sf	0.01355 per square foot	10,233
Multi-Family	330 du	5.63 per unit	1,858
Single Family	3,726 du	5.63 per unit	20,977
Industrial	68,800 sf	0.011 per square foot	757
Stadium[3]	45 events	87 MWh for a 6-hour event	3,915
Total			**52,935**
Project Net Demand			3,665
Subtotal			**56,600**

1 *Consumption factors derived from SCAQMD* CEQA Air Quality Handbook, *1993.*
2 *Since the SCAQMD CEQA Air Quality handbook does not provide an electricity consumption rate specific to Adult Day Care Facilities, the consumption rate for Commercial uses was applied.*
3 *Assumes each event would be 6 hours. (Source: City of Industry's* 2008 Draft Supplement to Industry Business Center Environmental Impact Report, p. 5.9-24.)
du = dwelling units; rm = rooms; sf = square feet.

As discussed above, the California Energy Commission indicates that SCE will have an available supply of approximately 123,675,000 MWh of power in 2018 to meet a projected statewide demand of 27,112 MWh.[21] As such, the proposed Project in combination with related projects would consume less than 0.05 percent of the available supply in 2018.

21 California Energy Commission, *November 2007, California Energy Demand 2008-2018 Staff Revised Forecast,* http://www.energy.ca.gov/2007publications/CEC-200-2007-015/CEC-200-2007-015-SF2.PDF.

Additionally, as with the proposed Project, each related project would be required to comply with energy efficiency standards as regulated by Title 24 of the *California Code of Regulations*. Additionally, County of Los Angeles projects that would obtain a building permit on or after January 1, 2009 would be required to comply with the Green Building Ordinance and therefore would be designed to consume at least 15 percent less Time Dependent Valuation than the energy usage permitted by the 2005 California Energy Efficiency Standards. As SCE has supply to meet the statewide demand in 2018 and given that each new project within the County would consume 15 percent less than permitted by the 2005 California Energy Efficiency Standards, implementation of each of the proposed related projects is accounted for within SCE projections prepared by the California Energy Commission, and operation of the proposed Project in combination with each of the identified related projects would not result in a substantial increase in electricity demand relative to the availability of supply such that impacts would be significant. Therefore, cumulative electricity impacts would be less than significant.

Natural Gas

The potential for cumulative impacts to natural gas is assessed based upon consideration of the proposed Project in combination with the list of related projects identified in **Table 4.0-1**. As shown in **Table 5.12-4, Annual Natural Gas Demand – Proposed Project and Related Projects**, the related projects and the proposed Project would result in a net natural gas demand of approximately 398.34 mcf per year.

In 2007, total residential and commercial uses within the Gas Company service area accounted for 957 mcf/d, while residential and commercial natural gas demand is projected to decrease by 41 mcf/d or 23,725 mcf per year, by 2030, due to very aggressive energy efficiency goals and associated programs. However, there is projected to be 3,875 mcf/d or 1.4 trillion cubic feet per year available in 2012.[22] Cumulative project demand would result in an additional 398.09 mcf per year, which represents an increase of less than 0.03 percent. Given that cumulative project demand is accounted for within the available supply for the planning period, the Gas Company has adequate supply to serve the Project and related projects in addition to its existing commitments. The Gas Company has indicated the proposed Project would not result in a significant impact based on the availability of natural gas supply and facilities in the Project area.[23] Furthermore, as with the proposed Project, alterations to distribution facilities would be implemented based on the specific needs of each related project as determined by a load survey through consultation with the Gas Company.

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22 SCGC, *2008 California Gas Report*, p. 96, http://www.socalgas.com/regulatory/cgr.shtml, September 18, 2008.

23 Mel Whitaker, Technical Services, North Region, The Gas Company, written communication with Lexbheth Nunez, August 22, 2007.

Table 5.12-4
Annual Natural Gas Demand – Proposed Project and Related Projects

Land Use	Quantity	Demand Factor[1] (cf/unit or sf per month)	Monthly Demand (cf)	Annual Demand (cf)	Annual Demand (mcf)
Adult Day Care Facility[2]	10,755	2.90	31,190	374,274	0.37
Office	395,430	2	790,860	9,490,320	9.49
Commercial	104,100	2.9	301,890	3,622,680	3.62
Restaurant	179,500	2.9	520,550	6,246,600	6.25
Retail	755,200	2.9	2,190,080	26,280,960	26.28
Multi-Family	330	4,011.50	1,323,795	15,885,540	15.89
Single Family	3,726	6,665.00	24,833,790	298,005,480	298
Industrial	68,800	2.9	199520	2,394,240	2.39
Subtotal				**362,300,094**	**362.29**
Project Net Demand			2,982,461	35,789,532	35.80
Total				**398,089,626**	**398.09**

Source: Impact Sciences, December 2008.
[1] *Consumption factors derived from SCAQMD* CEQA Air Quality Handbook*, 1993.*
[2] *Since the SCAQMD CEQA Air Quality handbook does not provide a natural gas consumption rate specific to Adult Day Care Facilities, the consumption rate for Commercial uses was applied.*
du = dwelling units; sf = square foot; cf = standard cubic feet; mcf = million cubic feet

Additionally, as discussed above, County of Los Angeles projects that would obtain a building permit on or after January 1, 2009, would be required to comply with the Green Building Ordinance and therefore would be designed to consume at least 15 percent less Time Dependent Valuation than the energy usage permitted by the 2005 California Energy Efficiency Standards. Therefore, the cumulative impact to natural gas would be less than significant.

NO UNAVOIDABLE SIGNIFICANT IMPACTS

Project impacts to electricity and natural gas would be less than significant. No unavoidable significant Project-specific or cumulative significant impacts to electricity supply or distribution would result.

5.13 SOLID WASTE

SUMMARY

Residential, commercial, and industrial trash collection in the unincorporated areas of Los Angeles County, including the Project area, is handled by private haulers who contract with property owners. When collected, the waste may be taken to any landfill or processing center willing to accept it. For any use other than single-family residential and two dwelling units, private haulers are allowed to operate in any unincorporated area of the County and may transfer waste to a variety of available sites both inside and outside the County. Based on information provided by the Los Angeles County Department of Public Works, Los Angeles County landfills within the County or those under contract outside the County have adequate capacity to accommodate anticipated solid waste projections through 2015.

The proposed Project would also generate approximately 5,000 cubic yards (7,000 tons) of construction and demolition materials and 55,000 cubic yards (77,000 tons) of excess earth material that would likely be disposed of at the Puente Hills Recycling Facility and Puente Hills Landfill. Additionally, 45,000 cubic yards of earth would be graded or excavated, but recompacted on the Project site. Demolition materials and exported earth material from the Project site will be sent to solid waste facilities during late 2009 and early 2010. County landfills within the County or those under contract outside the County have the capacity to accept and process construction debris and excess earth material generated during demolition and grading.

During Project operation, the proposed Project would generate a net increase of solid waste generation of approximately 3,100 pounds per day, or approximately 509 tons per year, assuming no solid waste from the Project would be recycled (a worst-case scenario). Solid waste from the Project would be disposed at Puente Hills Landfill until 2013. Thereafter, United Pacific Waste would either dispose of solid waste at the Mesquite Regional Landfill in southern Imperial County via rail system or use a local transfer station.[1]

INTRODUCTION

This section of the Draft Environmental Impact Report (EIR) evaluates potential impacts of the proposed Project on solid waste disposal facilities. The proposed Project involves the redevelopment of the approximately 15.7-acre property located at 1920 Brea Canyon Cutoff Road. The Project would develop 775 for-lease residential units in multiple buildings, a recreational facility for residents, parking structures

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1 Juan Villa, Los Angeles County Department of Public Works Environmental Programs Division, personal communication with Impact Sciences, Inc., September 25, 2008.

containing 1,544 parking spaces, and landscaping throughout the Project site. The Project would replace the existing Southlands Christian Church and Southlands Christian Schools structures, parking lots, and athletic field on the Project site.

This section discusses the Project's impact on solid waste services, including the pickup and disposal of solid waste. Solid waste is defined as refuse requiring collection, recycling, or disposal into a landfill. This section also includes a discussion of the cumulative impacts of the proposed Project in conjunction with other related projects. Where impacts are identified, mitigation measures are recommended to reduce such impacts to acceptable levels.

Information in this section was derived from the Los Angeles County Department of Public Works (LACDPW), the County Sanitation Districts of Los Angeles County, the California Integrated Waste Management Board, and a variety of documents including Los Angeles County Integrated Waste Management Plan; 2006 Annual Report on the Countywide Summary Plan and Countywide Siting Element; and Household Hazardous Waste Element.

EXISTING CONDITIONS

The LACDPW has the responsibility to develop plans and strategies to manage solid waste generated (including hazardous waste) in the County's unincorporated areas and to address the disposal needs of Los Angeles County as a whole. In the past, solid waste was simply collected and disposed of at landfills in the local vicinity. More recently, many jurisdictions, including the County of Los Angeles, have maintained that existing local landfill space may reach capacity in the very near future. Even with waste reduction and recycling efforts, jurisdictions are having difficulty siting new landfills or alternative means of disposal to address the anticipated shortage.

Options to reduce the amount of waste disposed of in landfills have traditionally included curbside pickup of recyclable materials and separate processing of these materials at recycling facilities. Solid waste collection has become highly privatized in recent years and a number of companies have developed recycling facilities that can process and sort recyclables from other wastes. In this free-enterprise system, private industries now compete for contracts to collect and dispose of solid waste. After materials separation, private haulers dispose of the remaining solid waste at whatever landfill they choose that can accept the materials. These facilities may be within the local geographic region, outside the County, or even outside the state.

Landfills in Los Angeles County are nearing capacity; however, it is unlikely that all existing landfill space will reach capacity and that no new landfill space or disposal options will be made available. Because untreated solid waste is a public health risk (e.g., from disease), it will be necessary for either

local agencies or the state to intervene to assist with implementing new landfills and/or other disposal options. Discussion of such intervention is currently taking place at the state level.

It was necessary in this EIR to formulate a method to evaluate impacts on presently available landfills that are likely to serve the Project site because of the difficulty in predicting what facilities private haulers will use, or predicting future waste disposal sites or methods. Specifically, this EIR section compares the solid waste generation of the proposed Project with (1) the capacity of the existing landfills operating within Los Angeles County that accept waste from unincorporated areas including the Project site; (2) landfills located outside the County that are owned and operated by the Los Angeles County Sanitation District; and (3) available capacity at landfills outside the County based on existing agreements. This narrow threshold of analysis is considered a worst-case evaluation scenario since it does not consider the possibility that new landfills may be developed in the future. It acknowledges, but does not assume or consider other disposal options that are available to local private haulers.

Existing Solid Waste Generation

Statewide Solid Waste Generation

In the State of California, approximately 92 million tons of solid waste was generated in 2006.[2] Of the 92 million tons of solid waste generated in 2006, 42.2 million tons were disposed of in landfills and 49.8 million tons were diverted from landfills through various source reduction, recycling, and re-use efforts.[3] The diversion rate in the state was estimated to be 54 percent in 2006.[4]

Regional Solid Waste Generation

The Disposal Reporting System is used to estimate the amount of disposal from each jurisdiction.[5] The Disposal Reporting System states that disposal information must include all sources of solid waste within a jurisdiction, including residential, commercial, industrial, self-haul, and any other sources (military, marine, parks, etc.) disposed at California Integrated Waste Management Board (CIWMB)-permitted landfills, transformation facilities, or exported. A total of 1.36 million tons of solid waste originated

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2 California Integrated Waste Management Board, *2007 Annual Report*, http://www.ciwmb.ca.gov. 2008.

3 California Integrated Waste Management Board, *2007 Annual Report*.

4 California Integrated Waste Management Board, http//www.ciwmb.ca.gov. 2008.

5 California Integrated Waste Management Board, *Regulations: Title 14, Natural Resources Division 7, CIWMB Chapter 9. Planning Guidelines and Procedures for Preparing and Revising Countywide and Regional Agency Integrated Waste Management Plans*, http://www.ciwmb.ca.gov/Regulations/Title14/ch9a92.htm. 2008.

within unincorporated Los Angeles County for the year 2006.[6] Some of the solid waste stream was diverted from landfills through various source reduction, recycling, and re-use efforts. The diversion rate in unincorporated Los Angeles County has increased since 1995. Between 1995 and 2004, the diversion rate for the County has increased from 27 percent in 1995, to 53 percent in 2004.[7] The CIWMB conducts biennial reviews of solid waste diversion to ensure compliance with Assembly Bill (AB) 939. AB 939 requires a minimum 50 percent diversion rate for cities and counties. The CIWMB reviewed waste diversion figures for 2003-2004 and official diversion rates for these years were 12 percent in 2003 and 53 percent for 2004. The biennial review has not been conducted yet for years 2005 through 2008, but is estimated to be at 54 percent.[8] For the purpose of this EIR, the 50 percent diversion rate mandated by the CIWMB will be used.

Project Site

The Project site is currently developed with Southlands Christian Church and the Southlands Christian School, which span grades Pre-K through 12. Nine single-story buildings, two paved surface parking lots and an athletic field currently occupy the Project site. Approximately 70 percent (11 acres) of the Project site is currently developed with buildings or pavement, and approximately 30 percent (4.7 acres) is unpaved. As shown in **Table 5.13-1**, **Existing Solid Waste Generation (No Recycling)**, existing uses on the Project site are estimated to generate a total of approximately 82 tons per year of solid waste. This number is derived by using a solid waste generation factor provided by the CIWMB for use in estimating solid waste from institutions such as schools and multiplying the factor by the square footage of the site. These factors exist for different uses and have been created to assist local governments in assessing solid waste generation for planning purposes. These quantities represent a worst-case scenario for solid waste sent to landfills as information on the quantity diverted through recycling is not available.

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6 California Integrated Waste Management Board, "Disposal Reporting System (DRS) Single-year Countywide Origin Detail: Los Angeles County," http://www.ciwmb.ca.gov/LGCentral/DRS/Reports/Orgin/WFOrgin.asp?VW=SUBMIT. 2008.

7 California Integrated Waste Management Board, "Jurisdiction Diversion and Disposal Profile: Los Angeles County," http://www.ciwmb.ca.gov/Profiles. 2008.

8 California Integrated Waste Management Board, "Jurisdiction Diversion and Disposal Profile: Los Angeles County," http://www.ciwmb.ca.gov/Profiles. 2008.

Table 5.13-1
Existing Solid Waste Generation (No Recycling)

Land Use	Square Feet	Generation Factor	Annual Generation (tons/year)
School/Church	63,226 sf	0.0013 tons/sf/year	82.194
Total:			**82.194**

Source: California Integrated Waste Management Board, Estimated Solid Waste Generation Rates for Institutions, http://www.ciwmb.ca.gov/wastechar/wastegenrates/Institution.htm,September 2008.
sf = square feet

Existing Solid Waste Collection

Trash collection in unincorporated Los Angeles County, including Rowland Heights, is handled by private haulers. Once collected, the waste may be taken to any landfill that is willing to accept it. Currently, approximately 111 haulers are permitted by the County of Los Angeles Department of Health Services to collect residential, commercial, and industrial waste in unincorporated Los Angeles County.[9] However, some of the waste is delivered to waste-to-energy transformation facilities or to inter-modal facilities for transport to facilities outside of Los Angeles County.

Existing Solid Waste Disposal

Within Los Angeles County, there are four classifications of solid waste disposal facilities: (1) Class III landfills; (2) Unclassified landfills; (3) transformation facilities; and (4) materials recovery facilities (MRF). Class III landfills accept all types of non-hazardous solid waste, while Unclassified landfills accept only inert waste, including soil, concrete, asphalt, and other construction and demolition debris, as defined by California Code of Regulations, Title 23, Section 2554. Transformation facilities incinerate municipal solid waste in order to generate energy. MRFs recover recyclable materials from other waste to provide for the efficient transfer of the residual waste to permitted landfills for proper disposal. Landfill locations in Los Angeles County are shown in **Figure 5.13-1, Locations of Major Los Angeles County Landfill Sites**.

The *Los Angeles County Integrated Waste Management Plan 2006 Annual Report*, prepared by the Los Angeles County Department of Public Works, indicates that residents and businesses in Los Angeles County (both incorporated cities and unincorporated areas) disposed of approximately 12 million tons of solid waste in

9 Juan Villa, Los Angeles County Department of Public Works, Environmental Programs Division, personal communication with Impact Sciences, Inc., September 22, 2008.

landfills in and out of Los Angeles County and at waste-to-energy facilities in 2006. Of this amount, approximately 9.58 million tons were disposed of at Class III landfills within Los Angeles County; approximately 1.78 million tons were exported to out-of-County Class III landfills; approximately 101,747 tons were disposed of in Unclassified (Inert) landfills; and approximately 537,733 tons were disposed of at waste-to-energy facilities.[10]

The estimated remaining capacity of permitted Class III landfills at the end of 2006 in Los Angeles County was approximately 87.83 million tons.[11] Based on the 2006 average disposal rate of 38,478 tons per day (six days a week), including waste being imported to the County, local permitted Class III landfills will be at capacity in the year 2015. However, ultimate landfill capacity would be determined by several factors, including (1) expiration of various permits (e.g., Land Use Permits, Waste Discharge Requirements Permits, Solid Waste Facilities Permits, and air quality permits); (2) restrictions to accepting waste generated only within a landfill's particular jurisdiction and/or watershed boundary; and (3) operational constraints.

The capacities of Unclassified landfills are affected by these same factors, but they are not affected to the same extent. The total estimated remaining capacity of Inert landfills at the end of 2006 in Los Angeles County was approximately 63.6 million tons.[12] Based on a 2004 average disposal rate of 540 tons of inert waste per day (six days per week), there is remaining capacity for approximately 279 years.

Currently most solid waste collected within Los Angeles County by private haulers is disposed of within the County. However, it is likely that independent solid waste haulers will continue to take solid wastes to facilities outside the County. Greater inter-County transfer of solid waste may occur in the near future if landfills outside of Los Angeles County provide greater economic advantages to haulers, or if landfills within the County reach capacity.

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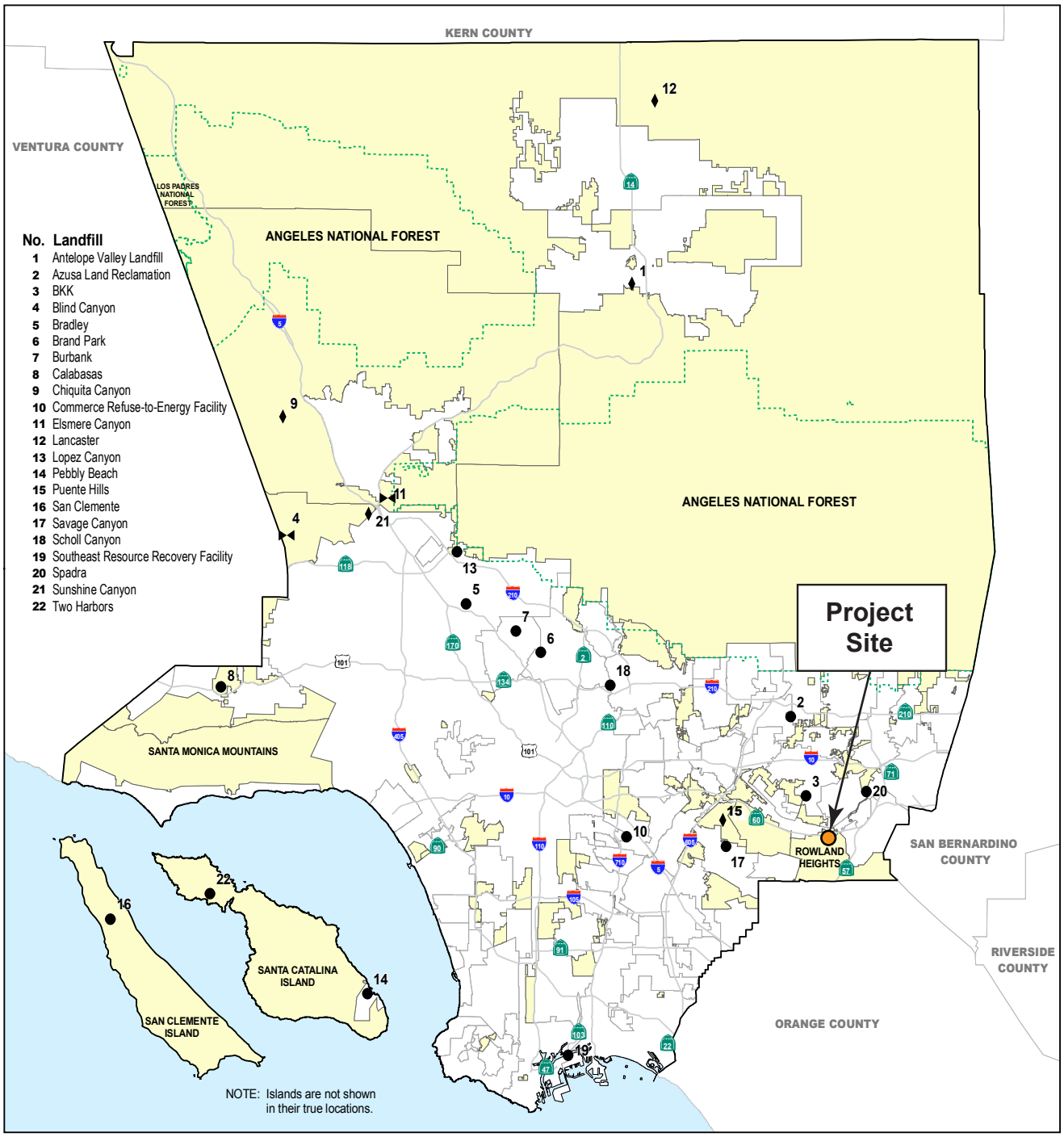
10 County of Los Angeles Department of Public Works, *Los Angeles County Integrated Waste Management Plan, 2006 Annual Report on the Countywide Summary Plan and Countywide Siting Element*, 2008.

11 County of Los Angeles Department of Public Works, *Los Angeles County Integrated Waste Management Plan, 2006 Annual Report on the Countywide Summary Plan and Countywide Siting Element*.

12 County of Los Angeles Department of Public Works, *Los Angeles County Integrated Waste Management Plan, 2006 Annual Report on the Countywide Summary Plan and Countywide Siting Element*.



No.	Landfill
1	Antelope Valley Landfill
2	Azusa Land Reclamation
3	BKK
4	Blind Canyon
5	Bradley
6	Brand Park
7	Burbank
8	Calabasas
9	Chiquita Canyon
10	Commerce Refuse-to-Energy Facility
11	Elsmere Canyon
12	Lancaster
13	Lopez Canyon
14	Pebbly Beach
15	Puente Hills
16	San Clemente
17	Savage Canyon
18	Scholl Canyon
19	Southeast Resource Recovery Facility
20	Spadra
21	Sunshine Canyon
22	Two Harbors

LEGEND:

- ● *Existing Class III Landfill*
- ♦ *Existing Transformation Facility*
- ⧓ *Existing Unclassified (Inert) Landfill*
- *National Forest*
- *Unincorporated Area*

NOT TO SCALE

SOURCE: Los Angeles County Department of Regional Planning - 2007

FIGURE **5.13-1**

Locations of Major Los Angeles County Landfill Sites

291-006•10/08

According to the *2006 Annual Report on the Countywide Summary Plan and Countywide Siting Element*, County landfills have the capacity to accommodate solid waste projections through 2011 under business as usual. However, as described below, the Mesquite Regional Landfill, which would accept up to 20,000 tons per day from the County, is anticipated to be operational in 2009, before capacity at the existing County landfills is reached. Due to expansions and the opening of the Mesquite landfill, County landfills would have the capacity to accommodate solid waste beyond 2021 (the current planning horizon). The disposal needs analysis contained in the *2006 Annual Report on the Countywide Summary Plan and Countywide Siting Element* projects that increasing the current estimated countywide diversion rate from 50 percent to 60 percent would further assure the County's disposal capacity needs would be met through the end of the planning period. A gradual increase in the diversion rate to 60 percent by 2021 would result in a 10,000 ton per day reduction in the projected disposal need.[13] Of the County landfills, there have been recent expansions at the Antelope Valley, Bradley, Chiquita Canyon, Lancaster, Puente Hills, and Sunshine Canyon Landfills. A number of County landfills have an anticipated life expectancy that extends beyond 2017. For example, the Lancaster Landfill, which can accept 1,700.00 tons per day, was approved for expansion to extend the life of this landfill to 2030 and the Burbank (accepts 240.00 tons per day), Chiquita Canyon (accepts 6,000.00 tons per day), Pebbly Beach (accepts 49.00 tons per day), San Clemente (accepts 10.00 tons per day), Scholl (accepts 3,400.00 tons per day) and Whittier (Savage Canyon) Landfills (accepts 35.00 tons per day) are permitted until 2054, 2019, 2033, 2032, 2019 and 2025, respectively.[14]

Other recent events have expanded landfill capacity within Los Angeles County. An agreement between Orange County and Waste Management, Inc., (WMI) would divert 168,000 tons per year of San Diego County's waste to Orange County instead of to Los Angeles County landfills. Also, an agreement between Orange County and Taormina Industries, which mainly serves Los Angeles County, calls for 2,000 tons of solid waste per day to be diverted to Orange County landfills.[15]

Local Solid Waste Hauler

The exclusive franchise waste hauler for single-family and duplex units in Rowland Heights is United Pacific Waste (UPW). UPW uses the three-cart system, which provides customers with one cart for refuse, one cart for recyclables, and one cart for green waste. Condominiums, town homes, apartments, and multi-family properties are allowed to use this service. UPW currently disposes of recyclables from

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13 County of Los Angeles Department of Public Works, *Los Angeles County Integrated Waste Management Plan, 2006 Annual Report on the Countywide Summary Plan and Countywide Siting Element*, *Appendix E-2*.

14 California Integrated Waste Management Board, http//www.ciwmb.ca.gov. 2007.

15 GBB, Solid Waste Management Consultants, *Approaching an Integrated Solid Waste Management System for Los Angeles County, California*, (1997).

Rowland Heights at the Allen Company facility in Baldwin Park and solid waste at the Puente Hills Landfill in the City of Industry.[16]

Hazardous Materials Collection and Disposal

Certain uses and activities generate hazardous waste that cannot be disposed of at Class III or unclassified landfills. The California Hazardous Waste Control Law (Health and Safety Code Section 25100 through Section 25249) requires that these hazardous materials be transported and disposed of or treated at a licensed facility. The disposal and transport of hazardous materials is complicated by the fact that there are many forms of hazardous materials. Operations that use hazardous materials and/or generate hazardous waste are responsible for the disposal of the waste.

LACDPW has existing hazardous waste management facilities within the County that are inadequate to meet the waste currently generated within Los Angeles County. However, there are several Class I and II landfills that exist in Southern and Central California that can accept hazardous waste generated within the County. Each is identified briefly below.

- Laidlaw Landfill, Buttonwillow, Kern County, California: This facility accepts hazardous and non-hazardous waste and is permitted as a Class I landfill. The facility has no restrictions for the amount of waste that can be accepted on a daily basis.
- Kettleman Hills Landfill, Kettleman City, Kings County, California: This is a Class I permitted landfill that accepts hazardous and non-hazardous waste with no capacity restrictions.
- McKittrick Waste Treatment Site, McKittrick, Kern County, California: This facility is a Class II permitted landfill that accepts hazardous and non-hazardous waste. The facility has a capacity restriction of 412 cubic meters daily.

As discussed below, Los Angeles County has prepared a Household Hazardous Waste Element (HHWE) to provide for management of household hazardous waste generated by the residents within its jurisdiction.

FUTURE SOLID WASTE MANAGEMENT CONDITIONS

Currently, most solid waste is disposed of in local landfills. In the future, the amount of waste diverted from landfills is expected to increase as capacity limitations occur and jurisdictions throughout the state achieve compliance with the provisions of AB 939. This diversion will increase the life expectancy of landfills, but not eliminate the need for new landfills. As growth occurs throughout Southern California, new landfill capacity will be required and/or other waste disposal alternatives will require

16 Ashley Johnson, United Pacific Waste, personal communication with Impact Sciences, Inc., September 25, 2008.

implementation. Options that have been discussed include expanding existing landfills, developing new landfills locally, transferring solid waste out of the County or state by truck or rail, or the incineration of solid waste in co-generation plants that generate electricity.

As described above, the transfer of solid waste either out of the County or state is also an option. A landfill, which would receive Los Angeles area waste by rail car, is proposed to provide some long-term solid waste disposal for Los Angeles County. In early October 2008, the Sanitation Districts' Board of Directors approved a Memorandum of Understanding with Union Pacific Railroad which details terms for the general design of a 17-acre intermodal facility in the City of Industry, where municipal solid waste will be loaded into rail cars for shipping, and the design of an unloading facility at the Mesquite Regional Landfill. The Mesquite Regional Landfill, owned by the Sanitation Districts of Los Angeles County (Sanitation Districts), is anticipated to be operational in 2009 and the rail yard to be complete in 2010. Waste from Los Angeles County would not be permitted until rail infrastructure to the landfill is completed, which would occur in 2011. When in full operation, the landfill will receive up to 20,000 tons per day (tpd) of the County's municipal solid waste. Up to 1,000 tpd is reserved for waste generated in Imperial County. The rail yard is designed to load up to two unit trains a day, each carrying 4,000 tons of municipal solid waste to the Mesquite Regional Landfill.[17]

Though some landfills are currently restricted to accept solid waste from a limited geographical area, the US Supreme Court has held that any restriction limiting interjurisdictional transfers to landfills willing to accept solid waste is unconstitutional because such restrictions infringe on the landfill operator's ability to actively participate in interstate commerce.[18] It is therefore likely that interjurisdictional transfers will increase as a method of managing solid waste.

Incineration facilities provide a dual function of disposing of solid waste and generating regional power supplies; their use may increase in the future as new plants are built.

Because the siting of future landfills, expansions of recycling efforts, and construction of co-generation plants is speculative at this time, this EIR methodology will focus only on landfills in Los Angeles County and/or those contracted. Specifically, this EIR section compares the solid waste generation of the proposed Project with (1) the capacity of the existing landfills operating within Los Angeles County that accept waste from unincorporated areas including the Project site; (2) landfills located outside the County that are owned and operated by the Los Angeles County Sanitation District; and (3) capacity at landfills outside the County that is available based on existing agreements.

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17 Sanitation Districts of Los Angeles County, "Agreements for MRL Rail Construction Accepted - News Article," http://www.mrlf.org/index.php?build=view&idr=122&page2=&pid=32. 2008.

18 *Philadelphia v. New Jersey*, 437 U.S. 617 (1978).

REGULATORY SETTING

State

California Integrated Waste Management Act

In response to reduced landfill capacity, in 1989 the State of California passed the California Integrated Waste Management Act (CIWMA). This legislation (generally known by the name of the enacting bill AB 939) required cities and counties to reduce the amount of solid wastes entering existing landfills, through recycling, reuse and waste prevention efforts.

AB 939 required every city and county in the state to prepare a Source Reduction and Recycling Element to its Solid Waste Management Plan that identified how each jurisdiction would meet the mandatory state waste diversion goals of 25 percent by the year 1995 and 50 percent by the year 2000. On June 30, 2008, the State Assembly amended Senate Bill 1252 to include further waste diversion goals of 60 percent by the year 2015 and 75 percent by the year 2025.[19] The purpose of AB 939 was to "reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible." Noncompliance with the goals and timelines set forth within the act can be severe, as the bill imposed fines up to $10,000 per day on jurisdictions not meeting these recycling and planning goals.

AB 939 requires jurisdictions to utilize "integrated waste management"— a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. The act establishes the following waste management hierarchy:

- **Source Reduction:** "Source reduction" means any action that causes a net reduction in the generation of solid waste. "Source reduction" includes, but is not limited to, reducing the use of nonrecyclable materials, replacing disposable materials and products with reusable materials and products, reducing packaging, reducing the amount of yard wastes generated, establishing garbage rate structures with incentives to reduce the amount of wastes that generators produce, and increasing the efficiency of the use of paper, cardboard, glass, metal, plastic, and other materials. "Source reduction" does not include steps taken after the material becomes solid waste.[20]
- **Recycling:** "Recycling" means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace. "Recycling" does not include transformation.[21]

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19 California Integrated Waste Management Board, *Senate Bill 1252 Amendment*, (2008).

20 California Public Resources Code, Sec. 40196.

21 California Public Resources Code, Sec. 40180.

- **Composting:** "Compost" means the product resulting from the controlled biological decomposition of organic wastes that are source separated from the municipal solid waste stream, or that are separated at a centralized facility. "Compost" includes vegetable, yard, and wood wastes that are not hazardous waste.[22]

- **Transformation:** "Transformation" means incineration, pyrolysis, distillation, or biological conversion other than composting. "Transformation" does not include composting, gasification, or biomass conversion.[23]

- **Disposal:** "Solid waste disposal" or "disposal" means the final deposition of solid wastes onto land, into the atmosphere, or into the waters of the state.[24]

California Solid Waste Reuse and Recycling Access Act of 1991 Subsequent to the passage of CIWMA, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Reuse and Recycling Access Act of 1991 (Section 42900–42911 of the Public Resources Code) directs the CIWMB to draft a "model ordinance" for the provision of adequate areas for collecting and loading recyclable materials in development projects. If, by September 1, 1994, a local agency did not adopt its own ordinance based on the CIWMB model, the CIWMB model ordinance took effect for that local agency. The County of Los Angeles chose to use the CIWMB model ordinance.

In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, further requires each development project to provide an adequate storage area for collection and removal of recyclable materials.

Local

County of Los Angeles Solid Waste Management Action Plan

In the mid-1980s, Los Angeles County experienced extreme population growth, a correlated increase in waste generation, and was facing a situation of rapidly decreasing landfill capacity. On October 28, 1986, the County Board of Supervisors initiated a solid waste management study and implementation program. This and subsequent Board actions resulted in the development of various planning strategies addressing the solid waste management options, economic considerations, and the identification of the best sites for future landfill capacity, which were incorporated in the following planning documents: the Los Angeles County Solid Waste Siting Project (March 1987); the Report on the Solid Waste Management Status and Disposal Options in Los Angeles County (February 1988); and the Preliminary Alternate Site

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22 California Public Resources Code, Sec. 40116.

23 California Public Resources Code, Sec. 40201.

24 California Public Resources Code, Sec. 40192.

Study (January 1988). The Los Angeles County *Solid Waste Management Action Plan* is a plan to provide long-range management of the solid waste generated within the County. This plan includes such approaches as source reduction, recycling and composting programs, household hazardous waste management programs and public education awareness programs. The plan concludes that land filling would remain an integral part of the waste management system and calls for the establishment of 50 years of in-County permitted landfill capacity, as well as the County's support for the development of disposal facilities out of the County.[25] As required by AB 223, in 1988, the State Legislature approved the Los Angeles County *Solid Waste Management Action Plan*, prepared by the County of Los Angeles Board of Supervisors and County Sanitation District.[26]

County of Los Angeles Source Reduction and Recycling Element

The Source Reduction and Recycling Element (SRRE) was prepared as required by AB 939. It describes policies and programs implemented by the County for the County's unincorporated areas to achieve the state's mandates of 25, 50, 60, and 75 percent waste disposal reductions for the years 1995, 2000, 2015, and 2020, respectively. Per the Integrated Waste Management Act of 1989, the SRRE projects disposal capacity needs for a 15-year period. The current SRRE 15-year period commenced in 2006.

County of Los Angeles Non-Disposal Facility Element

AB 939 requires every city and county within the state to prepare and adopt a Non-Disposal Facility Element (NDFE) to identify all existing, proposed expansions of, and proposed new non-disposal facilities. These include source reduction and recycling facilities that are needed to implement the local jurisdiction's SRRE.[27] Los Angeles County's NDFE identifies 20 existing materials recovery facilities/transfer stations, and nine proposed material recovery facilities as non-disposal facilities. In addition, the County's NDFE also identifies the utilization of four landfill facilities, operated by the County Sanitation Districts of Los Angeles County, for diversion of yard/green waste which is intended to be used as alternative daily cover at the landfills.

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25 County of Los Angeles Department of Public Works, 1997, "Countywide Siting Element," http://dpwprod2.co.la.ca.us/swims/Upload/LACCSitingElement_VolumeI_TheElement_061997.pdf. 2008.

26 California Integrated Waste Management Board, *History of California Solid Waste Law, 1985-1989*, http://www.ciwmb.ca.gov /Statutes/Legislation/CalHist/1985to1989.htm. 2008.

27 California Integrated Waste Management Board, *Regulations: Title 14, Natural Resources Division 7, CIWMB Chapter 9. Planning Guidelines and Procedures for Preparing and Revising Countywide and Regional Agency Integrated Waste Management Plans*, http://www.ciwmb.ca.gov/Regulations/Title14/ch9a92.htm. 2008.

County of Los Angeles Green Building Ordinance

The County of Los Angeles adopted the Green Building Ordinance on November 18, 2008. The purpose of the ordinance is to establish green building techniques for the construction of new buildings, which are intended to conserve water, energy, and natural resources; divert waste from landfills; minimize impacts to existing infrastructure; and promote a healthier environment. Under this ordinance all residential projects obtaining a building permit on or after January 1, 2009, through January 1, 2010, must comply with the County Green Building Ordinance standards. After January 1, 2010, all residential projects containing five or more units must comply with the County of L.A. Green Building Standards and either the GreenPoint Rated (GPR), California Green Builder (CGB), or Leadership in Energy and Environmental Design (LEED) Green Building Rating System. All new residential projects containing five or more units must recycle and/or salvage for reuse a minimum of 65 percent of non-hazardous construction and demolition debris by weight.

ENVIRONMENTAL IMPACTS

Project Improvements

The proposed Project involves the redevelopment of the approximately 15.7-acre property located at 1920 Brea Canyon Cutoff Road. The existing Southlands Christian Church and Southlands Christian Schools structures, parking lots, and athletic field would be replaced with 775 for-lease residential units in multiple buildings, a recreational facility for residents, parking structures containing 1,544 parking spaces, and landscaping throughout the Project site.

Construction of the proposed Project would involve several phases, including demolition of asphalt paving and the existing structures, excavation of the site for below-grade parking, and construction of the new buildings, parking areas, and related improvements. This process would occur over an approximately 36-month period and some of the phases may overlap with other phases.

The volume of debris expected to be generated from the demolition of the existing church and school facilities and the associated parking structure has been estimated at approximately 5,000 cubic yards, including both hard and soft demolition.[28] The demolition process would separate debris and recycle a minimum of 65 percent (approximately 3,250 cubic yards) of the basic building materials; however, the percentage may be higher since as much of the basic building materials as possible would be separated and recycled. This demolition and recycling process would occur over a period of approximately 12 weeks.

The proposed Project would comply with Title 20, Chapter 20.87, of the Los Angeles County Code, Construction and Demolition Debris Recycling. The Project Applicant would also prepare a Waste Management Plan to recycle, at a minimum, 65 percent of the construction and demolition debris. Construction and demolition (C&D) debris typically includes lumber, drywall, metals (which is most commonly recycled), masonry (brick, concrete, etc.), carpet, plastic, pipe, rocks, dirt, paper, cardboard, or green waste. Reuse of C&D debris could include salvaging dimensional lumber from the Project, using aggregates reclaimed from crushed concrete, or grinding drywall scraps for use on site as a soil amendment. This plan would be reviewed and approved by the LACDPW and would identify methods to promote recycling and re-use of materials, as well as safe disposal consistent with the policies and programs contained within the County of Los Angeles SRRE. The Waste Management Plan would be provided to the County of Los Angeles Department of Public Works for review and approval, prior to the issuance of the demolition permit.

Additionally, due to the slope of the Project site and the proposed below-grade parking structure, excavation and recompaction activities would be required on the Project site. Approximately 55,000 cubic yards of earth would be removed and hauled from the Project site and would likely be taken to the Puente Hills Landfill, as it is the closest facility, but may be taken to any landfill permitted to accept earth material.[29] Additionally, 45,000 cubic yards of earth would be graded or excavated but recompacted on the Project site. Earthwork and excavation would occur over a period of approximately 12 weeks.

Thresholds of Significance

Based on the County's Initial Study Checklist and Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, impacts related to solid waste are considered significant based on the following:

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28 "Soft" demolition is another term for deconstruction, the orderly dismantling building components for re-use or recycling. In contrast to demolition, where buildings are demolished and materials may be either landfilled or recycled, deconstruction involves carefully taking apart portions of buildings or removing their contents with the primary goal of reuse.

29 Ziad El Jack, Senior Engineer, County of Los Angeles, Sanitation District, personal communication with Impact Sciences, Inc., October 21, 2008.

- Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?
- Would the project not comply with federal, state, and local statutes and regulations related to solid waste?

Impact Analysis

Threshold 1: **Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?**

Threshold 2: **Would the project not comply with federal, state, and local statutes and regulations related to solid waste?**

Analysis

Construction Impacts

Demolition is scheduled to commence in December of 2010; construction (inclusive of demolition and grading) would occur over a 36-month period; and Project buildout is expected in August of 2012.

Construction of the proposed Project would involve several phases, including demolition of asphalt paving and the existing structures, excavation of the Project site for below-grade parking, and construction of the new buildings, parking areas, and related improvements. This process would occur over an approximately 36-month period and some of the phases may overlap with other phases.

As proposed, the Project would require the removal of the existing church and schools facilities and the associated asphalt parking lots (assumed to occur in 2010) located at the Project site. As discussed above, demolition of the existing buildings on the Project site is expected to generate approximately 5,000 cubic yards of debris (of which a minimum of 3,250 cubic yards would be recycled and a maximum of 1,750 cubic yards would be disposed of in a landfill), while earthwork cut and fill volumes are expected to generate approximately 55,000 cubic yards of earth that would need to be removed from the Project site. Therefore, collectively a total of approximately 60,000 cubic yards of demolition debris and earth would be transported off of the Project site.

Waste materials generated during construction and operation are expected to be typical construction debris, including concrete, stucco, asphalt, rocks, building materials, wood, paper, glass, plastic, metals, cardboard, and other inert wastes (i.e., wastes that are not likely to produce leachates of environmental concern), as well as green wastes. As discussed in **Section 5.18, Environmental Safety**, an Asbestos Survey Report was prepared for the Project site and determined the existing structures contain asbestos

and lead-based paint. Abatement of identified materials would occur prior to building removal. Building materials containing asbestos, would be handled, transported, and disposed of off site in accordance with applicable laws and regulations prior to building removal.

On January 4, 2005, Los Angeles County adopted an amendment to Title 20, Utilities, of the Los Angeles County Code, to add Chapter 20.87, Construction and Demolition Debris Recycling, to provide for the recycling and reuse of construction and demolition debris in the unincorporated areas of the County of Los Angeles. As discussed above, the proposed Project would comply with this amendment. The Project Applicant would prepare a Waste Management Plan to recycle, at a minimum, 65 percent of the construction and demolition debris. The Plan would be submitted to the Los Angeles County Environmental Programs Division for review and approval prior to issuance of the demolition permit.

Waste generated during demolition and construction that is not recycled would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities generally within Los Angeles County. Demolition debris would be trucked from the Project site to one of two locations. Trash and wood would be delivered to the Puente Hills Recovery Facility located in the City of Industry. The Puente Hills Recovery Facility has a maximum capacity of 4,400 tons per day and, at the end of 2006 received an average of 312 tons per day.[30] Accordingly, this facility has the capacity to accommodate the approximate 3,250 tons of recyclable demolition and construction debris that would be delivered in late 2010 and early 2011. Given the sufficiency of available capacity, demolition and construction debris impacts to solid waste facilities would be less than significant.

As discussed above, site grading would require the export of 55,000 cubic yards of earth material (approximately 77,000 tons with a maximum of 1,400 cubic yards or 1,960 tons per day), as well as 1,750 cubic yards of non-recycled construction demolition debris (approximately 2,450 tons with a maximum of 84 cubic yards or 117.6 tons per day). These materials would be disposed of at the Puente Hills Landfill during 2010 and 2011, assuming a construction start date in 2010. The Puente Hills Landfill has a remaining capacity of 26.6 million cubic yards, a maximum capacity of 24,000 cubic yards per day, and a 2006 average disposal of 22,278 cubic yards per day. As such, the Puente Hill Landfill has the capacity to accommodate the 55,000 cubic yards of earth material and the 1,750 cubic yards of non-recycled construction demolition and debris to be removed from the Project site. Given the available capacity at the Puente Hills Landfill, disposal of excess earth material at the Puente Hills Landfill would result in a less than significant impact.

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30 California Integrated Waste Management Board, http//www.ciwmb.ca.gov. 2008.

Therefore, construction impacts, including disposal of construction, demolition, and earth materials, would be less than significant.

Operational Impacts

As shown in **Tables 5.13-1**, and **5.13-2**, **Proposed Project Solid Waste Disposal until 2015**, below, the proposed Project, beginning in 2012, would generate approximately 565.75 tons per year of solid waste, a net increase of approximately 484 tons per year over existing uses on the Project site (which generate 82.19 tons per year). This number is derived by using a solid waste generation factor provided by the CIWMB for estimating solid waste from residential developments, and multiplying that factor by the number of proposed dwelling units. These factors exist for different uses and have been created to assist local governments in assessing solid waste generation for planning purposes. These quantities represent a worst-case scenario, with no recycling activities in place.

Table 5.13-2
Proposed Project Solid Waste Disposal until 2015

Land Use	Units	Generation Factor[1]	Daily Generation (lbs/day)	Annual Generation (tons/year)	Waste to be Diverted (50 Percent) (tons/year)	Remainder Disposed in Landfill
Multi-family Residential	775 du	4 lbs/du/day	3,100.0	565.75	282.88	282.88
Existing Uses				82.19	41.1	41.1
Net Total:				**483.56**	**241.78**	**241.78**

Source: Impact Sciences, Inc., September 2008.
du = dwelling unit
[1] *The County Department of Regional Planning has not established uniform waste generation rates for specific land uses. California Integrated Waste Management Board, http://www.ciwmb.ca.gov/wastechar/wastegenrates/Institution.htm. 2008. The California Integrated Waste Management Board has not established uniform waste generation rates for specific uses; they provide examples of*

However, the proposed Project would recycle a minimum of 50 percent until 2015, when the Project would be required to recycle a minimum of 60 percent of the solid waste generated, in accordance with current state law and in compliance with the prepared Waste Management Plan. Assuming 50 percent diversion, the Project would generate a gross total of approximately 283 tons per year of solid waste, or a net increase of 242 tons over existing conditions. Assuming a 60 percent reduction beginning in 2015, the Project would generate a gross total of 226 tons per year, or a net increase of 185 tons over existing conditions, as shown in **Table 5.13-3**, below. The Project would include a solid waste diversion program (e.g., adequate areas for collecting and loading recyclables, as required by the California Solid Waste

Reuse and Recycling Access Act of 1991) and would result in the Project meeting at least the minimum recycling level established by Los Angeles County in accordance with AB 939. Meeting the 2004 recycling levels (53 percent) would result in a further reduction of 17 tons of solid waste per year.

Table 5.13-3
Proposed Project Solid Waste Disposal After 2015

Land Use	Units	Generation Factor	Annual Generation (tons/year)	Waste to be Diverted (60 Percent) (tons/year)[a]	Remainder Disposed in Landfill
Multi-family Residential	775 du	4 lbs/du/day	565.75	339.45	226.3
Existing Uses			82.19	41.1	41.1
Net Total:			**483.56**	**298.35**	**185.2**

Source: Impact Sciences, Inc., 2008.
du = dwelling unit
[a] *A 50 percent diversion rate was used for the existing uses, since they would cease to operate upon Project implementation and therefore would not exist in 2015 when the 60 percent diversion rate is to take effect.*

UPW would serve the Project site during operation since the Project proposes multi-family residential units.

Project occupancy and operation is anticipated to commence in mid- to late 2012. Solid waste from the Project site would be transported to Puente Hills Landfill and recyclables would be transported to Allan Company in Baldwin Park. The Conditional Use Permit for the Puente Hills Landfill expires in 2013. Thereafter, waste haulers currently using Puente Hills Landfill would either dispose of solid waste at the Mesquite Regional Landfill in southern Imperial County via rail system or use another local transfer station.[31]

The Mesquite Regional Landfill can accept a maximum of 20,000 tons per day and has a capacity of 600 million tons. Additionally, Mesquite Regional Landfill has a life expectancy of 100 years. Construction of the Mesquite Regional Landfill began in 2007 and is expected to be operational in 2009 and receive waste from the County of Los Angeles in 2011. The Landfill has received all required permits, including the Land Use and SWF permits.

[31] Juan Villa, Los Angeles County Department of Public Works Environmental Programs Division, personal communication with Impact Sciences, Inc., September 25, 2008.

Total disposal in the County of Los Angeles (including both incorporated cities and unincorporated areas) in 2006 was 12 million tons. Total disposal into the Puente Hills Landfill in 2006 was 3.823 million tons.[32] The 242 net tons of solid waste per year generated by the Project after 50 percent diversion that would require disposal would represent less than a 0.0021 percent increase in the total solid waste disposal by the County of Los Angeles, until 2015. After 2015, the Proposed Project would generate approximately 185 net tons of solid waste after 60 percent diversion, representing less than 0.002 percent increase of the total solid waste disposal by the County of Los Angeles. Project-generated waste would result in an approximately 0.006 percent increase in total disposal to Puente Hills Landfill, until 2015, and 0.005 percent increase in total disposal to Puente Hills Landfill after 2015. As discussed above, the Puente Hills Landfill has a remaining capacity of 26.6 million cubic yards and a maximum capacity of 24,000 cubic yards per day. This increase in outflow is not considered substantial. The approximately 242 tons of solid waste per day generated by the Project after 50 percent diversion and requiring disposal before 2015 would represent approximately 1 percent of the maximum daily capacity of the landfill.

The Project is required to implement a waste diversion program to help the County meet its annual waste diversion goal of 50 percent as mandated by the state in AB 939; additionally, the Project would comply with all other applicable statutes and regulations related to solid waste. Based on the fact that sufficient landfill capacity exists to serve the Project and that the Project would comply with all applicable regulations, impacts to solid waste services would be less than significant.

Mitigation Measures

As discussed above, impacts associated with solid waste service would result in less than significant impacts; as such, no mitigation measures are required.

CUMULATIVE IMPACTS

An EIR must address cumulative impacts or the impact of the proposed Project in combination with other related past projects or projects that are proposed or recently approved. A list of these cumulative projects is incorporated as part of **Section 4.0, Cumulative Projects**. It is beyond the scope of this EIR and too speculative to attempt to quantify the solid waste that could be generated by cumulative development during construction. As such, this analysis is limited to the impact of solid waste that would be generated during operation.

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32 Los Angeles County Department of Public Works, *Los Angeles County Integrated Waste Management Plan, 2006 Annual Report on the Countywide Summary Plan and Countywide Siting Element, Appendix E-2.1*, 2008.

As shown in **Tables 5.13-2** through **5.13-4**, the proposed Project combined with other cumulative projects, would generate an increase in solid waste of approximately 10,524.20 tons per year. These quantities represent a worst-case scenario, with no recycling activities in place. Should recycling occur in accordance with current state law, cumulative projects solid waste generation would be reduced by approximately 50 percent. Should cumulative projects meet the 2004 recycling levels (53 percent) further reductions may occur. Based on the County's 2004 solid waste diversion rate of 53 percent, approximately 5,577.83 tons of solid waste would be diverted annually, leaving approximately 4,946.37 tons of solid waste to be disposed. This additional outflow generated by the proposed Project in conjunction with the identified related projects would represent an approximately 0.04 percent increase above the quantity disposed by the County in 2006.

As discussed above, County landfills have the capacity to accommodate solid waste projections through 2015 under business as usual. However, ultimate landfill capacity would be determined by several factors, including (1) expiration of various permits (e.g., Land Use Permits, Waste Discharge Requirements Permits, Solid Waste Facilities Permits, and air quality permits); (2) restrictions to accepting waste generated only within a landfill's particular jurisdiction and/or watershed boundary; and (3) operational constraints.

Additionally, the County would meet disposal capacity requirements of AB 939 by successfully permitting and developing all in-County landfill expansions, utilizing available or planned out-of-County disposal capacity, developing the necessary infrastructure to facilitate exportation of waste to out-of-County landfills, and developing conversion/alternative technology facilities. Therefore, the Project would have a less than cumulatively considerable contribution to cumulatively significant impacts on solid waste.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

No unavoidable significant Project-specific or cumulative impacts to solid waste services are anticipated.

Table 5.13-4
Proposed Project and Related Projects Solid Waste Generation (No Recycling)

Land Use	Measure	Quantity (Net)	Generation Factor[1]	Annual Generation (tons/year)
Related Projects				
Adult Day Care Facility[2]	sf	10,755	3.25 lbs/100 sq ft/year	0.17
Single Family	du	3,726	10 lb/dwelling unit/day	6,799.95
Multi-Family	du	330	4 lb/dwelling unit/day	240.90
Commercial[3]	sf	104,100	5 lbs/1000 sf/day	94.99
Retail	sf	755,200	2.5 lb/1000 sq ft/day	344.56
Restaurant	sf	179,500	0.005 lb/sq ft/day	163.79
Office	sf	295,430	6 lbs/1000 sf/day	323.50
Medical Office	sf	100,000	0.0108 tons/sq ft/year	1,080.00
Industrial	sf	68,800	5 lb/1000 sq ft/day	62.78
Stadium	Event	30	5,095.9 lbs/day[4]	930.00[5]
Subtotal:				**10,040.645**
Proposed Project (Net Generation)	du	775	4 lb/dwelling unit/day	483.56
Total:				**10,524.20**

Source: California Integrated Waste Management Board, Estimated Solid Waste Generation, http://www.ciwmb.ca.gov/wastechar/wastegenrates/default.htm. 2008.
du = dwelling unit; sf = square feet
Note: Numbers may not total exactly due to rounding.

1 *Generation factors are derived from the Ventura County Solid Waste Management Department's Guidelines for Preparation of Environmental Assessments for Solid Waste Impacts, unless otherwise noted.*

2 *Since the County's Guidelines do not provide a waste generation factor specific to Adult Day Care Facilities, the waste generation factor for Service Establishments: Other Uses, which includes such uses as health clubs and recreation, was applied to this land use. This is a higher generation factor than is applied to commercial or office uses, and is likely a conservative (overstated) estimate.*

3 *Includes cinema uses.*

4 *Generation factor is based on the assumption that 31 tons of solid waste would be generated per maximum capacity event; an estimated 30 maximum capacity events per year are assumed.*

5 *Annual Tonnage derived from the City of Industry's* 2008 Draft Supplement to Industry Business Center Environmental Impact Report, p. 5.9-21.

5.14 PARKS AND RECREATION

SUMMARY

The County of Los Angeles Department of Parks and Recreation operates parks and recreational facilities throughout the County of Los Angeles, including within the Community of Rowland Heights. The Project is located within the Rowland Heights Community General Plan Area and Park Planning Area 10. Buildout of uses have the potential to generate a demand for parkland within Rowland Heights.

INTRODUCTION

This section of the EIR addresses the availability of park and recreational facilities in the Project area, and the proposed Project's anticipated impact on those facilities. Where impacts are identified as significant, mitigation is recommended to reduce these impacts to acceptable levels. The following analysis is based on information contained in the Rowland Heights Community General Plan, the Los Angeles County Code, as well as correspondence with personnel from the County of Los Angeles Department of Parks and Recreation.

EXISTING CONDITIONS

Outdoor Recreation Standards

The Rowland Heights Community General Plan identifies a planning standard of 4.0 acres of local parkland per 1,000 residents.[1] Additionally, Los Angeles County uses an adopted planning standard of 6.0 acres per 1,000 residents for regional parkland.[2]

The unincorporated areas of the County are divided into 47 Park Planning Areas based on location and neighborhood characteristics. Rowland Heights is located within Park Planning Area 10, which encompasses the Rowland Heights Community General Plan Area and the Puente Hills east of the Orange Freeway.

Existing Facilities

The Project site is located at 1920 Brea Canyon Cutoff Road and is situated in the Rowland Heights Community General Plan Area, within the County of Los Angeles. The Rowland Heights Community General Plan Area encompasses seven parks totaling 703.3 acres, five of which are classified as local

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1 County of Los Angeles, Department of Regional Planning, *Rowland Heights Community General Plan*, (1981).

2 Correspondence between Joan Rupert, Los Angeles County Parks and Recreation Department, and Anthony Curzi, Los Angeles County Department of Regional Planning, August 5, 2009.

parks. The local parks include Bill Blevins Park, Gloria Heer Park, Carolyn Rosas Park, Rowland Heights Park, and Trailview Park. Two regional parks, Pathfinder Community Regional Park and Schabarum Regional Park, are also located in Rowland Heights (Pathfinder Community Regional Park is considered to function as both a local and regional park, since it provides ball fields and hard athletic courts, amenities more typical of a local park). Park acreages and facilities are summarized in **Table 5.14-1, Local and Regional Parks in Rowland Heights**. The location of each of these facilities is shown in **Figure 5.14-1**.

Table 5.14-1
Local and Regional Parks in Rowland Heights

Name	Facilities	Acreage
	Local Parks	
1. Bill Blevins Park	Picnic tables, children's play area, multi-purpose field	5.0
2. Gloria Heer Park	Baseball field, playground, multi-purpose field	10.5
3. Carolyn Rosas Park	Basketball courts, computer room, weight lifting, community building, picnic area, multi-purpose field	6.6
4. Rowland Heights Park	Tennis courts, basketball courts, multi-purpose field, dance lessons, community building, children's play area	11.1
5. Trailview Park	Picnic areas	1.1
LOCAL PARK TOTAL		**34.3**
	Regional Parks	
1. Pathfinder Community Regional Park	Tennis courts, tennis lessons, ball fields, aerobic classes, community classes, basketball courts, picnic area, conference room	29.0
2. Schabarum Regional Park	Hiking, biking, horseback riding, equestrian center, soccer fields, fitness trail, community meeting room, playground	640.0
REGIONAL PARK TOTAL		**669.0**

Source: Los Angeles County Department of Parks and Recreation, July 2008.

SOURCE: Google Earth - 2008, Impact Sciences, Inc. – August 2008

FIGURE **5.14-1**

Location of Existing Parks within Rowland Heights

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As discussed above, the established standard in the Rowland Heights Community General Plan for local parkland is 4.0 acres of local parkland per 1,000 residents. Based on the 1981 Rowland Heights Community General Plan, Rowland Heights was deficient in local parkland by 120 acres.[3] However, at that time, Rowland Heights had an estimated 34,000 residents and only two local parks, Fajardo Park (now Carolyn Rosas Park) and Rowland Heights Park, totaling 17.7 acres. As shown in **Table 5.14-1**, a total of five parks totaling 34.3 acres of local parkland currently exists within the Rowland Heights Community General Plan Area. Based on the 2000 U.S. Census, the most recent official data, the population of Rowland Heights is approximately 48,553.[4] Accordingly, Rowland Heights is currently deficient in local parkland by approximately 160 acres.[5]

The adopted standard for regional parkland is 6.0 acres of parkland per 1,000 residents. The County currently has a total of 26,424 acres of regional parkland; the two regional parks located within Rowland Heights are included in **Table 5.14-1**. Based on the Southern California Association of Government's estimated 2008 population for Los Angeles County of 9,519,324,[6] the County should have 57,116 acres of parkland. Accordingly, there is a Countywide deficit of regional parkland of approximately 30,692 acres; the County therefore has approximately 46 percent of the total parkland acreage it should have, given the Countywide population.

REGULATORY SETTING

Los Angeles County Code

The County of Los Angeles has adopted a Parkland Dedication Ordinance (Los Angeles County Ordinance 21.24.340 et seq.), which is consistent with the Quimby Act. Applicants proposing residential subdivisions within Los Angeles County are required either to provide local park space to serve a project; pay a fee in lieu of the provision of such park space in accordance with the provisions of Section 21.28.140 of the Los Angeles County Code (which places a representative land value of $219,187 per acre on land within Park Planning Area 10, Rowland Heights, as of July 2009);[7] provide local park space containing less than the required obligation but developed with amenities equal in value to the park fee; or do a

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3 County of Los Angeles, *Rowland Heights Community General Plan*.

4 U.S. Census Bureau, "2000 Census Quick Tables - American Fact Finder for Rowland Heights CDP," http://factfinder.census.gov. 2008.

5 The standard provision for local parkland per the County's Parkland Standards was calculated as follows: (48,553 / 1,000) = 48.5 x 4 acres = 194 acres, and 194 – 34 acres of existing parkland = 160 (the deficit).

6 Southern California Association of Governments, *2008 Regional Transportation Plan*, http://www.scag.ca.gov /rtp2008/pdfs/finalrtp/f2008RTP_Complete.pdf. 2008

7 Los Angeles County Municipal Code, Section 21.28.140, http://www.bpcnet.com/cgi-bin/hilite.pl /codes/lacounty/_DATA/TITLE21/Chapter_21_28_DEDICATIONS.html#12. Effective July 1, 2009.

combination of the above in accordance with the requirements of the Code. According to the Code, the extent of the local park space obligation is 3 acres per 1,000 residents.

The proposed Project involves the development of 775 for-lease residential units and does not propose any subdivision of land. The Parkland Dedication Ordinance does not apply to projects that are not subdivisions, and therefore does not apply to the proposed Project or any related projects that are not subdivisions.

Rowland Heights Community General Plan

According to the Rowland Heights Community General Plan, the established standard in the Rowland Heights Community General Plan for local parkland is 4 acres of local parkland per 1,000 residents. This obligation is considered by the County Department of Parks and Recreation to supersede the less stringent County Code requirement for 3 acres per 1,000 residents, and is therefore the obligation assumed in this analysis. Additionally, the Outdoor Recreation Element of the Rowland Heights Community General Plan sets forth plans and policies regarding parks and recreational facilities, as follows:

- Acquire land for local park sites as a first priority.
- Develop park sites as a second priority.
- Use school facilities to supplement recreational services provided by local parks.
- Require that all new subdivisions dedicate land for local parks according to requirements of the Quimby Law. Fees may be paid in lieu of park land dedication only when the land requirement is less than 5 acres. Where only part of a given ownership is being developed at a particular time, the amount of park space required will be based on the most intense development allowed on the entire site.
- Acquire potential park sites in the areas shown on the Land Use Map as funds are available.
- Obtain rights-of-way for a system of hiking trails, nature walks, and equestrian trails in the areas suggested on the Conservation and Recreation Map. Hazard reduction techniques, including fuel modification, should be practiced along trails that traverse chaparral-covered areas.
- Develop a network of bikeways as shown on the Conservation and Recreation Map.

Other Applicable Regulations

The established standard for regional parkland in Los Angeles County is 6.0 acres of regional parkland per 1,000 residents.

ENVIRONMENTAL IMPACTS

Project Improvements

The proposed Project involves the redevelopment of the approximately 15.3-acre property located at 1920 Brea Canyon Cutoff Road. The Project site is currently occupied by the existing Southlands Christian Church and Southlands Christian Schools structures, parking lots, gymnasium and athletic field. Since the Project site is currently used as a private school during the week and a church on the weekends, it is assumed that the existing on-site athletic and recreational facilities are not accessible for public use.

The existing buildings and improvements on the Project site would be replaced with approximately 775 for-lease residential units in multiple buildings, a central recreational clubhouse and pool for residents plus recreational amenities in each building, parking structures and at-grade surface parking totaling approximately 1,544 parking spaces, and landscaped areas throughout the Project site. Three different types of residences are proposed: three-story Townhome-style apartments, a four-story Podium building, and a three- and four-story Wrap-Around building.

The central recreational clubhouse would be two stories, and 6,532 square feet and would include such facilities as a "great room" or community room, yoga/multipurpose room, media room, fitness center, sports lounge, library/multipurpose room, conference room, and business center. Second-story terraces would provide outdoor seating. An outdoor swimming pool and spa, as well as a barbeque area, would be located adjacent to the recreational clubhouse.

Additional indoor and outdoor recreational facilities would be incorporated into the Podium buildings, Townhome-style apartment building clusters, and Wrap-Around buildings, as shown in **Figure 5.14-2, Open Space and Recreational Amenities**.

The two courtyards within the Podium buildings, the East Podium Pool Court and the West Podium Pool Court, would each contain a swimming pool, spa, and landscaped terraces. Both Podium buildings would also contain indoor recreational facilities, together totaling 4,871 square feet, for residents of the buildings. A landscaped plaza incorporated into the two Podium buildings would face the central recreational clubhouse.

The eastern Townhome-style apartment building cluster would surround a landscaped quadrangle containing a barbeque area (East Quad). The western cluster would surround a smaller landscaped

quadrangle (West Quad) and would be bordered by landscaped areas, including a playground area to the north.

A swimming pool and spa serving residents of both Wrap-Around buildings would be located in a courtyard (Wrap Building Pool Court) within the northern Wrap-Around building. The northern Wrap-Around building would also contain a 1,160-square-foot indoor recreational facility for residents of both buildings. Two landscaped courtyards, the East Court and the West Court, would be located within the southern Wrap-Around building.

Landscaped and hardscaped open space and outdoor amenities on the Project site, including quadrangles, the playground area, swimming pools and pool courts, common areas such as courtyards and plazas, and internal pedestrian walkways (and excluding driveways and surface parking areas), total approximately 194,200 square feet, or 4.46 acres.

Thresholds of Significance

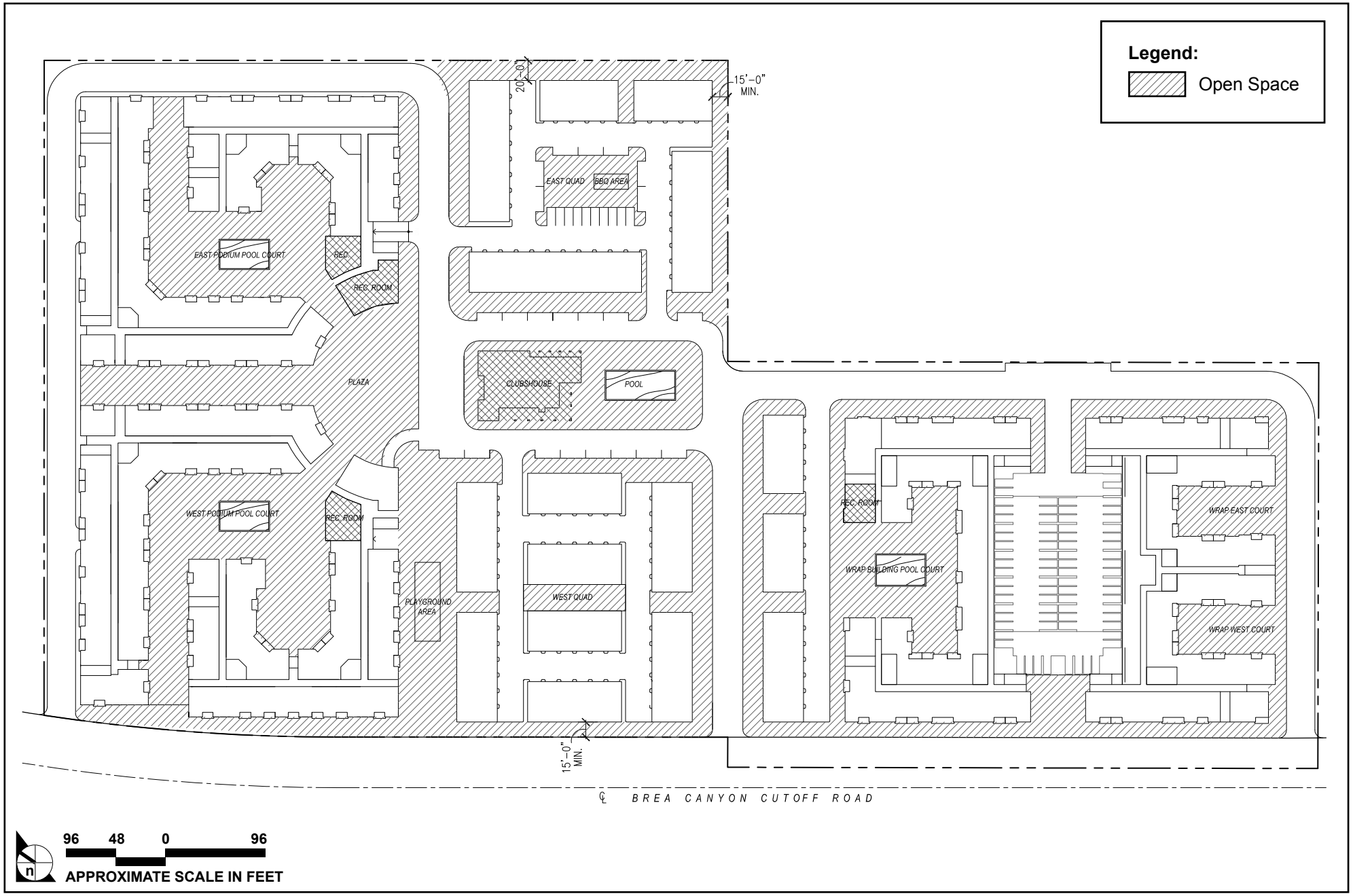
Based on the County's Initial Study Checklist and Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, projects should be evaluated for potentially significant impacts related to Parks and Recreation based on the following criteria:

- Would the Project require new or expanded recreational facilities for future residents?
- Would the Project 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 or facilities (e.g., fire protection, police protection, schools, parks, roads)?

Impact Analysis

Threshold 1: **Would the Project require new or expanded recreational facilities for future residents?**

Threshold 2: **Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 or facilities (e.g., fire protection, police protection, schools, parks, roads)?**



SOURCE: Van Tilburg, Banvard & Soderbergh, AIA – December 2009

FIGURE **5.14-2**

Open Space and Recreational Amenities

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Analysis

Construction Impacts

Construction activities, including demolition, associated with the Project would result in the removal of the existing Southlands Christian Church and Southlands Christian School. The existing private recreational facilities located on the Project site, including a gymnasium and athletic field, would be removed. Impacts associated with the loss of privately held recreational land through construction activities would be less than significant, however, since no public local or regional parkland or recreational facilities are being removed as a result of Project construction.

Operational Impacts

Project implementation would result in a net increase of approximately 775 dwelling units on the Project site, and as discussed in **Section 5.16, Population, Housing, and Employment**, the construction of which would result in an increase in on-site population of approximately 2,139 residents, based on the average household size in the Project's Census Tract.[8] Although the local park space obligations defined in the County's Parkland Dedication Ordinance (3 acres per 1,000 residents) and within the Rowland Heights Community General Plan (4 acres per 1,000 residents) do not normally apply to projects where no subdivision of property is proposed, these obligations nonetheless serve as a reasonable basis for determining Project impacts on local park facilities. Applying the more stringent obligation of 4 acres per 1,000 residents, as required by the County's Department of Parks and Recreation, the population increase associated with Project implementation would generate the need for approximately 8.6 acres of local parkland within the Rowland Heights Community General Plan Area, which would increase the local parkland deficit in the this area by approximately 8.6 acres, or 5.3 percent, from 160 acres to 168.6 acres.[9]

Project-related demand for recreational facilities would be partially offset by open space totaling 4.46 acres and recreational amenities proposed on the Project site (see **Proposed Improvements,** above). These include amenities typically found in local parks, such as swimming pools, playground equipment, barbeque areas, and indoor recreational equipment.

Even with proposed on-site open space and recreational amenities, the Project would still result in the need for 4.14 acres of local park space (8.6 acres of calculated Project demand less 4.46 acres of proposed

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8 U.S. Census Bureau, "2000 Census, Quick Tables - American Fact Finder for Census Tract 4033.04, Los Angeles County, California."

9 The Project-related demand in local parkland deficit was calculated by dividing the proposed Project resident population by 1,000 and multiplying the result by the Rowland Heights Community General Plan requirement for 4 acres per 1,000 residents, as follows: (2,139 / 1,000) x 4 acres = 8.556 acres, or 8.6 acres.

on-site open space and recreational amenities = 4.14 acres). As stated in the **Regulatory Setting** section, above, where a project does not fully meet its required park space obligations on site, the Parkland Dedication Ordinance requires payment of a fee based on the representative market value of land in the Park Planning Area, and permits the value of proposed on-site recreational amenities to be considered in lieu of payment of the park fee, since such amenities meet some of the recreational needs of Project residents. The value of the Project's proposed on-site amenities was determined to be approximately $3.2 million, which considerably exceeds the required Parkland Dedication Ordinance fee for the Project's 4.14-acre unmet local park space obligation. Therefore, on-site amenities were determined by the County Department of Parks and Recreation to further offset Project demand for recreational facilities.[10]

> However, it is expected that Project residents would still use local parks when athletic courts and playing fields are required, since these amenities are not proposed on the Project site. Moreover, the facilities on the Project site are intended for the use of Project residents and would not be accessible to the general public. Therefore, the Project-related population increase still would result in residual, potentially significant impacts related to the need for new or expanded recreational facilities in local parks to serve Project residents, and still would increase the existing local parkland deficit in the Rowland Heights Community General Plan Area. With implementation of **Mitigation Measure 5.14-1**, which specifically addresses the Project's impacts on local public parks and recreation facilities to the satisfaction of the County Parks and Recreation Department, these impacts would be reduced to a less than significant level.

Project-related population increases would also increase the regional parkland deficit by 13 acres, or 0.04 percent, from 30,692 to 30,705 acres. This is considered a minor increase. Moreover, although regional parkland supply and demand is assessed on a countywide basis, the Rowland Heights Community General Plan Area contains two regional parks totaling 669 acres. The Project's impact on the ratio of regional parkland to population is therefore considered less than significant.

Mitigation Measures

The following mitigation measure would reduce Project impacts on local parkland to a less than significant level:

5.14-1: The Applicant shall either provide funds for, or implement improvements within, the Rowland Heights Park Baseball Field in the amount of $28,000 to the satisfaction of the County Department of Parks and Recreation. If the Applicant implements the

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10 Joan Rupert, Section Head, Environmental, Los Angeles County Parks and Recreation Department, personal communication with Trammell Crow Residential and Impacts Sciences, October 5, 2009.

improvements, no permissions or permits shall be required beyond the approval of the County Department of Parks and Recreation. Funds or improvements shall be directed towards the Baseball Field since these amenities are not proposed as part of the Project. Funds shall be provided or improvements initiated upon issuance of a building permit for the Project, as follows:

- Dugouts (4) shading structures or covers: $4,000;
- Batting cages (2): $16,000; and
- To be spent as directed by County: $8,000.

CUMULATIVE IMPACTS

Development of the proposed Project in combination with related projects identified in **Section 4.0, Cumulative Projects,** would introduce an additional 4,833 dwelling units and an estimated population of 13,581 persons. However, only two of the related projects are within the Rowland Heights Community General Plan Area. These two related projects would introduce approximately 34 new residents to the Community Plan Area. Therefore, together with the proposed Project, approximately 2,212 new residents would be introduced to the Rowland Heights community. Development of the proposed Project in combination with related projects located within Rowland Heights would increase the local recreational parkland deficit by 5.5 percent to 168.8 acres, and would increase the regional parkland deficit by 0.04 percent to 30,705 acres. On-site recreational amenities would partially offset Project-related demand for local park facilities, and implementation of the required mitigation measure would further reduce such impacts to less than significant levels. The Project-related increase in the regional parkland deficit would be negligible. Therefore, the Project's contribution to cumulatively significant impacts on the established standards for local and regional parkland would be less than considerable.

Projected growth within Rowland Heights will continue to increase the demand placed on parks and recreational facilities. As discussed above, the County of Los Angeles has adopted a Parkland Dedication Ordinance (Los Angeles County Ordinance 21.24.340 et seq.), which is consistent with the Quimby Act. Residential subdivisions proposed within Rowland Heights would be required to meet County and Quimby act local parkland standards through dedication of land, fees in lieu of the dedicated parkland, construction of amenities on dedicated parkland, or a combination of these. While the proposed Project and two applicable related projects do not propose any subdivision of land, and are thus exempt from the provisions of this ordinance, application of this ordinance to future subdivision projects within Rowland Heights would ensure that the demand for parks and recreational facilities are met as new subdivisions are constructed in the future.

Mitigation Measures

Project-level impacts on local parkland are mitigated to a less than significant level through implementation of **Mitigation Measure 5.14-1.** The proposed Project would have a less than considerable contribution to cumulatively significant impacts on parks and recreational facilities, and no additional mitigation measure is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project-specific impacts and Project contributions to cumulatively significant impacts on local and regional County parks and recreational facilities would be less than significant.

5.15 LIBRARY SERVICE

SUMMARY

Library service in Rowland Heights is provided by the County of Los Angeles Public Library system. The Rowland Heights Library, located at 1850 Nogales Street, would serve the Project site. Current services provided by the Rowland Heights Library are considered inadequate based on current library service planning guidelines.

Development of the Project would introduce approximately 775 new residential units to the Rowland Heights Library service area. Based on the current Los Angeles County service level guidelines for planning purposes of 2.75 items (books, magazines, periodicals, etc.) per person, 0.50 square foot of library facilities per person, and 1 computer per 1,000 persons, demands on library services and facilities from the Project's anticipated increase in residents could not be accommodated by the existing Rowland Heights Library. As a result, the Project Applicant would be required to pay County-adopted library mitigation impact fees at the time building permits are issued to mitigate impacts from the Project to a less than significant level.

INTRODUCTION

This section presents an overview of the existing library services in the Rowland Heights area and discusses the potential impacts to library services associated with development of the Project. This section also includes a discussion of the cumulative impacts of the Project in conjunction with other related projects. Where impacts are identified as significant, mitigation measures are recommended to reduce such impacts to acceptable levels. Information for this section was obtained through correspondence with personnel from the Staff Services Division of the County of Los Angeles Public Library, and from the Rowland Heights branch of the Los Angeles Public Library system.

EXISTING CONDITIONS

Library Facilities

The Los Angeles County Library operates library facilities and services Countywide, in both unincorporated and incorporated areas of the County. As shown on **Figure 5.15-1, Location of Rowland Heights Library**, the County currently operates one branch library in Rowland Heights. The Rowland Heights Library, located at 1850 Nogales Street, is approximately 14,863 square feet in size and contains

approximately 138,682 items (books, video and audio titles, periodical subscriptions, etc.),[1] and 11 computers.[2] The library's operating hours are Monday through Thursday 9:00 AM to 9:00 PM; Friday 9:00 AM to 6:00 PM; Saturday 9:00 AM to 5:00 PM; and Sunday 1:00 PM to 5:00 PM.[3] The Rowland Heights Library maintains a staff of five full-time and 19 part-time employees.[4] The library does not have adequate resources and facilities to serve the existing community based on Los Angeles County service level guidelines.[5]

The population of the library service area was estimated to be 50,263 in the year 2000 and is anticipated to increase by 4,161 to 54,424 in the year 2020.[6] Other library resources may also be available to area residents, including libraries in nearby cities and communities (i.e., Diamond Bar, Walnut, Hacienda Heights), and libraries located at local colleges (e.g., Mt. San Antonio Community College, Cal Poly Pomona), high schools, and junior high schools. These library services augment County facilities by providing residents alternative sources for library materials. It is not anticipated, however, that residents of Rowland Heights would make significant use of these alternate facilities due to the distance to these other facilities (see **Table 5.15.1)**. Many of these alternate library facilities may charge user fees or restrict use of their materials to local residents or students. Additionally, for planning purposes, the County of Los Angeles Public Library only considers the closest community library while establishing existing service adequacy.[7]

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1 Written correspondence from Terry Maguire, Chief Deputy County Librarian, County of Los Angeles Public Library, July 3, 2008.

2 Correspondence from Mosie Blow, Staff, County of Los Angeles Public Library, July 23, 2008.

3 Los Angeles County Library Web site, http://www.colapublib.org.

4 Correspondence from Malou Rubio, Head, Staff Services, County of Los Angeles Public Library, Library Headquarters, July 17, 2008

5 Written correspondence from Terry Maguire, Chief Deputy County Librarian, County of Los Angeles Public Library, July 3, 2008. (Refer to **Appendix 5.15** for a copy of this correspondence.)

6 Correspondence from Malou Rubio, Head, Staff Services, County of Los Angeles Public Library, Library Headquarters, July 17, 2008. Population projection is based on the 2000 US Census.

7 Correspondence with Malou Rubio, Head, Staff Services, County of Los Angeles Public Library, Library Headquarters, October 22, 2008.

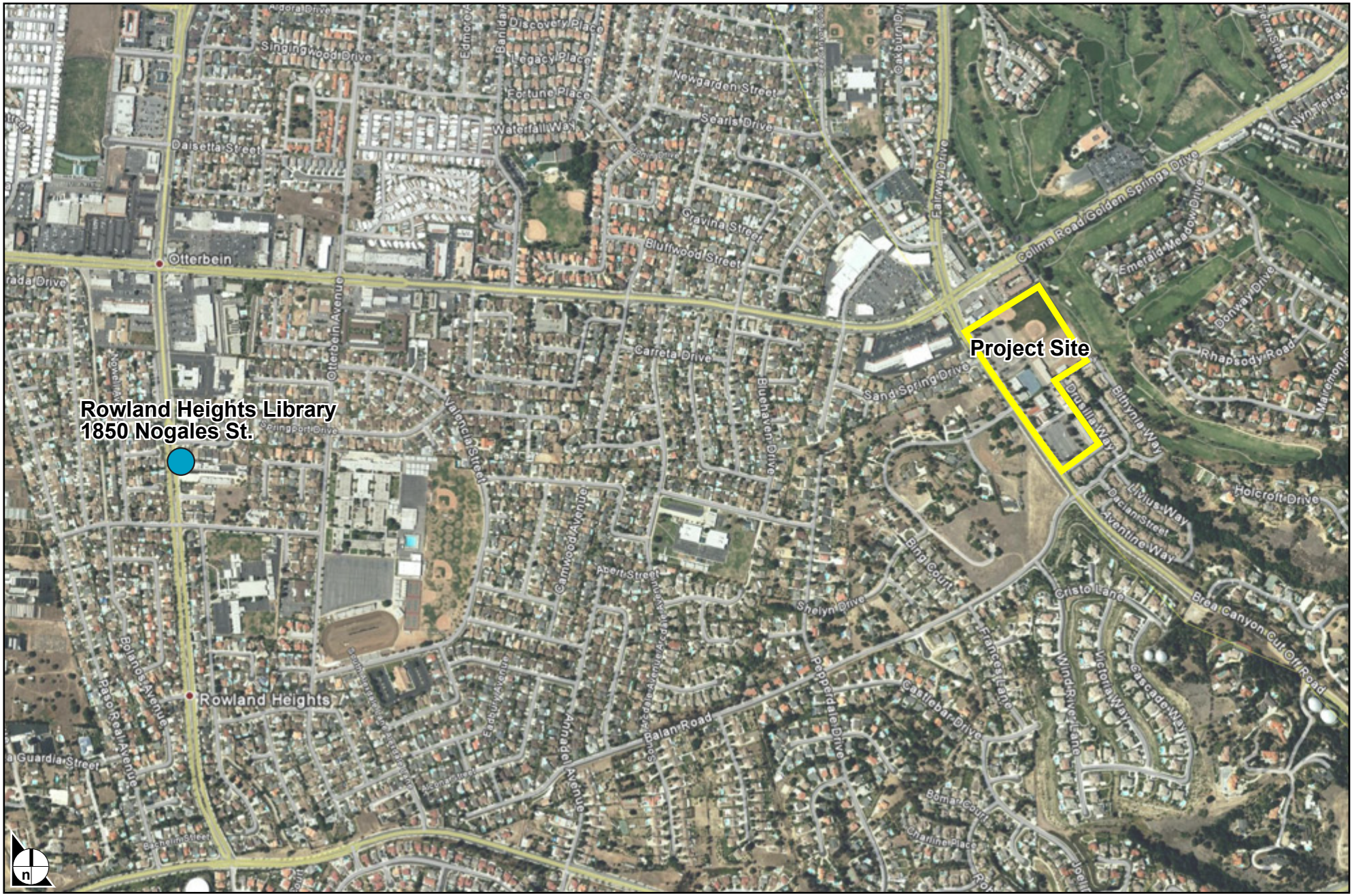
Rowland Heights Library
1850 Nogales St.
Project Site
Otterbein
Rowland Heights
Colima Road/Golden Springs Drive
Fairway Drive
Otterbein Avenue
Valencia Street
Carreta Drive
Sand Spring Drive
Bluehaven Drive
Bluffwood Street
Gravina Street
Newgarden Street
Searls Drive
Fortune Place
Waterfall Way
Discovery Place
Legacy Place
Singingwood Drive
Daisetta Street
Emerald Meadow Drive
Donway Drive
Rhapsody Road
Bithynia Way
Divilus Way
Holcroft Drive
Aventine Way
Brea Canyon Cut Off Road
Cristo Lane
Wind River Lane
Victoria Way
Cascade Way
Castlebar Drive
Pepperdale Drive
Balan Road
Shelyn Drive
Binpi Court
Camwood Avenue
Abert Street
Nogales Avenue
Bonita Avenue
Bonanza Street
Bonanza Court
Charline Place
Bonnie Court
Bonnie Place
Bonnie Way
Bonnie Avenue
Bonnie Street

Table 5.15.1
Public Libraries Within and in Proximity to Rowland Heights

Library	Distance[1]
Rowland Heights	-
Walnut	3.9 miles
La Puente	4.3 miles
Diamond Bar	4.4 miles
Hacienda Heights	4.4 miles
West Covina	6.7 miles
Sunkist-La Puente	7.0 miles

[1] *Distance is from the Rowland Heights Library*
Source: Impact Sciences, Inc.

General Level of Service Standards

For planning purposes, the Los Angeles County Library has established service level guidelines for library square footage, items (books, periodicals, audio cassettes, videos, etc.), and computers, per capita. Current service level guidelines include 0.50 gross square foot of library facilities per person, 2.75 library items per person, and one computer per 1,000 persons.[8] The Rowland Heights Library currently provides 0.30 square feet of library facilities per person, 2.76 items per person, and 0.2 computers per 1,000 persons, or 11 computers in all; therefore, the library does not meet the per-capita library square footage or computer service level guidelines for residents of its service area.[9] **Table 5.15-2, Rowland Heights Library Capacity**, shows the capacity of the existing Rowland Heights Library to accommodate new users based on standards currently used by the Los Angeles County Library.

Funding

Funding sources for the County Library consist of, in descending proportions, property taxes, County General Fund allocation, a special tax, and revenue from fines, fees and other miscellaneous sources.[10] The Board of Supervisors has, for several years, made an allocation to library services from the County General Fund. However, there is no guarantee of ongoing funding from the County General Fund as a specific budget allocation. Decisions on funding for the County Library are made on an annual basis by

8 Written correspondence from Terry Maguire, Chief Deputy County Librarian, County of Los Angeles Public Library, July 3, 2008.

9 Ibid.

10 Correspondence from Michele Mathieu, Administrative Assistant, County of Los Angeles Public Library, Library Headquarters, November 26, 2002.

the Board of Supervisors based on total available funding for all County services. The County Library's budget provides for periodic replacement of existing public access computers and library items.[11] However, funding in the County Library's operating budget does not provide for the replacement or the expansion of library facilities. Currently, the only funding available for the replacement or the expansion of library facilities is generated from the Developer Fee Program by payment of a library mitigation impact fee. As noted above, the Rowland Heights Library does not have adequate resources and facilities to serve the existing community.

Table 5.15-2
Rowland Heights Library Capacity

Population in 2000	Standard per Resident	Space and Item Standards for Existing Population	Rowland Heights Library Present Conditions	Surplus/(Deficit) Capacity	Additional Residents Able to Accommodate
50,263	0.5 gross sq. ft.	25,132 sq. ft.	14,863 sq. ft.	(10,269 sq. ft.)	-20,538
	2.75 items	138,223 items	138,682 items	459 items	167
	.001 computer	50 computers	11 computers	(39)	-39,000

Source: Impact Sciences, Inc.

In 1992, the state shifted property tax revenues from library operations to help finance education. In response to this lost revenue, in 1994 the County Board of Supervisors adopted a community facilities district for extended library services and facilities in the unincorporated areas of the County and 12 cities. Proposition L, passed by a two-thirds majority on June 3, 1997, assesses a yearly tax of $22.00 per parcel for library services. Properties which include multiple parcels must pay the tax amount multiplied by the number of parcels on the property. As of July 1, 2008, this tax has increased to an annual tax of $27.29 per parcel.[12] This special tax is subject to an annual Consumer Price Index (CPI) adjustment on July 1 of each year.[13]

On October 27, 1998, the County Board of Supervisors established a permanent library mitigation impact fee of $569.87 per residential unit on all new residential development to mitigate impacts to the County's libraries. This fee is assessed regardless of the adequacy of existing facilities. The County Library's

11 Written correspondence from Terry Maguire, Chief Deputy County Librarian, County of Los Angeles Public Library, Library Headquarters, December 31, 2008.

12 Correspondence from Malou Rubio, Head, Staff Services, County of Los Angeles Public Library, Library Headquarters, July 17, 2008.

13 Ibid.

mitigation fee is subject to an annual CPI adjustment on July 1 of each year.[14] The library fee in Developer Fee Area 4, within which the Project site is located, is currently $788.00 per dwelling unit.[15] The library mitigation fee is assessed on all residential units built after October 27, 1998, and is based on the fee in place at the time building permits are issued.

REGULATORY SETTING

Local

The Los Angeles County Library has an adopted planning standard for library space and items (books, periodicals, audio cassettes, videos, etc.) per capita. This standard is 0.50 gross square foot of library facilities and two items per capita, with no mention of computer standards**.** However, the County Library has deemed the adopted standards as inadequate and follows updated guidelines for items and computers per capita. The guidelines currently used by the County Library are 2.75 items per person, 0.50 square foot of library facilities per person, and 1 computer per 1,000 persons.

ENVIRONMENTAL IMPACTS

Project Improvements

Implementation of the proposed Project would result in the development of approximately 775 residential dwelling units. Presently, no existing residential units are located on the Project site. Therefore, completion of the proposed Project would result in a net increase of approximately 775 apartment units and a population increase of approximately 2,139 new residents in the Rowland Heights community.

Thresholds of Significance

Based on the County's Initial Study Checklist and Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, impacts related to Library Services are considered significant if the Project would:

- Create substantial library impacts due to increased population and demand, i.e., exceed the current County Library planning standards for library space, items, and computers per capita.

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14 Written correspondence from Terry Maguire, Chief Deputy County Librarian, County of Los Angeles Public Library, July 3, 2008.

15 Ibid.

Impact Analysis

Threshold 1: **Would the Project create substantial library impacts due to increased population and demand?**

Analysis

Construction Impacts

Construction activities associated with the Project would not generate a permanent residential population. Therefore, no impacts to library services would occur as a result of Project construction.

Operational Impacts

Implementation of the Project would add a total of approximately 775 dwelling units, with a net increase in population of approximately 2,139 persons, as discussed in **Section 5.16, Population, Housing, and Employment.**

As discussed above, the County Library uses a planning standard of 0.50 gross square foot of library facilities, 2.75 items (books, periodicals, audio cassettes, videos, etc.), and one computer per 1,000 residents to define the target levels of service.[16] As shown above in **Table 5.15-2**, the Rowland Heights Library currently does not meet the requirement of 0.50 gross square foot of library space per resident, and therefore is not large enough to accommodate the additional 2,139 residents resulting from Project implementation. As such, impacts to the Rowland Heights Library would be significant. However, with implementation of mitigation measure **5.15-1**, below, the Project's contribution towards service deficiencies at Rowland Heights Library would be reduced to a less than significant level.

Based on the current adopted library planning standard of 2.75 (books, magazines, periodicals, etc.) per capita, 5,882 items would be required to serve the net increase in residents from the Project. As shown in **Table 5.15-2**, the Rowland Heights Library currently has holdings of 459 items in excess of planning standards. However, with the projected population increase associated with Project implementation, there would not be a sufficient number of items in the library's collection to satisfy the additional demand generated by new Rowland Heights residents. As such, impacts to the Rowland Heights Library would be significant. With implementation of mitigation measure **5.15-1**, which requires payment of a library mitigation impact fee at the time a building permit is issued, the Project's contribution towards service deficiencies at Rowland Heights Library would be reduced to a less than significant level.

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16 Correspondence from Malou Rubio, Head, Staff Services, County of Los Angeles Public Library, Library Headquarters, July 14, 2008.

Based on the County's planning standard of one computer per 1,000 residents, 52 computers are required to serve the present Rowland Heights community population. As shown in **Table 5.15-2**, the Rowland Heights Library currently has 11 computers, a deficit of 41 computers per County standards. An additional two computers would be required as a result of the increase in residents from the Project implementation. The increase in population associated with Project implementation would therefore exacerbate the deficit of computers to residential population in Rowland Heights, which is a significant impact. With implementation of mitigation measure **5.15-1**, the Project's contribution towards service deficiencies at Rowland Heights Library would be reduced to a less than significant level.

Based on the current library mitigation impact fee of $788 per unit, the estimated fees that would be collected from the Project to pay for new library construction, library expansion, and/or item/computer purchases would be $610,700 ($788 x 775 units = $610,700).[17] The fee is subject to the annual CPI that is in effect at the time the building permits are issued.[18] The library mitigation fee is assessed on all residential units built after October 27, 1998 at the time building permits are issued. As a result, all new units would be assessed the library mitigation fee at the time building permits are issued.[19] Payment of this fee would reduce impacts to library services associated with Project implementation to a less than significant level.

Mitigation Measures

5.15-1: The Project Applicant shall pay the library mitigation impact fee in effect at the time building permits are issued for the Project ($788 per residential unit as of July 1, 2008). Fees are paid to Los Angeles County to offset the demand for library items, building square footage, and computers generated by the proposed Project.

CUMULATIVE IMPACTS

The cumulative impacts on library services from the proposed Project, in combination with other related projects identified in **Section 4.0**, **Cumulative Projects,** were analyzed. Implementation of the proposed Project would introduce an approximately 775 dwelling units into Rowland Heights, with a net increase in population of approximately 2,139 persons, as discussed in **Section 5.16**, **Population, Housing, and Employment**. Development of the identified related projects, as discussed in **Section 4.0**, would introduce approximately 13,581 new residents into the area. However, only two of the related projects are within the service area of the Rowland Heights Library. These two related projects would introduce

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17 Written correspondence from Terry Maguire, Chief Deputy County Librarian, County of Los Angeles Public Library, July 3, 2008.

18 Ibid.

19 Ibid.

approximately 34 new residents to the library service area. Together with the proposed Project, approximately 2,173 new residents would be introduced to the library service area.

As shown in **Table 5.15-3, Rowland Heights Library Capacity with Cumulative Projects**, demand for library services, including library square footage, library items, and library computers, from the proposed Project and cumulative projects would not be satisfied by the current holdings at the Rowland Heights library under current planning guidelines. The existing facility is not large enough and does not have sufficient holdings and computers to accommodate the additional demands on library space. As such, impacts to the Rowland Heights Library would be cumulatively considerable with implementation of the proposed Project and identified related projects.

However, as with the proposed Project, each individual related project would be required to pay the library mitigation impact fee in effect at the time building permits are issued. These fees can be used by the County Library system to purchase additional volumes, computers, and to fund library improvements. This would reduce each related project's contribution to cumulative library impacts to a less than significant level. Therefore, potentially significant cumulative impacts to library services can be mitigated to a less than significant level. Additionally, given that the proposed Project's contribution to cumulative impacts can be mitigated to a less than significant level with implementation of mitigation measure **5.15-1**, the Project would not contribute to cumulatively considerable impacts.

Table 5.15-3
Rowland Heights Library Capacity with Cumulative Projects

Residents from Cumulative Projects	Standard per Resident	Present Surplus/(Deficit) Capacity at Rowland Heights Library	Space and Items Needed for New Residents	Surplus/(Deficit) Capacity with Cumulative Projects
2,173	0.5 gross sq. ft.	(10,269) sq. ft	1,086 sq. ft.	(11,355) sq. ft.
	2.75 items	459 items	5,976 items	(5,517) items
	.001 computer	(39) computers	2 computers	(41) computers

Source: Impact Sciences, Inc.

Mitigation Measures

Implementation of **Mitigation Measure 5.15-1** identified above would reduce the proposed Project's contribution to cumulative impacts to County Library services and specific library services at Rowland Heights Library.

LEVEL OF SIGNIFICANCE AFTER MITIGAION

With implementation of **Mitigation Measure 5.15-1**, Project-specific and cumulative impacts to local County Library and Rowland Heights Library services associated with Project implementation would be reduced to a less than significant level.

5.16 POPULATION, HOUSING, AND EMPLOYMENT

SUMMARY

This section summarizes the existing and projected population, housing, and employment supply in the unincorporated Los Angeles County community of Rowland Heights and analyzes the potential for Project impacts on population, housing, and employment growth. Information on population, housing, and employment for Rowland Heights was derived from the United States Census Bureau, State of California Employment Development Department, Los Angeles County General Plan, and Southern California Association of Governments. This analysis uses forecasts prepared by the Southern California Association of Governments to evaluate the potential Project-related contribution to population growth, housing, and employment.

INTRODUCTION

Information used in this section was obtained from the official websites of three standard sources of local population and housing information: the U.S. Census Bureau, the California Department of Finance, and the Southern California Association of Governments. Population and housing data for the Rowland Heights Census Designated Place from years 1990 and 2000, the most recent years available, were retrieved from the United States Census website. Additionally, the population estimates for the balance of Los Angeles County for years 2007 and 2008 were retrieved from the California Department of Finance.

Since these three organizations use different methods of data collection and calculation, they do not always result in the same findings. For example, the term "households" as defined in the U.S. Census refers to occupied dwelling units. Therefore, U.S. Census household counts do not consider all habitable dwelling units (i.e., occupied units and vacant units) within a defined geographical area. However, the general population and housing estimates are relatively consistent with one another and are all used in this analysis. In addition, employment projections were obtained through consultation with the Southern California Association of Governments.

EXISTING CONDITIONS

Population and Housing Growth Projections

United States Census 2000

The U.S. Census is conducted every 10 years in order to document the population and number of housing units for the entire United States. Census data form the basis from which most demographic projections are calculated.

The Project site is located within the relatively small Census Tract 4033.04, which is bordered by Colima Road/Golden Springs Drive to the north, Brea Canyon Cut-Off Road to the west and the Orange Freeway to the east. In 2000, the population of Tract 4033.04 was 5,474 residents and the housing supply was 1,675 units. Since 1,646 of these units were occupied in 2000, the vacancy rate of Tract 4033.04 was 1.7 percent.[1]

In 2000, the total population for the Rowland Heights Census Designated Place (CDP)[2] was 48,553 and the number of occupied housing units was 14,175. The 2000 Rowland Heights CDP population reflects an approximately 13.8 percent growth over the 42,647 population reported in 1990. The number of occupied housing units, 14,175, increased by approximately 10.0 percent (or 1,288 households) as compared to the 12,887 housing units reported in 1990. In 2000, the vacancy rate of Rowland Heights CDP was 2.5 percent compared to 5.2 percent in 1990. **Table 5.16-1, Population and Housing in the Project Vicinity** summarizes population and housing data for Census Tract 4033.04 and the Rowland Heights CDP as a whole. No population projections are available specifically for Census Tract 4033.04 or the Rowland Heights CDP.

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1 U.S. Census Bureau, "2000 Census, Quick Tables - American Fact Finder for Census Tract 4033.04, Los Angeles County, California," http://factfinder.census.gov. 2008.

2 A Census Designated Place is a statistical entity defined for each decennial census according to Census Bureau guidelines, comprising a densely settled concentration of population that is not within an incorporated place, but is locally identified by a name. CDPs are delineated cooperatively by state and local officials and the Census Bureau, following Census Bureau guidelines. Beginning with Census 2000 there are no size limits.

Table 5.16-1
Population and Housing in the Project Vicinity

Category	Census Tract 4033.04[a]	Rowland Heights CDP[b]		
	2000*	1990	2000	Percent Change
Total Population	5,474	42,647	48,553	13.8
Total Housing Units	1,675	13,595	14,543	7.0
Total Occupied Housing Units	1,646	12,887	14,175	10.0
Vacant Housing Units	29	708	368	(48.0)

Sources: U.S. Census Bureau

[a] *U.S. Census Bureau, "2000 Census, Quick Tables - American Fact Finder for Census Tract 4033.04, Los Angeles County, California," http://factfinder.census.gov. 2008.*

[b] *U.S. Census Bureau, "2000 Census Quick Tables - American Fact Finder for Rowland Heights CDP," http://factfinder.census.gov., 2008; U.S. Census Bureau, "1990 Census Quick Tables - American Fact Finder for Rowland Heights CDP," http://factfinder.census.gov., 2008*

* *1990 Census data for Tract 4033.04 not available.*

Department of Finance

The California Department of Finance annually estimates the population of all cities and counties in California. While population numbers for individual unincorporated communities within Los Angeles County are not available, the population of the "balance of the county" (i.e., the overall County population exclusive of incorporated cities) is available. As of January 1, 2007, the population of the balance of the County was estimated to be 1,086,026. By January 1, 2008, the population had increased by 0.6 percent to 1,092,078.[3]

REGULATORY FRAMEWORK

The following plans provide estimates for projected growth in Los Angeles County and the San Gabriel Valley. The analyses and forecasts included in these plans are intended to guide planning and development activities throughout the region.

Southern California Association of Governments Growth Forecast

The Southern California Association of Governments is a federally designated metropolitan planning organization for the Southern California region. The Project site is located within the six-county jurisdiction of the Southern California Association of Governments, which includes Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura counties. One of the organization's primary functions is

[3] State of California, Department of Finance, *E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2007 and 2008*, (2008).

to forecast population, housing, and employment growth for each region, subregion, and city. The latest forecast was completed as part of the 2008 Regional Transportation Plan update, which was adopted in May 2008. The Project site is located in an unincorporated portion of the San Gabriel Valley Council of Governments subregion, which encompasses several cities within the San Gabriel Valley as well as unincorporated Los Angeles County areas of the valley. The population of the subregion in 2005 was 1.9 million and is projected to be 2.4 million in 2035, a 26 percent increase over the 2005 population. The number of occupied households[4] in the subregion is expected to increase from 557,606 in 2005 to 685,034 in 2030, which represents a 23 percent increase. Total employment in the subregion is expected to increase from 784,168 in 2005 to 890,626 in 2030, a 14 percent increase.

San Gabriel Valley Council of Governments growth forecasts for the unincorporated area of the subregion are shown in **Table 5.16-2, SCAG's Growth Forecast for the Unincorporated SGVCOG Subregion**. According to the San Gabriel Valley Council of Governments' Growth Forecast, the population of the unincorporated subregion is expected to grow from 364,836 residents in the year 2005 to 525,960 residents in the year 2035. This represents a 44 percent increase in population growth over a 30-year period. The number of occupied housing units is expected to increase from 99,301 in the year 2005 to 143,890 units in the year 2035, a 45 percent increase in the number of households during this 30-year period. The number of jobs in the unincorporated subregion is expected to increase from 98,834 employees in the year 2005 to 114,369 employees in the year 2035, a 16 percent increase.

Based on the anticipated growth between 2005 and 2010, the current (2008) population in the unincorporated portion of the San Gabriel Valley Council of Governments subregion is estimated to be 379,495 residents; the current number of households is estimated to be 103,269 households; and the current number of employees is estimated to be 99,284 employees. Based on these estimates, the current jobs/housing (the ratio of jobs to housing units) in the unincorporated subregion ratio is 0.96:1, indicating a slight housing oversupply and the need for additional jobs. Although the term "jobs/housing balance" is still often used, the more precise relationship is between jobs and the number of employable residents (because some households have no workers while others have multiple workers). Ideal ratios, between 1:1 and 1.29:1, indicate a balanced labor force and housing supply.[5] The jobs/housing ratio in the unincorporated portion of the subregion is anticipated to be 0.79:1 in 2035, indicating an exacerbation of the existing jobs-to-housing imbalance (that is, a continued oversupply of housing relative to employment opportunities).

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4 According to the U.S. Census Bureau, a household includes "all the people who occupy a housing unit as their usual place of residence." (U.S. Census Bureau, "American Fact Finder: Glossary: Household," http://factfinder.census.gov/home/en/epss/glossary_h.html. 2009.)

5 Southern California Association of Governments, *The New Economy and Jobs/Housing Balance in Southern California*, August 2001, http://www.scag.ca.gov/Housing/pdfs/balancenomaps.pdf.

Table 5.16-2
SCAG's Growth Forecast for the Unincorporated SGVCOG Subregion

	2005	2010	2015	2020	2025	2030	2035
Population	364,836	389,267	417,451	445,986	473,598	500,358	525,960
Households	99,301	105,914	114,690	123,937	131,156	138,128	143,890
Jobs	98,834	102,581	105,559	107,461	109,697	112,084	114,369

Source: Southern California Association of Governments, 2004 Regional Transportation Plan/Growth Vision: Socio-Economic Forecast Report, June 2008.

Los Angeles County General Plan

On August 5, 2008, the Los Angeles County Board of Supervisors adopted the Los Angeles County 2008-2014 General Plan Housing Element. The main goal of the Housing Element is to ensure sufficient housing inventory to accommodate the housing needs of unincorporated area residents. As recognized by the State legislature, there are significant housing deficiencies and housing availability is considered an issue of "vital Statewide importance."[6] The Housing Element contains short-term projections of the expected population, number of households, and employment through the year 2014 for unincorporated areas within the County, including the unincorporated San Gabriel Valley Council of Governments subregion that encompasses the Project site. These projections, which are based on 2007 Southern California Council of Governments forecasts, show that the population of the unincorporated subregion will increase by 13 percent from 364,836 in 2007 to 411,629 in 2014, the end of the planning period for the current Housing Element.[7] The Housing Element also reviews affordable housing, housing availability, financial resources, and residential development standards, and outlines goals, policies, and programs.

The Housing Element also discusses the San Gabriel Valley Council of Governments' current Regional Housing Needs Assessment, which covers the planning period from 2006 to 2014. The Regional Housing Needs Assessment is mandated by State Housing Law as part of the periodic process of updating local housing elements of the General Plan. The Regional Housing Needs Assessment quantifies the need for housing within each jurisdiction during specified planning periods. Communities use the Regional Housing Needs Assessment in land use planning, prioritizing local resource allocation, and in deciding how to address identified existing and future housing needs resulting from population, employment, and household growth. The Regional Housing Needs Assessment does not necessarily encourage or promote growth, but rather allows communities to anticipate growth. The San Gabriel Valley Council of

6 County of Los Angeles, "Housing Element 2007-2014."

7 County of Los Angeles, "Housing Element 2007-2014," 3-8.

Governments, as the regional planning agency, is responsible for allocating housing units in the Regional Housing Needs Assessment to each local jurisdiction within its six-county region. Los Angeles County has been allocated a Regional Housing Needs Assessment of 57,176 units, which is broken down as follows:

- Extremely Low-/Very Low-Income (up to 50% of Area Median Income [AMI]): 14,425 units (25.2%)
- Lower-Income (51 to 80% of AMI): 9,073 units (15.9%)
- Moderate-Income (81 to 120% of AMI): 9,816 units (17.2%)
- Above Moderate-Income (more than 120% of AMI): 23,862 units (41.7%)[8]

The County is required to ensure the availability of residential sites at adequate densities and appropriate development standards in the unincorporated areas to accommodate the Regional Housing Needs Assessment. Program No. 44 of the Housing Element is to identify sites specifically for multi-family housing. Objectives under this program include undertaking rezoning efforts to make sites available for apartment units and identifying adequate vacant sites with water and sewer services.[9]

ENVIRONMENTAL IMPACT ANALYSIS

Significance Criteria

Based on the County's Initial Study Checklist, impacts related to population, housing and employment are considered significant if the Project would:

- Cumulatively exceed official regional or local population projections;
- Induce substantial direct or indirect population growth in an area (for example, through projects in an undeveloped area or extension of major infrastructure); or
- Result in a substantial job/housing imbalance or substantial increase in Vehicle Miles Traveled (VMT).

The following significance threshold(s), through preparation of the Initial Study, were found not to be applicable for the proposed Project and are discussed further in **Section 7.0, Effects Found Not to be Significant**.

- Displace substantial numbers of existing housing, especially affordable housing.

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8 County of Los Angeles, "Housing Element 2007-2014," 2-24.

9 County of Los Angeles, "Housing Element 2007-2014," B-12.

- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Impact Analysis

The following presents an analysis of the Project's potential impacts on population growth. As described in **Section 3.0, Project Description**, the proposed Project involves the redevelopment of the approximately 15.7-acre property located at 1920 Brea Canyon Cutoff Road. The existing Southlands Christian Church and Southlands Christian Schools structures, parking lots, and athletic field would be replaced with approximately 775 for-lease residential units in multiple buildings, recreational amenities for residents, parking garages and at-grade parking totaling 1,544 parking spaces, and landscaping throughout the Project site. The floor area ratio (FAR) on the proposed Project site would be 1.35:1.

Threshold 1: **Would the project cumulatively exceed official regional or local population projections?**

Threshold 2: **Would the project induce substantial direct or indirect population growth in an area (for example, through projects in an undeveloped area or extension of major infrastructure)?**

Analysis

As proposed, the Project would develop 775 multi-family residential units, consisting of 401 one-bedroom units, 328 two-bedroom units, and 46 three-bedroom units. In 2000, the average household size of a renter-occupied unit in Census Tract 4033.04, which encompasses the Project site, was 2.76 persons.[10] Based on an average household size of 2.76 persons per unit within Census Tract 4033.04, the Project would provide housing for approximately 2,139 residents. Therefore, the Project would result in a total population increase of approximately 2,139 new residents in Rowland Heights.

Therefore, the population increase from the Project would account for approximately 8 percent of the expected increase from 2005 to 2010 (the data for the closest year to Project buildout) in the unincorporated San Gabriel Valley Council of Governments subregion population. In addition, the housing increase from the Project would account for approximately 11.7 percent of the expected increase from 2005 to 2010 in households (6,613 households). Both increases are within the 2010 unincorporated subregion projections of 389,267 residents and 105,914 households and thus account for a minor amount of the total increase in the unincorporated subregion. The Project would provide housing to

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10 U.S. Census Bureau, "2000 Census, Quick Tables - American Fact Finder for Census Tract 4033.04, Los Angeles County, California."

accommodate a portion of the expected population growth in the unincorporated subregion. For this reason, the Project is consistent with growth projections and would not directly induce population growth that is substantially higher than expected population growth in the area. Therefore, impacts would be less than significant.

As discussed in **Section 5.17, Land Use and Planning**, the maximum residential density currently permitted within Rowland Heights is 35 dwelling units per gross acre, as allowed under the Urban 5 "U5" designation. The Project Applicant is requesting a site-specific General Plan Amendment to the Community Plan to apply the U6 designation to the site to permit up to 50 dwelling units per gross acre on the Project site. The proposed new category would only apply to the Project site based on compliance with specific criteria related to property size and location. Compliance with these specific criteria would allow greater density with minimal impacts, and thus would justify a density of up to units per acre. The proposed U6 category would not be available for other property owners in the Rowland Heights community, as the U6 category is site-specific based on the narrow site-specific criteria. As a result, no other property owners in Rowland Heights would be able to obtain density beyond the maximum currently allowed in the Rowland Heights Community General Plan (35 units per acre), and any changes in density for other properties would require a discretionary process. The specific criteria would include the following:

U6 Urban 6

- 36 to 50 dwelling units per gross acre
- 15 acre minimum lot size
- Situated on a minimum four-land roadway with a minimum 80 foot right of way
- Located within 250 feet of neighborhood serving commercial/retail uses
- Located within 0.25 mile of a public transit stop
- Located within 0.75 mile of a freeway
- Not adjoining single-family residences
- Urban high density residential apartments
- Assessor Parcel Numbers 8764-001-131 and 8764-001-132

Approval of the General Plan Amendment requires a determination of consistency with the General Plan, which includes the Housing Element. As discussed above, the Housing Element contains short-term projections of the expected population, number of households, and employment through the year 2014

for unincorporated areas within the County, including the unincorporated San Gabriel Valley Council of Governments subregion that encompasses the Project site. These projections are based on 2007 San Gabriel Valley Council of Governments forecasts. Additionally, as discussed in **Section 5.17**, with approval of the General Plan Amendment and application of the new land use designation to the Project site, the Project would be consistent with the Community Plan land use policy map.

Since the Project site is located within an urban area and is served by existing circulation and utility infrastructure, no major extension of infrastructure is required as part of the Project. Additionally, no expansion to the existing service area of a public service provider is required. Therefore, development of the Project site would not indirectly induce population growth and impacts would be less than significant.

Mitigation Measures

Since no significant population or housing impacts would occur, no mitigation measures are required.

Threshold 3: Would the project result in a substantial job/housing imbalance or substantial increase in Vehicle Miles Traveled (VMT)?

Analysis

The Project would introduce 775 new for-lease dwelling units to the Rowland Heights community, which is located within the unincorporated San Gabriel Valley Council of Governments subregion. As identified by the Rowland Heights Community General Plan, Rowland Heights is primarily designated for residential land uses. Few areas of the community are designated for commercial and industrial uses. Since the community is predominantly residential, the Project would be consistent with the present residential land use pattern that is supported by the Community Plan. The addition of housing would contribute to the 2010 jobs/housing imbalance of 0.96:1 in the unincorporated subregion; however, this impact is not considered adverse since Rowland Heights is intended to be a residential community, as stated in the Rowland Heights Community General Plan.[11]

Additionally, the City of Industry, directly north of Rowland Heights Community Plan area, was incorporated for the purposes of promoting commerce. The City of Industry is predominantly developed with industrial, office, and commercial uses and serves as the major employment center for the San Gabriel Valley.[12] The City of Industry's General Plan and Zoning Code designate no land for residential use and only a few units currently exist in the community, and are considered non-conforming uses. In

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11 County of Los Angeles, Rowland Heights Community General Plan, 1.

12 City of Industry, Housing Element, 5.

2006, the City of Industry's Housing Need Assessment indicated that the Industry had a population of 801 residents. This represents an increase of only 24 residents, or a modest three percent, since 2000.[13,14] The City of Industry expects a minimal increase in population. As such, the City of Industry plays a vital role as an employment hub and helps to offset any jobs/housing imbalance in Rowland Heights.

The Project site also is located near local employment opportunities along the Pomona Freeway (State Route [SR] 60) corridor, such as within the neighboring City of Industry, as described above. The Pomona Freeway also provides access to employment opportunities in Downtown Los Angeles and the greater Los Angeles area, while the Orange Freeway provides access to employment opportunities within north Orange County.

Development of multi-family residential housing on the Project site would also be consistent with Program No. 44 of the Los Angeles County General Plan Housing Element, which states that sites for multi-family housing are needed within unincorporated Los Angeles County to meet its Regional Housing Needs Assessment allocation.[15] Additionally, the Project would help meet the County's need for 23,862 above-moderate-income housing units as allocated by the Regional Housing Needs Assessment. As such, the addition of housing would contribute to the existing jobs/housing imbalance in the unincorporated San Gabriel Valley Council of Governments subregion. However, this impact is not considered adverse since Rowland Heights is intended to be a residential community and is in close proximity to other communities with employment centers. Since the Project would be consistent with regional housing need objectives, impacts would be less than significant.

According to the San Gabriel Valley Council of Governments, the six-county region under its jurisdiction forecasts that vehicle miles traveled, will increase by over 110 percent by 2030, growing from a level of 22.4 million in 2000 to 48.4 million by 2030, or an increase of 26 million. The proposed Project is estimated to result in approximately 46,065 vehicle miles traveled per year (42,001 net vehicle miles traveled when taking existing land uses into account). Therefore, the proposed Project would account for approximately 0.18 percent of the year 2030s expected increase in vehicle miles traveled in the six-County Southern California Association of Governments region.[16] However, the Project would provide housing near existing commercial and employment centers, which would contribute to minimizing overall vehicle miles traveled by Project residents or households. For these reasons, Project-related increases related to vehicle miles traveled would not be substantial and impacts would therefore be less than significant.

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13 City of Industry, Housing Element, 5.

14 The City of Industry's Housing Needs Assessment was performed by gathering data based on Census tracts. Census figures for population and households are somewhat inaccurate because they include housing units located outside the City's incorporated limits.

15 County of Los Angeles, "Housing Element 2007-2014," B-12.

16 Southern California Association of Governments, *Multi-County Goods Movement Action Plan*, Executive Summary, (2008).

Mitigation Measures

Since the proposed Project would have a less than significant impact related to the job/housing balance would occur, no mitigation measures are required.

CUMULATIVE IMPACTS

The proposed Project and the majority of the related projects are located in the unincorporated community of Rowland Heights. However, five of the related projects are located within the cities of Diamond Bar or Industry (related projects are identified in **Section 4.0, Cumulative Projects)**. The proposed Project plus related projects would therefore increase the population and housing supplies in unincorporated Rowland Heights as well as within those cities. In order to clearly define impacts at both scales, this section analyzes cumulative impacts with respect to population and housing projections for the unincorporated portions of the subregion alone, as well as with respect to projections that encompass unincorporated areas plus the cities of Diamond Bar and Industry.

Cumulative Impacts on the Cities of Diamond Bar and Industry plus Unincorporated Portions of the San Gabriel Valley Council of Governments Subregion

The proposed Project plus related projects would result in the creation of 4,833 new dwelling units (i.e., 775 proposed Project units plus 4,058 related project units). Assuming an average household size of 2.76 residents per unit for the proposed Project (per the Project Census Tract average) and an average household size of 3.05 persons per unit for the related projects (per the Countywide average), the proposed Project plus related projects would add approximately 14,516 residents (including 2,139 proposed Project residents and 12,377 related project residents) to the 2008 population of unincorporated portions of the subregion plus the cities of Diamond Bar and Industry (440,787),[17] for a total population within these areas of approximately 455,303 persons.[18,19]

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17 Southern California Association of Governments, *Integrated Growth Forecasts: Adopted 2008 RTP Growth Forecast, by City*, (2008). Current (2008) population and housing figures are estimated based on the average annual growth rate between 2005 and 2010.

18 U.S. Census, *American FactFinder: 2005-2007 American Community Survey 3-Year Estimates for Los Angeles County, California*, http://factfinder.census.gov/servlet/ACSSAFFFacts?_event=Search&geo_id=&_geoContext=&_street=&_county=los+angeles+county&_cityTown=los+angeles+county&_state=04000US06&_zip=&_lang=en&_sse=on&pctxt=fph&pgsl=010. 2007.

19 The Project site is located in the San Gabriel Valley Council of Governments (SGVCOG) subregion, which encompasses several cities within the San Gabriel Valley as well as the unincorporated Los Angeles County area of the valley. Accordingly, related project contributions to population growth are calculated using the County's average household size of 3.05 persons per unit, rather than the average household size within the Project's census tract (2.76 persons per unit) as is the case for some other Draft EIR sections, since population projections are regional in scale.

As of 2008, an estimated 121,567 dwelling units existed within the unincorporated portion of the San Gabriel Valley Council of Governments subregion plus the cities of Diamond Bar and Industry.[20] The proposed Project plus related projects would increase this number by 4,833 units for a total of 126,400 units.

Increases in population and dwelling units resulting from the proposed Project plus related projects would cause an exceedance of 2012 projections encompassing the unincorporated portions of the San Gabriel Valley Council of Governments (SGVCOG) subregion plus the Cities of Diamond Bar and Industry (389,267 residents and 124,694 dwelling units), but would be well within 2020 projections (511,043 residents and 143,838 dwelling units).[21]

As shown in **Table 5.16-3, Related Project Employee Generation - SGVCOG**, the related projects would collectively provide 3,861 employees with jobs. This would increase the estimated number of employees in 2008 within the unincorporated portion of the subregion plus the cities of Diamond Bar and Industry from 201,854 to 205,715.[22] Accordingly, employment growth would be within 2020 projections of 210,642 employees within the unincorporated portion of the subregion plus the Cities of Diamond Bar and Industry.[23] Implementation of the related projects would result in a job/housing ratio of 1.63:1 in 2012 (assuming buildout by that date), which is considered a job-saturated jobs/housing ratio. Since the proposed Project would create few permanent jobs (such as those related with upkeep, maintenance and security), it would not result in a cumulatively considerable contribution to this cumulative impact.

Table 5.16-3
Related Project Employee Generation - SGVCOG

Land Use	Square Footage	Generation Factor	Employees[4]
Commercial[1]	104,100	424 sf/employee	246
Restaurant[1]	179,500	424 sf/employee	423
Office	395,430	379.5 sf/employee	1,042
Retail[1]	755,200	424 sf/employee	1,781

20 Southern California Association of Governments, *Integrated Growth Forecasts: Adopted 2008 RTP Growth Forecast, by City*, (2008).

21 Southern California Association of Governments, *Integrated Growth Forecasts: Adopted 2008 RTP Growth Forecast, by City*, (2008).

22 Southern California Association of Governments, *Integrated Growth Forecasts: Adopted 2008 RTP Growth Forecast, by City*, (2008).

23 Southern California Association of Governments, *Integrated Growth Forecasts: Adopted 2008 RTP Growth Forecast, by City*, (2008).

Land Use	Square Footage	Generation Factor	Employees[4]
Adult Day Care Facility[2]	10,755	1,152 sf/employee	9
Industrial[3]	68,800	829 sf/employee	83
Stadium & Stadium Attraction[4]			277
Total			3,861

Source: Impact Sciences, Inc., 2009.
Generation factors from SCAG's Employment Density Study, Summary Report, dated October 31, 2001. Available online at http://www.scag.ca.gov/pdfs/Employment_Density_Study.pdf.

1 *Generation factor for Other Retail/Service category.*
2 *Generation factor for Hotel/Motel category.*
3 *Generation factor for Light Manufacturing category.*
4 *City of Industry's 2008 Draft Supplement to Industry Business Center Environmental Impact Report: Table 5.8-7, Estimated Full-Time Employment Generation.*
5 *The total Employees does not include the 1,515 part-time employees expected from the Industry Business Center Project in the City of Industry. (City of Industry's* 2008 Draft Supplement to Industry Business Center Environmental Impact Report, p. 5.8-15.)

sf = square feet; ee = employee;

Cumulative Impacts on Unincorporated Portions of the San Gabriel Valley Council of Governments Subregion

The proposed Project plus those related projects within the unincorporated portion of the San Gabriel Valley Council of Governments subregion would create a total of 934 dwelling units (775 proposed Project units plus 159 related project units). Assuming average household sizes of 2.76 residents per unit for the proposed Project and 3.05 persons per unit for the related projects, these dwelling units would provide housing for a total of 2,624 new residents (2,139 Project residents plus 485 related project residents). This would increase the projected 2008 population for the unincorporated portions of the subregion from 379,495 to 382,119.[24] This increase is within the 2012 projection of 389,267 residents for the unincorporated portions of the subregion.

The addition of 934 dwelling units to the 2008 estimate of 103,269 units within the unincorporated portions of the San Gabriel Valley Council of Governments subregion would increase the number of units to 104,203. This increase is within the 2012 projection of 105,914 dwelling units for the unincorporated portions of the subregion.

According to the San Gabriel Valley Council of Governments, vehicle miles traveled in the region are projected to increase by 26 million or more than 110 percent between 2000 and 2030, from 22.4 million to

24 Southern California Association of Governments, *Integrated Growth Forecasts: Adopted 2008 RTP Growth Forecast, by City*, (2008).

48.4 million. The related projects within the San Gabriel Valley Council of Governments subregion are estimated to result in approximately 676,238[25] vehicle miles traveled per year, or approximately 2.6 percent of the expected increase by 2030 in the Southern California Council of Governments six-county region. Combined, the related projects and the proposed Project would account for approximately 2.8 percent of the year 2030s expected increase in the six-county region.[26] The Project's contribution to cumulatively significant increases in vehicle miles traveled in the six-County region, considered together with that of the related projects, would be less than cumulatively considerable.

As shown in **Table 5.16-4, Related Project Employee Generation—Unincorporated SGVCOG**, the related projects within the unincorporated San Gabriel Valley Council of Governments subregion would collectively provide 1,399 employees with jobs. This would increase the estimated number of employees within the unincorporated portion of the subregion as of 2008 from 101,082 to 102,481 by 2010.[27] Accordingly, the cumulative increase in employment growth is within 2012 projections for the unincorporated portion of the subregion of 102,581 employees.

Since cumulative population, housing, and employment growth within the unincorporated San Gabriel Valley Council of Governments subregion would not exceed the Southern California Council of Governments' projections during the current planning period (2005 to 2035), cumulative population and housing impacts would be less than significant.

Additionally, the proposed Project considered together with the related projects within the unincorporated San Gabriel Valley Council of Governments subregion would result in a job/housing ratio of 0.98:1 in 2012 (assuming proposed Project and the related projects within the unincorporated subregion are built out by that date). As the proposed Project and related projects within the unincorporated subregion would result in a nearly balanced jobs/housing ratio, the cumulative impact of the proposed Project and related projects would be less than significant.

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25 The total vehicle miles traveled does not include game days at the proposed stadium as set forth in the Industry Business Center Project EIR, since game days are considered atypical (occurring only 8 percent of the year) and would skew normal day results. Game days at the stadium would add an additional 277,771 vehicle miles traveled.

26 Southern California Association of Governments, *Multi-County Goods Movement Action Plan*, Executive Summary.

27 Southern California Association of Governments, *Integrated Growth Forecasts: Adopted 2008 RTP Growth Forecast, by City*, (2008).

Table 5.16-4
Related Project Employee Generation—Unincorporated SGVCOG

Land Use	Square Footage	Generation Factor	Employees[4]
Commercial[1]	52,100	424 sf/employee	122.88
Restaurant[1]	129,500	424 sf/employee	305.42
Office	15,430	379.5 sf/employee	40.66
Retail[1]	355,200	424 sf/employee	837.74
Adult Day Care Facility[2]	10,755	1,152 sf/employee	9.34
Industrial[3]	68,800	829 sf/employee	82.99
Total			**1,399.02**

Source: Impact Sciences, Inc., 2009.
Generation factors from SCAG's Employment Density Study, Summary Report, dated October 31, 2001. Available online at http://www.scag.ca.gov/pdfs/Employment_Density_Study.pdf.
6 Generation factor for Other Retail/Service category.
7 Generation factor for Hotel/Motel category.
8 Generation factor for Light Manufacturing category.
sf = square feet; ee = employee;

LEVEL OF SIGNIFICANCE AFTER MITIGATION

There are no significant and unavoidable Project or cumulative impacts related to population growth, housing, or employment.

5.17 LAND USE AND PLANNING

SUMMARY

This section describes the existing land uses on the Project site and the land uses in the Project site's vicinity. This section also describes the regulations and policies affecting development of the proposed Canyon Residences Project (Project) and the Project's consistency with applicable land use plans and codes, including the Rowland Heights Community General Plan, Rowland Heights Community Standards District, County of Los Angeles General Plan, County of Los Angeles Zoning Ordinance, and Los Angeles County Green Building Program. Additionally, this section evaluates the Project's consistency with the applicable land use goals and policies of the Southern California Association of Governments.

The proposed Project, while consistent with several regional planning objectives, would conflict with the land use and zoning designations that currently apply to the Project site. Therefore, implementation of the Project would require a General Plan Amendment and Zone Change. Furthermore, the Project would conflict with specific land use policies of the Rowland Heights Community General Plan due to the proposed building heights and density. For these reasons, the Project would result in a significant and unavoidable land use impact. However, the inconsistencies with the existing land use designations and zoning are primarily administrative and do not constitute physical environmental effects. Further, the Project would become consistent with the land use and zoning designation with the adoption of the proposed site-specific General Plan Amendment and proposed Zone Change.

INTRODUCTION

This section of the Environmental Impact Report (EIR) describes the existing land uses at the Project site and within the Project site vicinity. Regulations and policies affecting development of the proposed Project and the Project's consistency with applicable land use regulations are also described. Additionally, this section of the EIR includes a discussion of the cumulative impacts of the proposed Project in conjunction with related past, present and reasonably foreseeable future projects. Where impacts are identified, mitigation measures are recommended to avoid or reduce impacts to the fullest extent feasible.

EXISTING CONDITIONS

On-Site Land Uses

The proposed Project site is located at 1920 Brea Canyon Cutoff Road in the northeastern portion of the unincorporated Los Angeles County community of Rowland Heights, approximately 0.75 mile south of

the Pomona Freeway (State Route [SR] 60). As shown on **Figure 3.0-4, Existing Aerial Photo**, in **Section 3.0, Project Description**, the approximately 15.7-acre Project site is presently developed with Southlands Christian Church and the Southlands Christian School. Access to the Project site currently is provided by Fairway Drive, Brea Canyon Cutoff Road, and Colima Road. The Project site was used for agricultural cultivation until approximately 1970, when the first church buildings on the site were constructed.

The Rowland Heights Community General Plan designates the Project site for "U1" Urban 1 uses, which include very low density (hillside) residential, large lot residential and single-family detached units. The U1 designation allows 1.1 to 3.2 dwelling units per gross acre and 10,000- to 39,999-square-foot typical lot sizes.[1]

The Project site is presently zoned A-1, Light Agriculture, by the County Zoning Ordinance. This designation allows by right permitted uses such as light agricultural uses (raising of horses, cattle grazing) as well as adult residential facilities, crops, family child care homes, foster family homes, group homes, single-family residences, second units, and small family homes. A-1 zoning also allows accessory uses, as well as certain uses subject to a Conditional Use Permit, including churches and schools. The A-1 zone does not allow for multi-family residential use.

Surrounding Land Uses

The land use pattern in and around the Project site is suburban in character. The Project site is bounded by a senior housing complex and three commercial buildings along Colima Road on the north, the Royal Vista Golf Course and multi-family residences along Drusilla Way, Esquiline Avenue and Bithynia Way on the east, multi-family residences along Ostia Way and Latium Way on the south, and Brea Canyon Cutoff Road and single-family residences on the west. Shopping centers occupy three of the four corners of the Brea Canyon Cutoff Road/Colima Road intersection. Regional access to the Project site is provided by the Pomona Freeway (SR-60) and the Orange Freeway (SR-57), while local access to the Project site is provided by Fairway Drive, Brea Canyon Cutoff Road and Colima Road. **Figure 3.0-2, Vicinity Map,** in **Section 3.0, Project Description,** identifies the Project site and surrounding roadways.

Land use in Rowland Heights is predominately residential south of the Pomona Freeway, with neighborhood-serving commercial development concentrated along segments of Colima Road and Nogales Street. The portions of the community north of the Pomona Freeway are generally developed with commercial and industrial uses. South of the Pomona Freeway, Rowland Heights primarily contains residential neighborhoods with densities of up to 35 units per acre, pockets of undeveloped or very low

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1 County of Los Angeles Department of Regional Planning, Rowland Heights Community General Plan, (1981) 7.

density uses (0 to 1 dwelling units per acre), regional parks, and neighborhood parks. More recent residential developments have expanded into the hillsides south of Pathfinder Road.

REGULATORY SETTING

Development on the Project site is governed by the land use planning and zoning designations in the County of Los Angeles General Plan, the Rowland Heights Community General Plan, and the County of Los Angeles Zoning Ordinance. The Project site is also located within the six-county planning area of the Southern California Association of Governments (SCAG), which is responsible for preparing the Regional Comprehensive Plan and Guide (RCPG), Regional Transportation Plan (RTP), and Compass Growth Vision (CGV). The Project site is included within SCAG's San Gabriel Valley Association of Cities (SGVAC) Subregion.

County of Los Angeles Regulatory Setting

County of Los Angeles General Plan

The Project site is located in the unincorporated community of Rowland Heights in Los Angeles County. Overall land use direction for the County is provided in the County of Los Angeles General Plan (General Plan), which was adopted by the County Board of Supervisors in November 1980. The General Plan includes all state-mandated elements and several optional elements as well as a series of community plans that set forth more detailed growth and development for specific unincorporated communities. The various elements of the General Plan provide Countywide goals, policies, and objectives that govern the location and overall pattern of development, provide for an adequate transportation network and identify areas for recreation and conservation, among many other items. The following elements of the General Plan would be applicable to the Project: Land Use; Circulation; Conservation, Open Space and Recreation; Safety; and Public Facilities. The General Plan policies applicable to the proposed Project are identified in **Table 5.17-2, Los Angeles County General Plan Policies**.

The County is currently updating the General Plan. No land use category changes are proposed or recommended as a part of the General Plan update; therefore, the discussion for the current General Plan land use change is equally applicable.

Rowland Heights Community General Plan

As mentioned above, the General Plan includes a series of community plans that further guide land use decisions for certain communities. The Project site is located within the Rowland Heights Community General Plan Area (Plan Area). The Plan Area is bounded by the City of Industry on the north, Orange

County on the south, the City of Diamond Bar on the east, and the unincorporated community of Hacienda Heights and the City of La Habra Heights on the west.

The Rowland Heights Community General Plan was adopted by the Board of Supervisors on September 1, 1981. In conjunction with other elements of the Los Angeles County General Plan, the Rowland Heights Community General Plan is a coordinated statement of public policy by Los Angeles County for use in making decisions relating to future land uses within Rowland Heights. The Rowland Heights Community General Plan establishes a direction and form for the future development of Rowland Heights, setting forth broad guidelines for the extent and nature of growth. The Rowland Heights Community General Plan contains goals and policies related to land use, circulation and scenic highways, conservation and open space, outdoor recreation, public health and safety, housing and noise. The policies applicable to the proposed Project are identified in **Table 5.17-1, Rowland Heights Community General Plan Policies**.

As shown in **Figure 5.17-1, County of Los Angeles Land Use Designations,** the Rowland Heights Community General Plan designates the Project site for "U1" Urban 1 uses, which include very low density (hillside) residential, large lot residential and single-family detached units. The U1 designation allows 1.1 to 3.2 dwelling units per gross acre and 10,000- to 39,999-square-foot typical lot sizes.[2] The area immediately north of the Project site is designated for Commercial uses; the area immediately west of the Project site is designated for "N2" Non-Urban 2 uses (0.3 to 1.0 dwelling unit per gross acre); the area immediately south of the Project site is designated for "U4" Urban 4 uses (12.1 to 22.0 dwelling units per unit); and the area immediately east of the Project site is designated for Open Space uses.

Rowland Heights Community Standards District

The Rowland Heights Community Standards District (CSD) (Section 22.44.132 of the Los Angeles County Code) is established to implement the Rowland Heights Community General Plan. The CSD provides development standards and outlines review processes to ensure that new development retains the residential character of the area. Additionally, the CSD is established to ensure that commercial development, signs in commercial areas, landscaping, and setbacks are appropriate for the community and are implemented to protect the community's health, safety, and welfare. The boundaries of the CSD are coterminous with the boundaries of the Rowland Heights Community General Plan. According to the CSD, all properties within its boundaries shall be neatly maintained, and yard areas that are visible from the street shall be free of debris, trash, lumber, overgrown or dead vegetation, broken or discarded furniture, and household equipment such as refrigerators, stoves, and freezers. The CSD also contains

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2 County of Los Angeles Department of Regional Planning, Rowland Heights Community General Plan, (1981) 7.

zone-specific standards. The majority of the standards only apply to properties that are zoned C-1, C-2, C-3, A-1, A-2, and R-A or R-1. The following two standards apply to development in Zone A-1, the designation that currently applies to the Project site:

- A minimum of 50 percent of the required front yard area shall contain landscaping consisting of grass, shrubs, trees, and other similar plant materials. Paved or all-gravel surfaces may not be included as part of the required landscaped area.
- Trash containers and dumpsters stored in the front or side yard areas shall be screened from view from streets, walkways, and adjacent residences.

County of Los Angeles Zoning Ordinance

Title 22 of the Los Angeles County Code establishes the County of Los Angeles Zoning Ordinance. For each defined zone, the ordinance identifies the permitted uses and applicable development standards for characteristics of development such as density, height, and parking. As shown in **Figure 5.17-2, County of Los Angeles Zoning Designations**, the Project site is presently zoned A-1, Light Agriculture, by the County Zoning Ordinance. This designation allows by right permitted uses such as light agricultural uses (raising of horses, cattle grazing) as well as adult residential facilities, crops, family child care homes, foster family homes, group homes, single-family residences, second units, and small family homes. A-1 zoning also allows accessory uses, as well as certain uses subject to a discretionary Conditional Use Permit, including churches and schools. The A-1 zone does not allow for multi-family residential use.

Los Angeles County Green Building Program

The Los Angeles County Green Building Program applies to certain projects located in unincorporated Los Angeles County. The Program consists of three ordinances that establish green building standards, low impact development standards, and drought-tolerant landscaping requirements for new construction. The County Board of Supervisors passed these ordinances on November 18, 2008. The ordinances amend Title 12, Environmental Protection, Title 21, Subdivisions, and Title 22, Planning and Zoning, of the Los Angeles County Code. The purpose of the amendments is to establish and mandate green building techniques for the construction of new buildings. Green building practices are intended to conserve water, conserve energy, conserve natural resources, divert waste from landfills, minimize impacts to existing infrastructure, and promote a healthier environment.

The Green Building Ordinance applies to all residential and non-residential construction in unincorporated Los Angeles County for which building permit applications are submitted on or after January 1, 2009. The Low Impact Development Ordinance applies to all construction in unincorporated Los Angeles County for which a complete development application was not filed with the Department of Regional Planning before January 1, 2009. Lastly, the Drought Tolerant Landscaping Ordinance applies to

all construction in unincorporated Los Angeles County for which the filing of a building permit application occurs more than 90 days after January 1, 2009.

Regional Plans

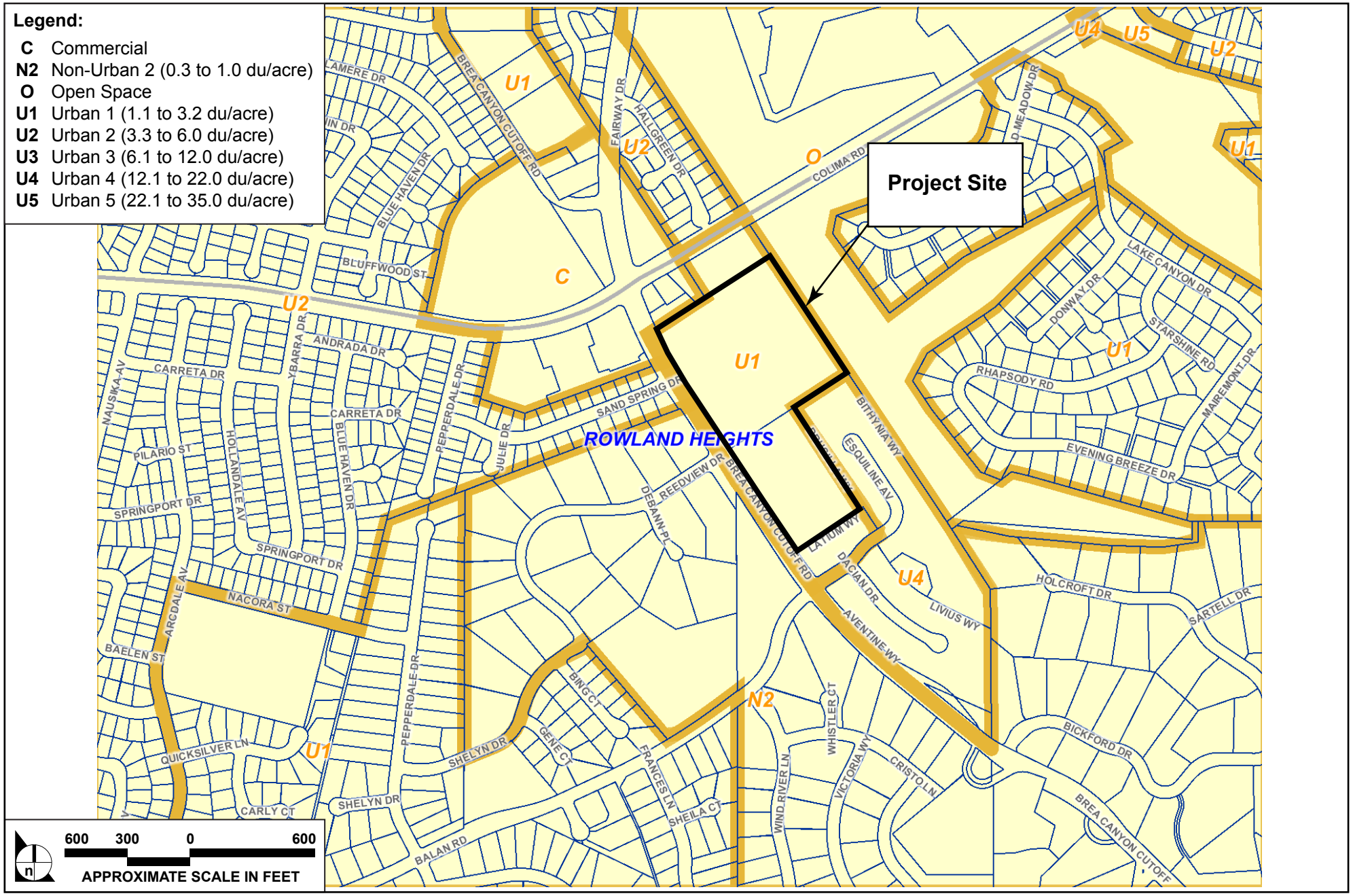
SCAG Regional Comprehensive Plan and Guide

SCAG's Regional Comprehensive Plan and Guide (RCPG) was adopted in 1996 as a policy document that sets broad goals for the Southern California region and identifies strategies for agencies at all levels of government to use in guiding their decision making. The RCPG is intended to serve the SCAG region as a framework for a 20-year horizon. It includes input from each of the 13 subregions that make up the Southern California region (which comprises Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial Counties).

Adopted RCPG policies related to land use are contained primarily in the Growth Management Chapter of the RCPG. The purpose of the Growth Management Chapter is to present forecasts which establish the socioeconomic parameters for the development of the Regional Mobility and Air Quality Chapters of the RCPG. The growth management policies in the RCPG encourage local land use actions that could ultimately lead to the development of an urban form that will minimize development costs, save natural resources, and enhance the quality of life in the region. Specific growth management policies are divided into four main categories: (1) growth forecasts; (2) improving the regional standard of living; (3) improving the regional quality of life; and (4) providing social, political, and cultural equity. In addition to the Growth Management Chapter, the RCPG includes an Air Quality Chapter, Open Space and Conservation Chapter and Water Quality Chapter that contain policies related to land use. The applicable policies of the RCPG and an analysis of Project consistency are presented in **Table 5.17-4, SCAG Regional Comprehensive Plan and Guide Policies**.

SCAG Regional Transportation Plan and Regional Transportation Improvement Program

In addition to the RCPG, SCAG has prepared the 2008 Regional Transportation Plan (RTP). The RTP is a federal and state-mandated 20-year transportation plan that envisions the future multi-modal transportation system for the region and reflects a vision for the region that balances land use with transportation investments in a way that is complementary to existing investments. In addition, the RTP addresses the goals and objectives established by SCAG based on application of a number of key performance measures. The RTP reflects the growing realization that the region must do a better job of integrating transportation and land use planning.

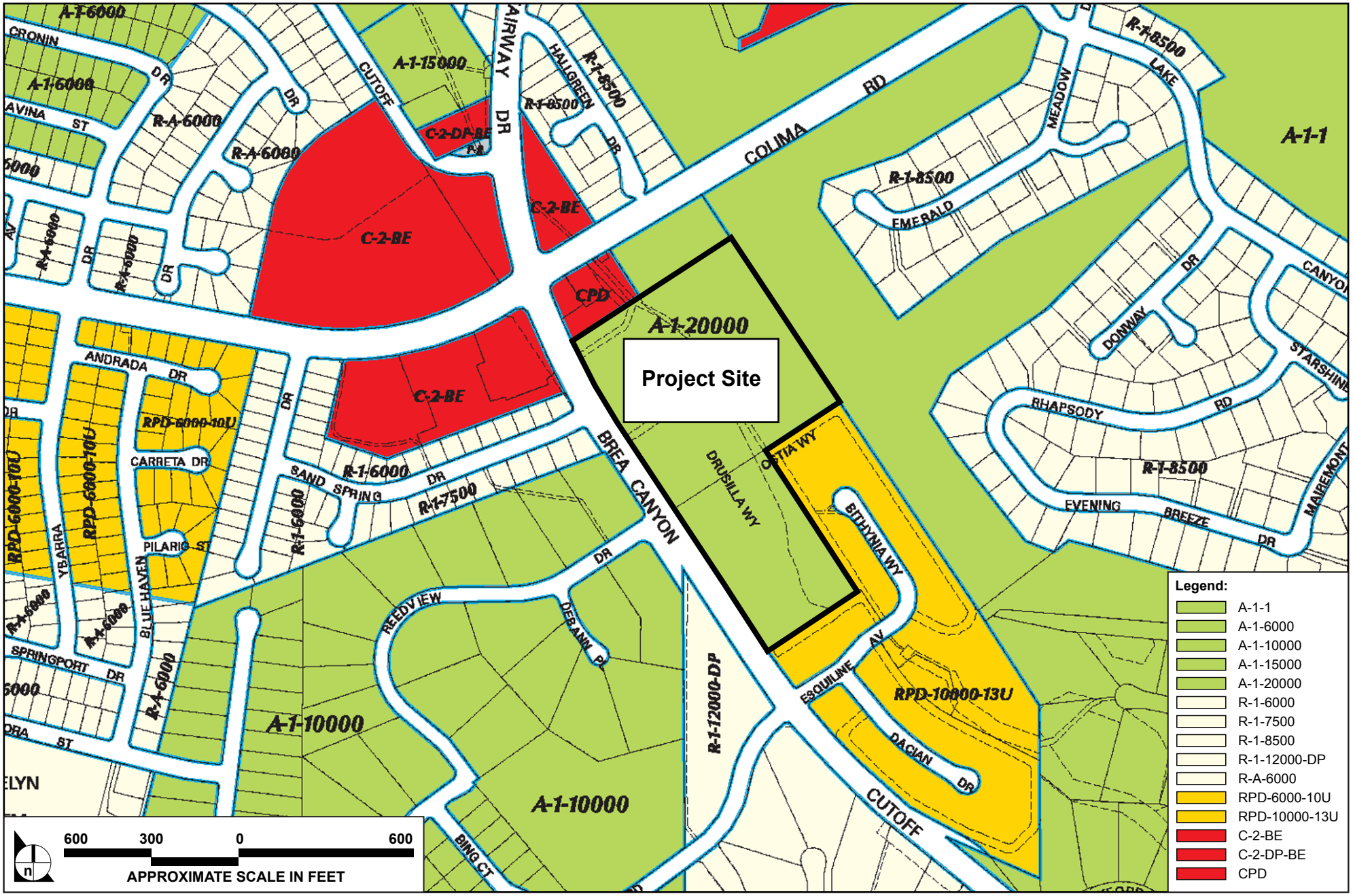


SOURCE: Los Angeles County, Department of Regional Planning - 2007

FIGURE **5.17-1**

County of Los Angeles Land Use Designations

291-006•06/09



SOURCE: County of Los Angeles, Department of Regional Planning - September 2005

FIGURE **5.17-2**

County of Los Angeles Zoning Designations

291-006•06/09

The 2008 RTP's goals are to maximize mobility and accessibility and to ensure travel safety and reliability for all people and goods in the region; preserve and ensure a sustainable regional transportation system; maximize the productivity of the transportation system; protect the environment, improve air quality and promote energy efficiency; encourage land use and growth patterns that complement the region's transportation investments; and maximize the security of the transportation system through improved monitoring, rapid recovery planning, and coordination with other security agencies.

In compliance with state and federal requirements, SCAG also prepares the Regional Transportation Improvement Program (RTIP) to implement projects and programs listed in the RTP. Short-term implementation requirements are set forth in the RTIP, which covers a six-year period and contains short-term programming necessary to fund implementation of RTP requirements. The RTP is updated every other year, and contains a capital listing of all transportation projects proposed for the region over a six-year period. The policies of the RTP and an analysis of Project consistency are presented in **Table 5.17-5, SCAG Regional Transportation Plan Goals**.

SCAG Compass Growth Vision Report

In an effort to maintain the region's prosperity, continue to expand its economy, house its residents affordably, and protect its environmental setting, SCAG embarked on a visioning process by soliciting input from public and private stakeholders throughout the region. The 2004 Growth Vision Report represents the outcome of this process. The report contains four principles: improve mobility for all residents; foster livability in all communities; enable prosperity for all people; and promote sustainability for future generations. Decisions regarding growth, transportation, land use, and economic development in the region should support and be guided by these principles. The policies of the 2004 Growth Vision Report and an analysis of Project consistency are presented in **Table 5.17-5, SCAG Growth Visioning Principles**.

ENVIRONMENTAL IMPACTS

Project Improvements

Under the proposed Project, the existing Southlands Christian Church and Southlands Christian School structures, parking lots, and athletic field would be replaced with approximately 775 for-lease residential units in multiple buildings, a recreational facility for residents, parking structures containing a total of 1,544 parking spaces, and landscaping throughout the Project site. The floor area ratio (FAR) on the proposed Project site would be 1.35:1.

The Project proposes three types of residences—Podium units, Townhome-style apartments, and Wrap-Around units. Podium building residential units would be contained in two four-story buildings set above a landscaped courtyard and partial below-grade parking within the northern portion of the Project site. Collectively, the two Podium buildings would total 499,500 square feet. The height above grade for the Podium buildings would vary due to the slope of the Project site. Building heights fronting Brea Canyon Cutoff Road would range from 56 feet to 69 feet above finished grade; the maximum building height along the southern elevation (along an interior driveway) would be approximately 57 feet. The Podium building would maintain a setback of 15 feet from the Brea Canyon Cutoff Road curbline, 35 feet from the northern property line and 35 feet from the eastern property line.

Townhome-style apartments would be contained in a cluster of three-story buildings within the central portion of the Project site. The Townhome-style apartments would total 150,900 square feet; building heights would be approximately 39.5 feet above finished grade. The Townhome-style apartments would maintain a setback of 15 feet from the Brea Canyon Cutoff Road curbline, 20 feet from the eastern property line and 15 feet from the southern property line.

The Wrap-Around building units would be contained in three- and four-story buildings arrayed around landscaped courtyards and a four-level above-grade parking structure within the southern portion of the Project site. The Wrap-Around buildings would total 266,000 square feet. Building heights fronting Brea Canyon Cutoff Road would range from approximately 44 feet to 60 feet above finished grade; the maximum height along the southern elevation (along an interior driveway) would be approximately 47 feet. The Wrap-Around buildings would maintain a setback of 15 feet from the Brea Canyon Cutoff Road curbline, 55 feet from the eastern property line and 42 feet from the southern property line.

A series of approvals from the County are necessary or desirable for implementation of the Project. Discretionary approvals for the Project would include, but are not limited to, the following:

- Zone Change (Residential Planned Development 50U)
- Conditional Use Permit
- General Plan Amendment (Rowland Heights Community General Plan)
- Oak Tree Permit
- Certification of an Environmental Impact Report
- Grading, excavation, foundation, and associated building permits
- Other permits and approvals as deemed necessary

Thresholds of Significance

Based on the County's Initial Study Checklist and Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, projects should be evaluated for potentially significant impacts related to Land Use based on the following criteria

- Would the Project be inconsistent with the plan designation(s) of the subject property?
- Would the Project be inconsistent with the zoning designation of the subject property?
- Would the Project result in a major change in the patterns, scale, or character of the general area or community?

The following significance thresholds, through preparation of the Initial Study, were found not to be applicable to the proposed Project and are discussed further in **Section 7.0, Effects Found Not to be Significant**.

- Can the Project be found to be inconsistent with the following applicable land use criteria: Hillside Management Criteria? SEA Conformance Criteria?
- Would the Project physically divide an established community?

Impact Analysis

Threshold 1: Is the Project inconsistent with the plan designation(s) of the subject property?

Analysis

The evaluation below addresses whether the proposed Project would conflict with any applicable land use plans, policies, or regulations identified above. The Project's consistency with plans related to other environmental topics is discussed in the relevant topical section. For example, consistency with the South Coast Air Quality Management District Air Quality Management Plan is discussed in **Section 5.4, Air Quality**.

Rowland Heights Community General Plan

As previously mentioned, the Rowland Heights Community General Plan, adopted September 1, 1981, is an element of the Los Angeles County General Plan that delineates County policies and standards for development in Rowland Heights. The land use policy map of the Rowland Heights Community General Plan designates the Project site as "U1" Urban 1, which allows 1.1 to 3.2 dwelling units per gross acre. At 50 dwelling units per gross acre, the proposed Project would exceed the maximum residential density permitted under the U1 designation, which is a potentially significant impact.

Currently, the maximum residential density permitted within Rowland Heights is 35 dwelling units per gross acre, as allowed under the "U5" Urban 5 designation. In order to address this inconsistency, the Project Applicant is requesting a General Plan Amendment to the Rowland Heights Community General Plan to apply the U6 designation to the site to permit a density of 36 to 50 dwelling units per gross acre.[3] The proposed new category would only apply to the Project site based on compliance with specific criteria related to property size and location. Compliance with these specific criteria would allow greater density with minimal impacts, and thus would justify a density of up to 50 acres per unit. The proposed U6 category would not be available for other property owners in the Rowland Heights community, as the U6 category is site specific based on the narrow site-specific criteria. As a result, no other property owners in Rowland Heights would be able to obtain density beyond the maximum currently allowed in the Rowland Heights Community General Plan (35 units per acre), and any changes in density for other properties would require a discretionary process. The specific criteria would include the following:

Urban 6 (U6)

- 36 to 50 dwelling units per gross acre
- 15-acre minimum lot size
- Situated on a minimum four-lane roadway with a minimum 80-foot right-of-way
- Located within 250 feet of neighborhood serving commercial/retail uses
- Located within 0.25 mile of a public bus stop
- Located within 0.75 mile of a freeway
- Not adjoining single-family residences
- Urban high-density residential apartments

With approval of the General Plan Amendment and application of the new site-specific land use designation, the Project would be consistent with the Rowland Heights Community General Plan land use policy map. However, since the Project is not consistent with the current plan designation for the

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3 The Project site and proposed Project meet the aforementioned criteria. First, the Project is a large parcel that is approximately 15.7 acres, providing a rare opportunity for infill development nearby neighborhood serving commercial uses. As recognized in the County Housing element, which noted the difficulty in assembling large parcels of land for infill development, such a large parcel available for infill development presents a unique opportunity for smart growth development. The Project site is also within 200 feet of commercial/retail uses situated at the corner of Brea Canyon Cuttoff Road and Colima Road intersection, is situated within 0.25 miles from bus stops along Colima Road, is approximately 2.5 miles of a Metrolink Station, and is situated 0.75 miles south of the Pomona Freeway (SR-60). The Project site also is situated on a four-lane roadway (Brea Canyon Cuttoff Road) which has a turn lane and right of way of approximately 80 feet, and this four land roadway buffers the Project site from the closest single family residences.

Project site and a new designation would be required to accommodate the proposed density of 50 dwelling units per gross acre, land use impacts would be significant.

In addition to consistency with the land use policy map, this section evaluates the proposed Project's consistency with the policies of applicable land use plans. These plans include the Rowland Heights Community General Plan, the County of Los Angeles General Plan, and the RCPG, RTP and CGV prepared by SCAG. Furthermore, the Project's consistency with the Los Angeles County Green Building Program is evaluated.

Table 5.17-1, Rowland Heights Community General Plan Policies, identifies all relevant policies contained in the Rowland Heights Community General Plan and presents an assessment of Project consistency with these policies. As the table shows, the Project is generally consistent with the Rowland Heights Community General Plan, with the exception of Policy 4, where it was determined that the Project's proposed density of 50 dwelling units per gross acre would be inconsistent with the existing General Plan Land Use Element land use designation.

Rowland Heights Community General Plan policies not listed in **Table 5.17-1** were determined not to apply to the proposed Project, either because they apply to different land uses or because they are program-oriented policies intended for implementation by planning bodies and do not apply to individual projects such as the proposed Project.

Table 5.17-1
Rowland Heights Community General Plan Policies

Land Use Policies		
1	Prohibit residential uses in industrial areas. Residential uses in commercial areas are allowed when ancillary to primary commercial uses.	**Consistent:** The Project site is not located within an industrial area. The Project site is located in close proximity to commercial uses to the north. The Project would complement these commercial uses, as it would allow residents to walk to local retail stores, restaurants, and other local businesses. Specifically, neighborhood-serving commercial uses, including various retail stores, shops, a grocery store, and restaurants, are within a short walking distance to the Project site.

Land Use Policies (continued)		
4	Restrict multiple-family or attached housing to the U3, U4 and U5 categories.	**Not Consistent:** The Project site is not designated U3, U4, or U5 by the Community Plan. A new land use designation would be required to accommodate the Project due to the proposed density of 50 dwelling units per acre. With approval of the General Plan Amendment and application of the new land use designation to the U6 category, the Project would be consistent with the Community Plan land use policy map.
5	Prohibit mobile home parks in non-urban and industrial areas.	**Consistent:** The Project does not propose a mobile home park.
6	Design multiple family developments to minimize their impacts on surrounding neighborhoods and adjacent dwellings. The design shall adhere to the following guidelines • Maintain setbacks which are adequate to preserve the privacy of adjacent residences and yards. • Provide a minimum of 15 feet of landscaping along street frontages. This shall include specimen trees, and plants capable of providing screening up to a height of 42 inches, landscaped berms or a combination of trees. • Screen parking and trash areas with landscaping, berms, compatible structures, or a combination of these. • Locate trash areas away from adjacent residential properties. • Locate driveways so as to minimize impacts on local street traffic. • Provide sufficient off-street guest parking. • Conditional Use Permits will be required to insure that these concerns are addressed.	**Consistent:** The Project would be consistent with the design guidelines. All garbage bins and parking stalls would be located in the interior of the Project site or within parking structures or other types of enclosures, and screened from view. Landscaping would be added within the 15-foot setback from the Brea Canyon Cutoff Road curbline. In addition, the Project would implement several design features to ensure compatibility with the community and minimize impacts on the surrounding neighborhood. For example, the Project would incorporate open space areas and setbacks to minimize impacts from increased density. The Project would also be designed to step back from adjacent development to minimize height impacts, and the Project would utilize the existing topography of the Project site to minimize visual impacts to surrounding properties. The Project also would include a landscaping program which may include elements such as canopies of shade trees, flowers, landscaping lighting features, broad landscaped setbacks, and streetscape amenities. Further, the Project would supply sufficient off-street parking (a total of approximately 1,544 parking spaces) for residents and guests, therefore precluding the need for residents and guests to use street parking in the neighborhood.

Land Use Policies (continued)		
8	Encourage the beautification of new and existing commercial areas. This can be achieved through the combined efforts of the public and private sectors. Where practical, adhere to the following guidelines: • Complete landscaping of public rights-of-way. • Provide a minimum of 10 feet of landscaping along the street frontage of commercial uses. This shall include plants, landscaped berms, or a combination of these, capable of providing screening up to a height of 42 inches. • Landscape a minimum of 5 percent of the parking area. • Freestanding portable signs are prohibited. • Limit signs to one for each street frontage of a shopping center listing all businesses. This sign should reflect the architectural style of the center. • New commercial uses shall be sensitive to neighboring uses. • All businesses in a center (three establishments or more) should present a general harmony of facades. Conditional use permits will be required of new commercial centers to insure that these concerns are addressed.	**Consistent:** Although the Project does not propose commercial uses, the Project includes streetscape improvements along Brea Canyon Cutoff Road. These improvements are consistent with this policy since they would enhance the adjacent Colima Road commercial corridor with landscaping.
Circulation Policies		
3	Designate Brea Canyon Cutoff, southerly of Colima Road, a limited secondary highway. • The standard improvement for a limited secondary highway is two traffic lanes on 64 feet of right-of-away. Typically, such improvements would consist of 26-30 feet of pavement with graded shoulders. • The right-of-way may be increased up to 80 feet for additional improvements where traffic or drainage conditions so warrant. • A uniform building setback shall be established 40 feet from the centerline for all limited secondary highways in order to preserve proper sight distances and to help maintain a rural appearance adjacent to the roadway.	**Consistent:** The Project would implement streetscape improvements along Brea Canyon Cutoff Road, but would not interfere with the design standards for a limited secondary highway or preclude designation of Brea Canyon Cutoff Road as a limited secondary highway.

Conservation and Open Space Policies		
4	Encourage preservation of cultural heritage, historical, and geological resources.	**Consistent:** Other than one heritage oak tree, there are no historical or cultural structures on the Project site, as discussed in **Section 7.0, Effects Found Not to be Significant**. Additionally, the Project site is located within an urbanized area, and is neither on nor near any unique or natural geologic or topographic features such as hilltops, ridges, hill slopes, canyons, ravines, rock outcrops, water bodies, streambeds, and/or wetlands. No distinctive natural landforms are located around the Project site. Given that the proposed Project does not contain culturally historic or geologic features, the proposed Project is consistent with this policy.
5	Protect visual qualities of scenic areas including ridgelines and views from public roads and trails, particularly in the Brea Canyon Cutoff area.	**Consistent**: The Project would obstruct easterly views of the golf course and southerly views of the developed hillsides along the Brea Canyon Cutoff corridor, but would not obstruct significant views of any ridgelines or landforms in the Puente Hills given intervening residential tracts and vegetation as well as the elevation differential across the Project site and proposed building heights, as discussed in detail in **Section 5.6, Visual Quality**. Additionally, due to the elevation differential across the Project site, building heights would be generally consistent with the residential uses to the south and east. The Project would also be designed to step back from adjacent development to minimize height impacts, and the Project would utilize the existing topography of the Project site to minimize visual impacts on surrounding properties. Furthermore, Brea Canyon Cutoff Road is designated by the Rowland Heights Community General Plan as a limited secondary highway south of Colima Road. This classification is designed to protect routes in rural areas and preserve a rural appearance. When the Community Plan was released in 1981, the Brea Canyon Cutoff Road corridor consisted of largely undeveloped hillsides. However, since that time, residential development in Rowland Heights has expanded to the south of Colima Road on both sides of Brea Canyon Cutoff Road. Brea Canyon Cutoff Road now serves as a four-lane, commuter route through the Puente Hills. As a result, the character of the corridor has been transformed from rural (undeveloped) to urban. The Project site is also within 250 feet of Colima Road, which is a major highway and heavily developed commercial corridor.

Conservation and Open Space Policies (continued)		
8	Encourage the use of solar energy for water and space heating.	**Consistent:** Although specific design criteria, such as the use of solar energy, have not yet been identified, the Project would support this policy by incorporating environmentally sensitive and sustainable design features such that the Project may potentially qualify for Build It Green certification. Project design features that are proposed and that may qualify for the GreenPoint checklist include the Project's location on an infill development site that is within an urban growth boundary and avoids sensitive sites, is already serviced by utilities, proposes a housing density of more than 15 units per acre, is within pedestrian access of services within 0.25 mile, and is within 0.5 mile of a bus stop; the provision of outdoor gathering places for residents; design features for safety and vandalism deterrence; construction and demolition waste management; the use of recycled materials; "cool site" techniques including the use of light-colored paving materials; the use of drought-tolerant landscaping; light pollution reduction; noise and vibration control; the use of high-quality insulation; the use of water-efficient fixtures; air conditioning with non-HCFC refrigerants; garage ventilation; building performance that exceeds Title 24; low/no-VOC paint and other coatings; low-VOC adhesives and sealants; low-emitting flooring; recycling and waste collection; the development of operations and maintenance manuals for building maintenance staff; and the installation of educational signage.

Outdoor Recreation		
3	Use school facilities to supplement recreational services provided by local parks.	**Consistent:** Recreational facilities on the existing Southlands Christian Schools campus do not supplement recreational services provided by local parks. Therefore, the Project would not remove recreational facilities available to the public.
4	Require that all new subdivisions dedicate land for local parks according to the requirements of the Quimby Law. Fees may be paid in lieu of park land dedication only when the land requirement is less than 5 acres. Where only part of a given ownership is being developed at a particular time, the amount of park space required will be based on the most intense development allowed on the entire site.	**Consistent:** No subdivision of land is proposed as part of the Project, and no dedication of land or payment of fees in lieu of park land dedication under the Quimby Law is required. However, Project-related increases in demand for local park land facilities would be partially offset by planned on-site recreational amenities. The Project applicant would also be required to provide funds for, or implement improvements within, local parks within the Rowland Heights Community General Plan Area to the satisfaction of the County Department of Parks and Recreation, to be directed towards amenities not proposed as part of the Project. Proposed Project site amenities include the following: • A recreational facility to be centrally located on the Project site for use by all Project residents is proposed to include such facilities as a "great room" or community room, yoga/multipurpose room, media room, fitness center, sports lounge, library/multipurpose room, conference room, and business center. Second-story terraces would provide outdoor seating. • A swimming pool and spa, as well as a communal barbeque area, adjacent to the recreational facility. • The two courtyards within the Podium buildings would each contain a swimming pool, spa, landscaped terraces, and indoor recreational facilities. • The Townhome-style apartment buildings would be configured around two landscaped quadrangles and a playground area adjacent to the western cluster of buildings. • The Wrap-Around buildings would be served by a centrally located swimming pool and spa and would incorporate three courtyards.

Public Health and Safety		
2	All proposals for development within a seismic management zone must include an evaluation of the site prepared by a geologist registered in the State of California.	**Consistent:** As discussed in **Section 7.0, Effects Found Not To Be Significant**, the Project site is not located within a seismic management or active fault zone.
6	Conduct soils and groundwater investigations for any proposed developments in the potential liquefaction zone.	**Consistent:** A soils and groundwater investigation of the site was conducted. As discussed in **Section 5.1, Geotechnical and Soil Resources**, this investigation determined that the potential for liquefaction and associated ground deformations beneath the Project site is very low and is therefore considered less than significant. Impacts associated with high groundwater levels beneath the Project site would be less than significant with implementation of mitigation measures contained within the geotechnical investigation.
7	Vigorously enforce Building and Safety regulations, especially regarding hillside development.	**Consistent:** The proposed Project is not located in a designated hillside area. The applicant would comply with all Building and Safety regulations applicable to fire safety and would enforce strict compliance with Fire Department brush clearance standards.
8	Encourage the use of fire retardant building materials and vegetation in the hillside areas. Vegetation capable of providing soil stability also is encouraged.	
9	Enforce strict compliance with Fire Department brush clearance standards.	
Housing		
1	Encourage the equitable distribution of housing for low and moderate income individuals and households throughout the community and the region.	**Consistent:** The Project would increase the supply of rental units in Rowland Heights by providing approximately 775 new multi-family apartment units with high-quality amenities, which would provide housing in proximity to jobs, services, and public transportation. The Housing Element update states that housing in the unincorporated areas is predominantly single-family homes, with only 20 percent of the housing stock being multi-family, and that such "lack of housing diversity in many unincorporated areas emerged as a common theme from community members during the Housing Element meetings held in November 2007." The Project's addition of approximately 775 residential multi-family units would contribute to meeting the increased housing need in the area and region, while at the same time promoting development complementary to local land uses.

Housing (continued)		
3	Require that new housing be consistent with the maintenance of community character.	**Consistent:** The proposed Project constitutes infill development in close proximity to jobs, services, and public transportation. Moreover, Project implementation would place multi-family housing on a property already bordered by multi-family housing to the south. To the immediate south of the Project site are townhomes on a property designated U4 and is developed with a maximum of 13 residential units per acre, and to the immediate north are various neighborhood-serving commercial and retail uses. Additionally, single-family residences to the west are separated from the Project site by a major four-lane road. The Project would also implement numerous design features to promote compatibility with the community. For instance, the Project would incorporate open space areas and setbacks to minimize impacts from increased density. The Project would also be designed to step back from adjacent development to minimize height impacts, and the Project would utilize the existing topography of the Project site to minimize visual impacts to surrounding properties. For these reasons, the Project would be consistent with the character of the existing community.
6	Encourage the provision of an adequate supply of housing in close proximity to jobs.	**Consistent:** The Project site is located in proximity to many employment opportunities. According to the San Gabriel Valley Economic Partnership, there currently are over 600,000 jobs in the San Gabriel Valley. The Los Angeles County Economic Development Corporation's 2007–2008 Economic Overview and Forecast reports that Rowland Heights alone is home to over 2,022 business establishments and the San Gabriel Valley as a whole housed over 42,416 businesses in 2005. Several large companies and corporations are also housed in nearby cities such as City of Industry, Diamond Bar, Pomona, and Brea. In particular, the City of Industry contains an employment corridor just north of the SR-60, which is located in close proximity to the Project site.

Noise		
1	In areas experiencing exterior noise levels of 65 dB(A) or more, require that all new residential structures having four or more units be insulated so that interior noise levels do not exceed 45 dB(A).	**Consistent:** As discussed in **Section 5.3, Noise**, implementation of mitigation requiring specific construction techniques and acoustical analyses would ensure that interior noise levels on the Project site do would not exceed 45 dB(A) CNEL, as discussed in **Section 5.3, Noise**.
4	Encourage the use of car pools, buses and other forms of mass transit.	**Consistent:** Bus service is provided by Foothill Transit in the immediate Project area with bus service along Colima Road, Diamond Bar Boulevard, and Brea Canyon Road. The nearest bus stops are for Foothill Transit Line 482 and Line 493, which run every 30 minutes weekdays and weeknights, and approximately every 15 minutes after 2:00 PM until 8:00 PM weekdays only, respectively. Bicycle racks would be provided on the Project site for residences and an alternative transportation information kiosk would be located in the main lobby of the residential units. Mitigation in **Section 5.4, Air Quality**, would require the Project to designate parking spaces for carpools and vanpools.

Table 5.17-2
Los Angeles County General Plan Policies

Land Use Element Policies		
3	Encourage the development of well designed twinhomes, townhouses and garden apartments, particularly on by-passed parcels within existing urban communities.	**Consistent:** The Project would consist of a combination of one-, two- and three-bedroom units including Townhome-Style apartments, Podium building apartments, and Wrap-Around building units, within an existing urban community, and proposed design features would ensure that the Project enhances the quality of the existing neighborhood while remaining compatible with surrounding uses. Lighting would be designed to minimize impacts on adjacent residential uses and landscaping and streetscape improvements would be used to integrate the Project into the neighborhood. The Project is intentionally designed as a village with multiple separate buildings that would foster interaction of neighbors and create small distinct communities within the larger Project site. The facades of the buildings would be enhanced with projecting balconies and recessed patios.

Land Use Element Policies (continued)		
12	Concentrate well designed high-density housing in and adjacent to centers to provide convenient access to jobs and services without sacrificing livability or environmental quality.	**Consistent:** The Project would concentrate high-density housing in and adjacent to jobs and services without sacrificing livability or environmental quality. The Project, which proposes approximately 775 multi-family units, is located near local employment opportunities and services along Colima Road and the Pomona Freeway. Additional employment opportunities are located in nearby cities such as City of Industry, Diamond Bar, Pomona, and Brea. Thus, the Project site's location adjacent to Colima Road, a major roadway and public transportation corridor running the length of Rowland Heights, would provide residents easy access to local employment, while proximity to the two major freeways via Brea Canyon Cutoff Road and Fairway Drive would allow access to jobs in the broader San Gabriel Valley and Northern Orange County areas with minimal impacts to local streets. Further, the Pomona Freeway also provides regional access to employment opportunities and services in Downtown Los Angeles and the greater Los Angeles area. In addition, since the Project site is in close proximity to neighborhood-serving retail and commercial stores at the intersection of Colima Road and Brea Canyon Cutoff Road, Project residents would be less than 0.25 mile to a wide variety of uses and services, such as a bank, pharmacy, grocery store, restaurants, real estate agency, gym, tax services, dry cleaners, and more.

Land Use Element Policies (continued)		
15	Protect the character of residential neighborhoods by preventing the intrusion of incompatible uses that would cause environmental degradation such as excessive noise, noxious fumes, glare, shadowing and traffic.	**Partially Consistent:** The Project proposes a greater development density than is permitted under the current zoning or General Plan land use designation, or than exists elsewhere in Rowland Heights. However, multi-family residential housing is generally compatible with the multi-family senior living facility to the north and the 128-unit multi-family development to the south. As discussed in the relevant impact analysis sections of this Draft EIR, impacts related to operational noise as well as odors/noxious fumes and light and glare would be less than significant. Certain Project construction activities would result in significant and unavoidable construction noise and vibration impacts on residential land uses adjacent to the Project site, because of their close proximity. However, because such impacts would be short-term (i.e., limited to specific phases of construction) and not a permanent feature of the Project, the Project is therefore not considered to permanently alter the character of the residential neighborhood because of noise and vibration impacts. Project implementation would construct several buildings that would be taller than existing buildings in the Project area. Specifically, the proposed Podium buildings, at the northern end of the site, would shade the multi-family senior living facility north of the Project site for more than 3 hours, which is considered a significant and unavoidable impact. As stated in **Section 5.7, Traffic, Parking, Circulation, and Access**, the Project would have less than significant impacts on all intersections in proximity to residential neighborhoods and on all residential street segments in the study area. Therefore, although the Project is generally compatible with the character of the neighborhood, it would not be entirely consistent with this policy, since it would result in significant and unavoidable impacts related to the shading of an off-site land use.

Land Use Element Policies (continued)		
22	Promote land use arrangements that will maximize energy conservation.	**Consistent:** The Project constitutes an infill development in close proximity to jobs, services, and public transit. Since access to these uses would facilitate a reduction in vehicle miles traveled, this land use arrangement would maximize energy conservation. Further, the Project would support this policy by incorporating environmentally sensitive and sustainable design features such that the Project may qualify for Build It Green certification. Project design features that are proposed and that may qualify for the GreenPoint checklist include the Project's location on an infill development site that is within an urban growth boundary and avoids sensitive sites, is already serviced by utilities, proposes a housing density of more than 15 units per acre, is within pedestrian access of services within 0.25 mile, and is within 0.5 mile of a bus stop; the provision of outdoor gathering places for residents; design features for safety and vandalism deterrence; construction and demolition waste management; the use of recycled materials; "cool site" techniques including the use of light-colored paving materials; the use of drought-tolerant landscaping; light pollution reduction; noise and vibration control; the use of high-quality insulation; the use of water-efficient fixtures; air conditioning with non-HCFC refrigerants; garage ventilation; building performance that exceeds Title 24; low/no-VOC paint and other coatings; low-VOC adhesives and sealants; low-emitting flooring; recycling and waste collection; the development of operations and maintenance manuals for building maintenance staff; and the installation of educational signage.
30	Prevent inappropriate development in areas that are environmentally sensitive or subject to severe natural hazards, and in areas where essential services and facilities do not exist and are not planned.	**Consistent:** The Project site is not within an area subject to significant natural hazards and services and community facilities are located adjacent to the site. The Project site is located within a highly developed area of Rowland Heights that is well served by existing roadways and other regional infrastructure. The existing regional infrastructure and the established roadway network are sufficient to serve the Project's residential population. The Project would also be adequately supported by public services. Public bus serves the nearby major roads, and the Project site also is located within 2.7 miles of the Metrolink commuter rail station in the City of Industry.

Land Use Element Policies (continued)		
31	Promote compatible land use arrangements that reduce reliance on the private automobile in order to minimize related social, economic, and environmental costs.	**Consistent:** The proposed Project is an infill project located within an urbanized area of Rowland Heights. The Project site is in close proximity to neighborhood-serving retail and commercial stores at the intersection of Colima Road and Brea Canyon Cutoff Road, placing Project residents within a short walking distance of a wide variety of uses. Shopping centers occupy three of the four corners of the Brea Canyon Cutoff Road and Colima Road intersection. Accordingly, this would encourage Project residents to walk from the Project site to the various surrounding uses and services. The Project site is located within 0.5 mile of a bus stop and approximately 2.7 miles from the Metrolink commuter rail station in the City of Industry. The nearest bus stops are for Foothill Transit Line 482 and Line 493, which run every 30 minutes weekdays and weeknights, and approximately every 15 minutes after 2:00 PM until 8:00 PM weekdays only, respectively. The Riverside Metrolink line, which stops at the City of Industry, makes approximately five stops during the AM hours and six stops during the PM hours. As a result, the proposed Project has the potential to reduce automobile emissions as future residents would have the opportunity to utilize alternative modes of transportation.
32	Provide a land use mix at the countywide, areawide and community levels based on projected need and supported by evaluation of social, economic and environmental impacts.	**Consistent:** The Project would increase the supply of residential units in Rowland Heights by providing approximately 775 new, highly amenitized units to provide housing in proximity to jobs, services and public transportation, and would provide rental units to an area currently underserved by this type of housing. The need for housing in the area and within the region has increased over the past several years. As described in the most recent update for the County Housing Element, between the years 2000 and 2007, the population in the County increased at a much higher rate than the number of housing units, suggesting a shortage of housing. Thus, at the regional level, the Project's addition of approximately 775 residential multi-family units would help meet the County's need for 23,862 additional housing units as allocated by SCAG's Regional Housing Needs Assessment (RHNA).

Circulation Element Policies		
36	Develop parking management plans for application in selected areas of urban concentration.	**Consistent:** The proposed Project would provide a total of 1,544 parking spaces, which conforms to the County's general apartment parking requirements. As discussed in **Section 5.6, Traffic, Parking, Circulation, and Access**, parking impacts would be less than significant.
37	Support traffic-operation improvements for improved flow of vehicles.	**Consistent:** As discussed in **Section 5.6, Traffic, Parking, Circulation, and Access**, the Project would result in potentially significant impacts at four intersections during the PM peak hour. The Applicant would be required to implement mitigation at those intersections, including contributing to the construction of additional turn lanes, through-lanes, minor road widening, and lane restriping. After implementation of the mitigation measures, impacts at those intersections would be reduced to less than significant levels.
Conservation, Open Space and Recreation Element Policies		
3	Promote the use of solar energy to the extent possible.	**Consistent:** Although specific design criteria, such as the use of solar energy, have not yet been identified, the Project would support this policy by incorporating environmentally sensitive and sustainable design features such that the Project may potentially qualify for Build It Green certification. Project design features that are proposed and that may qualify for the GreenPoint checklist include the Project's location on an infill development site that is within an urban growth boundary and avoids sensitive sites, is already serviced by utilities, proposes a housing density of more than 15 units per acre, is within pedestrian access of services within 0.25 mile, and is within 0.5 mile of a bus stop; the provision of outdoor gathering places for residents; design features for safety and vandalism deterrence; construction and demolition waste management; the use of recycled materials; "cool site" techniques including the use of light-colored paving materials; the use of drought-tolerant landscaping; light pollution reduction; noise and vibration control; the use of high-quality insulation; the use of water-efficient fixtures; air conditioning with non-HCFC refrigerants; garage ventilation; building performance that exceeds Title 24; low/no-VOC paint and other coatings; low-VOC adhesives and sealants; low-emitting flooring; recycling and waste collection; the development of operations and maintenance manuals for building maintenance staff; and the installation of educational signage.

Conservation, Open Space and Recreation Element Policies (continued)		
6	Encourage the maintenance of landscaped areas and pollution-tolerant plants in urban areas. Integrate landscaping and open space into housing, commercial and industrial developments especially in urban revitalization areas. Use drought-resistant vegetation.	**Consistent:** The proposed Project would include abundant landscaping throughout the site, and the currently proposed landscaping program includes compliance with the County's Drought-Tolerant Landscaping Ordinance and includes such elements as shade trees, flowers, landscaping lighting, landscaped building setbacks, and streetscape amenities. Street trees would enhance the streetscape along Brea Canyon Cutoff Road, as well as provide a buffer between the sidewalk and roadway traffic.
19	Protect the visual quality of scenic areas including ridge-lines and scenic views from public roads, trails and key vantage points.	**Consistent:** The Project would be designed to step back from adjacent development to minimize height impacts, and the Project would utilize the existing topography of the Project site to minimize visual impacts to surrounding properties. While the Project would obstruct easterly views of the golf course and southerly views of the developed hillsides along the Brea Canyon Cutoff corridor, it would not obstruct significant views of any ridgelines or landforms in the Puente Hills, as discussed in detail in **Section 5.6, Visual Quality**. Furthermore, Brea Canyon Cutoff Road is designated by the Rowland Heights Community General Plan as a limited secondary highway south of Colima Road. This classification is designed to protect routes in rural areas and preserve a rural appearance. When the Community Plan was released in 1981, the Brea Canyon Cutoff Road corridor consisted of largely undeveloped hillsides. However, since that time, residential development in Rowland Heights has expanded to the south on both sides of Brea Canyon Cutoff Road. Brea Canyon Cutoff Road now serves as a four-lane, commuter route through the Puente Hills. As a result, the character of the corridor has been transformed from rural (undeveloped) to urban. The Project site is also within 250 feet of Colima Road, which is a major highway and heavily developed commercial corridor.

Conservation, Open Space and Recreation Element Policies (continued)		
24	Support preservation of heritage trees. Encourage tree planning programs to enhance the beauty of urban landscaping.	**Consistent:** The Project site contains three coast live oak trees, one of which is a heritage tree. The three oak trees would be removed as part of the Project. However, consistent with the requirements outlined in the Oak Tree Report for the Project, this impact shall be mitigated through compliance with County Code Section 22.56.2050 et seq., which provides for the replacement of affected oak trees at a ratio of 2:1 for non-heritage oak trees and a ratio of 10:1 for heritage oak trees (County Code Section 22.56.2180) or a payment into the Oak Forestry Special Fund in an amount equivalent to the oak resource loss if the County Forester determines that replacement or relocation on site is inappropriate (County Code Section 22.56.2140).
25	Restrict urban development in areas subject to seismic and geologic hazards.	**Consistent:** The Project site is not located within an area subject to significant seismic, geologic, flood or wildfire hazards as discussed in **Section 5.1, Geotechnical and Soil Resources**; **Section 5.2, Hydrology, Drainage, and Water Quality**; and **Section 5.10.1, Fire Service**.
26	Restrict urban development in flood prone areas, and thus avoid major new flood control works.	
28	Manage development in hillside areas to protect their natural and scenic character and to reduce risks from fire, flood, mudslides, erosion and landslides.	
Safety Element Policies		
3	Continue enforcement of stringent site investigations (such as seismic, geologic, hydrologic, and soils investigations) and implementation of adequate hazard mitigation measures for development projects in areas of high earthquake hazard, especially those involving critical facilities. Do not approve proposals and projects which cannot mitigate safety hazards to the satisfaction of responsible agencies.	**Consistent:** A geotechnical investigation of the site has been conducted. The Project site is not located within an area subject to significant seismic or geologic hazards, as discussed in **Section 5.1, Geotechnical and Soil Resources**.
8	Review proposals and projects proposing new development and expansion of existing development in areas susceptible to landsliding, debris flow, and rockfalls, and in areas where collapsible soils are a significant problem; and disapprove projects which cannot mitigate these hazards to the satisfaction of responsible agencies.	**Consistent:** The Project site is not located within an area subject to significant seismic, geologic, flood or wildfire hazards as discussed in **Section 5.1, Geotechnical and Soil Resources**; **Section 5.2, Hydrology, Drainage, and Water Quality**; and **Section 5.10.1, Fire Service**. Impacts associated with high groundwater levels beneath the Project site and the potential for differential settlement would be less than significant with implementation of mitigation measures contained within the geotechnical investigation.

Public Facilities Element Policies		
16	Encourage development and application of water conservation, including recovery and reuse of storm and waste water.	**Consistent:** The Project would support this policy through application of green building design techniques and compliance with the Los Angeles County Green Building Program. Additionally the Project site is served by the Water District recycled water infrastructure. The Project would also implement measures to qualify for Build It Green certification, such as reducing water consumption through the use of drought-tolerant plants and recycled water for irrigation and the installation of high-efficiency irrigation systems, 2.0-gallon-per-minute shower heads for bathrooms, flow limiters on all faucets, and high-efficiency toilets.
General Goals and Policies		
13	Promote a distribution of population consistent with service system capacity, resource availability, environmental limitations and accessibility.	**Consistent:** The Project is located in an urbanized area presently served by infrastructure, public services and other resources. The Project site is located within a highly developed area of Rowland Heights that is well served by existing roadways and other regional infrastructure. The existing regional infrastructure and the established roadway network are sufficient to serve the Project's residential population. The Project would also be supported by sufficient public services. The Project site is located within 0.5 mile of a bus stop and approximately 2.7 miles from the Metrolink commuter rail station in the City of Industry

General Goals and Policies (continued)		
17	Conserve energy to ensure adequate supplies for future use.	**Consistent:** Project design would incorporate energy conserving features as part of its proposed green building design. The Project would incorporate environmentally sensitive and sustainable design features such that the Project may potentially qualify for Build It Green certification. Project design features that are proposed and that may qualify for the GreenPoint checklist include the Project's location on an infill development site that is within an urban growth boundary and avoids sensitive sites, is already serviced by utilities, proposes a housing density of more than 15 units per acre, is within pedestrian access of services within 0.25 mile, and is within 0.5 mile of a bus stop; the provision of outdoor gathering places for residents; design features for safety and vandalism deterrence; construction and demolition waste management; the use of recycled materials; "cool site" techniques including the use of light-colored paving materials; the use of drought-tolerant landscaping; light pollution reduction; noise and vibration control; the use of high-quality insulation; the use of water-efficient fixtures; air conditioning with non-HCFC refrigerants; garage ventilation; building performance that exceeds Title 24; low/no-VOC paint and other coatings; low-VOC adhesives and sealants; low-emitting flooring; recycling and waste collection; the development of operations and maintenance manuals for building maintenance staff; and the installation of educational signage.
18	Conserve the available supply of water and protect water quality.	**Consistent:** Project design would incorporate water supply and quality conserving features as part of its proposed green building design. The Project would support this policy through application of green building design techniques and compliance with the Los Angeles County Green Building Program. The Project would also implement measures to qualify for Build It Green certification, such as reducing the water consumption through the use of drought-tolerant plants and recycled water for irrigation and the installation of high-efficiency irrigation systems, 2-gallon-per-minute shower heads for bathrooms, flow limiters on all faucets, and high-efficiency toilets.

General Goals and Policies (continued)		
19	Restore and protect air quality through the control of industrial and vehicular emissions, improved land use management, energy conservation and transportation planning.	**Consistent:** The Project is consistent with the goal of improved land use management, energy conservation, and transportation planning. The proposed Project would be an infill project located within an urbanized area of Rowland Heights, and would incorporate environmentally sensitive and sustainable design features such that the Project would be eligible for Build It Green certification. Further, the Project site is in close proximity to neighborhood-serving retail and commercial stores at the intersection of Colima Road and Brea Canyon Cutoff Road, placing Project residents within a short walking distance to a wide variety of uses. Shopping centers occupy three of the four corners of the Brea Canyon Cutoff Road and Colima Road intersection. Accordingly, such location would encourage Project residents to walk from the Project site to the various surrounding uses and services and would reduce reliance on vehicles. The Project site is also located within 0.5 mile of a bus stop and is approximately 2.7 miles from the Metrolink commuter rail station in the City of Industry. The nearest bus stops are for Foothill Transit Line 482 and Line 493, which run every 30 minutes weekdays and weeknights and approximately every 13 minutes after 2:00 PM until 8:00 PM weekdays only, respectively. The Riverside Metrolink line, which stops at the City of Industry, makes approximately five stops during the AM hours and six stops during the PM hours. Furthermore, mitigation in **Section 5.4, Air Quality**, would require the Project to designate parking spaces for carpools and vanpools. As a result, the proposed Project has the potential to reduce automobile emissions as future residents would have the opportunity to utilize alternative modes of transportation.

General Goals and Policies (continued)		
22	Promote the efficient use of land through a more concentrated pattern of urban development, including the focusing of new urban growth into areas of suitable land.	**Consistent:** The project is an infill development and therefore would promote more concentrated urban growth. The Project site is in close proximity to neighborhood-serving retail and commercial services at the intersection of Colima Road and Brea Canyon Cutoff Road, placing Project residents within a short walking distance to a wide variety of uses. Shopping centers occupy three of the four corners of the Brea Canyon Cutoff Road and Colima Road intersection. Accordingly, such location would encourage Project residents to walk from the Project site to the various surrounding uses and services and would reduce reliance on vehicles. The Project site is also located within 0.5 mile of a bus stop, and its proximity to two major freeways via Brea Canyon Cutoff Road and Fairway Drive would reduce the need for future tenants to drive through local streets, thereby channeling Project traffic where it can best be accommodated. The Project site also is located approximately 2.7 miles from the Metrolink commuter rail station in the City of Industry. The nearest bus stops are for Foothill Transit Line 482 and Line 493, which run every 30 minutes weekdays and weeknights and approximately every 15 minutes after 2:00 PM until 8:00 PM weekdays only, respectively. The Riverside Metrolink line, which stops at the City of Industry, makes approximately five stops during the AM hours and six stops during the PM hours.
29	Maintain and conserve sound existing development.	**Consistent:** The Project proposes a greater development density than is permitted under the current zoning or General Plan land use designation, or than exists elsewhere in Rowland Heights. Project implementation also would place several buildings on the Project site that would be taller than existing buildings in the Project area. Nonetheless, the proposed Project would place multi-family residential uses on the Project site, including a mix of unit types, recreational amenities, and landscaped open space that would be generally compatible with the existing multi-family development to the south. For these reasons, the Project is considered to maintain and conserve sound existing development.

General Goals and Policies (continued)		
34	Preserve sound residential areas and protect them from intrusion of incompatible uses.	**Consistent:** The Project would not remove any residential uses and instead would construct additional residences adjacent to an existing residential community. The Project site is immediately adjacent to a townhouse development on a property zoned U4 and developed at a density of 13 units per acre, which is at the lower end of the allowed U4 density range of 12.1 to 22 dwelling units per acre, and is near single-family residences buffered from the site by a major four-lane road. The Project would also implement several design features to ensure compatibility with the surrounding uses and community. For example, the Project would incorporate open space areas and setbacks to minimize impacts from increased density. The Project would also be designed to step back from adjacent development to minimize height impacts, and the Project would utilize the existing topography of the Project site to minimize visual impacts to surrounding properties.
35	Increase the availability of low and moderate income housing and encourage its distribution throughout the urban area.	**Consistent:** The Project would increase the supply of rental housing, which is more affordable for people of low and moderate income levels, in Rowland Heights by providing approximately 775 new, amenitized units in proximity to jobs, services, and public transportation. The need for diversified housing in the area and Los Angeles County has increased over the last several years, and the Housing Element update states that housing in the unincorporated areas is predominantly single-family homes, with only 20 percent of the housing stock being multi-family, and that such "lack of housing diversity in many unincorporated areas emerged as a common theme from community members during the Housing Element meetings held in November 2007." The Project's addition of approximately 775 residential multi-family units would contribute to meeting the increased multi-family housing need in the area and region, which serve people of low to moderate income levels, while at the same time promoting development complementary to local land uses.

General Goals and Policies (continued)		
39	Emphasize the preservation, conservation, and maintenance of stable residential areas.	**Consistent:** The Project would not remove or otherwise interfere with conservation of stable residential areas in Rowland Heights. The Project would be constructed adjacent to existing residential neighborhoods, and would be consistent with the uses surrounding the Project site. To the immediate south of the Project site is a townhouse development on a property designated U4 with approximately 22 units per acre, and to the immediate north are various neighborhood-serving commercial and retail uses. The Project also is nearby other single-family residences, which are buffered from the Project site by a major four-lane road.
41	Encourage the provision of adequate rental housing.	**Consistent:** The Project would increase the supply of rental housing in Rowland Heights by providing approximately 775 new multi-family rental units with high-quality amenities near commercial uses and other employment centers. The Project site is within close commuting range of areas with high concentrations of employment. According to the San Gabriel Valley Economic Partnership, there currently are over 600,000 jobs in the San Gabriel Valley. The Los Angeles County Economic Development Corporation's 2007–2008 Economic Overview and Forecast reports that Rowland Heights alone is home to over 2,022 business establishments and the San Gabriel Valley as a whole housed over 42,416 businesses in 2005. Several large companies and corporations are also housed in nearby cities such as City of Industry, Diamond Bar, Pomona, and Brea. The Project site's location adjacent to Colima Road, a major roadway and public transportation corridor running the length of Rowland Heights, would provide residents easy access to local employment, and its proximity to the two major freeways via Brea Canyon Cutoff Road and Fairway Drive would allow access to jobs in the broader San Gabriel Valley and Northern Orange County areas with minimal impact to local streets.

General Goals and Policies (continued)		
		The Project site also is in close proximity to neighborhood-serving retail and commercial stores at the intersection of Colima Road and Brea Canyon Cutoff Road, placing Project residents within a short walking distance to a wide variety of uses. This location is expected to encourage Project residents to walk from the Project site to the various surrounding uses and services. The Project site is also located within 0.5 mile of a bus stop, and its proximity to two major freeways via Brea Canyon Cutoff Road and Fairway Drive would reduce the need for future tenants to drive through local streets, thereby channeling Project traffic where it can best be accommodated. The Project site also is located approximately 2.7 miles from the Metrolink commuter rail station in the City of Industry.
51	Encourage the location of medium- and high-density housing in close proximity to regional multi-purpose centers.	
53	Emphasize the location of low- and moderate- income housing within easy commuting range of multipurpose and single purpose centers with high concentrations of employment.	

Rowland Heights Community Standards District

The Rowland Heights Community Standards District (CSD) implements the Rowland Heights Community General Plan and establishes standards for new development. The CSD provides specific requirements for uses within certain zones, such as Zone A-1, the current zoning designation for the Project site. However, the majority of the standards only apply to properties that are zoned C-1, C-2, C-3, A-1, A-2, and R-A or R-1.

A zone change to Residential Planned Development (RPD) is being requested for implementation of the proposed Project. The CSD does not establish any specific design criteria for development within the RPD zone. Therefore, the CSD is not applicable to the proposed Project. However, as described above in **Table 5.17-1**, the Project would comply with other applicable design guidelines, including those in the Rowland Heights Community General Plan for multifamily housing.

Los Angeles County General Plan

In addition to the land use policies and design criteria established specifically for projects within Rowland Heights, the Los Angeles County General Plan contains several land use policies that apply to all areas of unincorporated Los Angeles County. **Table 5.17-2, Los Angeles County General Plan**

Policies, identifies the Countywide policies applicable to the proposed Project and provides an analysis of the Project's consistency with those policies. As the table shows, the Project is generally consistent with applicable land use policies, with the exception of Policy 15, as identified in the table below.

Los Angeles County General Plan policies not listed in **Table 5.17-2** were determined not to apply to the proposed Project, either because they apply to different land uses or because they are program-oriented policies intended for implementation by planning bodies and do not apply to individual projects such as the proposed Project.

County of Los Angeles Green Building Program

The Los Angeles County Green Building Program is designed to improve energy and water efficiency, reduce the County's carbon footprint and increase environmental responsibility. According to the Green Building Ordinance, all residential projects containing at least five dwelling units and whose building permit applications are filed between January 1, 2009, and January 1, 2010, shall at minimum, meet the Los Angeles County Green Building standards. All residential projects containing at least 5 dwelling units and whose building permit applications are filed after January 1, 2010, shall meet the Los Angeles County Green Building standards in addition to qualifying for California Green Builder, Build It Green, or LEED certification.

Build It Green is a membership-supported nonprofit organization that promotes energy- and resource-efficient construction (i.e., green building practices) throughout California. The organization has developed Green Building Guidelines as well as checklists for single- and multi-family housing construction that address building location, building performance, construction techniques, energy efficiency, water conservation, waste management and indoor air quality, among other variables Projects are required to comply with a minimum number of checklist items to be eligible for Build It Green certification. The Project has been designed to be eligible for Build It Green certification.

The Project would comply with the Green Building Program by adhering to the following standards:

- Buildings shall be designed to consume at least 15 percent less energy allowed under the 2005 Update to the California Energy Efficiency Standards.
- The applicant shall install a smart irrigation controller for any area of the lot that is either landscaped or designated for future landscaping.
- All new residential projects containing five or more dwelling units, and hotels/motels, lodging houses, non-residential, and mixed use buildings with a gross floor area of 10,000 square feet or more shall install high-efficiency toilets when tank-type toilets are installed.

- All new residential projects containing five or more units and hotels/motels, lodging houses, non-residential, and mixed-use buildings with a gross floor area of 10,000 square feet or more must recycle and/or salvage for reuse a minimum of 65 percent of non-hazardous construction and demolition debris by weight.
- For each residential lot with a building having more than one dwelling unit, a minimum of one 15-gallon tree shall be planted and maintained per every 5,000 square feet of gross lot area, at least 50 percent of which shall be selected from the drought-tolerant approved plant list. This requirement may fulfill other tree-planting requirements.
- Drought-Tolerant Landscaping
  - A minimum of 75 percent of the total landscaped area shall be plants specified by the Drought-Tolerant Approved Plant List.
  - Turf shall be limited to a maximum of 25 percent of the total landscaped area.
  - Plants shall be grouped in hydrozones in accordance with their respective water, cultural (soil, climate, sun and light) and maintenance needs.

Additional features of the proposed Project site, or that would be incorporated into the proposed Project, include the following:

Planning and Design

- Infill Site
  - The Project is located within an urban growth boundary and avoids environmentally sensitive sites
  - The Project proposes a housing density of 15 units per acre or more
  - The Project is located in an area that has sewer lines and utilities in place
  - The Project site has pedestrian access within 0.25 mile to a range of neighborhood services
  - The Project is located within 0.5 mile of a bus stop
- Social Gathering Places (an average of 50 square feet per unit or more; includes natural elements)
- Design for Safety and Vandalism Deterrence

Site

- Construction & Demolition Waste Management
- Performance of a two-week whole-building flush-out of Volatile Organic Compounds (VOCs) prior to occupancy

- Recycled Aggregate
- "Cool Site" Techniques (cool site techniques include the construction of light-colored concrete materials).
- Drought-Tolerant Landscaping
- Light Pollution Reduction

Structure

- Acoustics: Noise and Vibration Control
- Recycled Materials (Slag or Flyash) Replace the Portland Cement Component of Concrete By a Minimum of 20 Percent
- High-Quality Insulation (01350 certified or contains no formaldehyde; recycled content of 75 percent or more)

Systems

- Water-Efficient Fixtures
- Dual Flush Toilets
- Air Conditioning with Non-HCFC Refrigerants
- Garage Ventilation
- Building Performance Exceeds Title 24

Finishes and Furnishings

- Low/No-VOC Paint and Other Coatings
- Low-VOC Adhesives and Sealants
- Low-Emitting Flooring

Operations and Maintenance

- Recycling and Waste Collection
- Development of Operations and Maintenance Procedures for Building Maintenance Staff
- Educational Signage

For these reasons, the Project would be consistent with the County's Green Building Program.

SCAG Regional Comprehensive Plan and Guide

Table 5.17-3, SCAG Regional Comprehensive Plan and Guide (RCPG) **Policies**, lists the SCAG RCPG policies applicable to the proposed Project along with a determination of the consistency of the proposed Project with each policy. The analysis shows that the proposed Project is consistent with the applicable policies of the RCPG.

Policies not listed in **Table 5.17-1** were determined not to apply to the proposed Project, either because they apply to different land uses or because they are program-oriented policies intended for implementation by planning bodies and do not apply to individual projects such as the proposed Project.

SCAG RCPG policies not listed in **Table 5.17-3** were determined not to apply to the proposed Project, either because they apply to different land uses or because they are program-oriented policies intended for implementation by SCAG and do not apply to individual projects such as the proposed Project. Where a policy was not technically applicable but the potential existed for the proposed Project to be compliant or noncompliant with the intent of the policy, that policy was included.

Table 5.17-3
SCAG Regional Comprehensive Plan and Guide Policies

Growth Management Chapter Policies		
3.01	The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies shall be used by SCAG in all phases of implementation and review.	**Consistent:** When the housing increase from the Project is added to SCAG'S 2008 estimate of 103,269 households in the unincorporated San Gabriel Valley subregion, the resulting number of households is 104,044 units. This is well within SCAG's 2010 projection of 105,914 households for that subregion. Additionally, when the population increase from the Project is added to the 2008 population of 379,495, the resulting population is 381,634 persons. This is well within SCAG's 2010 projection of 389,267 residents for that subregion. Therefore, the Project is consistent with population and housing projections adopted by SCAG. For a more detailed discussion, see **Section 5.16, Population, Housing, and Employment**.

Growth Management Chapter Policies (continued)		
3.04	Encourage local jurisdictions' efforts to achieve a balance between the types of jobs they seek to attract and housing prices.	**Consistent:** The Project supports this policy by expanding housing opportunities within Rowland Heights and by providing approximately 775 residential units in proximity to jobs, services, and public transportation. The Project site's location adjacent to Colima Road, a major roadway and public transportation corridor running the length of Rowland Heights, would provide residents easy access to local employment, and its proximity to the two major freeways via Brea Canyon Cutoff Road and Fairway Drive would allow access to jobs in the broader San Gabriel Valley and Northern Orange County areas.
3.05	Encourage patterns of urban development and land use, which reduce costs on infrastructure construction and make better use of existing facilities.	**Consistent:** The Project would be served by water, wastewater, electricity, and natural gas infrastructure that currently serve the Project site and surrounding area. The Applicant would implement on-site and off-site infrastructure improvements as required by service providers to ensure adequate service, as discussed throughout this EIR. The Project site also is adequately served by public and private service facilities. The Project site is located within a highly developed area of Rowland Heights that is well served by existing roadways and other regional infrastructure. The existing regional infrastructure and the established roadway network are sufficient to serve the Project's residential population, and the Project would also be supported by sufficient public services. The Project site is situated on Brea Canyon Cutoff Road, a major four-lane road, and in close proximity to Colima Road, another major roadway, and public transportation corridor running the length of Rowland Heights.

Growth Management Chapter Policies (continued)		
3.09	Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.	**Consistent:** The Project would be served by water, wastewater, electricity, and natural gas infrastructure that currently serve the Project site and surrounding area. Additionally, the Project site is within the jurisdictions of public service providers. Therefore, consistent with this policy, major extension of infrastructure and service areas and the associated costs would not be required.
3.11	Support provisions and incentives created by local jurisdictions to attract housing growth in job-rich subregions and job growth in housing-rich subregions.	**Consistent:** The Project would increase housing opportunities within Rowland Heights, which is in close proximity to employment centers. The Project would increase the supply of residential units in Rowland Heights by providing approximately 775 new multi-family apartment units with high-quality amenities in proximity to jobs, services and public transportation The need for housing in the area and within the region has increased over the last several years, and the Housing Element update states that housing in the unincorporated areas is predominantly single-family homes, with only 20 percent of the housing stock being multi-family. The Project site's location adjacent to Colima Road, a major roadway and public transportation corridor running the length of Rowland Heights, also would provide residents easy access to local employment. Further, its proximity to the two major freeways via Brea Canyon Cutoff Road and Fairway Drive would allow access to jobs in the broader San Gabriel Valley and Northern Orange County areas with minimal impact to local streets.

Growth Management Chapter Policies (continued)		
3.12	Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled and create opportunities for residents to walk and bike.	**Consistent:** The Project is consistent with the goal of improving the use of transit and encouraging walking and/or biking. The proposed Project would be an infill project located within an urbanized area of Rowland Heights, and would incorporate environmentally sensitive and sustainable design features such that the Project would be eligible for Build It Green certification. Further, the Project site is in close proximity to neighborhood-serving retail and commercial stores at the intersection of Colima Road and Brea Canyon Cutoff Road, placing Project residents within a short walking distance to a wide variety of uses. Shopping centers occupy three of the four corners of the Brea Canyon Cutoff Road and Colima Road intersection. Accordingly, such location would encourage Project residents to walk from the Project site to the various surrounding uses and services and would reduce reliance on vehicles. The Project site is also located close to within 0.5 mile of a bus stop and is approximately 2.7 miles from the Metrolink commuter rail station in the City of Industry. The nearest bus stops are for Foothill Transit Line 482 and Line 493, which run every 30 minutes weekdays and weeknights, and approximately every 15 minutes after 2:00 PM until 8:00 PM weekdays only, respectively. The Riverside Metrolink line, which stops at the City of Industry, makes approximately five stops during the AM hours and six stops during the PM hours. Furthermore, mitigation in **Section 5.4, Air Quality**, would require the Project to designate parking spaces for carpools and vanpools. As a result, the proposed Project has the potential to reduce vehicle miles traveled as future residents would have the opportunity to utilize alternative modes of transportation.
3.13	Encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and redevelopment.	**Consistent:** The Project supports the policy of encouraging development in existing urbanized areas accessible to transit. The Project is an infill development, and the Project area is urbanized and accessible to transit. Project residents would be able to walk to nearby retail stores, shops, a grocery store, and restaurants north of the Project site, thereby reducing reliance upon the automobile and encouraging pedestrian activities. Further, the proximity of the Project to several public transit options including Metro Buses, Foothill Transit and Metrolink would encourage the use of public transportation, and commuters would have quick access to the Orange and Pomona Freeways via Brea Canyon Cutoff Road and Fairway Drive, reducing impacts on local streets.

Growth Management Chapter Policies (continued)		
3.14	Support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems, and activity centers.	**Consistent:** Consistent with the Rowland Heights Community General Plan, the Project would develop a residential use in an urbanized area that is presently served by several mass transit providers, including Metro, Foothill Transit, and Metrolink. The Project site is adjacent to existing commercial uses. Additionally, several commercial uses are concentrated along the Pomona Freeway. Therefore, the Project would be developed within an activity center.
3.15	Support local jurisdictions' strategies to establish mixed-use clusters and other transit-oriented developments around transit stations and along transit corridors.	
3.16	Encourage developments in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.	
3.18	Encourage planned development in locations least likely to cause environmental impact.	**Consistent:** Environmental impacts are disclosed throughout this EIR. However, impacts would generally be limited since the proposed Project is an infill development project. The Project would not require expansion of service areas or the construction of new major infrastructure, thereby reducing the potential for secondary impacts. Furthermore, the Project site is served by major transportation corridors, including the Pomona Freeway and Orange Freeway, and public transit that allow convenient access to regional employment centers, facilitating a reduction in vehicle miles traveled and associated impacts.
3.19	Support plans and actions that preserve open space areas identified in local, state, and federal plans.	**Consistent:** The Project site is not a designated open space area.
3.20	Support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.	**Consistent:** The Project site does not contain wetlands, groundwater recharge areas, woodlands, production lands, or unique/endangered plants and animals. The Project site does, however, contain three oak trees, one of which is a heritage oak tree. However, proposed mitigation would reduce the impact of their potential removal to a less than significant level.
3.21	Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.	**Consistent:** Three oak trees, including one heritage oak tree, are located on the Project site. However, proposed mitigation would reduce the impact of their potential removal to a less than significant level. No recorded or unrecorded archaeological, paleontological, or historical sites are located on the site, resulting in less than significant impacts. For a more detailed discussion, see **Section 7.0, Effects Found Not to be Significant**.

Growth Management Chapter Policies (continued)		
3.22	Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.	**Consistent**: The Project site is not subject to flood or wildland fire hazards, and the site does not contain any steep slopes. Additionally, the Project site is not subject to significant seismic hazards such as an active fault zone. For additional information on geological hazards, refer to **Section 5.1, Geotechnical and Soil Resources**.
3.23	Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.	**Consistent**: A detailed discussion of the proposed Project's consistency with noise reduction can be found in **Section 5.3, Noise**. No biological and/or ecological resources are located on or near the Project site and the site does not provide habitat for special status plant or animal species. Seismic hazards are addressed in **Section 5.1, Geotechnical and Soil Resources. Section 5.10, Public Services**, provides detailed discussions of Project consistency with emergency response plans.
3.24	Encourage efforts of local jurisdictions in the implementation of programs that increase the supply and quality of housing and provide affordable housing as provided in the Regional Housing Needs Assessment.	**Consistent:** The Project would provide rental units to an area currently underserved by this type of housing. At the regional level, the Project would help meet the County's need for 23,862 additional housing units as allocated by the RHNA by providing approximately 775 residential multi-family units in Rowland Heights.
3.27	Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services, such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.	**Consistent:** Project impacts to public services are evaluated in **Section 5.10, Public Services**.
Air Quality Chapter Policies		
5.11	Through the environmental documentation review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.	**Not Applicable**: This is a program-oriented policy and does not apply to individual projects. However, a comprehensive air quality study has been prepared to evaluate potential air quality impacts of the proposed Project and is discussed in **Section 5.4, Air Quality**. The proposed Project's consistency with the requirements of the South Coast Air Quality Management Plan (AQMP) is also discussed in **Section 5.4** of this Draft EIR.

Open Space and Conservation Chapter Policies		
9.03	Promote self-sustaining regional recreation resources and facilities.	**Consistent:** The Project includes on-site recreational amenities to serve residents of the Project, including recreational facility to be centrally located on the Project site for use by all Project residents, with an adjacent swimming pool and barbeque area; two courtyards within the Podium buildings that would each contain a swimming pool, spa, landscaped terraces, and indoor recreational facilities; a centrally located swimming pool and spa and three courtyards incorporated into the Wrap-Around buildings; and two landscaped quadrangles within the Townhome-Style Apartment buildings and a playground area adjacent to the western cluster of buildings. The Project applicant would also be required to provide funds for, or implement improvements within, local parks within the Rowland Heights Community General Plan Area to the satisfaction of the County Department of Parks and Recreation, to be directed towards amenities not proposed as part of the Project.
9.04	Maintain open space for adequate protection to lives and properties against natural and manmade hazards.	**Consistent:** The Project is not located within an area subject to significant natural or manmade hazards, as discussed in **Section 5.1, Geotechnical and Soil Resources**; **Section 5.2, Hydrology, Drainage, and Water Quality**; **Section 5.10.1, Fire Service;** and **Section 5.18, Environmental Safety**.
9.05	Minimize potentially hazardous developments in hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipments.	**Consistent:** The Project site is not located within a hillside, or canyon area that is susceptible to flooding, earthquakes, wildfire or other known hazards, or area with limited access for emergency equipment.
9.08	Develop well-managed viable ecosystems or known habitats of rare, threatened and endangered species, including wetlands.	**Consistent:** The Project site does not contain habitats of rare, threatened, or endangered species.
Water Quality Chapter Policies		
11.02	Encourage "watershed management" programs and strategies, recognizing the primary role of local governments in such efforts.	The proposed Project would comply with County of Los Angeles requirements for development projects under the County's National Pollutant Discharge Elimination System (NPDES) Permit and would obtain all necessary permits for both the construction and ultimate development stages. See **Section 5.2, Hydrology, Drainage, and Water Quality**, for further discussion of on-site water quality issues and Best Management Practices (BMPs) to be implemented as part of the proposed Project.

SCAG Regional Transportation Plan

Table 5.17-4, SCAG Regional Transportation Plan Goals, lists applicable goals from the 2008 RTP along with a determination of the consistency of the proposed Project with each goal. The analysis shows that the Project is consistent with the applicable land use goals of the RTP.

Table 5.17-4
SCAG Regional Transportation Plan Goals

Goals		
RTP G1	Maximize mobility and accessibility for all people and goods in the region.	**Not Applicable**: These core transportation goals are directed toward regional transportation planning. It is beyond the scope of individual projects, such as the proposed Project, to address the regional transportation issues raised in these policies. However, development of uses provided by the proposed Project is consistent with the intent behind these policies. For example, as previously discussed, the Applicant is proposing a number of off-site street improvements to improve vehicular circulation in the Project area. In addition, mitigation measures identified in **Section 5.7, Traffic, Parking, Circulation, and Access**, would reduce all proposed Project-level traffic impacts associated with operation of the proposed Project to a less than significant level. Further, the Project site's unique location would promote a sustainable transportation system and maximize the productivity of the transportation system. The Project site is located within 0.5 mile of a bus stop and is within 2.7 miles of the Metrolink commuter rail station in the City of Industry. The nearest bus stops are for Foothill Transit Line 482 and Line 493, which run every 30 minutes weekdays and weeknights and approximately every 15 minutes after 2:00 PM until 8:00 PM weekdays only, respectively. The Riverside Metrolink line, which stops at the City of Industry, makes approximately five stops during the AM hours and six stops during the PM hours. Further, its proximity to two major freeways via Brea Canyon Cutoff Road and Fairway Drive (Brea Canyon Cutoff Road becomes Fairway Drive north of Colima Road) would reduce the need for future tenants to drive through local streets, thereby channeling traffic where it can best be accommodated.
RTP G2	Ensure travel safety and reliability for all people and goods in the Region.	
RTP G3	Preserve and ensure a sustainable transportation system.	
RTP G4	Maximize the productivity of our transportation system.	
RTP G5	Protect the environment, improve air quality, and promote energy efficiency.	

Goals		
RTP G6	Encourage land-use and growth patterns that complement our transportation investments	**Consistent**: As described above, the proposed Project is currently served by several mass transit lines and located near a transportation corridor. As a result, the proposed Project would provide future residents the option to utilize public transportation. The nearest bus stops are for Foothill Transit Line 482 and Line 493, which run every 30 minutes weekdays and weeknights, and approximately every 13 minutes after 2:00 PM until 8:00 PM weekdays only, respectively. The Riverside Metrolink line, which stops at the City of Industry, makes approximately five stops during the AM hours and six stops during the PM hours.

SCAG Regional Transportation Plan goals not listed in **Table 5.17-4** were determined not to apply to the proposed Project, either because they apply to different land uses or because they are program-oriented policies intended for implementation by SCAG and do not apply to individual projects such as the proposed Project. Where a policy was not technically applicable but the potential existed for the proposed Project to be compliant or noncompliant with the intent of the policy, that policy was included.

SCAG Growth Vision Report

Table 5.17-5, SCAG Growth Visioning Principles, lists applicable principles from the 2004 SCAG Growth Vision Report and a determination of the consistency of the proposed Project with each principle. The analysis shows that the proposed Project is consistent with the applicable principles of the Growth Vision Report.

Table 5.17-5
SCAG Growth Visioning Principles

Principle 1	**Improve Mobility for All Residents.**	
GV P1.1	Encourage transportation investments and land use decisions that are mutually supportive.	**Consistent**: The proposed Project is located within an urbanized area of Rowland Heights and is located in proximity to various employment opportunities. According to the San Gabriel Valley Economic Partnership, there currently are over 600,000 jobs in the San Gabriel Valley. The Los Angeles County Economic Development Corporation's 2007–2008 Economic Overview and Forecast reports that Rowland Heights alone is home to over 2,022 business establishments, and the San Gabriel Valley as a whole housed over 42,416 businesses in 2005. Several large companies and corporations are also housed in nearby cities such as City of Industry, Diamond Bar, Pomona, and Brea. Thus, the Project site's location adjacent to Colima Road, a major roadway and public transportation corridor running the length of Rowland Heights, would provide residents easy access to local employment. Further, its proximity to the two major freeways via Brea Canyon Cutoff Road and Fairway Drive would allow access to jobs in the broader San Gabriel Valley and Northern Orange County areas with minimal impact to local streets. The Orange Freeway also provides access to employment opportunities within north Orange County.
GV P1.2	Locate new housing near existing jobs and new jobs near existing housing.	
GV P1.3	Encourage transit-oriented development.	
GV P1.4	Promote a variety of travel choices.	

Principle 2	Foster Livability in all Communities	
GV P2.1	Promote infill development and redevelopment to revitalize existing communities.	**Consistent:** The Project is an infill development, and would redevelop a property which mostly consists of paved parking lots and dispersed buildings, and replace it with residential uses and landscaped open space. The Project would create a neighborhood for existing and future residents and would help to make the Rowland Heights and San Gabriel Valley area attractive to future investment. The proximity of the Project site to neighborhood-serving commercial and retail uses at the intersection of Brea Canyon Cutoff Road and Colima Road would provide a greater opportunity for residents to live near jobs, restaurants, shops, and other entertainment uses. By adding residential uses to an existing residential, commercial and retail area, the Project would help to create a diverse and interconnected neighborhood. Project residents would be able to walk to nearby retail stores, shops, a grocery store, and restaurants north of the Project site, thereby reducing reliance upon the automobile and encouraging pedestrian activities. Streetscape improvements would further improve the local pedestrian experience.
GV P2.2	Promote developments which provide a mix of uses.	**Consistent:** The Project would only provide residential uses, consistent with the residential character of the community. However, the Project site also is in close proximity to neighborhood-serving retail and commercial stores at the intersection of Colima Road and Brea Canyon Cutoff Road, placing Project residents within a short walking distance to a wide variety of uses. Accordingly, such location would allow Project residents to walk from the Project site to the various surrounding uses and services. Project residents would be able to walk to nearby retail stores, shops, a grocery store, and restaurants north of the Project site, thereby reducing reliance upon the automobile, and further encouraging pedestrian activities.
GV P2.3	Promote "people-scaled" walkable communities.	
GV P2.4	Support the preservation of stable, single-family neighborhoods.	**Consistent:** The Project would not remove or otherwise interfere with stable, single-family neighborhoods in the neighborhoods adjacent to the Project site.

Principle 3	**Enable prosperity for all people**	
GV P3.1	Provide, in each community, a variety of housing types to meet the housing needs of all income levels.	**Consistent:** The Project would provide rental units to an area currently underserved by this type of housing.
GV P3.2	Support educational opportunities that promote balanced growth.	**Not Applicable:** The Project does not propose educational services; however, the Applicant would pay school impact fees to Rowland Unified School District prior to issuance of the building permit.
GV P3.3	Ensure environmental justice regardless of race, ethnicity, or income class.	**Consistent:** The Project would not disproportionately impact any minority or low-income populations.
GV P3.5	Encourage civic engagement.	**Consistent:** Civic engagement is encouraged throughout the CEQA review process, which was established in part to provide the public with the opportunity to comment on proposed projects.
Principle 4	**Promote sustainability for future generations**	
GV P4.1	Preserve rural, agricultural, recreational, and environmentally sensitive areas.	**Consistent:** The Project site is not within a rural, agricultural, recreational, or environmentally sensitive area.
GV P4.2	Focus development in urban centers and existing cities.	**Consistent**: The proposed Project is an infill project and is located within an urbanized area of Rowland Heights that is surrounded by residential and commercial uses. The Project would create a neighborhood for existing and future residents and would help to make the Rowland Heights and San Gabriel Valley area attractive to future investment. The proximity of the Project site to neighborhood-serving commercial and retail uses at the intersection of Brea Canyon Cutoff Road and Colima Road would provide a greater opportunity for residents to live near jobs, restaurants, shops, and other entertainment uses. Project residents would be able to walk to nearby retail stores, shops, a grocery store, and restaurants north of the Project site, thereby reducing reliance upon the automobile and encouraging pedestrian activities.
GV P4.3	Develop strategies to accommodate growth that uses resources efficiently, eliminate pollution and significantly reduce waste.	**Consistent**: The proposed Project is an infill project located within an urbanized area of Rowland Heights. Several transit lines serve the Project area. As a result, the proposed Project has the potential to reduce automobile emissions as future residents will have the opportunity to utilize alternative modes of transportation.

Principle 4	Promote sustainability for future generations (continued)	
GV P4.4	Utilize "green" development techniques.	**Consistent:** The Project would incorporate environmentally sensitive and sustainable design features such that the Project would be eligible for Build It Green certification. Project design features that are proposed and that may qualify for the GreenPoint checklist include the Project's location in an infill development site that is within an urban growth boundary and avoids sensitive sites, is already serviced by utilities, proposes a housing density of more than 15 units per acre, is within pedestrian access of services within 0.25 mile, and is within 0.5 mile of a bus stop; the provision of outdoor gathering places for residents; design features for safety and vandalism deterrence; construction and demolition waste management; the use of recycled materials; "cool site" techniques including the use of light-colored paving materials; the use of drought-tolerant landscaping; light pollution reduction; noise and vibration control; the use of high-quality insulation; the use of water-efficient fixtures; air conditioning with non-HCFC refrigerants; garage ventilation; building performance that exceeds Title 24; low/no-VOC paint and other coatings; low-VOC adhesives and sealants; low emitting flooring; recycling and waste collection; the development of operations and maintenance manuals for building maintenance staff; and the installation of educational signage.

SCAG Growth Visioning Principles not listed in **Table 5.17-5** were determined not to apply to the proposed Project, because they are program-oriented policies intended for implementation by SCAG and do not apply to individual projects such as the proposed Project. Where a principle was not technically applicable but the potential existed for the proposed Project to be compliant or noncompliant with the intent of the principle, that policy was included.

Summary of Consistency Analysis

As discussed in the analysis above, the proposed Project would be consistent with the majority of the policies of the Rowland Heights Community General Plan, the County of Los Angeles General Plan, and the County of Los Angeles Green Building Program as well as applicable SCAG goals and policies. However, the proposed Project is not consistent with the land use designation that presently applies to the Project site. For this reason, the impact would be significant.

Mitigation Measures

No feasible mitigation is available to reduce this impact. Impacts would be significant and unavoidable.

Threshold 3: Is the project inconsistent with the zoning designation of the subject property?

Analysis

According to the County of Los Angeles Zoning Designation, the zoning designation for the site is A-1, Light Agriculture, which allows for light agricultural uses (raising of horses, cattle grazing) as well as adult residential facilities, crops, family child care homes, foster family homes, group homes, single-family residences, second units, and small family homes. A-1 zoning also allows accessory uses, as well as certain uses subject to a discretionary Conditional Use Permit, including churches and schools. The A-1 zone does not allow for multi-family residential use.

Accordingly, the proposed Project, which would develop multi-family housing on the Project site, is not a permitted or conditional use under Zone A-1. Therefore, the Project Applicant is requesting a Zone Change to Residential Planned Development (RPD) under County Zoning Ordinance Section 20.20.460. With approval of the Zone Change, the Project would be consistent with the County Zoning Ordinance. However, since the Project is not currently consistent with the current zoning designation for the Project site, impacts would be significant.

Mitigation Measures

No feasible mitigation is available to reduce this impact. Impacts would be significant and unavoidable.

Threshold 4: Would the project result in a major change in the patterns, scale, or character of the general area or community?

Analysis

As previously mentioned, land uses surrounding the Project site include a senior housing complex, single-family residences, multi-family residences, and commercial establishments. Land use in Rowland Heights is predominately residential south of the Pomona Freeway, with resident-serving commercial development concentrated along segments of Colima Road and Nogales Street. The portions of the community north of the Pomona Freeway are generally developed with commercial and industrial uses. The proposed Project is residential, which is consistent with the land use pattern in Rowland Heights south of the Pomona Freeway. Furthermore, the Project represents a transitional land use buffering

adjacent commercial uses along Colima Road and lower density residential uses south and west of the Project site.

However, the scale of the Project is not consistent with surrounding residential uses due to the proposed building heights and density. The building heights of the Project would generally exceed the heights of the surrounding uses, which are generally one to two stories (approximately 12 to 24 feet) in height. The Podium Buildings would range from 56 to 69 feet above grade (four stories in height); the Townhome Style Apartment Buildings would be 39.5 feet above grade (three stories in height); and the Wrap-Around Buildings would be 44 to 60 feet above grade (three to four stories in height). See **Section 5.6, Visual Quality**, for a discussion of the anticipated visual impacts of the proposed building heights; as stated therein, the proposed Podium buildings at the northern end of the Project site would shade the senior multi-family residential uses, which have outdoor balconies, to the north for more than 3 hours at the Winter Solstice, which is considered a significant and unavoidable impact. Furthermore, as previously discussed, the proposed density of the Project (50 dwelling units per gross acre) exceeds the maximum density currently permitted by the existing land use designations set forth in the Rowland Heights Community General Plan. The Project would, however, implement several design features to be complementary to the surrounding community. For instance, the Project would incorporate open space areas and setbacks to minimize impacts from increased density. The Project would also be designed to step back from adjacent development to minimize height impacts, and the Project would utilize the existing topography of the Project site to minimize visual impacts to surrounding properties.

While the proposed Project is not consistent with the existing scale of the surrounding uses, the Project is consistent with several regional planning objectives. For example, the Project is an infill development and would not require expansion of service districts or the construction of new major infrastructure. The Project site is served by major transportation corridors, including the Pomona Freeway and Orange Freeway, and public transit that allow convenient access to regional employment centers. Furthermore, the Project would place rental dwelling units to an area that is presently underserved by this type of housing. Nevertheless, due to the proposed scale of the Project and conflict with land use densities and designations within the Rowland Heights Community General Plan, impacts would be significant.

Mitigation Measures

No feasible mitigation is available to reduce this impact. Impacts would be significant and unavoidable.

CUMULATIVE IMPACTS

As discussed above, implementation of the proposed Project, on its own, would result in land use policy inconsistencies and incompatibilities. Thus, a significant land use impact is anticipated at the Project level

and the Project. As identified in **Table 4.0-1, Related Projects,** in **Section 4.0, Cumulative Projects**, related projects in Rowland Heights include a 14-acre commercial development located at 18880 Railroad Street north of the Pomona Freeway, an 11-unit multi-family residential project at 19280 Colima Road, and several smaller projects. All projects proposed within Rowland Heights would be required to comply with the Rowland Heights Community General Plan, CSD, Los Angeles County General Plan, and County Zoning Ordinance, or approval of a General Plan Amendment, Zone Change or variance is required. These plans provide guidelines which regulate permitted uses, development density, building heights, site and building design, and transportation and public services/utilities demand. Moreover, the Project proposes a land use designation for the Project site that would be specific to this site based on site-specific criteria, and not applicable to other properties. Considered together with the related projects, the Project's contribution to cumulatively significant land use impacts would be less than cumulatively considerable.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed Project would result in significant and unavoidable land use impacts related to the Project's inconsistency with the current land use and zoning designations for the Project site as well as the difference in scale compared to surrounding uses.

5.18 ENVIRONMENTAL SAFETY

SUMMARY

A Phase I Environmental Site Assessment (ESA), a Limited Phase II ESA, and an Asbestos Survey Report were prepared for the Project site. The existing structures on the Project site were built in the early 1970s and contain asbestos containing materials (ACMs) and possibly lead-based paint (LBP). Upon Project implementation, the existing structures would be demolished and would present a potentially significant environmental safety impact to humans and/or the environment. However, compliance with federal, state, and local regulations, as well as with the recommendations contained within the reports described above, would reduce potentially significant environmental safety impacts to less than significant levels. No additional environmental concerns were identified.

INTRODUCTION

This section addresses the Project's potential impacts associated with hazards, hazardous materials, and environmental safety. The section is based on the findings of the Phase I ESA, Limited Phase II ESA, and an Asbestos Survey Report prepared by LFR, Inc., for the Project site. The Phase I ESA, dated September 2007; Limited Phase II ESA, dated November 2007; and Asbestos Survey Report, dated September 2007, are contained within **Appendix 5.18** of this EIR. The purpose of these studies was to identify the environmental conditions on the Project site, the likely presence of any hazardous substances under conditions that indicate an existing release, past release, or a material threat of a release into structures, property, groundwater, or into surface drainage on the Project site.

METHODOLOGY

The Phase I ESA was prepared in accordance with the requirements of the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: E 1527-05. The ASTM standard practice defines commercial and customary practices for conducting ESAs using reasonable inquiry. Preparation of the Phase I ESA consisted of several tasks, including: a reconnaissance of the Project site; drive-by observations of adjacent properties and the Project site vicinity; interviews with people familiar with the Project site; a review of regulatory agency files; review of historical documents; and a summary of findings, conclusions, and recommendations. Preparation of the Limited Phase II ESA consisted of several tasks, including: soil gas investigation, including the collection of two soil gas samples at 5 feet below ground surface at two boring locations along the northern property boundary; groundwater investigation, including collection of a groundwater samples at approximately 15 to 20 feet below ground surface at the two boring locations; laboratory analysis of the two soil gas samples;

laboratory analysis of the two groundwater samples; submittal of groundwater and soil gas samples to a state certified laboratory located in Irvine, California.

Preparation of the Asbestos Survey Report consisted of several tasks, including: a visual assessment of the buildings on the Project site to locate suspect ACMs, which were then divided into building materials that were determined by the asbestos inspector to be likely to contain asbestos based on their color, texture, and age. Additionally, a representative number of samples were collected, analyzed, and stored in accordance with strict chain-of-custody protocol.

EXISTING CONDITIONS

The proposed Project site is located in the northeastern portion of the unincorporated Los Angeles County community of Rowland Heights, approximately 0.75 mile south of the Pomona Freeway (State Route [SR] 60). The Project site is located near the southeast corner of the intersection of Brea Canyon Cutoff Road and Colima Road in Rowland Heights. The Project site is approximately 15.7 acres and currently developed with nine stand-alone and interconnected structures that house a chapel, a gymnasium, a maintenance building, and classrooms for the Southlands Christian Church and Southlands Christian School, a pre-K through grade 12 campus. The first on-site buildings were constructed in approximately 1970.

The Project site is bounded by a senior housing complex and three commercial buildings along Colima Road on the north, the Royal Vista Golf Course and multi-family residences along Drusilla Way, Esquiline Avenue and Bithynia Way on the east, multi-family residences along Ostia Way and Latium Way on the south, and Brea Canyon Cutoff Road and single family residences on the west. Shopping centers occupy three of the four corners of the Brea Canyon Cutoff Road/Colima Road intersection.

Title Records

An environmental lien report was prepared by Environmental Data Resources, Inc., (EDR) which did not list any environmental liens or activity and use limitations for the Project site. Additionally in accordance with ASTM 05 guidelines, an environmental questionnaire requesting information on environmental liens or activity and use limitations was sent to the Vice President of Land Acquisitions with Trammell Crow Residential. Responses to the questionnaire did not indicate any environmental concerns for the Project site. A copy of the environmental lien report and questionnaire is included in **Appendix 5.18**.

Records Review

Los Angeles County Public Works, Building and Safety Division, Records Review

Building permits for the Project site at the Los Angeles County Public Works, Building and Safety Division were provided on microfilm which were of poor quality, and therefore, difficult to read. A permit dated 1970 indicated plans for a septic system; however, according to Mr. Sergio Garcia, a representative of the Southlands Christian Schools, the site is connected to the municipal sewer system. Permits were reviewed dating from 1970 to 2000 for various church buildings and classrooms; however, according to the Phase I ESA, it is unclear which permits apply to which building. No environmental concerns were identified during a review of building permits.

Los Angeles Regional Water Quality Control Board

As part of the Phase I ESA, the Regional Water Quality Control Board (RWQCB) was contacted regarding hazardous materials spills, underground storage tanks (USTs), and leaking USTs (LUSTs) for the Project site. According to the RWQCB, no records for the Project site address are on file for the LUSTs or the Spills, Leaks, Investigations, and Cleanup (SLIC) Unit. Additionally, the State Water Resource's Control Board's Geotracker Internet database did not list the site address in any RWQCB files.

Los Angeles County Department of Environmental Health, Public Health Investigations

Information for the Project site was requested from the Los Angeles County Department of Environmental Health, Public Health Investigations (PHI) regarding hazardous materials and USTs. According to the PHI, there are no records of hazardous materials or USTs for the Project site.

California Division of Oil, Gas, and Geothermal Resources

According to the California Division of Oil, Gas, and Geothermal Resources (DOGGR) Wildcat Map W 1-5, dated June 29, 2006, there is no current or historical oil and gas drilling activity at the Project site. The nearest well is a plugged and abandoned dry hole located approximately 0.25 mile west of the Project site.

Los Angeles County Department of Public Works

According to the file information with the Los Angeles County Department of Public Works (DPW) for the Project site, there was an inspection conducted by the DPW regarding three on-site storm drains on March 7, 2007. The DPW requested that two of the storm drains be cleaned, and reinspection was

conducted on April 9, 2007, at which time both storm drains were observed to be clean and functional. There were no other documents in the file and no environmental concerns were identified.

Historical Land Use

Information regarding the history of the Project site was obtained from review of local agency records, historic city directories, historic aerial photographs provided by EDR, Inc., historic United States Geological Survey (USGS) topographic maps, and interviews with people familiar with the Project site. According to review of available historical data, the Project site was agricultural land or fallow agricultural land covered with low-lying vegetation, with a possible unlined stream running in a south-north direction present on the Project site until approximately 1949. By 1964, the western portion of the Project site was developed with a few residences, and by 1968 several more residences had been developed to the west of the Project site beyond Brea Canyon Cutoff Road. By 1976, the chapel building and two classroom buildings occupied the southern portion of Project site. Also in 1976, an unidentified structure was identified on the east side of the Project site and a paved parking lot was located in the southwest corner. By 1989, the current gymnasium east of the chapel and preschool building was constructed on the southeast corner of the Project site. The school administration building and classroom building to the south were also constructed by 1989, to the north of the chapel. By 1994, a new classroom was constructed to the east of the gymnasium and a maintenance building was located in the southern portion of the Project site. No environmental concerns were readily apparent through the review of aerial photographs. No features were depicted on or near the Project site on the topographic maps reviewed that would present an environmental concern for the site.

Site Reconnaissance

Site reconnaissance conducted on August 20, 2007, identified the following uses and potential environmentally significant details, on the site:

- The 15.7-acre Project site is occupied with approximately nine stand-alone and interconnected structures that house a chapel, a gymnasium, a maintenance building, and classrooms for Southlands Christian School, a pre-school through high school campus.

- An asphalt-paved parking lot is located on the northwest corner of the Project site. The northeast corner of the Project site is developed with the school's athletic fields. The majority of the buildings are located near the center of the Project site and include the Southlands Christian School administrative offices and classrooms, two buildings containing classrooms and the school kitchen, a blacktop area with basketball courts, and a maintenance building that also houses the athletic department. Most of the buildings are constructed of wood and stucco; however, several of the buildings are constructed of wood only.

- There are a few parking spaces on the east-central portion of the Project site, adjacent to a modular wood building. Several soil piles were observed on the east side of the Project site to the southeast of the parking spaces. According to a representative of the Southlands Christian Church, the soil washed onto the site from the adjacent golf course during a rainstorm, and has since been left in place.

- The school gymnasium is a one-story structure with several classrooms located in a subterranean level. The chapel is located in a building to the west of the gymnasium, which is separated by a small walkway from two buildings containing classrooms to the south. The preschool building is located near the southeast corner of the Project site.

- A small driveway is present near the center of the Project site in a north-south direction. Landscaping consisting of grass, trees, and shrubs is located throughout the Project site in and around the buildings. A metal cabinet is used to store 1-gallon containers of paint on the east side of the maintenance building. No evidence of leaks or stains was observed. Also, two exterior metal storage containers were observed on the east side of the maintenance building that contained excess text books and classroom furniture. According to a representative of the Southlands Christian Church, no on-site auto maintenance activities have taken place at the Project site. Two metal storage containers were also observed near the northwest corner of the Project Site that reportedly contain football equipment.

- During the reconnaissance a circular metal plate was observed in the asphalt pavement near the northwest corner of the Project site. Neither the representative nor the maintenance supervisor of the Southlands Christian Church was aware of its purpose; however, the plate appeared to be an access plate, possibly to the municipal sewer or a storm drain.

- During the inspection, no distressed vegetation, monitoring wells, or remediation systems were observed at the Project site. There was no evidence of current aboveground storage tanks (ASTs) or USTs at the Project site.

- The interior of the buildings consists mostly of classroom space that includes carpeted floors, rows of desks, fluorescent lights, and drywall or wood paneling. Administrative areas included individual offices and work space.

- During the reconnaissance, several compressed gas cylinders of helium and several 1-gallon containers of gasoline stored on the concrete floor in the maintenance building were observed near the center of the Project site. The gasoline is used for the property's power tools. No evidence of leaks or stains was observed. There were no other potentially hazardous materials observed in the maintenance building or any of the other on-site buildings. Also observed was one janitorial closet located near the gymnasium that contained several 1-gallon containers of glass cleaners and floor cleaners. No evidence of leaks or stains was observed. Additionally, no evidence of water intrusion or microbial amplification was observed in the site buildings.

- No hazardous substances or petroleum products or containers of hazardous substances or petroleum products were observed during this investigation with the exception of the gasoline containers discussed above. No current or historical petroleum or chemical USTs or ASTs are known to be associated with the Project site. No evidence of USTs such as vent pipes, fill pipes, or access ways was identified on the Project site. No readily noticeable strong, pungent, or noxious odors were identified

during this investigation. No readily visible standing surface water, pools, or sumps containing liquids likely to be hazardous substances or petroleum products were identified during this investigation.

- Three polyethylene 55-gallon drums were observed on the east side of the maintenance building. According to a Campus Security officer, the drums are used to store water. Also observed was one 55-gallon drum in the kitchen that is used to store cooking grease. No other storage drums were observed.

- No opened or damaged containers with unidentified contents suspected of being hazardous substances or petroleum products were identified during this investigation.

- During the site visit, a search for electrical or hydraulic equipment known to contain polychlorinated biphenyls (PCBs) or likely to contain PCBs was conducted. As indicated in the ASTM standard, fluorescent light ballasts (which may or may not be present on the Project site) were not evaluated as part of this Phase I ESA. Three pad-mounted electric transformers were observed on the Project site that are owned and maintained by Southern California Edison (SCE). No evidence of leaks or stains was observed in the vicinity of the transformers.

- During the Project Site visit, no pits, ponds, or lagoons on the Project site or on adjoining properties were visually and/or physically observed from the Project site or identified in the interviews or records review.

- No areas suggesting trash construction debris, demolition debris or other solid waste disposal, or mounds or depressions suggesting trash or other solid waste disposal were observed.

- Wastewater was not observed discharging into any drains or underground injection systems. No wells were observed during this investigation. The site is connected to the municipal sewer system and is not connected to a septic system.

- Roof-mounted heating, ventilating, and air conditioning (HVAC) units were observed on the building's roofs.

- A floor drain was observed in the kitchen. No other drains or sumps were observed at the Project site. No evidence of water intrusion or microbial amplification was observed at the Project Site.

- Lead was a major ingredient in paint pigment prior to and through the 1940s. While other pigments were used in the 1950s, the use of lead in paint continued until the mid 1970s. In 1978, the Consumer Products Safety Commission banned paint and other surface coating materials which contain lead. Based on the original date of building construction (1970s), it is possible that LBP is present at the Site. Thus, a visual lead-based paint survey was performed in accessible areas at the subject property. All of the paint observed on site appeared to be in good condition with no visible evidence of damage or peeling.

- According to the US Environmental Protection Agency (EPA), the site is located in Zone 2, an area with expected radon levels to be >2.0 picoCuries/liter (pCi/L) of air and <4.0 pCi/L of air. Therefore, the Phase I ESA concludes that radon gas is unlikely to represent an environmental concern to the site and no further investigation regarding this issue appears warranted.

- A drive-by reconnaissance of adjacent properties was performed to observe businesses that may use, store, generate, or dispose of hazardous materials. These adjacent properties included Summerville at Villa Colima Senior Residences at 19850 E. Colima Road and a parking lot and a Yamaha Music Store, located north of the Project site; a fairway of the Los Angeles Royal Vista Golf Course and condominiums, located east of the Project site; condominiums located south of the Project site; and Brea Canyon Cutoff Road followed by a retail shopping center, single-family residences, and vacant land, located west of the Project site. None of the adjacent properties are anticipated to impact the site.

- No additional environmental concerns, such as USTs, clarifiers, drums, or hazardous materials storage were observed on the site.

Asbestos-Containing Materials

As part of completing the Asbestos Survey Report, bulk samples were collected from buildings on the Project site. From a total of 80 bulk samples, ACMs were identified at the subject building in the some of the buildings' exterior stucco, drywall joint compound, and hardwood floor adhesive. However, the following areas/materials of the site were inaccessible or deemed impractical for sampling, and therefore asbestos was assumed to exist in these areas:

- concrete foundations;
- waterproofing mastics associated with foundations;
- mechanical pipe/duct chases, if any;
- interior portions of mechanical and electrical equipment other than those identified as being sampled; and
- roofing.

Limited Phase II ESA

A subsurface soil gas and groundwater investigation was conducted to observe the potential for subsurface impacts at the Project site from volatile organic compounds (VOCs) from one of the above-identified neighboring dry cleaning facilities.

A total of two borings were taken at the Project site. One boring location (Boring B1) was drilled in the asphalt paved parking area of the Project site adjacent to the dry cleaning facility located in the retail center at the southeast corner of Colima and Brea Canyon Cutoff Roads. Boring B1 was drilled to a depth of approximately 32 feet below ground surface when the drilling rig met with refusal. Groundwater entered the borehole and a groundwater sample was collected at a depth of approximately 15 feet below ground surface. Another boring (Boring B4) was drilled in the athletic field to a depth of approximately

40 feet below ground surface. Groundwater entered the borehole and a groundwater sample was collected at a depth of approximately 20 feet below ground surface. (Similarly, the geotechnical consultant conducted 13 borings across the Project site in August 2007 and groundwater was encountered in 11 of the borings at depths between 11 and 19 feet below the ground surface, as discussed in **Section 5.1, Geotechnical and Soil Resources**).

Toluene and m,p-xylenes were detected in the groundwater and soil gas samples collected from the boring drilled closest to the dry cleaning facility, Boring B1. They were also detected in soil gas and groundwater samples at the Boring B4 location. Toluene and xylenes are components of gasoline and not typically associated with dry cleaning operations. No contaminants typically associated with a dry cleaning operation were detected and thus no impacts to the Project site from the dry cleaning operation were detected. The components detected are likely associated with automotive parking.

Toluene was the only VOC detected above the laboratory detection limits in both the soil gas and groundwater samples at the Boring B4 location.

Based on the laboratory testing results, the toluene and m,p-xylenes concentrations are not considered an environmental concern to the Project site.

REGULATORY AGENCY RECORDS REVIEW

Federal and State Environmental Databases

A review of available federal, state, and county agency databases was prepared by EDR, Inc., in order to identify the presence of any government-regulated properties, either on site or adjacent to the Project site, that could potentially result in hazardous on-site conditions. The radii of investigation for federal and state agency lists were selected in accordance with the ASTM Standards for Environmental Site Assessments. The following federal and state lists were reviewed:

- National Priorities List (NPL): Sites listed on the NPL database, also known as EPA Superfund sites, these sites are considered to pose an immediate threat to human health and the environment.
- Delisted NPL Site List: The list of Delisted NPL sites includes properties that have been removed from the NPL.
- Comprehensive Environmental Response, Compensation and Liability Information Systems List (CERCLIS): CERCLIS is the Superfund database that contains information on all aspects of hazardous waste sites until listed on the NPL.
- CERCLIS-No Further Remedial Action Planned (CERCLIS-NFRAP): This database contains information on sites where, following an initial investigation, contamination was quickly removed

without the need for the site to placed on the NPL, or the contamination was not serious enough to require Federal Superfund action of NPL consideration.

- Corrective Action Report (CORRACTS): This database identifies hazardous waste handlers with Resources Conservation and Recovery Act (RCRA) corrective action activity.

- Emergency Response Notification System (ERNS): ERNS tracks the initial notification and response to all reported petroleum and hazardous materials spills.

- Resource Conservation and Recovery Information System (RCRIS-TDS): RCRIS includes information on sites which generate, transport, store, treat, and/or dispose of hazardous wastes defined by the RCRA.

- RCRA Lists: Tracks all events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste.

- Historical Cal-Sites (CALS): The CAL-SITES list contains information on potential or confirmed hazardous waste sites that have been identified. This database is no longer updated and has been replaced by ENVIROSTOR.

- Bond Expenditure Plan: The Department of Health Services developed a site specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act Funds., which is not updated.

- California Hazardous Material Incident Report System (CHMIRS): This database contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

- ENVIROSTOR: The ENVIROSTOR identifies sites that have known contamination or sites for which there may be a reason to investigate. The ENVIROSTOR database provides similar information that was available in Cal-Sites.

- The Facility Index System (FINDS): The FINDS list contains both facility information and "pointers" to other sources that contain more detail. These sources include: RCRIS, Permit Compliance System (PCS), Aerometric Information Retrieval System (AIRS), FATES (Federal Insecticide, Fungicide, and Rodenticide Act [FIFRA] and the Toxic Substances Control Act [TSCA], also FTTS [FIFRA/TSCA Tracking System]), CERCLIS, U.S. EPA Enforcement and Compliance Docket Information Center (DOCKET), Federal Underground Injection Control Reporting System (FURS), Federal Reporting Data System for Wells (FRDS), Surface Impoundments Assessment (SIA), TSCA Chemicals in Commerce Information System (CICIS), PADS (PCB [polychlorinated biphenal] Activity Data System), RCRA-J (medical waste transporters/disposers), Toxic Chemical Release Inventory System (TRIS) and TSCA.

- State and Tribal-Equivalent SWF/LF, State Landfill: The State and Tribal-Equivalent Solid Waste Information System (SWF/LF), State Landfill database is an inventory of active, inactive, and closed solid waste disposal and transfer facilities.

- Waste Management Unit Database System (WMUDS)/Solid Waste Assessment Test (SWAT): The State Water Resource Control Board uses this system for tracking and inventory of waste

management units. WMUDS comprises the following databases: facility information, scheduled inspections information, waste management unit information, Solid Waste Assessment Test (SWAT) program information, SWAT report summary information, Chapter 15 information and monitoring parameters, TPCA program information, RCRA program information, closure information, and interested parties information.

- State and Tribal Leaking Underground Storage Tanks (LUST): The LUST database is a list of reported leaking underground storage tanks incidents.
- Toxic Chemical Release Inventory System (TRIS): TRIS identifies facilities which release toxic chemicals to the air, water, and land in reportable quantities under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 313.
- Hazardous Waste Information System (HAZNET): This list consists of data extracted from hazardous materials manifests received by the Department of Toxic Substances Control.
- Active Toxic Site Investigation (SLIC): This report contains a list of Active Toxic Site Investigations that are under the direction of the Regional Water Quality Control Board.
- CONSENT (EPA Regional Offices Superfund Consent Decrees)
- ROD (Records of Decision)
- FINDS (Facility Index System)
- HMIRS (Hazards Materials Information Reporting Systems)
- MLTS (Material Licensing Tracking System)
- MINES (Mines Master Index Files)
- NPL LIENS (Superfund Liens)
- PADS (PCB Activity Database System)
- DOD (Department of Defense)
- RAATS (RCRA Administrative Action Tracking System)
- TSCA (Toxic Substances Control Act)
- SSTS (Section 7 Tracking Systems)
- FTTS (FIFRA/TSCA Tracking System)
- AST (Aboveground Petroleum Storage Tank Facilities)
- CLEANERS (California DTSC Drycleaners)
- CA WDS (Waste Discharge System)

- DEED (List of Deed Restrictions)
- SCH (School Property Evaluation Program)
- EMI (Emissions Inventory Data)
- REF (Unconfirmed Properties Referred to Another Agency)
- NFA (No Further Action Determination)
- NFE (Properties Needing Further Evaluation)
- US Brownfields (US Brownfields Listings)
- COAL GAS (Manufactured Gas Plants)
- LA co. Site Mitigation (Site Mitigation)
- VCP (Voluntary Cleanup Program Properties)

A review of publicly available federal and state databases was conducted to identify properties with recognized environmental conditions within the vicinity of the Project site. The search of federal and state agency lists was performed in accordance with the ASTM Standards for Environmental Site Assessments. The Project site itself is not listed on any federal or state databases that were reviewed as part of the Phase I ESA. However, the Phase I ESA identified the following sites that represent a potential environmental concern to the Project site within a 0.5-mile radius of the Project site:

- Two properties, including the LA Royal Vista Golf Course, were listed within a 0.5-mile radius on the LUST database.
- Royal Vista Golf Course, located at 20055 E. Colima Road, is listed on the RCRA small-quantity generators (SQG) and the State and Tribal LUST databases. The golf course is located adjacent to and east of the Project site at its closest point, and is hydraulically upgradient from the Project site. The portion of the golf course located adjacent to the Project site consists of fairway and a green and the maintenance areas are not located adjacent to the Project Site. No violations are reported in the RCRA-SQG database. The LUST database lists a release to the soil only. The clubhouse for this facility is located approximately 0.2-mile northeast of, and hydraulically crossgradient from the Project site. However, it is unknown if this is the location of the UST. Because the release affected soil only, and not groundwater, and the fact that the release location is not located adjacent to the Project site, this listing is not anticipated to impact the Project site.
- California Machine Specialties, located at 1180 Center Drive, is listed on the ENVISTOR database and is located within 1.0 mile of the Project site. ENVISTOR identifies sites that have known contamination or sites for which there may be a reason to investigate, however, the facility status is "no further action."

- Road Division 417, located at 19865 Walnut Drive north of, and hydraulically crossgradient from the Project site, is listed on the Stated and Tribal-Equivalent Solid Waste Information System (SWF/LF) database. The database reports a limited volume transfer station for construction/demolition debris, green materials, and mixed municipal waste. Based on the reported waste types, distance from the Project site, and the site's hydraulically crossgradient location, this facility is not anticipated to impact the Project site.

- Three facilities, located within a 0.1-mile radius of the Project site which are hydraulically crossgradient and downgradient, are listed on the Cleaners database. The closest dry cleaner is Professional Cleaners, located at 19800 Colima Road, approximately 80 feet north of, and hydraulically downgradient of the Project site, and is listed twice on the database. The second dry cleaners, Canyon Point Cleaners, is located at 19735 E. Colima Road located approximately 300 feet northwest of the Project site in a hydraulically crossgradient-to-downgradient location. This facility is also listed twice on the Orphan Summary. Neither is listed with any environmental remediation activities, and given their hydraulic location relative to the Project site, neither is anticipated to impact the Project site.

Regional Regulations

South Coast Air Quality Management District

Asbestos emissions are regulated by the South Coast Air Quality Management District (SCAQMD). The SCAQMD rule relative to hazards and hazardous emissions applicable to the proposed Project is Rule 1403, Asbestos Emissions from Demolition/Renovation Activities. Compliance with SCAQMD Rule 1403 requires that the owner or operator of any demolition or renovation activity to have an asbestos survey performed prior to demolition.

Regional Water Quality Control Board, Los Angeles Region

The Regional Water Quality Control Board (RWQCB) is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. RWQCB regulations are contained in Title 27 of the California Code of Regulations (CCR). Additional state regulations applicable to hazardous materials are contained in Title 22 of the CCR. Title 26 of the CCR is a compilation of those sections or titles of the CCR that are applicable to hazardous materials.

The Spills, Leaks, Investigation and Cleanup (SLIC) Program was established by the State Water Resources Control Board (SWRCB) to allow each of its nine Regional Boards to oversee the cleanup of illegal discharges, contaminated properties, and other unregulated releases adversely impacting the state's waters. Sites managed within the SLIC Program include sites polluted as a result of recent or historic spills, subsurface releases (e.g., pipelines, sumps), complaint investigations, and all other unauthorized discharges that pollute or threaten to pollute surface and/or ground waters. The SLIC Section of the LARWQCB oversees activities at non-UST sites where soil or groundwater contamination

have occurred due to former industrial facilities and dry cleaners, and where chlorinated solvents were spilled or have leaked into the soil or groundwater.

The LARWQCB also maintains an UST Program that deals specifically with leaking fuel tanks. While there may be other constituents of concern resulting from leaking fuel tanks, the primary substance of concern of this program is fuel. Most frequently, these fuel tank leaks are associated with common neighborhood gasoline service stations.

Local Regulations

Los Angeles County Fire Department

As the Los Angeles County Certified Unified Program Agency (CUPA), the Los Angeles County Fire Department (LACoFD) has jurisdiction in all unincorporated and most incorporated areas in the County, including the Rowland Heights Community General Plan area. Serving as the CUPA, LACoFD's Health Hazardous Materials Division (HHMD) directly administers programs related to waste generation, hazardous materials inventories, and risk management. The HHMD's mission is to protect the public health and the environment throughout Los Angeles County from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes through coordinated efforts of inspections, emergency response, enforcement, and site mitigation oversight. The Los Angeles County Department of Public Works is a participating agency under the LACoFD CUPA and implements the underground storage tank program.[1]

ENVIRONMENTAL IMPACTS

Project Improvements

The proposed Project involves the redevelopment of the approximately 15.7-acre property located at 1920 Brea Canyon Cutoff Road. The existing Southlands Christian Church and Southlands Christian Schools structures, parking lots, and athletic field would be replaced with 775 for-lease residential units in multiple buildings, a recreational facility for residents, parking structures (one with a ground level and a partial subterranean level and the other is a four-story parking structure) containing a total of 1,544 parking spaces, and landscaping throughout the Project site. Three different types of residences are proposed: three-story townhome-style apartment buildings, a four-story podium building, and a three- and four-story wrap-around building.

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1 County of Los Angeles, The Certified Unified Program of Los Angeles County, July 2005.

Construction of the proposed Project would involve several phases, including demolition of asphalt paving and the existing structures, excavation of the site for below-grade parking, and construction of the new buildings, parking areas, and related improvements. Excavation would be done to a depth of 20 feet to accommodate two levels of subterranean parking. This process would occur over an approximate 36-month period and some of the phases may overlap with other phases.

The volume of debris expected to be generated from the demolition of the existing church and school facilities and the associated parking structure has been estimated at approximately 5,000 cubic yards, including both hard and soft demolition.[2] The demolition process would separate debris and recycle a minimum of 65 percent (approximately 3,250 cubic yards) of the basic building materials; however, the percentage may be higher since as much of the basic building materials as possible would be separated and recycled. This demolition and recycling process would occur over a period of approximately 12 weeks.

Additionally, due to the slope of the Project site and the proposed below-grade parking structure, excavation and recompaction activities would be required on the Project site. Approximately 55,000 cubic yards of earth would be removed and hauled from the Project site and would likely be taken to the Puente Hills Landfill, as it is the closest facility, but may be taken to any landfill permitted to accept earth material.[3] Additionally, 45,000 cubic yards of earth would be removed and recompacted on the Project site. Earthwork and excavation would occur over a period of approximately 12 weeks.

Thresholds of Significance

Based on the County's Initial Study Checklist and Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, the following thresholds are considered to determine the significance of Project impacts related to environmental safety:

- Are any hazardous materials used, transported, produced, handled, or stored on site?
- Would the Project create a significant hazard to the public or the environment involving the accidental release of hazardous materials into the environment?

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2 "Soft" demolition is another term for deconstruction, the orderly dismantling building components for re-use or recycling. In contrast to demolition, where buildings are demolished and materials may be either landfilled or recycled, deconstruction involves carefully taking apart portions of buildings or removing their contents with the primary goal of reuse.

3 Ziad El Jack, Senior Engineer, County of Los Angeles, Sanitation District, telephone communication with Impact Sciences, Inc. October 21, 2008.

The following significance threshold(s), through preparation of the Initial Study, were either found not to be applicable for the proposed Project or impacts were determined to be less than significant. As such, these thresholds are discussed further in **Section 7.0, Effects Found Not to be Significant**.

- Are any pressurized tanks to be used or any hazardous wastes stored on site?
- Are any residential units, schools, or hospitals located within 500 feet and potentially adversely affected?
- Have there been previous uses that indicate residual soil toxicity of the site or is the site located within 2 miles downstream of a known groundwater contamination source within the same watershed?
- Would the Project emit hazardous emissions or handle hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?
- Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or environment?
- Would the Project result in a safety hazard for people in a Project area located within an airport land use plan, within 2 miles of a public or public use airport, or within the vicinity of a private airstrip?
- Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact Analysis

Threshold 1: **Are any hazardous materials used, transported, produced, handled, or stored on site?**

Analysis

Construction Impacts

Construction of the proposed Project would involve several phases, including demolition of asphalt paving and the existing structures, excavation of the site for below-grade parking, and construction of the new buildings, parking areas, and related improvements. This process would occur over an approximately 36-month period; some of the phases may overlap with one another. As discussed above, the volume of debris expected to be generated from the demolition of the existing church and school facilities and the associated parking structure has been estimated at approximately 5,000 cubic yards, including both hard and soft demolition. The demolition process would separate debris and recycle a minimum of 65 percent (approximately 3,250 cubic yards) of the basic building materials; however, the percentage may be higher since as much of the basic building materials as possible would be separated

and recycled. Additionally, approximately 55,000 cubic yards of earth would be removed and hauled from the Project site and 45,000 cubic yards of earth would be removed and recompacted on the Project site. As discussed above, groundwater and soil gas samples were collected from the Project site. Tests indicated that volatile organic compounds (VOCs) are not present above the laboratory detection limit, with the exception of very low concentrations of toluene and m,p-xylene. The concentration of toluene is below the California Department of Health Services maximum contaminant levels and the m,p-xylene concentration is below the California Human Health Screening Level for residential use. These contaminants are not considered an environmental concern. Therefore, no additional subsurface investigation was required, and impacts associated with the transport of this earth from the Project site would be less than significant.

As identified above, hazardous materials currently used and stored on the Project site are limited to 1-gallon containers of paint, cylinders of helium, 1-gallon containers of gasoline for power hand tools, and small containers of cleaning agents. The storage and use of these materials are typical to school operations. These materials are generally disposed of at non-hazardous Class II and III landfills (along with traditional solid waste) and are not considered an environmental concern. Additionally, these materials would be removed before Project implementation. As such, the presence of these materials would not result in significant hazard or hazardous materials impacts to the Project site during construction.

Additionally, as discussed above, an Asbestos Survey Report was prepared for the Project site. According to the report, the earliest built structures of the nine stand-alone and interconnected buildings on the site were constructed in 1970. According to samples collected from the structures on the Project site, exterior stucco, drywall joint compound and adhesive under hardwood floors contain asbestos. Therefore, the presence of asbestos poses a potentially significant impact to the Project site and surrounding area relative to hazards and hazardous materials. However, with implementation of **Mitigation Measure 5.18-1**, identified below, the removal of ACM in compliance with federal, state and local requirements can reduce potentially significant hazards impacts to a less than significant level.

Additionally, as discussed in the Phase I ESA, due to the original date of construction, it is possible the Lead-Based Paint (LBP) is present at the Project site. However, no areas of flaking or peeling pain were observed. While the presence of LBP has not been confirmed on the Project site, the likely presence of LBP, due to the date of original construction, poses as a potentially significant impact due to the likely presence of a hazardous substance. However, with implementation of **Mitigation Measure 5.18-2**, identified below, the potential for identification and abatement of LBP can reduce potentially significant hazards impacts to a less than significant level.

Operational Impacts

Occupancy and operation of the proposed 775 for-lease residential units would not include uses with the potential to generate large quantities of hazardous and/or toxic materials, and thus would not have a high potential to result in accidents or releases associated with the use of hazards and hazardous materials. The occasional use of hazardous materials generally associated with residential units and maintenance of residential amenities include the use and disposal of hazardous materials such as unused paint, aerosol cans, cleaning agents (solvents), landscaping related chemicals, and automotive supplies (by products). These materials are generally disposed of at non-hazardous Class II and III landfills. As such, no hazardous materials that would create a significant hazard to the public would be used, transported, produced, handled or stored on site and operational impacts would be less than significant.

Mitigation Measures

5.18-1: Any ACMs and ACCMs identified at the Project Site, which may by disturbed during renovation/demolition activities, shall be removed by a licensed asbestos abatement contractor utilizing state-of-the-art work procedures and in accordance with all federal, state, and local regulations.

5.18-2: Any suspect lead-based paint shall be sampled prior to any renovations or demolition activities. Any identified lead-based paint located within buildings scheduled for renovation or demolition, or noted to be damaged, shall be abated by a licensed lead-based paint abatement contractor, and disposed of according to all state and local regulations.

Threshold 2: **Would the Project create a significant hazard to the public or the environment involving the accidental release of hazardous materials into the environment?**

Analysis

Construction Impacts

The Asbestos Survey Report prepared for the Project site found that several materials, including exterior stucco, adhesive under hardwood floors and drywall joint compound, which exist within structures on the Project site, contain asbestos. Construction activities are required to comply with SCAQMD Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities. This rule is intended to limit asbestos emissions from the demolition or renovation of structures and the associated disturbance of ACMs generated or handled during these activities. The rule requires that SCAQMD be notified before

demolition or renovation activity occurs. This notification includes a description of structures and methods utilized to determine the presence or absence of asbestos. All ACMs found on the Project site shall be removed prior to demolition or renovation in accordance with the requirements of Rule 1403. Project compliance with Rule 1403 would ensure that ACM would be disposed of appropriately. Compliance with Rule 1403 and incorporation of mitigation identified below would reduce impacts associated with ACM to less than significant.

As discussed above, the Project site may have been used for agricultural purposes at one time and it is possible that herbicides or pesticides were applied to the Project site. However, as discussed in the Phase I ESA and the Limited Phase II ESA, analysis of the soil and soil sampling results did not determine the known presence of any toxins in the soil as a result of past agricultural use of the site. Based on the mostly developed nature of the Project site, which includes the building pads, asphalt, and concrete pavement, it is unlikely that residual pesticides or herbicides would present an environmental concern to the Project site. However, approximately 100,000 cubic yards (approximately 55,000 cubic yards of earth would be removed and hauled from the Project site and 45,000 cubic yards of earth would be removed and recompacted on the Project site) of earthen material would be excavated and would disturb any residual pesticides or herbicides that may be present. Due to the relatively low potential of encountering residual pesticides and herbicides, impacts would be less than significant.

Additionally, as discussed above, two dry cleaners are located within 0.1 mile of the Project site. Groundwater and soil gas samples identified VOCs toluene and xylenes as being present on the Project site. The toluene and xylenes are components of gasoline and not typically associated with dry cleaning operations. No contaminants associated with a dry cleaning operation were detected and thus no impacts to the Project site from the dry cleaning operation were detected. While the samples did indicate the presence of toluene and xylenes, as discussed above, the concentrations found on site fall below established thresholds; therefore the contaminants would not pose a significant threat to humans or the environment.

Operational Impacts

Occupancy and operation of the proposed 775 for-lease residential units would not include uses with the potential to generate large quantities of hazardous and/or toxic materials, and thus would not have a high potential to result in accidents or releases associated with the use of hazards and hazardous materials. The occasional use of hazardous materials generally associated with residential units and maintenance of residential amenities include the use and disposal of hazardous materials such as unused paint, aerosol cans, cleaning agents (solvents), landscaping related chemicals, and automotive supplies (by products). These materials are generally disposed of at non-hazardous Class II and III landfills. The County of Los

Angeles adopted Uniform Building Code, County of Los Angeles Department of Environmental Health, LACoFD and the State of California Occupational Safety and Health Administration regulate the use, storage, and handling of hazardous materials. Provided the Project abides by all applicable rules and regulations concerning on-site hazardous materials, the operational impact of the proposed Project on the environment through the release of hazardous materials under reasonably foreseeable upset and accident conditions would be less than significant.

Mitigation Measures

5.18-3: The sampling of all suspect ACMs such as roofing, wall finishes and non-friable floor finishes, shall be conducted prior to demolition. If the suspect ACMs are confirmed to contain asbestos, their removal in accordance with applicable regulations shall be necessary prior to impact by renovation or demolition activities.

5.18-4: Construction activities shall comply with SCAQMD Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities. This rule is intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of ACMs generated or handled during these activities. The rule requires that SCAQMD be notified before demolition or renovation activity occurs. This notification includes a description of structures and methods utilized to determine the presence or absence of asbestos. All ACMs found on the site shall be removed prior to demolition or renovation in accordance with the requirements of Rule 1403.

CUMULATIVE IMPACTS

Environmental safety impacts associated with a proposed Project tend to occur on a project-by-project basis, rather than in a cumulative nature. Because Project implementation would comply with regulatory controls to abate the site-specific hazards, including confirmed ACM and potentially present LBP, prior to demolition activities, any potential cumulative impacts associated with the Project would be decreased, as the harmful substances and subsequent exposure to a health hazard would be removed from the Project site. Therefore, cumulative impacts associated with the proposed Project are considered to be less than significant.

LEVEL OF SIGNIFICANCE AFTER MITIGAION

With implementation of **Mitigation Measures 5.18-1** through **5.18-4**, all potentially significant impacts related to environmental safety would be reduced to a less than significant level.

6.0 PROJECT ALTERNATIVES

INTRODUCTION

The *California Environmental Quality Act (CEQA) Guidelines* (Section 15126.6(a)) require an environmental impact report (EIR) to (1) describe a range of reasonable alternatives to a proposed project, or to the location of a proposed project, that would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and (2) evaluate the comparative merits of the alternatives. Section 15126.6(b) of the *State CEQA Guidelines* directs that this analysis be limited to those alternatives to the project or its location that are capable of avoiding or substantially lessening any significant project impacts, even if those alternatives would impede, to some degree, attainment of project objectives, or would be more costly.

The selection and evaluation of alternatives is intended to foster meaningful public participation and informed decision-making. As stated in Section 15126.6(f) of the *State CEQA Guidelines*, the selection of the range of alternatives required in an EIR is governed by a "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. Accordingly, an EIR need not analyze alternatives whose effects cannot be reasonably ascertained, or whose implementation might be considered remote or speculative.

Of the range of alternatives that would avoid or substantially lessen any of the significant effects of the project, an EIR need only examine in detail those that the Lead Agency determines could feasibly attain most of the basic project objectives. Section 15126.6(c) of the *State CEQA Guidelines* requires an EIR to identify any alternatives considered by the lead agency but rejected as infeasible during the scoping process, and briefly explain the reasons underlying that determination. According to Section 15126.6(f)(1), among the reasons for the elimination of possible alternatives from detailed consideration in the EIR are (1) failure to meet basic project objectives, (2) infeasibility, and (3) inability to avoid significant environmental impacts. The determination of feasibility may take into account such variables as site suitability, economic viability, the availability of infrastructure, General Plan consistency, other plan or regulatory limitations, jurisdictional boundaries, and site availability.

Section 15126.6(d) of the *State CEQA Guidelines* states that alternatives analysis need not be presented in the same level of detail as the assessment of the proposed project. Rather, the EIR is required to provide sufficient information to allow meaningful evaluation, analysis, and comparison with the proposed project. If an alternative would cause one or more significant impacts in addition to those of the proposed project, analysis of those impacts is to be discussed, but in less detail than for the proposed project.

Section 15126.6(e)(2) of the *State CEQA Guidelines* requires the evaluation of a No Project Alternative to permit the evaluation of project impacts against those of not approving the project, and an evaluation of an alternative location for the project, if feasible. According to Section 15126.6(e)(2) of the *State CEQA Guidelines*, the No Project analysis is required to evaluate the circumstance under which the proposed project does not proceed. Section 15126.6(e)(2) further states that the No Project analysis for a proposed development project should discuss conditions on the Project site at the time the Notice of Preparation is published, as well as what is reasonably expected to occur in the foreseeable future if the project is not approved, based on current plans and consistent with available infrastructure. If disapproval of the proposed project is likely to result in predictable actions by other parties, such as another project, that consequence should be discussed. That is, if the proposed project does not proceed, the practical consequences of non-approval are to be analyzed, and not preservation of the existing physical environment under an artificial set of assumptions.

An environmentally superior alternative is to be identified from the alternatives evaluated; if the No Project Alternative is the environmentally superior alternative, then another environmental superior alternative must also be identified from among the remaining alternatives.

OBJECTIVES OF THE PROPOSED PROJECT

Section II, Project Description, of this EIR sets forth a list of the Applicant's Project Objectives for the proposed Project. As indicated therein, through the proposed Project, the Applicant seeks to replace the existing church and school facilities on the 15.7-acre Project site with 775 for-lease multi-family residential dwelling units and resident-oriented amenities, in an area presently underserved by such highly amenitized multi-family uses and in close proximity to nearby employment centers, mass transit, and commercial and retail services.

The Alternatives to the proposed Project ultimately selected for analysis in this EIR were developed to avoid or substantially lessen one or more of the significant environmental impacts associated with the proposed Project, while attempting to attain most of the basic objectives.

The Project's Objectives are listed below.

Key Residential Objectives

1. Assist Los Angeles County in meeting the housing needs of its residents by contributing to the fulfillment of Los Angeles County's SCAG Regional Housing Needs Assessment (RHNA) allocation for moderate-income and above-moderate-income units, which requires the County to accommodate expected growth by ensuring the availability of residential sites at adequate densities and appropriate development standards in unincorporated areas, as stated in the Los Angeles County General Plan Housing Element.

2. Provide new multi-family rental housing in the unincorporated Los Angeles County Rowland Heights area that is presently underserved by lifestyle multi-family residential uses that include various leisure and recreational amenities for residents, and increase the diversity of housing options as recommended by the Housing Element of the Rowland Heights Community General Plan.

3. Provide high-quality multi-family housing options without displacing existing residential uses.

4. Provide a diverse multi-family residential unit mix to meet the needs of a variety of tenants.

5. Provide sufficient outdoor gathering spaces and recreational amenities on the Project site to meet the needs of Project residents and reduce demand for off-site park and recreational facilities.

Key Sustainability Objectives

1. Implement sustainable design features that incorporate the *California Build It Green Multi-Family GreenPoint Checklist* of sustainable, green design principles into site location, site design, building construction techniques, and building materials.

2. Locate multi-family housing on an urban infill site within an urban growth boundary and already served by existing infrastructure.

3. Provide multi-family housing in proximity to existing employment centers in the eastern San Gabriel Valley, including the City of Industry, the major employment center for the San Gabriel Valley, Diamond Bar, and Pomona.

4. Encourage pedestrian activity and minimize vehicle use by providing higher-density housing in proximity to existing neighborhood-serving retail and commercial uses.

5. Locate multi-family housing in an area well served by mass transit, including bus and rail, to reduce Project-related vehicle miles traveled.

6. Locate multi-family housing on a site well served by the local and regional roadway network.

Additional Project Objectives

1. Utilize existing topography to minimize the visual impact of proposed buildings.
2. Build housing that is physically compatible with adjacent land uses.
3. Provide streetscape improvements that enhance the visual environment of the neighborhood and encourage pedestrian activity within the Project site as well as between the site and nearby retail and commercial land uses.
4. Meet all Project-related parking demand on the Project site.

SELECTION OF ALTERNATIVES

Significant Project Effects

According to the *State CEQA Guidelines*, the discussion of alternatives should focus on alternatives to a project or its location that can feasibly avoid or substantially lessen one or more of the significant effects of the project. The alternatives discussion should provide decision makers with an understanding of the comparative merits of the alternatives in relation to the proposed project.

Section 4.0, Environmental Impact Analysis, of this EIR concludes that proposed Project implementation would result in the following significant and unavoidable environmental impacts, after the implementation of required mitigation measures:

Noise

- **Construction Noise**. Project construction activities could temporarily result in noise impacts that exceed the County's Noise Control Ordinance thresholds governing the operation of construction equipment. Potentially affected residential receptors include the multi-family senior living facility immediately north of the Project site on Colima Road; multi-family residential residences (condominiums) south and west of the Project site on Ostia Way, Bithynia Way, Esquiline Avenue, Drusilla Way, and Latium Way; and single-family residences west of Brea Canyon Cutoff Road.
- **Construction Vibration.** Project construction activities, including the operation of bulldozers, loaded trucks, and jackhammers, as well as caisson drilling, could subject residences adjacent to the Project site to temporary groundborne vibration that exceeds the Vibration Guidelines contained in the County's Noise Ordinance. Specifically, Project construction could result in vibration of up to 0.089 inch/second PPV (peak particle velocity) at off-site locations, which exceeds the County's vibration perception threshold of 0.01 inch/second PPV. Vibration levels would vary in the Project vicinity, depending on localized soil properties and the type of construction of an affected building, but could be perceptible up to 200 feet from a vibration source. Potentially affected residential receptors include the multi-family senior living facility immediately north of the Project site on Colima Road; multi-family residential residences (condominiums) south and west of the Project site

on Ostia Way, Bithynia Way, Esquiline Avenue, Drusilla Way, and Latium Way; and single-family residences west of Brea Canyon Cutoff Road.

Air Quality

- **Construction Emissions.** Construction of the Project (specifically, earthmoving activities) would generate on-site emissions that would exceed the site-specific localized significance thresholds for PM_{10} (respirable particulate matter) and $PM_{2.5}$ (fine particulate matter) for nearby residential receptors. Implementation of the fugitive dust control measures required by the South Coast Air Quality Management District's Rule 403 (Fugitive Dust) would reduce the localized impacts of $PM_{2.5}$ to a less than significant level. However, localized impacts of PM_{10} would remain potentially significant.

- **Operational Emissions.** Following buildout, the proposed Project would provide housing for up to 2,139 residents and generate up to 5,208 daily vehicle trips. Project operation, specifically the operation of vehicles by Project residents, would result in the generation of Volatile Organic Compound emissions (VOCs), the hydrocarbons created by combustion that contribute to ozone formation, that exceed to the South Coast Air Quality Management District's VOC thresholds for summer and winter.

Visual Quality

- **Visual Character.** The Project's proposed development density (50 units per gross acre) and the height of the proposed Podium and Wrap-Around buildings (three and four stories and up to 69 feet above finished grade) would be visually inconsistent with some of the adjacent land uses. Adjacent land uses include moderate density commercial land uses to the north and multi-family residences of one to three stories in height to the south and west; the Royal Vista Golf Course and single-family residences to the east; and single-family residences to the west across Brea Canyon Cutoff Road.

- **Shade and Shadow.** The Podium buildings proposed for the Project site's northern parcel would be three and four stories, or up to 69 feet, above finished grade, and would cast shadows to the north, northeast, and northwest at the Winter Solstice (December 21), shading portions of the senior living facility located north of the Project site. The Podium buildings would shade the facility, including outdoor balconies facing the Project site, for more than 3 hours at the Winter Solstice, which is considered a significant impact.

Land Use and Planning

- **Project Not Consistent with Zoning and General Plan Designations**. The proposed Project site is designated A-1 (Agricultural) in the County's Zoning Code and U1 (Urban 1) in the Rowland Heights Community General Plan. Multi-family housing is not a permitted use under the A1 zoning designation, and the U1 General Plan designation allows very low density hillside residential, large-lot residential, and single-family detached uses (1.1 to 3.2 units per gross acre). A zone change to Residential Planned Development (RPD) is requested as part of the proposed Project, as well as a General Plan Amendment for a new site-specific land use designation, U6 (36 to 50 units per gross acre), which would apply only to the Project site based on specific criteria related to property size and

location. Following approval of a zone change and General Plan Amendment, the Project would be consistent with the zoning and General Plan designation.

Alternatives Selected for Analysis

Four Alternative scenarios, including a No Project scenario, have been selected for detailed evaluation and comparison to impacts associated with the proposed Project. Each is briefly described below.

1. **Alternative 1: No Project: Existing Facilities Re-Occupied with School and Church.** Under Alternative 1, the Project site would remain occupied for educational and religious institutional uses. According to conditions established under the current Conditional Use Permit and most recent Revised Exhibit A Site Plan approvals, building square footage on the property could increase by as much as 136,929 square feet to a maximum of 200,155 square feet at full buildout. Maximum school enrollment could increase by 420 students to a maximum of 900 students and a 3,500 seat church assembly building could be constructed all without any further discretionary entitlements. Alternative 1 was selected to evaluate impacts associated with school and church operations on the Project site, allowed under existing approvals, in the absence of the proposed Project approval.

2. **Alternative 2: Single-Family Residences.** Alternative 2 assumes redevelopment of the Project site with 50 single-family residences, the maximum permitted under the current zoning and land use designations (15.7 gross acres x 3.2 dwelling units per gross acre). Alternative 2 was selected for its potential to avoid or reduce significant and unavoidable Land Use impacts, as well as Noise, Air Quality, and Visual Quality impacts associated with the proposed Project.

3. **Alternative 3: Reduced Density: 537 Residential Units.** Under Alternative 3, the Project site would be redeveloped with multi-family residential uses and amenities comparable in quality to those proposed under the proposed Project. However, Alternative 3 would reduce the residential component from 775 units to 537 units, a more than 30 percent reduction in the number of residential units compared to the proposed Project. The developed square footage sitewide also would be reduced accordingly by more than 30 percent. Alternative 3 was selected for its potential to avoid or reduce significant and unavoidable Land Use impacts, as well as Noise, Air Quality, and Visual Quality impacts associated with the proposed Project.

4. **Alternative 4: Mixed Use: Residential and Commercial**. Under Alternative 4, the Project site would be redeveloped with a mix of residential and commercial uses. Alternative 4 would include approximately 325 residential units, 140,000 square feet of neighborhood-serving commercial uses, and a 4.2-acre parking lot. Alternative 4 was selected for its potential to avoid or reduce significant and unavoidable Visual Character, Shade and Shadow, and Land Use impacts associated with the proposed Project.

Alternatives Considered but Rejected as Infeasible

State CEQA Guidelines Section 15126.6(c) states, "The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination." As stated previously, the *State CEQA Guidelines* state that alternatives addressed in an EIR should be feasible, and not remote or speculative. Section 15364 of the *State CEQA Guidelines* states that feasible is defined as "capable of being accomplished within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors." Section 15126.6(f)(1) also states that consideration of the feasibility of an alternative may take into account site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and site accessibility and control.

Several scenarios were considered but dismissed from detailed analysis in the EIR because they did not avoid or reduce significant Project impacts, meet the proposed Project's objectives, or were determined to be infeasible. These alternatives are discussed below.

Alternative Site

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 could feasibly attain the basic objectives of the project, and evaluate the comparative merits of the alternatives." This EIR used specific criteria to determine the suitability of alternative locations for the proposed Project, including the following: zoning and land use designations/policies; surrounding land use compatibility; whether alternative sites were of adequate size to accommodate the proposed Project; whether such sites would be available for acquisition; whether such sites were within the same jurisdiction as the proposed Project site; and whether such alternative sites meet the proposed Project's objectives. Such Project objectives include encouraging pedestrian activity and minimizing vehicle use by providing high-density housing in proximity to neighborhood-serving retail and commercial uses (Key Sustainability Objective No. 4); locating multi-family housing in an area well served by mass transit to reduce Project-related vehicle miles traveled (Key Sustainability Objective No. 5); and providing high-quality multi-family housing without displacing existing residential uses (Key Residential Objective No. 3).

The results of the search to find an alternative site on which the proposed Project could be built and still meet the majority of the Project's objectives indicated that feasible alternative sites are not available in the Project site vicinity for several reasons. First, there is a scarcity of similar-sized and privately owned parcels appropriate for multi-family residential zoning within reasonably close proximity to the Project

site. Further, while some vacant sites are available in Rowland Heights north of the Pomona Freeway, these sites are in close proximity to industrial uses in the City of Industry as well as the freeway corridor. Consequently, air quality, noise, and hazards impacts would likely exceed those associated with development on the proposed Project site. Additionally, placement of housing in this area would conflict with Rowland Heights Community General Plan Land Use Policy No. 1, which prohibits residential uses in industrial areas.

Much of the vacant land in Rowland Heights is located in the hillsides south of Pathfinder Road. However, vacant hillside sites south of Pathfinder Road are less suitable for the development of new multi-family housing since they are primarily surrounded by low-density, single-family residential uses. Additionally, many undeveloped hillsides are viewed as key open space resources by the Community General Plan,[1] and as specified by Community General Plan Conservation and Open Space Policy No. 5, visual qualities of scenic areas including ridgelines, particularly in the Brea Canyon Cutoff area, should be protected. Development of high-density housing in the hillside areas of Rowland Heights would increase the number of publicly accessible and private vantage points from which such development would be visible, and would eliminate valued views of open space, vegetation, and ridgelines. These hillside areas are also subject to increased geologic and seismic hazards due to slope instability as well as to wildfire hazards, as identified in the Community General Plan.[2]

Furthermore, the hillside areas of Rowland Heights are less accessible to jobs, services and public transit, and are less pedestrian-friendly than the flatter, more densely developed area where the Project site is proposed. Few commercial uses are located south of Colima Road within Rowland Heights. As noted above, one of the proposed Project's Key Residential Objectives is to provide multi-family rental housing in close proximity to existing neighborhood-serving commercial/retail uses and in close proximity to public transit. Such factors are also given a high priority in the County's Housing Element, which also notes the difficulty of assembling large parcels of land for development. Placement of new, multi-family housing away from these uses would increase vehicle miles traveled, and increase traffic along Brea Canyon Cutoff Road and other north-south roadways.

Land designated for multi-family residential uses under the U4 (Urban 4) and U5 (Urban 5) categories on the Rowland Heights Community General Plan land use map is located primarily within 1,000 feet of Colima Road, the primary commercial arterial roadway in Rowland Heights. Therefore, in order to maintain consistency with the existing land use pattern of Rowland Heights and provide convenient access to neighborhood-serving commercial uses and public transit, new multi-family housing should be

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1 County of Los Angeles Department of Regional Planning, Rowland Heights Community General Plan, (1981) 16.

2 County of Los Angeles Department of Regional Planning, Rowland Heights Community General Plan, (1981) 24.

located within the Colima Road corridor and not in the hillside areas of Rowland Heights. Additionally, new multi-family housing should be sited near existing higher-density residential uses and not directly abutting or adjoining low-density uses. The proposed Project site, which is located immediately south of the commercial uses along Colima Road, satisfies these conditions. However, land in the hillside areas of Rowland Heights consists mostly of single-family residences. In contrast, the proposed Project site is adjacent to land designated as U4 by the Rowland Heights Community General Plan to the south. This land use category is appropriate for residential townhouses, condominiums, and apartments at a density of 12.1 to 22 dwelling units per gross acre. Additionally, the Project site is buffered from the single-family residences to the west by Brea Canyon Cutoff Road, a four-lane roadway with a left-turn lane (five lanes total, approximately 80 feet in width), and from the single-family residences to the east by the Royal Vista Golf Course.

Further, an alternative site would be suitable if no existing residential uses would be displaced by Project development, another high priority in the County's Housing Element. While the Project site would accomplish this goal, the Applicant was unable to find similarly available properties and centrally located properties that could achieve this goal. Additionally, the Project site is located in the eastern end of the Colima Road corridor, which is generally less impacted by existing traffic than the areas of Colima Road west of the Project area. The more heavily impacted intersections of Fullerton/Colima and Nogales/Colima, which primarily operate at unacceptable levels (LOS E and F) during peak hours,[3] are located to the west of the Project site. Therefore, development of the proposed Project at alternative sites closer to these congested intersections would worsen LOS levels at these intersections and result in greater traffic impacts than development at the proposed Project site.

Based on the above factors, the Applicant was unable to find an alternative site of comparable size (approximately 15.7 acres) in Rowland Heights that would reduce the impacts associated with the proposed development, while still attaining most of the basic Project objectives. The Applicant has reviewed the marketplace annually since 2006 and no sites comparable in size currently exist in this area of the San Gabriel Valley. This proposed Project is planned for implementation in a nearly fully developed community, which is one reason for the proposed development of the Project as an infill-project on a site that is currently occupied by church buildings and a school that plans to vacate the property.

Therefore, based on analysis of the factors considered above, an alternative site for the proposed Project is considered infeasible.

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3 Fullerton/Colima operates at LOS D during the PM peak hour.

Reduced Lot Coverage

Under this Alternative, the same uses planned under the proposed Project would be developed, with reduced total building square footage (668,000 square feet) and a reduction of 238 units to 537 total units, on the 15.7-acre proposed Project site. In addition to the reduced number of units, unit size would be reduced. Under the Project, Podium building units range from 620 square feet to 905 square feet, Townhome-style Apartments range from 1,150 square feet to 1,450 square feet, and the Wrap-Around building units range from 628 square feet to 1,216 square feet. However, under this Alternative, Podium building units would be 710 square feet, Townhome-Style Apartment units would be 1,000 square feet, and Wrap-Around building units would be 410 square feet. The Floor Area Ratio (FAR) would be less than the proposed Project at 0.98:1. Additionally, under this Alternative, lot coverage (i.e., the area developed with buildings or pavement) would decrease to approximately 50 percent, whereas the proposed Project's lot coverage is approximately 70 percent, with approximately 4.96 acres of open space, similar to existing conditions. However under this Alternative, unlike the Project, most of the available open space would be located on the perimeter of the Project site and not within the development. This Alternative would increase the building setbacks from the property line and concentrate proposed buildings in the interior of the site. This modified building configuration would eliminate the generation of off-site shadows that would occur under the proposed Project, particularly shadows cast by the proposed Podium building on the northern portion of the proposed Project site that shade portions of the senior housing complex to the north. Additionally, the decrease in lot coverage and corresponding increase in pervious surface area would incrementally reduce the volume of runoff generated on site compared to the proposed Project.

Although this reconfiguration would avoid the significant shading impacts associated with the proposed Project, it would not achieve equivalent building square footage nor the same unit mix as the proposed Project. Additionally, since buildings would be grouped more closely together, and a higher percentage of Wrap-Around building units, which are four stories tall, and a lower percentage of Townhome-Style Apartment units, which are three stories tall, would occur under this Alternative, building mass would not be evenly distributed across the site and the architectural variation among the proposed building styles would not be visible. Further, view corridors through the site would be unevenly distributed, with wide view corridors disproportionately concentrated along the perimeter, and few or no corridors through the buildings. As a result, this Alternative would appear more densely developed and less spatially and structurally articulated than the proposed Project. Therefore, this Alternative would have greater aesthetic and view impacts.

As a result, the Reduced Lot Coverage alternative is considered infeasible.

EVALUATION OF ALTERNATIVES

Table 6.0-1, Alternatives Analysis Comparison Summary, below, provides a summary matrix that compares the impacts associated with the proposed Project with the impacts of each of the proposed Alternatives. Where the net impact of the Alternative would be clearly less adverse (e.g., more beneficial) than the impact of the proposed Project, the comparative impact is said to be "Less." Where the Alternative's net impact would clearly be more adverse (e.g., less beneficial) than the proposed Project, the comparative impact is said to be "Greater." Where the impacts of the Alternative and proposed Project would be roughly equivalent, the comparative impact is said to be "Similar." Proposed Project impacts are indicated in **Table 6.0-1** in the first column. In addition, cumulative impact analysis was conducted for Alternative 3 and the resulting significance determinations are included in the table.

Table 6.0-1
Alternatives Analysis Comparison Summary

Environmental Issue Area	Proposed Project Impacts (After Mitigation)	Alternative 1: No Project – Buildout Under Existing Approvals	Alternative 2: Single-Family Residences	Alternative 3: Reduced Density – 537 Residential Units	Alternative 4: Mixed Use – Residential and Commercial
5.1 GEOTECHNICAL AND SOIL RESOURCES					
Geotechnical and Soil Resources – Construction	Less than Significant	Less	Less	Less	Less
Geotechnical and Soil Resources – Operation	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less
5.2 HYDROLOGY, DRAINAGE AND WATER QUALITY					
Hydrology, Drainage and Water Quality – Construction	Less than Significant	Less	Less	Less	Less
Hydrology, Drainage and Water Quality – Operation	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less
5.3 NOISE					
Noise – Construction	Significant and Unavoidable	Less	Less	Less	Less
Noise – Operation	Less than Significant	Greater	Less	Project Level: Less Cumulative Level: Less	Greater

Environmental Issue Area	Proposed Project Impacts (After Mitigation)	Alternative 1: No Project – Buildout Under Existing Approvals	Alternative 2: Single-Family Residences	Alternative 3: Reduced Density – 537 Residential Units	Alternative 4: Mixed Use – Residential and Commercial
5.4 AIR QUALITY					
Air Quality – Construction	Significant and Unavoidable (VOC emissions)	Less	Less	Less	Less
Air Quality – Operation	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Greater
5.5 CLIMATE CHANGE					
Climate Change – Construction	Less than Significant	Less	Less	Less	Less
Climate Change – Operation	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less
5.6 VISUAL QUALITY					
Visual Character and Views – Construction	Less than Significant	Less	Less	Less	Less
Visual Character and Views – Operation	Significant and Unavoidable (Building height incompatibility with adjacent uses)	Less	Less	Project Level: Less Cumulative Level: Less	Less
Light and Glare – Construction	Less than Significant	Less	Less	Less	Less
Light and Glare – Operation	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Similar
Shade and Shadow	Significant and Unavoidable (Shading of senior housing to north)	Less	Less	Project Level: Less Cumulative Level: Less	Less

Environmental Issue Area	Proposed Project Impacts (After Mitigation)	Alternative 1: No Project – Buildout Under Existing Approvals	Alternative 2: Single-Family Residences	Alternative 3: Reduced Density – 537 Residential Units	Alternative 4: Mixed Use – Residential and Commercial
5.7 TRAFFIC, PARKING, CIRCULATION, AND ACCESS					
Traffic, Parking, Circulation and Access – Construction	Less than Significant	Less	Less	Less	Less
Traffic, Parking, Circulation and Access – Operation	Less than Significant	Greater AM Peak Hour Impacts Less PM Peak Hour Impacts	Less	Project Level: Less Cumulative Level: Less	Greater
5.8 SEWAGE DISPOSAL					
Sewage Disposal	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less
5.9 EDUCATION					
Education	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less
5.10.1 PUBLIC SERVICES: FIRE SERVICES					
Fire Service – Construction	Less than Significant	Less	Less	Less	Less
Fire Service – Operation	Less than Significant	Less	Less	Less Cumulative Level: Less	Less
5.10.2 PUBLIC SERVICES: SHERIFF SERVICE					
Sheriff Service – Construction	Less than Significant	Less	Less	Less	Less
Sheriff Service – Operation	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less

Environmental Issue Area	Proposed Project Impacts (After Mitigation)	Alternative 1: No Project – Buildout Under Existing Approvals	Alternative 2: Single-Family Residences	Alternative 3: Reduced Density – 537 Residential Units	Alternative 4: Mixed Use – Residential and Commercial
5.11 WATER SERVICE					
Water Service	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less
5.2 UTILITY SERVICE (ELECTRICITY, NATURAL GAS)					
Utility Services – Electricity	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less
Utility Services – Natural Gas	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less
5.13 SOLID WASTE					
Solid Waste – Construction	Less than Significant	Less	Less	Less	Less
Solid Waste – Operation	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less
5.14 PARKS AND RECREATION					
Parks and Recreation	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less
5.15 LIBRARY SERVICE					
Library Service	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less
5.16 POPULATION, HOUSING AND EMPLOYMENT					
Population, Housing, and Employment	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less

Environmental Issue Area	Proposed Project Impacts (After Mitigation)	Alternative 1: No Project – Buildout Under Existing Approvals	Alternative 2: Single-Family Residences	Alternative 3: Reduced Density – 537 Residential Units	Alternative 4: Mixed Use – Residential and Commercial
5.17 LAND USE AND PLANNING					
Land Use and Planning	Significant and Unavoidable (Incompatible with General Plan land use and Zoning designations due to proposed residential density (50 units per acre) and new land use designation of U6)	Less	Less	Project Level: Less Cumulative Level: Less	Greater
5.1 ENVIRONMENTAL SAFETY					
Environmental Safety – Construction	Less than Significant	Less	Similar	Similar	Similar
Environmental Safety – Operation	Less than Significant	Less	Less	Project Level: Less Cumulative Level: Less	Less

1. Alternative 1 – No Project Alternative

Description of Alternative 1

Section 15126.6(e) of the *State CEQA Guidelines* requires that a No Project Alternative be evaluated. As described in the *State CEQA Guidelines*, the purpose of describing and analyzing the No Project Alternative is to allow decision makers to compare the impacts of approving the proposed Project with the impacts of not approving the proposed Project. As described in Section 15126.6(d)(2), the No Project Alternative shall discuss existing conditions at the time the Notice of Preparation is published as well as what would reasonably be expected to occur in the foreseeable future if the project was not approved based on current plans and consistent with available infrastructure and community services.

The proposed Project site is presently owned by Southlands Christian Church, which occupied buildings and facilities on the Project site until June 2009. The church has already relocated to another site, and the lease held by its sole tenant on the Project site, Southlands Christian Schools, which span grades Pre-K through 12, terminates in July 2010. It is expected that the Project site will be vacated by all occupants starting in July 2010.

The Project site is currently developed with nine single-story buildings, two paved surface parking lots, and an athletic field. Approximately 70 percent (11 acres) of the Project site is currently developed with buildings or paved, and 30 percent (4.7 acres) is athletic fields or landscaped area. The current church and school buildings were constructed between 1970 and 2002. The Southlands Christian Schools' maximum enrollment capacity was approximately 480 students during the 2008–2009 school year, the most recent year for which data are available.[4] The academic year extends from late August/early September through late May/early June and a summer school session is held during the month of July. The school currently holds regular after-school activities such as dances and sporting events. The Church hosted daytime and evening church meetings and classes as well as special events such as weddings, memorial services, and baptisms, and also made the building available for community events.

In the event that the proposed Applicant does not acquire the Project site and implement the proposed Project, it is reasonably expected that the Project site would change hands in the foreseeable future, and, in the absence of another specific development proposal for the property, could be re-occupied by educational and religious uses similar to those operating on the Project site in the past and consistent with already approved discretionary land use entitlements. The existing buildings and facilities on the

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4 Glenn Duncan, Administrator of Schools, Southlands Christian Schools, communication with Lee Jaffe, Impact Sciences, Inc., July 30, 2008.

Project site were originally constructed for, and would accommodate, such uses, and re-occupancy with similar uses would not require any new discretionary approvals from the County.

A number of conditional use permits (CUPs) have been granted over time for the Project site. The first CUP on the property was CUP 646, which was approved in 1975. The CUP sought to enlarge the existing church sanctuary on the property from 300 seats to 390 seats and add a 2,330-square-foot multipurpose building (classrooms and fellowship hall).

CUP 646 was superseded by CUP 1120 and Variance (VAR) 565 in 1977. CUP 1120 approved a broad expansion of the facilities and use of the property. This CUP approved a two-story addition to the existing chapel that would increase the chapel's total seating capacity to 1,000 seats. In addition, the CUP approved the addition of a new three-story church auditorium with seating capacity of 3,500 seats; a proposed 100-foot prayer tower was ultimately denied. Other development approved for the site included: a three-story, 31,033-square-foot multi-purpose building, a two-story, 19,040-square-foot-high school building, a 34,420-square-foot day school for kindergarten through junior high school, and an athletic field with bleachers of 1,500-seat capacity. Paved/landscaped parking areas were proposed for 846 cars and a parking area for 12 buses was to be developed. Construction was planned to occur in six phases, and at full buildout, the overall enrollment capacity for the school was projected to increase to 900 students. Further, church attendance was projected to be 3,500 persons for Sunday morning services and 900 persons for Sunday evening services.

CUP 1120 was subsequently superseded by CUP 2257 in 1983. CUP 2257 currently governs the property and allows for the operation of the church and school facilities that currently reside on the property. CUP 2257 and its associated Revised Exhibit A was a request for approximately the same development envelope and intensity of use as the previous entitlement granted under CUP 1120. Approved uses proposed by the Revised Exhibit A included a new 63,644-square-foot church auditorium containing 3,500 seats, a 31,000-square-foot multi-purpose building, a 31,000-square-foot administrative building, and a 19,000-square-foot-high school building. Overall, the proposed intensity of use included approximately 144,644 square feet of development, which would accommodate up to 3,500 persons for Sunday services and 900 students.

In 1990 and 1992, Revised Exhibit A documents were submitted and approved for the property under CUP 2257. Both Revised Exhibit A documents depicted development similar to the development proposed in CUP 1120, including a junior high and administrative building (34,420 square feet and 14 classrooms), a new church auditorium (63,644 square feet, 3,500 seats), a multi-purpose room (31,033 square feet), elementary classrooms (a total of 14 new classrooms and 16,793 square feet), and a

maintenance building (1,825 square feet). Net new square footage permitted under both the 1990 and 1992 Revised Exhibit A was 147,715 square feet sitewide.

Lastly, and most recently, in 2005 another Revised Exhibit A was submitted to accommodate the development of a new arts building, worship center, elementary classrooms, junior high school classrooms, administrative building, athletic fields and all related signage. Specifically, this Revised Exhibit A provided for a junior high school and administrative building (34,420 square feet and 14 classrooms), a new church auditorium (63,644 square feet and 2,500 seats), and a fine arts building (31,032 and 1,206 seats), for a total of 129,096 net new square feet. The proposed Project site was approved for a total of 200,155 square feet including existing buildings, the above-mentioned new buildings, and unspecified additional square footage. Maximum building heights appear to have been established at 50 feet above adjacent grade based upon drawings submitted as part of the Revised Exhibit A applications.

Alternative 1 assumes buildout of the Project site consistent with the most recent Revised Exhibit A under CUP 2257. In summary, this would allow a sitewide maximum total of 200,155 square feet of development including a new church auditorium, which would accommodate up to 3,500 persons for Sunday services and a school enrollment capacity of 900 students. There are currently 63,226 square feet of school and church buildings on the proposed Project site (61,692 square feet of permanent buildings plus 1,534 square feet of modular classrooms), and the school has indicated that its maximum enrollment is approximately 480 students. Thus, it can be reasonably expected that, absent development of the proposed Project, a combined church and school could use the property and develop a new church auditorium with capacity up to 3,500 seats such that Sunday morning services could accommodate up to 3,500 attendees. Building square footage on the property could increase by as much as 136,929 square feet to a maximum of 200,155 square feet at buildout, and school enrollment could increase by 420 students to a maximum of 900 students after completion of the approved development on the site.

Geotechnical and Soil Resources

Construction Impacts

Construction of additional building square footage under Alternative 1 would be subject to the same site conditions and potential geotechnical hazards as the proposed Project. These include potential hazards due to groundwater level, liquefaction, subsidence and hydrocompaction, differential settlement, expansive soils, and slope instability, which pose potentially significant impacts on the Project site. Several of the mitigation measures designed to remove hazardous geological conditions for the proposed Project would also be applicable to Alternative 1. With mitigation, both Alternative 1 and the proposed

Project would have less than significant geotechnical and soil impacts. However, since Alternative 1 would not require the construction of any subterranean parking structure, whereas the proposed Project would construct a partially subterranean structure beneath the Podium building, implementation of Alternative 1 would not require the same extent of excavation and construction dewatering as the proposed Project. Additionally, building heights across the site would be lower than those of the proposed Project and no higher than 50 feet, reducing the required depth of excavation for footings. Therefore, construction of Alternative 1 would result in less geotechnical impacts as compared to the proposed Project.

Operational Impacts

Alternative 1 would not require the construction of any subterranean parking, whereas the proposed Project would construct a partially subterranean parking structure as part of the Podium building. Therefore, implementation of Alternative 1 would not require permanent dewatering. Alternative 1 would have less than significant operational impacts related to geotechnical and soil resources and impacts would be less than those of the proposed Project.

Hydrology, Drainage and Water Quality

Construction Impacts

Under Alternative 1, the removal of vegetation and other soil-stabilizing features during construction of additional building square footage could accelerate wind and water driven erosion of soils that would increase sedimentation during storm events. During construction, dewatering could be achieved with temporary dewatering wells, storage tanks, and filters. The developer would be required to obtain a National Pollutant Discharge Elimination System permit for demolition and construction, and would comply with all applicable requirements of the National Pollutant Discharge Elimination program. The developer would also prepare a Stormwater Pollution Prevention Plan containing Best Management Practices, structural treatment and source control measures. Implementation of Best Management Practices would ensure that the Los Angeles Regional Water Quality Control Board water quality standards are met during construction activities. Like the proposed Project, Alternative 1 would have less than significant construction impacts related to hydrology, drainage, and water quality. However, since Alternative 1 would require less construction (i.e., no excavation for subterranean parking would be required), impacts would be incrementally less.

Operational Impacts

Currently, approximately 70 percent of the Project site is developed with buildings and pavement. Both Alternative 1 and the proposed Project would result in the reduction of pervious surfaces on the Project site. Under the proposed Project, drainage facilities on the site would be designed to hold and detain the increase in flows, such that impacts related to post-occupancy surface runoff volume would be less than significant. It is assumed that the turf fields on the Project site would remain for school use under Alternative 1. Additionally, Alternative 1 would reduce development density on the site compared to the proposed Project. Therefore, Alternative 1 would have a higher amount of pervious surface area compared to the proposed Project and result in reduced surface runoff volumes. Therefore, impacts related to surface runoff volumes would be less than significant, and less than those associated with the proposed Project.

Regarding compliance with Los Angeles Regional Water Quality Control Board requirements, under both Alternative 1 and the proposed Project, implementation of a Standard Urban Storm Water Mitigation Plan would be required to ensure that potential stormwater pollution is addressed by Best Management Practices incorporated into project design. Discharge from the permanent dewatering system associated with the proposed Project could contribute suspended solids and organic material, and therefore dewatering would require a National Pollutant Discharge Elimination System Permit for Groundwater Discharge. With compliance with National Pollutant Discharge Elimination System and Standard Urban Storm Water Mitigation Plan requirements, the proposed Project's potential water quality impacts would be less than significant. Similarly, Alternative 1 would have less than significant water quality impacts with Standard Urban Storm Water Mitigation Plan compliance. Since no subterranean parking structures would be developed under Alternative 1, minimal or no permanent dewatering would be required, and a National Pollutant Discharge Elimination System Permit for Groundwater Discharge would not be required under Alternative 1. For this reason, water quality impacts would be less than those of the proposed Project.

Noise

Noise impacts are evaluated for two categories: construction noise sources and operational noise sources. Construction-related noise sources are associated with construction activities such as demolition, earthmoving, and the use of construction equipment. Operational noise is primarily associated with stationary sources such as rooftop mechanical equipment and mobile sources such as vehicles traveling to and from the Project site.

Construction Impacts

Under Alternative 1, a maximum of 900 students could be enrolled at a future school, or 420 more than the current maximum enrollment, and a maximum of 136,929 net new square feet of school and church facilities could be constructed. Although the Project site would continue to be occupied with school and church uses under Alternative 1, the number of students and square footage of facilities would increase over existing conditions. Construction of 136,929 square feet of school and church facilities would necessitate the use of construction equipment on the Project site. Construction-related noise and groundborne vibration would be less than significant. However, since the duration of construction would be reduced, impacts would be less than those of the proposed Project. Nonetheless, noise and vibration impacts would remain significant and unavoidable under Alternative 1.

Operational Impacts

Although operation of a school would continue under Alternative 1, the number of students and square footage of facilities would increase. As indicted in **Table 6.0-2**, Alternative 1 would generate a greater number of trips during the AM peak hour than the proposed Project. However, Alternative 1 would result in 3,398 fewer daily trips than the proposed Project and the daily trips generated by Alternative 1 would not result in a doubling of existing trips in the study area, which is what would be necessary to increase noise by 3 dB(A) CNEL. Accordingly, the noise level increases along major arterials surrounding the Project site would be less than 3 dB(A). Therefore, traffic noise generated by Alternative 1 would be less than significant, as would proposed Project impacts; however, because of the expected increase in trips during the AM peak hour, noise impacts during the AM peak hour would be greater than those the proposed Project.

Occupancy of Alternative 1 at buildout would generate temporary and periodic noise levels similar in nature to those currently generated on site. These sounds may include students playing outdoors, bells sounding, horns honking, HVAC equipment, operation of landscaping equipment, and vehicles entering and exiting the Project site. Since such temporary and periodic noise levels are not considered substantial, impacts during operation under Alternative 1 would be less than significant. However, operation of a school throughout the day, particularly a larger school than currently exists on site, would be expected to generate more noise throughout the day than the residential uses under the proposed Project. A larger church than currently exists could also generate more noise during regular Sunday services and during daytime and evening church-sponsored events such as weddings and other services, community meetings, and other events. As a result, operation of an expanded school and church under Alternative 1 is likely to result in incrementally greater noise impacts as compared to the proposed Project.

Air Quality

Air quality impacts are evaluated for two categories: construction emissions and operational emissions. Construction-related emissions are associated with construction activities such as demolition, earthmoving, use of construction equipment, and application of coatings to surfaces. Operational emissions are primarily associated with mobile source emissions based on vehicle trips generated by the Project.

Table 6.0-2
Comparison of Proposed Project and Alternative 1: Unmitigated Net Operational Emissions

Pollutant	SCAQMD Threshold	Proposed Project	Proposed Project Exceeds Threshold?	Alternative 1	Alternative 1 Exceeds Threshold?
Net Summertime Emissions (pounds per day)[1]					
VOC	55	70.25	**YES**	7.74	NO
NO_X	55	47.47	NO	7.22	NO
CO	550	361.73	NO	59.42	NO
SO_X	150	0.44	NO	0.08	NO
PM_{10}	150	70.34	NO	13.49	NO
$PM_{2.5}$	55	13.72	NO	2.64	NO
Net Wintertime Emissions (pounds per day)[2]					
VOC	55	71.64	**YES**	7.04	NO
NO_X	55	55.25	**YES**	8.41	NO
CO	550	345.43	NO	54.47	NO
SO_X	150	0.36	NO	0.06	NO
PM_{10}	150	70.33	NO	13.47	NO
$PM_{2.5}$	55	13.71	NO	2.62	NO

Source: Impact Sciences, Inc., (2009). Emissions calculations are provided in ***Appendix 6.0****.*
Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations. Net emissions include credit for emissions from the existing land use.
[1] *"Summertime Emissions" are representative of the conditions that may occur during the ozone season (May 1 to October 31).*
[2] *"Wintertime Emissions" are representative of the conditions that may occur during the balance of the year (November 1 to April 30).*

Construction Impacts

Under Alternative 1, the Project site would be developed with a new junior high and administrative building (14 new classrooms), a multi-purpose room, a maintenance building, and a new church auditorium, for a maximum buildout of 136,929 net new square feet. Alternative 1 would result in

reduced overall square footage compared to the proposed Project, and the amount of grading and excavation required for subterranean parking also would be reduced. Unlike the proposed Project, Alternative 1 would not require demolition of the existing Southlands Christian Church or Southlands Christian Schools. While building construction would likely result in peak daily emissions similar to those of the proposed Project, the total duration of construction activity would be less as compared to the proposed Project. Therefore, Alternative 1 would generate less overall construction-related emissions as compared to the proposed Project, as discussed in **Section 5.4, Air Quality**. Alternative 1 would not result in NO_x emissions that exceed the SCAQMD's daily emissions thresholds during the grading phase of Project construction.

The LST analysis for the proposed Project shows that maximum 24-hour PM_{10} and $PM_{2.5}$ concentrations are anticipated to exceed the threshold of significance at the most impacted residential receptors near the Project site during construction; $PM_{2.5}$ impacts would be reduced to less than significant with mitigation. While PM_{10} impacts would be reduced by implementation of mitigation, impacts would remain significant and unavoidable. Alternative 1 would result in similar construction-related impacts and impacts would likewise be reduced with implementation of the same mitigation. However, Alternative 1 would result in fewer overall emissions compared to the proposed Project and, therefore, would less have construction-related LST impacts than the proposed Project.

Operational Impacts

As discussed in **Section 5.4**, vehicle trips associated with the proposed Project would generate net emissions that exceed the South Coast Air Quality Management District (SCAQMD) thresholds for Volatile Organic Compounds, or VOCs, an evaporative emission and a by-product of combustion that is a precursor to ozone formation, during both summer and winter. Therefore, Project-related operational emissions of VOC would result in a significant impact on air quality in the region. Alternative 1 would result in substantially fewer emissions due to reduced daily trip generation at buildout compared to the proposed Project (1,810 daily trips for Alternative 1 and 5,208 daily trips for the proposed Project). As noted in **Table 6.0-2**, operational emissions associated with Alternative 1 would not exceed the SCAQMD thresholds and impacts would be less than significant.

Table 6.0-2, Comparison of Proposed Project and Alternative 1: Unmitigated Operational Emissions, provides a comparison of the anticipated net operational emissions from Alternative 1 to the emissions from the proposed Project. As shown in the table, the net unmitigated operational emissions of Alternative 1 would be less than significant and less than those of the proposed Project.

Climate Change

Climate change impacts are evaluated for two categories: construction-related greenhouse gas (GHG) emissions and operational GHG emissions. While no state or local agency has formally adopted numerical significance thresholds related to GHG emissions, the Governor's Office of Planning and Research has released guidance on addressing climate change in CEQA and the Natural Resources Agency has adopted amendments to the *State CEQA Guidelines* establishing criteria for evaluating GHG emissions. CARB has also released the *Climate Change Scoping Plan* that discusses the strategies and measures CARB is intending to adopt for the state to achieve the goals of AB 32.

Construction Impacts

Under Alternative 1, the Project site would be developed with additional school and church facilities. Construction activity associated with Alternative 1 would be reduced compared to the proposed Project, since on-site buildings would not require demolition. While building construction would likely occur at a peak daily rate similar to the proposed Project, the total square footage constructed and duration of construction would be reduced compared to the proposed Project. In addition, less excavation for the construction of subterranean facilities would be required compared to the proposed Project. Therefore, Alternative 1 would generate less construction-related GHG emissions as compared to the proposed Project.

Operational Impacts

Alternative 1 would result in the construction of school and church facilities; however, the total building space would be substantially less than that of the proposed Project. Alternative 1 would also result in daily vehicle trips that are substantially less as compared to the proposed Project. The estimated maximum annual GHG emissions associated with operation of the proposed Project and Alternative 1 are shown in **Table 6.0-3, Comparison of Proposed Project and Alternative 1: Unmitigated Annual GHG Emissions**.

Table 6.0-3
Comparison of Proposed Project and Alternative 1: Unmitigated Annual GHG Emissions

Pollutant	Proposed Project	Alternative 1
Net Annual Emissions (metric tons per year)		
CO_2e	9,630.30	2,189.19

Source: Impact Sciences, Inc., (2009). Emissions calculations are provided in ***Appendix 6.0****.*
Totals in table may not appear to add exactly due to rounding.

Based on the unmitigated GHG emissions presented in the table above, the net total annualized emissions for Alternative 1 would be less than that of the proposed Project. Alternative 1 would therefore result in impacts that would be less than those associated with the proposed Project. Alternative 1 would implement design features and mitigation measures that would be consistent with many of the applicable measures recommended by the *Climate Change Scoping Plan* for AB 32, OPR guidance, the *2006 Climate Action Team Report*, and the County of Los Angeles Green Building Program. These measures would include energy efficiency features and drought-tolerant landscaping and would be similar to those measures listed in **Section 5.5, Climate Change**. However, Alternative 1 would not necessarily connect to the Water District's reclaimed water system and thus may not be able to implement the same water conservation measures as the proposed Project.

In addition, unlike the proposed Project, the existing buildings and land uses would remain on the Project site and would not be replaced with new buildings with energy efficiency standards that meet or exceed the Energy Efficiency Standards contained within Title 24 (2005), the California Building Standards Code. Existing landscaping and irrigation would also not necessarily comply with the County's *Drought-Tolerant Landscaping Ordinance*. Nonetheless, new construction under Alternative 1 would be required to implement many of the applicable goals, strategies, and control measures established under the guidelines and programs discussed in **Section 5.5, Climate Change**, including AB 32, OPR Guidance, the 2006 Climate Action Team Report, and the Los Angeles County Green Building Program.

Cumulative

Compared to the estimated GHG for all sources in California, the Project's and Alternative 1's contribution to global climate would be imperceptible. As discussed above, the proposed Project and Alternative 1 are consistent with the goals, strategies, and control measures established under AB 32, and with applicable Attorney General, Office of Planning and Research, and 2006 Climate Action Team Report recommended measures for the reduction of GHGs. No quantitative emission thresholds or similar criteria have been established to evaluate the cumulative impact of a single project on global climate. However, based on the findings that the Project and Alternative 1 incorporate energy and water efficiency measures as well as objectives and GHG reduction measures consistent with the County of Los Angeles Green Building Program that would reduce the contribution to cumulative GHG emissions, the Project and Alternative 1 are consistent with the goals, strategies, and control measures established under AB 32, Office of Planning and Research Guidance, the 2006 Climate Action Team Report, and the Los Angeles County Green Building Program. As with the proposed Project, Alternative 1 would have a less than significant cumulative impact on global climate change. Since Alternative 1 would result in less

GHG emissions as compared to the proposed Project, Alternative 1 would result in a less than considerable contribution to cumulatively significant global climate change impacts.

Visual Quality

Aesthetics and Views

Construction Impacts

Construction of Alternative 1 would periodically subject the Project site and neighboring land uses to the presence of construction equipment, incomplete (under construction) buildings and structures, stockpiled cut soil material, and areas in landscaping transition. Like the proposed Project, Alternative 1 would result in potentially significant construction-related aesthetic impacts, and the required mitigation measure for the proposed Project, which requires that the construction site be screened from street-level view with appropriate fencing and barriers, would be applicable to Alternative 1. However, since Alternative 1 would require less overall construction, impacts would be incrementally less than those associated with the proposed Project.

Operational Impacts

The Project site is not visible from any state-designated scenic highways, but is visible from Brea Canyon Cutoff Road, which is designated as a limited secondary highway by the Rowland Heights Community General Plan. This classification is intended to protect routes in rural areas. However, the Brea Canyon Cutoff Road corridor has been heavily urbanized since the designation was issued. Furthermore, the Project site is adjacent to Colima Road, which is a major highway and heavily developed commercial corridor. Views of the Project site from other off-site vantage points are limited due to intervening residential development, vegetation, and hillside topography. Therefore, like the proposed Project, Alternative 1 would result in less than significant impacts on scenic vistas since views of the proposed Project site are primarily blocked by existing residential development, vegetation, and hillside topography.

Alternative 1 assumes that the number of buildings on the Project site could increase such that total building area would reach 200,155 square feet at buildout. Additionally, building height could potentially increase to 50 feet. According to Exhibit A, an amphitheater could be built in the center of the proposed Project site near Brea Canyon Cutoff Road, with the new church auditorium and multipurpose room to the north. The new junior high and administration building could be built behind the existing playground along Ostia Way. Two classroom buildings could abut the existing athletic fields. The junior high and administration building could be two stories above grade and the church auditorium and

multipurpose room could be three stories above grade. Therefore, the existing building configuration on site, together with other visual characteristics of the existing site, would be modified by redevelopment of the site according to the approved Exhibit A plan, and building heights could be increased over existing building two-story heights. The approved multipurpose room and junior high and administrative buildings would likely block views of the proposed Project site from the Los Angeles Royal Vista Golf Course, but overall Alternative 1 would retain more open space on the site than the proposed Project. Accordingly, impacts on aesthetics and views under Alternative 1 would be less than those associated with the proposed Project and would result in less than significant impacts.

Light and Glare

Construction Impacts

During construction of additional building square footage on the Project site under Alternative 1, nighttime lighting would only be required for security purposes since no nighttime construction would occur. Security lighting during construction would be limited to only those areas of the site requiring illumination and all security lights would be properly shielded and projected downwards. Additionally, construction activities would not create sources of glare since construction is not expected to involve bright light or reflective sources that would be visible from off site. Both the proposed Project and Alternative 1 would have less than significant construction-related light and glare impacts with implementation of mitigation. Since Alternative 1 would require less overall construction, impacts would be less than those of the proposed Project.

Operational Impacts

During operation, neither the proposed Project nor Alternative 1 would introduce any sources of substantial light or glare. Proposed lighting is intended to create a safe, adequately illuminated nighttime environment on the Project site. Most sources of lighting would be shielded from off-site vantage points by surrounding structures and landscaping. Exterior lighting would incorporate low-intensity downlights, louvers, shields, hoods or other screening devices, and all proposed light sources would be directed downward to limit light spillover and glare generation. Building setbacks and perimeter landscaping would also reduce the potential for glare and light spillover onto neighboring uses. In addition, no highly reflective materials would be used in the design of the buildings on the site. Therefore, both the proposed Project and Alternative 1 would have less than significant light and glare impacts with implementation of mitigation. However, since Alternative 1 would result in a lower development density on the Project site, it would result in less impact with respect to light and glare than the proposed Project.

Shade and Shadow

Like the proposed Project, Alternative 1 could result in temporary shadows over the adjacent multi-family residential properties to the east if new buildings are added in the southeastern portion of the Project site, especially if building height is permitted to increase to 50 feet above grade. Given the location and heights of the approved multipurpose room and junior high and administrative buildings, they would likely have shade and shadow impacts on the Los Angeles Royal Vista Golf Course. Therefore, shading impacts on these properties could be significant and unavoidable under both the proposed Project and Alternative 1.

Under the proposed Project, the Podium Building in the northern portion of the site would cast shadows approximately 90 to 110 feet to the north over the senior housing complex. Under Alternative 1, it is assumed that this portion of the site would remain developed with surface parking and athletic fields, and that no shadows would be cast over the senior housing complex. Therefore, shade and shadow impacts on land uses to the north would be significant and unavoidable under the proposed Project, but less than significant under Alternative 1. Therefore, Alternative 1 would result in less shading impacts as compared to the proposed Project.

Traffic, Parking, Circulation and Access

Under Alternative 1, enrollment at a future school on the Project site would be capped at 900 students. Therefore, with addition of the aforementioned development on the site, a maximum of 900 students could be enrolled at a future school, which is 420 more students than the current maximum enrollment.

Construction Impacts

Under Alternative 1, approximately 136,929 net new square feet of additional school and church facilities could be constructed. Although the overall construction duration of Alternative 1 would be shorter than the proposed Project, construction-related traffic disruption could still occur. Like the proposed Project, implementation of mitigation such as the Construction Management Plan would reduce construction traffic impacts for Alternative 1 to less than significant. As with the proposed Project, Alternative 1 would result in less than significant parking impacts during construction, since construction worker parking would be accommodated on-site. Since Alternative 1 would necessitate less overall new construction as compared to the proposed Project, construction-related traffic impacts would be incrementally less as compared to those of the proposed Project.

Operational Impacts

Peak hour trip rates used for Alternative 1 were calculated based on manual traffic counts conducted in the driveways of the existing Southlands Christian Schools, since Alternative 1 assumes school uses. Traffic counts conducted at the proposed Project site driveways during the PM peak hour were extended to 5:00 PM, which is beyond the traditional 2:00 PM to 4:00 PM peak hour for school uses, in order to define overlap between trip generation for the existing school and the peak PM period of trip generation for the Project's proposed residential uses. Credit for traffic generated by the existing uses was applied to traffic generated by Alternative 1 because the proposed Project site is currently used by the Southlands Christian Schools and a school is assumed to continue operations on the site under Alternative 1. Weekday trip rates for Alternative 1, which are based on manual traffic counts conducted at the driveways of the existing school, are listed in **Table 6.0-4, Trip Generation Rates - Alternative 1**. Estimated trip generation for Alternative 1, which takes into account trip credit for existing school uses, is provided in **Table 6.0-5, Trip Generation - Alternative 1.**

Table 6.0-4
Trip Generation Rates - Alternative 1

Land Use[1]	Quantity	Daily Trips	AM Peak Hour Total	PM Peak Hour Total
School	900 students	1,810	0.62	0.25

Source: Impact Sciences, Inc. 2009

[1] *Generation rates for the AM and PM peak hours are based on manual traffic counts conducted on February 14, 2008 at the driveways of the existing Southlands Christian Schools; however, the ITE rate was used to calculate the daily trips, since counts were not conducted for daily trips.*

Table 6.0-5
Trip Generation - Alternative 1

Land Uses	Quantity	Daily Trips	AM Peak Hour Total	PM Peak Hour Total
Alternative 1	900 students	1,810	558	225
Existing Private School (actual counts)	480 students	619[1]	296	120
Alternative 1 – Net Increase in Trips		**1,191**	**262**	**105**

Source: Impact Sciences, Inc. 2009.

[1] *Driveway counts were conducted on February 14, 2008 for the AM and PM peak hours; however, the ITE rate was used to calculate the daily trips, since counts were not conducted for daily trips.*

Additionally, according to the calculations based on the 7th Edition of the *Trip Generation* manual, published by the ITE,[5] Alternative 1 would result in a total of 1,810 daily trips, whereas the proposed Project would result in 5,208 daily trips. Accordingly, Alternative 1 would result in fewer daily trips as compared to the proposed Project. According to the weekday trip generation rates provided in **Table 6.0-5**, Alternative 1 is expected to generate a net increase 262 trips during the AM peak hour and a net increase of 105 trips during the PM peak hour. The proposed Project is expected to generate approximately 99 net trips during the AM peak hour and 361 net trips during the PM peak hour. Consequently, Alternative 1 would generate 163 more trips during the AM peak hour and 256 fewer trips during the PM peak hour than the proposed Project. Given that Alternative 1 would result in greater AM peak hour trips than the proposed Project, Alternative 1 could still result in significant traffic impacts during the AM peak hour prior to implementation of mitigation, as would the proposed Project. Impacts would be reduced to less than significant levels for the proposed Project and Alternative 1 with mitigation measures. Since Alternative 1 would result in more AM peak hour trips, operational traffic impacts under Alternative 1 would be incrementally greater than those of the proposed Project during the AM peak hour. However, Alternative 1 would result in fewer PM peak hour trips, and operational traffic impacts under Alternative 1 would be less than those of the proposed Project during the PM peak hour.

Sewage Disposal

Two scenarios were analyzed for the proposed Project. Assuming the proposed Project's sewer laterals connected only to the 8-inch main line within Brea Canyon Cutoff Road, the proposed Project cumulative flows would slightly exceed the design capacity of the Brea Canyon Cutoff Road 8-inch main line between Manhole Nos. 81 (on site) and 74 (off site within Brea Canyon Cutoff Road). Also under this scenario, Project-generated wastewater flows would also contribute to the significant exceedance of the design capacity of a segment of the 8-inch main line farther downstream of the Project site, between Manhole Nos. 72 and 534 (i.e., between Brea Canyon Cutoff Road and Searls Drive). Project implementation may require upsizing approximately 2,300 feet of sewer line, including upsizing of the segment between Manhole Nos. 72 and 537 from 8 inches to 10 inches, and upsizing of the segment between Manhole Nos. 537 and 534 from 10 inches to 12 inches. Under the second scenario modeled for the proposed Project, it was assumed that sewer laterals for 103 units on the Project site would connect to the existing 8-inch main line within Sand Spring Drive, west of the Project site, while the remaining 674 units would connect to the 8-inch main line within Brea Canyon Cutoff Road at Reedview Drive, as under the first scenario. This would avoid exceedance of the design capacity of the sewer line between Manhole Nos. 81 and 74. However, this would not prevent exceedance of the design capacity of the

5 Institute of Transportation Engineers, *Trip Generation*, 7th Edition, Washington, D.C., 2004.

8-inch main line farther downstream of the Project site, between Manhole Nos. 72 and 534 (i.e., between Brea Canyon Cutoff Road and Searls Drive). Project implementation under this scenario may therefore require upsizing the approximately 2,300-foot sewer line segment between Manhole Nos. 72 and 537 from 8 inches to 10 inches, and upsizing of the segment between Manhole Nos. 537 and 534 from 10 inches to 12 inches. Project-related wastewater generation would not contribute to the exceedance of design capacity of any other sewer lines serving the Project site or Project area.

Since adequate capacity to serve the proposed Project as well as current uses exists at the San Jose Creek Water Reclamation Plant (WRP) for treatment, adequate capacity at this facility would also exist to accommodate Alternative 1 since it is projected to produce less wastewater. Mitigation measures required for the proposed Project would also apply to Alternative 1. These include requiring the Applicant to submit a Sewer Area Study for approval and obtain a will-serve letter from LACDPW's Waterworks and Sewer Maintenance Division, and payment of the development's fair share of the costs associated with any required upgrades. Both Alternative 1 and the proposed Project would result in less than significant impacts related to the provision of wastewater services with implementation of mitigation. Because of the reduction in development density, Alternative 1 would generate less sewage as compared to the proposed Project and, therefore, would result in less sewage disposal impacts as compared to the proposed Project.

Education

Unlike the proposed Project, Alternative 1 would not directly generate students in the Rowland Unified School District (RUSD) since no new dwelling units would be developed. Additionally, Alternative 1 assumes that the site would continue to operate as a church and school, and that maximum enrollment could increase to 900 students, as permitted under the current CUP. In contrast, the proposed Project would result in the closure of Southlands Christian Schools and would permanently remove school uses from the site.

District-wide enrollment within the RUSD currently exceeds the district's classroom capacity by 4,485 students. Additionally, the three schools that currently serve the Project site (Ybarra Academy of the Arts and Technology, Alvarado Intermediate School, and Rowland High School) are currently operating above design capacity and are using portable classrooms to alleviate overcrowding. The additional students indirectly and directly generated by the proposed Project would increase the permanent capacity that exists throughout the RUSD, such that impacts on schools would be potentially significant. However, since Alternative 1 would not contribute students to the RUSD, it would avoid the proposed Project's impact on schools.

Public Services (Fire Services)

Construction Impacts

During construction of additional building square footage under Alternative 1, wood framing and other flammable construction materials would be present on the Project site. Construction would be subject to the Los Angeles County code and inspection by County personnel prior to installation of drywall. The use of flagmen, traffic detour plans, haul routes, protective devices, warning signs, and access to abutting properties would aid emergency vehicle response. Alternative 1 would have less than significant fire hazard impacts during construction. However, since Alternative 1 would require less overall construction, it would have less impact on fire services as compared to the proposed Project.

Operational Impacts

Under Alternative 1, impacts related to response time, emergency access, and location within a Very High Fire Hazard Severity Zone would be similar to those associated with the proposed Project. However, since Alternative 1 would not add new residents to the service area, it would generate fewer new fire service calls than the proposed Project. Additionally, since building heights across the site would generally be reduced, Alternative 1 could reduce the need for local water pipe upgrades to meet fire flow requirements. Both the proposed Project and Alternative 1 would have less than significant fire hazard impacts. However, since Alternative 1 would not change the nature of the uses on the Project site and would not add new permanent residents to the service area, impacts on fire services would be less than those of the proposed Project.

Public Services (Sheriff Services)

Construction Impacts

Under Alternative 1, cases of trespass, theft and/or vandalism during any construction would require services from the County Sheriff's Department, but would not typically place undue demands on law enforcement services. The builder and contractor would use private security and flagmen at the construction site, practice general safekeeping of construction equipment, and implement other standard construction practices. However, since Alternative 1 would involve less overall construction, impacts on sheriff services would be less than those of the proposed Project.

Operational Impacts

Under Alternative 1, maximum enrollment could increase by 420 students for a maximum of 900 students, and approximately 136,929 additional square feet of school and church facilities could be

constructed to accommodate the additional students. However, Alternative 1 would not result in a population increase. Therefore, Alternative 1 would not result in an increase to the existing population of Reporting District 2938, which encompasses the Project site. In contrast, the proposed Project would result in a 1.4 percent population increase. The County Sheriff's Department stated that it had no specific concerns about the proposed Project's impacts on staffing or other Sheriff's Department resources. As with the proposed Project, with implementation of the traffic and access mitigation measures, local roadways would continue to operate at levels consistent with County Department of Public Works and the Los Angeles County Sheriff's optimal response time standards would be maintained. Additionally, like the proposed Project, Alternative 1 would generate revenues from property taxes that would be deposited in the County's General Fund and the State Treasury, a portion which would be allocated to maintain staffing and equipment levels for the Walnut/Diamond Bar Sheriff's Station for increased demands. For these reasons, the proposed Project would have less than significant sheriff protection impacts. Since Alternative 1 would not result in a population increase, it would also have a less than significant impact on sheriff services, and less impact than the proposed Project.

Water Service

As shown in **Table 6.0-6**, Alternative 1 would result in a net new potable water demand of approximately 28.76 acre-feet per year (afy). The proposed Project would result in a net demand of approximately 165 afy. A number of design features recommended by the Walnut Valley Water District (Water District), including high-efficiency toilets and urinals, and water-saving faucets, would be incorporated to conserve water. The Water District projects an increased water demand of 4,972 afy between 2010 and 2030. Alternative 1's anticipated net potable water demand of approximately 28.76 afy constitutes less than 5 percent of the projected demand increase. The Water District has sufficient supplies available to meet this projected demand increase. Alternative 1 would have a less than significant impact on the Water District's potable water supply.

Table 6.0-6
Water Demand –Alternative 1

Land Use	Square Feet	Demand Factor	Annual Demand
Proposed			
Church and school	136,929 net new	0.21 afy/1,000 sf[2]	28.76 afy
Net New Demand			**28.76 afy**
Existing			
Southlands Christian Church and Schools	--	--	13.2 afy[1]
Gross Demand			**41.96 afy**

1 *Existing demand is based on data provided by the Walnut Valley Water District. Existing uses on the Project Site are estimated to consume approximately 574,000 cubic feet of water per year over the last 18 years (from 1990 through 2007), which equates to 4,305,000 gallons of water per year or 13.21 afy.*

2 *Based on the existing demand, divided by the existing square footage: 13.2 afy/(63,226 sf) = 0.21 afy/1,000 sf*

Due to the reduction in development density, as well as the maintenance of the turf fields on the site, Alternative 1 would have a greater irrigation demand than the proposed Project. Under the proposed Project, the Project site would be connected to the Water District's reclaimed water system, which would be used for irrigation. However, under Alternative 1, the school would not be required to make such improvements given that development could occur without any further discretionary land use entitlements, and all domestic water demand on the Project site would continue to be met entirely by the Water District's potable water system. Although reclaimed water would not be used, Alternative 1 would still require less potable water than the proposed Project. Alternative 1 would have less than significant impacts on water supply and less impact as compared to the proposed Project.

Utility Service

Electricity

As shown in **Table 6.0-7**, Alternative 1 would result in a net electricity demand of approximately 1,506.3 Megawatt-hours (MWh) per year. Southern California Edison (SCE) will have an available supply of approximately 123,675 gigawatt-hours (GWh)[6] of power in 2018 to meet a projected statewide demand of 121,400 GWh within its service area. Alternative 1 would require less than 0.01 percent of the total 2018 supply. Additionally, new development under Alternative 1 would comply with the energy efficiency standards of the County of Los Angeles' Green Building Ordinance, which require exceedance of the Energy Efficiency Standards contained within Title 24 (2005), the California Building Standards

6 One GWh is equivalent to 1,000 mWh.

Code. Since current projections forecast that electricity generation would meet statewide demand throughout the current planning horizon, Alternative 1 is not anticipated to result in a substantial increase in electricity demand relative to the available supply. Alternative 1 could require the installation of new facilities and equipment, such as transformers, on the Project site, and also could require minor alterations to off-site electrical transmission and distribution infrastructure. Alternative 1 would have a less than significant impact related to electricity with the recommended Project mitigation, and, since it would generate less demand, it would have less electricity impact as compared to the proposed Project.

Table 6.0-7
Electricity Demand –Alternative 1

Land Use	Quantity	Demand Factor (Megawatt-hours/year)	Annual Demand (Megawatt-hours)
Proposed			
Church and school	136,939 sf	0.011[1]	1,506.3
Net New Demand			**1,506.3**
Existing			
Southlands Christian Schools (School and Church)[2]	63,226 sf	0.011[1]	695.5
Gross Demand			**2,201.8**

Consumption factor derived from SCAQMD CEQA Air Quality Handbook, *1993.*
sf = square foot; du = dwelling unit
[1] *Per Square Foot.*
[2] *Rate for church and school uses.*

The proposed Project is estimated to result in a net electricity demand of approximately 3,665.1 MWh per year. Alternative 1 would have a lower electricity demand as compared to the proposed Project. Therefore, Alternative 1 would result in less than significant impacts, and have less electricity impacts as compared to the proposed Project.

Natural Gas

As shown in **Table 6.0-8**, Alternative 1 would result in a gross estimated natural gas demand of 4.8 million cubic feet (mcf) per year. The Gas Company has sufficient gas supplies planned to accommodate the increase in gas demand by all of its market sectors, including residential, commercial, industrial, electric generation, and natural gas vehicle uses, through the current projection period (2008 to 2030). The supply from interstate pipelines is estimated to be 3,875 million cubic feet per day (mcf/d) in 2030. The demand generated by Alternative 1 would result in an additional 3.3 million cubic feet (mcf) per year or

0.009 mcf per day, which represents less than 0.0002 percent of the Gas Company's supply from interstate pipelines in 2030. Therefore, the Gas Company has adequate supply to serve Alternative 1 in addition to its existing commitments. Minor capacity-enhancing alterations to local natural gas transmission and distribution infrastructure may be necessary to serve Alternative 1. Alternative 1 would have a less than significant impact related to natural gas supply infrastructure with Project mitigation.

Table 6.0-8
Natural Gas Demand – Alternative 1

Land Use	Quantity	Monthly Demand Factor[1]	Monthly Demand (cf)	Annual Demand (mcf)
Proposed				
Church and school	136,929 sf	2.0 cf/sf[2]	273,858	3.3
Net New Demand			273,858	**3.3**
Existing				
Southlands Christian Schools (School and Church)	63,226 sf	2.0 cf/sf[2]	126,452	1.5
Gross Demand			**400,310**	**4.8**

[1] *Consumption factors derived from SCAQMD CEQA Air Quality Handbook, 1993.*
[2] *Consumption factor for school and church uses.*
du = dwelling units; sf = square foot; cf = standard cubic feet; mcf = million cubic feet

The proposed Project is estimated to result in a net natural gas demand of approximately 35.8 mcf per year. Alternative 1 would have a lower natural gas demand than the proposed Project. Therefore, Alternative 1 would result in less than significant impacts related to natural gas, and less impacts as compared to the proposed Project.

Solid Waste Service

Construction Impacts

Alternative 1 may require the demolition of some existing structures if school and church facilities are renovated or otherwise upgraded. However, Alternative 1 would result in substantially less demolition than the proposed Project, which would generate approximately 5,000 cubic yards of debris. Additionally, since it would not include subterranean parking, Alternative 1 would require substantially less excavation and soil removal than the proposed Project, which would generate approximately 55,000 cubic yards of earth for export.

For any demolition occurring under Alternative 1, the Applicant would prepare a Waste Management Plan to recycle, at a minimum, 65 percent of the construction and demolition debris and utilize methods

to promote recycling and re-use of materials, as well as safe disposal. Waste generated during demolition and construction that is not recycled would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities generally within Los Angeles County. Trash and wood would be delivered to the Puente Hills Recovery Facility, which has the capacity to accommodate the approximately 3,250 cubic yards of recyclable demolition and construction debris from the Project that would be delivered. Earth material and the remaining construction and demolition debris would be disposed of at the Puente Hills Landfill. Since this landfill has the capacity to accommodate the 55,000 cubic yards of earth material removed by the proposed Project, it would also have the capacity to accommodate any earth material and non-recycled construction and demolition debris disposed of by Alternative 1. Alternative 1 would have less than significant construction impacts. However, Alternative 1 would involve substantially less soil removal and demolition, and therefore have less impacts related to solid waste service, as compared to the proposed Project.

Operational Impacts

As shown in **Table 6.0-9**, Alternative 1, beginning in 2012, would generate approximately 178 net tons of solid waste per year, of which 89 net tons would be disposed into landfills assuming a 50 percent waste diversion rate. Alternative 1 would recycle a minimum of 50 percent until 2015, when it would be required to recycle a minimum of 60 percent of the solid waste generated, in accordance with current state law and in compliance with the prepared Waste Management Plan. As shown in **Table 6.0-10**, Alternative 1 would reduce annual landfill disposal to 71.2 net tons beginning in 2015. Alternative 1 would include a solid waste diversion program (e.g., adequate areas for collecting and loading recyclables) and would result in Alternative 1 meeting at least the minimum recycling level established by Los Angeles County in accordance with AB 939. Waste requiring disposal would be transported to the Puente Hills Landfill and, eventually, the Mesquite Regional Landfill. Waste generated under Alternative 1 would result in an approximately 0.002 percent increase in the total volume of solid waste disposal at Puente Hills Landfill until 2015, and a decrease after 2015.[7] This increase in outflow is not considered substantial and Alternative 1 would have less than significant operational impacts, and less solid waste impact as compared to the proposed Project.

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7 Total disposal into the Puente Hills Landfill in 2006 was 3.823 million tons.

Table 6.0-9
Solid Waste Disposal until 2015 – Alternative1

Land Use	Units	Generation Factor	Annual Generation (tons/year)	Waste to be Diverted (50 Percent) (tons/year)	Remainder Disposed in Landfill
Proposed					
Church and school	136,929 sf	1.3 tons/1,000 sf/year[1]	178	89	89
Net New Generation			**178**	**89**	**89**
Existing Uses			82.2	41.1	41.1
Gross Generation			**260.2**	**130.1**	**130.1**

du = dwelling unit
1 Based on the existing generation, divided by the existing square footage: 82.2 tons/63,226 sf = 1.3 tons/1,000 sf

Table 6.0-10
Solid Waste Disposal After 2015 – Alternative 1

Land Use	Units	Generation Factor	Annual Generation (tons/year)	Waste to be Diverted (60 Percent) (tons/year)[2]	Remainder Disposed in Landfill
Proposed					
Church and school	136,939 sf	1.3 tons/1,000 sf/year[1]	178	106.8	71.2
Net New Generation			**178**	**106.8**	**71.2**
Existing Uses			82.2	41.1	41.1
Gross Generation			**260.2**	**147.9**	**112.3**

du = dwelling unit
1 Based on the existing generation, divided by the existing square footage: 82.2 tons/63,226 sf = 1.3 tons/1,000 sf
2 A 50 percent diversion rate was used for the existing uses, since they would cease to operate upon implementation of Alternative 1 and therefore would not exist in 2015 when the 60 percent diversion rate is to take effect.

Parks and Recreation

Rowland Heights presently has a local parkland deficit of approximately 160 acres and a regional parkland deficit of approximately 30,692 acres. Under Alternative 1, maximum school enrollment could increase by 420 students to a maximum of 900 students, and approximately 136,929 net new square feet of school and church facilities could be constructed on the site. However, Alternative 1 would not result in a

permanent population increase. Therefore, Alternative 1 would not affect local or regional parkland-to-resident ratios and no impact would occur. Since the proposed Project would increase demand for parks and recreational resources, increasing existing deficits in the ratios of local and regional parkland to residents, Alternative 1 would have less impact on parks and recreation as compared to the proposed Project.

Library Service

Construction Impacts

Construction activities associated with the Project and Alternative 1 would not generate a permanent residential population. Therefore, no impacts on library services would occur as a result of the Project and Alternative 1 construction.

Operational Impacts

Rowland Heights Library currently does not meet the standard of 0.50 gross square feet of library space per resident, 2.75 library items (books, magazines, periodicals, etc.) per capita, and 1 computer per 1,000 residents. However, unlike the proposed Project, Alternative 1 would not result in an increase in population. Therefore, no additional demand for library resources would occur. As a result, Alternative 1 would have no impact on the library services and impacts would, therefore, be less than those of the proposed Project.

Population, Housing, and Employment

Operational Impacts

Under Alternative 1, maximum enrollment could increase by 420 students to a maximum of 900 students, and approximately 136,929 net new square feet of school and church facilities could be constructed to accommodate the additional students. Unlike the proposed Project, Alternative 1 would not result in an increase in population or households to the unincorporated San Gabriel Valley Council of Governments (SGVCOG) subregion. Therefore, Alternative 1 would have no impacts related to population or housing, and less impacts as compared to the proposed Project.

The increase in students and school and church facilities could result in an increase in employment at the school and church. This increase in employment would help to offset the 2010 jobs/housing imbalance of 0.96:1 in the unincorporated SGVCOG subregion. Therefore, like the proposed Project, Alternative 1 would have a less than significant impact on the jobs/housing imbalance. However, since Alternative 1 could add jobs to the Rowland Heights community, unlike the proposed Project, Alternative 1 would

result in a decrease in the jobs/housing imbalance. Accordingly, impacts related to the jobs/housing imbalance would be less than those of the proposed Project.

Land Use

The Rowland Heights Community General Plan designates the Project site for "U1" Urban 1 uses. Additionally, the Project site is presently zoned A-1, Light Agriculture, by the County Zoning Ordinance. Alternative 1 is consistent with these existing designations. Therefore, no General Plan Amendment or Zone Change would be required. The proposed Project would require both a General Plan Amendment and Zone Change to allow multi-family uses on the Project site. Additionally, the proposed Project would require the creation of a new site-specific land use designation, U6, that would permit a density of 36 to 50 dwelling units per gross acre.

School and church uses are allowed in an A-1 zone with a Conditional Use Permit, and thus Alternative 1 would be consistent with the zoning classification for the site. Further, urban classifications can include schools and churches, and thus Alternative 1 would be consistent with the Community Plan designation for the site.

Accordingly, Alternative 1 would have less than significant land use impacts. Moreover, Alternative 1 would avoid the Project's significant and unavoidable impacts related to the need for a new site-specific land use designation.

Environmental Safety

Construction Impacts

Alternative 1 could involve demolition of some existing structures on the Project site as school and church facilities are renovated, upgraded and expanded. The oldest structures on the Project site have building materials containing asbestos and lead-based paint. This poses a potentially significant impact during demolition. However, all asbestos containing materials and lead based paints would be removed during construction in accordance with SCAQMD's regulations and mitigation measures similar to those of the proposed Project. Therefore, like the proposed Project, Alternative 1 would have less than significant impacts during construction. However, since less demolition would be required under Alternative 1 than under the proposed Project, impacts associated with construction safety would be less than those of the proposed Project.

Operational Impacts

Similar to the proposed Project, Alternative 1 would develop land uses that would not use or generate large quantities of hazardous and/or toxic materials. The handling of hazardous materials would be limited to the use and disposal of household substances such as unused paint, aerosol cans, cleaning agents (solvents), landscaping related chemicals, and automotive supplies (by products). These materials are generally disposed of at non-hazardous Class II and III landfills. Compliance with County regulations for the use, storage, and disposal of hazardous materials would result in less than significant impacts. Since Alternative 1 would have a lower development density as compared to the proposed Project, impacts associated with the handling of hazardous materials would be less than those of the proposed Project.

Relationship to Project Objectives

Key Residential Objectives

Under Alternative 1, on-site facilities would be occupied by educational and religious uses similar to those recently operating on the Project site. Occupancy with similar uses would not require any discretionary approvals from the County. Alternative 1 would not result in the construction of new multi-family residences or the recreational amenities associated with the proposed Project. Because no residential uses of any kind (i.e., neither multi- nor single-family) would be developed on the site, none of the five Key Residential Objectives would be achieved:

1. Assist Los Angeles County in meeting the housing needs of its residents by contributing to the fulfillment of Los Angeles County's SCAG Regional Housing Needs Assessment (RHNA) allocation for moderate-income and above-moderate-income units, which requires the County to accommodate expected growth by ensuring the availability of residential sites at adequate densities and appropriate development standards in unincorporated areas, as stated in the Los Angeles County General Plan Housing Element.

2. Provide new multi-family rental housing in the unincorporated Los Angeles County Rowland Heights area that is presently underserved by lifestyle multi-family residential uses that include various leisure and recreational amenities for residents, and increase the diversity of housing options as recommended by the Housing Element of the Rowland Heights Community General Plan.

3. Provide high-quality multi-family housing options without displacing existing residential uses.

4. Provide a diverse multi-family residential unit mix to meet the needs of a variety of tenants.

5. Provide sufficient outdoor gathering spaces and recreational amenities on the Project site to meet the needs of Project residents and reduce demand for off-site park and recreational facilities.

As a result, Alternative 1 would not help meet the County's need for 23,862 above moderate income housing units as allocated by the RHNA.

Key Sustainability Objectives

Because no housing would be developed on the site, Alternative 1 would not achieve the following Key Sustainability Objectives:

2. Locate multi-family housing on an urban infill site within an urban growth boundary and already served by existing infrastructure.

3. Provide multi-family housing in proximity to existing employment centers in the eastern San Gabriel Valley, including the City of Industry, the major employment center for the San Gabriel Valley, Diamond Bar, and Pomona.

4. Encourage pedestrian activity and minimize vehicle use by providing higher-density housing in proximity to existing neighborhood-serving retail and commercial uses.

5. Locate multi-family housing in an area well served by mass transit, including bus and rail, to reduce Project-related vehicle miles traveled.

6. Locate multi-family housing on a site well served by the local and regional roadway network.

Because it is assumed that several existing buildings on the site would be retained under Alternative 1, the green building techniques identified by the County of Los Angeles Green Building Ordinance for the construction of new buildings would not be incorporated to the same extent as under the proposed Project. These are intended to conserve water, energy, and natural resources; divert waste from landfills; minimize impacts to existing infrastructure; and promote a healthier environment. Therefore, Alternative 1 would not achieve the following Key Sustainability Objective to the same extent as the proposed Project:

1. Implement sustainable design features that incorporate the *California Build It Green Multi-Family GreenPoint Checklist* of sustainable, green design principles into site location, site design, building construction techniques, and building materials.

Additional Project Objectives

It is assumed that the streetscape improvements proposed by the proposed Project would not be implemented under Alternative 1. Therefore, the following Additional Project Objective would not be achieved:

3. Provide streetscape improvements that enhance the visual environment of the neighborhood and encourage pedestrian activity within the Project site as well as between the site and nearby retail and commercial land uses.

Since no housing would be developed and Alternative 1 would not be compatible with adjacent land uses, the following Additional Project Objective would not be achieved:

2. Build housing that is physically compatible with adjacent land uses.

Alternative 1 would meet the following two Additional Project Objectives, since the existing topography could still be utilized to minimize visual impacts and parking demand could be accommodated on the site.

1. Utilize existing topography to minimize the visual impact of proposed buildings.

4. Meet all Project-related parking demand on the Project site.

Overall, this Alternative would not meet any of the five Key Residential Objectives; would not achieve any of the Sustainability Objectives; and would fully achieve one Additional Project Objective and not achieve two of the Additional Project Objective at all.

Alternative 2: Single-Family Residences

Description of Alternative 2

The Project site is currently zoned A-1, Light Agriculture, which allows development of single family residences. This designation allows the following by-right permitted uses: light agricultural uses, adult residential facilities, crops, family childcare homes, foster family homes, group homes, single-family residences, second units, and small family homes for children. The Rowland Heights Community General Plan land use designation for the Project site is "U1" Urban 1, which permits very low density (hillside) residential, large-lot residential and single-family detached units, between 1.1 and 3.2 dwelling units per gross acre, and a minimum lot size of 10,000 square feet. Lot sizes under the U1 designation are typically between 10,000 and 30,000 square feet. Since the Project site currently consists of only two lots, a residential subdivision application to divide the land would be requested to develop Alternative 2.

Alternative 2 assumes redevelopment of the Project site with 50 single-family residences, the maximum permitted under the current zoning and land use designations (15.7 gross acres x 3.2 dwelling units per gross acre). The average lot size would be between 10,000 and 30,000 square feet, with the remainder of area on the Project site used for roadways and sidewalks. The maximum building height would be two stories, or 24 feet, above finished grade, consistent with the building heights of surrounding uses.

Construction of Alternative 2 would involve demolition of asphalt paving and the existing structures, site grading, and construction of the new buildings, roadways, and related improvements. No excavation for subterranean parking would be required under Alternative 2.

Geotechnical and Soil Resources

Construction Impacts

Alternative 2 would be subject to the same geotechnical hazards and site conditions as the proposed Project. These include potential hazards due to groundwater level, liquefaction, subsidence and hydrocompaction, differential settlement, expansive soils, and slope instability, which pose potentially significant impacts on the Project site. Several of the mitigation measures designed to remove hazardous geological conditions for the proposed Project would also be applicable to Alternative 2. With mitigation, both Alternative 2 and the proposed Project would have less than significant impacts. However, since Alternative 2 would not require the construction of subterranean parking, whereas the proposed Project would construct a partially subterranean structure as part of the Podium building, Alternative 2 would require less excavation and less construction dewatering than the proposed Project. Additionally, building heights across the site would be lower than those of the proposed Project and no more than two stories, reducing the required depth of excavation for footings. Therefore, construction of Alternative 2 would result in less impact related to geotechnical and soil resources compared to the proposed Project.

Operational Impacts

Alternative 2 would not require the construction of any subterranean parking, whereas the proposed Project would construct a partially subterranean structure as part of the Podium building. Therefore, implementation of Alternative 2 would not require permanent dewatering. Alternative 2 would have less than significant operational impacts related to geotechnical and soil resources and impacts would be less than those of the proposed Project.

Hydrology, Drainage, and Water Quality

Construction Impacts

Under Alternative 2, the removal of vegetation and other soil-stabilizing features during construction could accelerate wind and water driven erosion of soils that would increase sedimentation during storm events. During construction, dewatering would be achieved with temporary dewatering wells, storage tanks, and filters. The Applicant would obtain a National Pollutant Discharge Elimination System permit for demolition and construction, and would comply with all applicable requirements of the National Pollutant Discharge Elimination System program. The Applicant would also prepare a Stormwater Pollution Prevention Plan containing Best Management Practices, structural treatment and source control measures. Implementation of Best Management Practices would ensure that the Los Angeles Regional Water Quality Control Board water quality standards are met during construction activities. Like the

proposed Project, Alternative 2 would have less than significant construction impacts related to hydrology, drainage, and water quality. However, since Alternative 2 would require less overall construction (i.e., no excavation for subterranean parking would be required), impacts would be incrementally less.

Operational Impacts

Currently, approximately 70 percent of the Project site is developed with buildings and pavement, and the proposed Project would likewise achieve lot coverage of approximately 70 percent. Alternative 2 would result in a reduction of pervious surfaces on the Project site, and therefore result in lower runoff volumes, compared to the proposed Project. Under the proposed Project as well as Alternative 2, drainage facilities on the site would be designed to hold and detain the increase in flows, such that impacts related to post-occupancy surface runoff volume would be less than significant. Therefore, Alternative 2 impacts related to surface runoff volumes would be less than significant, and less than those associated with the proposed Project because of the reduction in pervious surfaces on the site as compared to the Project.

Regarding compliance with Los Angeles Regional Water Quality Control Board requirements, the Applicant would be required under both Alternative 2 and the proposed Project to implement a Standard Urban Storm Water Mitigation Plan to ensure that potential stormwater pollution is addressed by Best Management Practices incorporated into project design. Discharge from the permanent dewatering system associated with the proposed Project could contribute suspended solids and organic material, and therefore dewatering would require a National Pollutant Discharge Elimination System Permit for Groundwater Discharge. With compliance with National Pollutant Discharge Elimination System and Standard Urban Storm Water Mitigation Plan requirements, the proposed Project's potential water quality impacts would be less than significant. Parking under Alternative 2 would likely be provided in attached garages and no subterranean parking structures would be developed. Therefore, minimal or no permanent dewatering would be required. Therefore, a National Pollutant Discharge Elimination System Permit for Groundwater Discharge would not be required under Alternative 2. For this reason, water quality impacts would be less as compared to the proposed Project.

Noise

Noise impacts are evaluated in two categories: construction noise sources and operational noise sources. Construction-related noise sources are associated with construction activities such as demolition, earthmoving, and the use of construction equipment. Operational noise is primarily associated with

stationary sources such as rooftop mechanical equipment and mobile sources such as vehicles traveling to and from the Project site.

Construction Impacts

Under Alternative 2, the number of proposed residential units would be reduced from 775 multi-family units to 50 single-family residential units. Given the reduced density of Alternative 2, excavation and construction durations for Alternative 2 would be shorter in duration as compared to the proposed Project. Construction of Alternative 2 would necessitate the use of construction equipment on the Project site. Construction-related noise and groundborne vibration would be comparable to those generated during proposed Project construction, and as with the proposed Project impacts would remain significant and unavoidable even with implementation of proposed mitigation measures. However, the duration of construction would be reduced and impacts would therefore be less than those of the proposed Project.

Operational Impacts

Alternative 2 would develop 50 single-family residential units compared to 775 multi-family units under the proposed Project. Therefore, Alternative 2 would generate fewer peak hour trips to and from the Project site, and consequently, lower roadway noise, than the proposed Project. Off-site roadway noise would be less than significant and would be less than those associated with the proposed Project.

Occupancy of Alternative 2 at buildout would generate temporary and periodic noise level increases typically associated with residential activities. These sounds may include people conversing in outdoor spaces, doors slamming, horns honking, HVAC equipment, operation of landscaping equipment, personal stereos audible through open doors and windows, vehicles entering and exiting the Project site, and domestic animals. Since such temporary and periodic noise level increases are common within residential areas and therefore not considered substantial, impacts during operation under Alternative 2 would be less than significant, and, because of the reduced density on the Project site (fewer residential units and a reduced residential population), impacts resulting from operation would be less than the proposed Project.

Air Quality

Air quality impacts are evaluated for two categories: construction emissions and operational emissions. Construction-related emissions are associated with construction activities such as demolition, earthmoving, use of construction equipment, and application of coatings to surfaces. Operational emissions are primarily associated with mobile source emissions based on vehicle trips generated by the proposed Project.

Construction Impacts

Under Alternative 2, the Project site would be developed with 50 single-family residential dwellings. Overall construction activity associated with Alternative 2 would be less than that of the proposed Project. While the site would require similar levels of demolition, no excavation for subterranean parking would be required. Building construction would likely occur at a daily rate that is similar to the proposed Project, although less overall building construction would take place. Alternative 2 could still result in NO_X emissions that exceed the SCAQMD's daily emissions thresholds during the grading phase of Project construction. However, since Alternative 2 does not require excavation, it is likely that the PM_{10} and $PM_{2.5}$ emissions would be less than those of the proposed Project and would result in a less than significant impact.

Under the proposed Project, the LST impact would be reduced to less than significant levels with mitigation, with the exception of PM_{10}, which would remain significant and unavoidable. While Alternative 2 would result in fewer overall emissions as compared to the proposed Project, the proposed Project mitigation measures would still be required and applicable. Accordingly, this Alternative's construction-related air quality impacts would be less than those of the proposed Project.

Operational Impacts

As discussed in **Section 5.4**, vehicle trips associated with the proposed Project would generate net emissions that exceed the South Coast Air Quality Management District (SCAQMD) thresholds for Volatile Organic Compounds, or VOCs, an evaporative emission and a by-product of combustion that is a precursor to ozone formation, during both summer and winter. Therefore, Project-related operational emissions of VOC would result in a significant impact on air quality in the region. During operation, Alternative 2 would increase the number of daily vehicle trips generated from existing levels by 479; however, the number of vehicle trips under Alternative 2 would be less than under the proposed Project (5,208 daily vehicle trips). As shown in **Table 6.0-11, Comparison of Proposed Project and Alternative 2: Unmitigated Operational Emissions**, operational emissions associated with Alternative 2 would not exceed the SCAQMD thresholds for any pollutant. Operational emissions under Alternative 2 would be less than significant and less than those of the proposed Project.

Table 6.0-11
Comparison of Proposed Project and Alternative 2: Unmitigated Operational Emissions

Pollutant	SCAQMD Threshold	Proposed Project	Proposed Project Exceeds Threshold?	Alternative 2	Alternative 2 Exceeds Threshold?
Net Summertime Emissions (pounds per day)[1]					
VOC	55	70.25	**YES**	-2.59	NO
NO_X	55	47.47	NO	-0.89	NO
CO	550	361.73	NO	-13.08	NO
SO_X	150	0.44	NO	0.00	NO
PM_{10}	150	70.34	NO	0.33	NO
$PM_{2.5}$	55	13.72	NO	0.07	NO
Net Wintertime Emissions (pounds per day)[2]					
VOC	55	71.64	**YES**	-1.19	NO
NO_X	55	55.25	**YES**	-0.83	NO
CO	550	345.43	NO	-14.37	NO
SO_X	150	0.36	NO	0.00	NO
PM_{10}	150	70.33	NO	0.35	NO
$PM_{2.5}$	55	13.71	NO	0.09	NO

Source: Impact Sciences, Inc., (2009). Emissions calculations are provided in ***Appendix 6.0****.*
Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations. Net emissions include credit for emissions from the existing land use.
[1] *"Summertime Emissions" are representative of the conditions that may occur during the ozone season (May 1 to October 31).*
[2] *"Wintertime Emissions" are representative of the conditions that may occur during the balance of the year (November 1 to April 30).*

Table 6.0-11 provides a comparison of the anticipated operational emissions from Alternative 2 to the emissions from the proposed Project. As shown in the table, the net operational emissions of Alternative 2 are less than those of the proposed Project. Therefore, Alternative 2 would result in less operational air quality impacts as compared to the proposed Project.

Climate Change

Climate change impacts are evaluated for two categories: construction related greenhouse gas (GHG) emissions and operational GHG emissions. While no state or local agency has formally adopted numerical significance thresholds related to GHG emissions, the Governor's Office of Planning and Research has released guidance on addressing climate change in CEQA and the Natural Resources Agency has adopted amendments to the *State CEQA Guidelines* establishing criteria for evaluating GHG

emissions. CARB has also released a *Climate Change Scoping Plan* that discusses the strategies and measures CARB is intending to adopt for the state to achieve the goals of AB 32.

Construction Impacts

Under Alternative 2, the Project site would be developed with 50 single-family residential dwellings. Some phases of construction activity associated with Alternative 2 would be similar to that of the proposed Project, as the site would require similar levels of demolition. Building construction would likely occur at a daily rate similar to the proposed Project; however, Alternative 2's overall building construction would be less than the Project. No excavation for the construction of a subterranean parking structure would be required under Alternative 2. Therefore, Alternative 2 would generate less construction-related GHG emissions as compared to the proposed Project.

Operational Impacts

Under Alternative 2, the average daily trips would be reduced compared to the proposed Project. In addition, Alternative 2 would provide housing for a reduced population. Like the proposed project, Alternative 2 would comply with the County of Los Angeles Green Building Program and reduce energy consumption by a minimum of 15 percent beyond the Energy Efficiency Standards contained within the Title 24 (2005), the California Building Standards Code, and would incorporate similar water efficient appliances, landscaping, and other features. The estimated maximum annual GHG emissions associated with operation of the proposed Project and Alternative 2 are shown in **Table 6.0-12, Comparison of Proposed Project and Alternative 2: Unmitigated Annual GHG Net Emissions**.

Table 6.0-12
Comparison of Proposed Project and Alternative 2: Unmitigated Annual GHG Net Emissions

Pollutant	Proposed Project	Alternative 2
	Net Annual Emissions (metric tons per year)	
CO_2e	9,630.30	138.01

Source: Impact Sciences, Inc., (2009). Emissions calculations are provided in ***Appendix 6.0****.*

Based on the unmitigated GHG emissions presented in the table above, the net total annualized emissions for Alternative 2 would be reduced compared to the proposed Project. Alternative 2 would therefore result in impacts that would be less than those associated with the proposed Project. Alternative 2 would implement design features and mitigation measures that would be generally consistent with measures

recommended by the *Climate Change Scoping Plan* for AB 32, Office of Planning and Research (OPR) guidance, the *2006 Climate Action Team Report*, and the County of Los Angeles Green Building Program; however, Alternative 2 would not meet some of the policies seeking higher density residential uses. Measures that would be implemented include energy-efficiency features, water conservation features, and drought-tolerant landscaping and would be similar to those measures listed in **Section 5.5, Climate Change**. Therefore, Alternative 2 would be consistent with the goals, strategies, and control measures established under these guidelines and programs and would result in a less than significant operational climate change impact.

Cumulative Impacts

Compared to the estimated GHG for all sources in California, the Project's and Alternative 2's contribution to global climate would be imperceptible. As discussed above, the proposed Project and Alternative 2 are consistent with the goals, strategies, and control measures established under AB 32, and with applicable Attorney General, Office of Planning and Research, and 2006 Climate Action Team Report recommended measures for the reduction of GHGs. No quantitative emission thresholds or similar criteria have been established to evaluate the cumulative impact of a single project on global climate. However, based on the findings that the Project and Alternative 2 incorporate energy and water efficiency measures as well as objectives and GHG reduction measures consistent with the County of Los Angeles Green Building Program that would reduce the contribution to cumulative GHG emissions, the Project and Alternative 2 are consistent with the goals, strategies, and control measures established under AB 32, Office of Planning and Research Guidance, the 2006 Climate Action Team Report, and the Los Angeles County Green Building Program. As with the proposed Project, Alternative 2 would have a less than significant cumulative impact on global climate change. Since Alternative 2 would result in less GHG emissions as compared to the proposed Project, Alternative 2 would result in a less than considerable contribution to cumulatively significant global climate change impacts.

Visual Quality

Aesthetics and Views

Construction Impacts

Construction of Alternative 2 would periodically subject the site and neighboring land uses to the presence of construction equipment, incomplete (under construction) buildings and structures, stockpiled cut soil material, and areas in landscaping transition. Like the proposed Project, Alternative 2 would result in less than significant construction-related aesthetic impacts with implementation of mitigation requiring that the construction site be screened from street-level view with appropriate fencing and

barriers. However, since Alternative 2 would require less construction, impacts would be incrementally less than those associated with the proposed Project.

Operational Impacts

The Project site is not visible from any state-designated scenic highways, but is visible from Brea Canyon Cutoff Road, which is designated as a limited secondary highway by the Rowland Heights Community General Plan, which is a classification, intended to protect routes in rural areas. However, the Brea Canyon Cutoff Road corridor has been heavily urbanized since the designation was issued. Furthermore, the Project site is adjacent to Colima Road, which is a major highway and heavily developed commercial corridor. Views of the Project site from other off-site vantage points are limited due to intervening residential development, vegetation, and hillside topography. Therefore, like the proposed Project, Alternative 2 would have less than significant impacts on scenic vistas.

Alternative 2 would develop the Project site with 50 single-family residences at a maximum building height of two stories. Alternative 2 is consistent with the Rowland Heights Community General Plan land use designation for the site, and with the character, building height, and massing of nearby single-family residences west of Brea Canyon Cutoff Road. These include large-lot, rural-style homes along Reedview Drive and smaller, bungalow-style homes along Sand Spring Drive. However, Alternative 2 would place low-density single-family residences directly adjacent to the commercial uses on Colima Road and to higher-density residential uses, including the senior housing complex on Colima Road and the multi-family residences along Drusilla Way, Esquiline Avenue, Bithynia Way, Ostia Way, and Latium Way. Therefore, Alternative 2 would not be visually consistent with these adjacent uses. Nevertheless, due to the reduced building height and development density, overall impacts under Alternative 2 would be less than significant and less than those associated with the proposed Project.

Light and Glare

Construction Impacts

During construction of Alternative 2, nighttime lighting would only be required for security purposes since no nighttime construction would occur. Security lighting during construction would be limited to only those areas of the site requiring illumination and all security lights would be properly shielded and projected downwards. Additionally, construction activities would not create sources of glare since construction is not expected to involve bright light sources or highly reflective surfaces that would be reflective or visible from off site. Both the proposed Project and Alternative 2 would result in potentially significant impacts that would be reduced to less than significant with mitigation. However, since Alternative 2 would require less construction, impacts would be less than those of the proposed Project.

Operational Impacts

During operation, neither the proposed Project nor Alternative 2 would introduce any sources of substantial light or glare. Proposed lighting would be used to create a safe, adequately illuminated nighttime environment on the Project site. Most sources of lighting would be shielded from off-site vantage points by surrounding structures and landscaping. Exterior lighting would incorporate low-intensity downlights, louvers, shields, hoods or other screening devices, and all proposed light sources would be directed downward to limit light spillover and glare generation. Building setbacks and perimeter landscaping would also reduce the potential for glare and light spillover onto neighboring uses. Therefore, both the proposed Project and Alternative 2 would have less than significant light and glare impacts with implementation of mitigation. However, since Alternative 2 would result in a reduced development density on the Project site, impacts associated with light and glare would be less than those of the proposed Project.

Shade and Shadow

Alternative 2 would not cast substantial off-site shadows given the maximum building height of 24 feet, and the increased setbacks from off-site uses. Under the proposed Project, the Podium Building in the northern portion of the site would cast shadows approximately 90 to 110 feet to the north over the senior housing complex. Therefore, shade and shadow impacts would be significant and unavoidable under the proposed Project. However, due to the reduction in building height and development density across the site, Alternative 2 would have less than significant shading impacts and would avoid the proposed Project's significant shading impacts.

Traffic, Parking, Circulation and Access

Under Alternative 2, the Applicant would reduce the residential component of the proposed Project from approximately 775 multi-family units to approximately 50 single-family residential units.

Construction Impacts

Given the reduced density of Alternative 2, excavation and construction durations for Alternative 2 would be shorter in duration as compared to the Project. Although the overall construction duration of Alternative 2 is shorter than the proposed Project, construction of Alternative 2 could cause similar traffic disruptions as the proposed Project due to construction activities. Like the proposed Project, implementation of mitigation such as a Construction Management Plan would reduce traffic impacts associated with construction of Alternative 2 to less than significant.

As with the proposed Project, Alternative 2 would result in less than significant parking impacts during construction since construction worker parking would be accommodated on site. Alternative 2 would require less construction, and would therefore have less of a construction-related traffic impact, than the proposed Project.

Operational Impacts

Peak hour trip rates used for Alternative 2 were calculated based on the 7th Edition of the *Trip Generation* manual, published by the ITE,[8] which is the current industry standard for trip generation data. Credit for traffic generated by the existing uses was applied to traffic generated by Alternative 2 because the existing uses would cease to operate within the study area. Weekday trip rates for Alternative 2 are listed in **Table 6.0-13, Trip Generation Rates – Alternative 2**. Estimated trip generation for Alternative 2, which takes into account trip credit for existing uses, is provided in **Table 6.0-14, Trip Generation – Alternative 2.**

Under Alternative 2, the Applicant would reduce the residential component of the proposed Project from approximately 775 multi-family units to approximately 50 single-family residential units. Consequently, Alternative 2 would generate fewer daily, AM, and PM peak hour trips than the proposed Project. As a result, Alternative 2 would reduce the number of AM and PM peak hour vehicle trips to and from the Project site. Additionally, according to the calculations based on the 7th Edition of the *Trip Generation* manual, published by the ITE,[9] Alternative 2 would result in a total of 479 daily trips, whereas the proposed Project would result in 5,208 daily trips. As such, Alternative 2 would result in fewer daily trips. Therefore, intersection impacts associated with Alternative 2 would be less than those associated with the proposed Project.

Table 6.0-13
Trip Generation Rates - Alternative 2

Land Use[1]	Quantity	Trip Generation Rate	Daily Trips Total	AM Peak Hour Total	PM Peak Hour Total
50 Single-Family Residential Units	50 du	9.57	479	0.75	1.01

Source: Institute of Transportation Engineers, Trip Generation*, 7th Edition, Washington, D.C., 2004*

[1] *Generation rates for the AM and PM peak hours are based on manual traffic counts conducted on February 14, 2008 at the driveways of the existing Southlands Christian Schools; however, the ITE rate was used to calculate the daily trips, since counts were not conducted for daily trips.*

8 Institute of Transportation Engineers, *Trip Generation*, 7th Edition, Washington, D.C., (2004).

9 Institute of Transportation Engineers, *Trip Generation*, 7th Edition, Washington, D.C., (2004).

Table 6.0-14
Trip Generation - Alternative 2

Land Uses	Quantity	Daily Trips	AM Peak Hour Total	PM Peak Hour Total
50 Single-Family Residential Units	50 du	479	38	50
Existing Private School	480 students	619	296	120
Alternative 2 – Net Increase in Trips		**-140**	**-258**	**-70**

Source: Institute of Transportation Engineers, Trip Generation, *7th Edition, Washington, D.C., 2004; Impact Sciences, Inc., 2009.*

[1] *Generation rates for the AM and PM peak hours are based on manual traffic counts conducted on February 14, 2008 at the driveways of the existing Southlands Christian Schools; however, the ITE rate was used to calculate the daily trips, since counts were not conducted for daily trips.*

Parking supply associated with Alternative 2 would meet the County requirement for single-family residential uses noted in Section 22.52.1180. Therefore, parking impacts under Alternative 2 would be less than significant and similar to impacts associated with the proposed Project.

Sewage Disposal

Two scenarios were analyzed for the proposed Project. Assuming the proposed Project's sewer laterals connected only to the 8-inch main line within Brea Canyon Cutoff Road, the proposed Project cumulative flows would slightly exceed the design capacity of the Brea Canyon Cutoff Road 8-inch main line between Manhole Nos. 81 (on-site) and 74 (off-site within Brea Canyon Cutoff Road) and between Manhole Nos. 72 and 534 (i.e., between Brea Canyon Cutoff Road and Searls Drive). Project implementation may require upsizing approximately 2,300 feet of sewer line, including upsizing of the segment between Manhole Nos. 72 and 537 from 8 inches to 10 inches, and upsizing of the segment between Manhole Nos. 537 and 534 from 10 inches to 12 inches. Under the second scenario modeled for the proposed Project, it was assumed that sewer laterals for 103 units on the Project site would connect to the existing 8-inch main line within Sand Spring Drive, west of the Project site, while the remaining 674 units would connect to the 8-inch main line within Brea Canyon Cutoff Road at Reedview Drive. This would result in the exceedance of the design capacity of the 8-inch main line farther downstream of the Project site, between Manhole Nos. 72 and 534 (i.e., between Brea Canyon Cutoff Road and Searls Drive). Project implementation under this scenario may therefore require upsizing the approximately 2,300-foot sewer line segment between Manhole Nos. 72 and 537 from 8 inches to 10 inches, and upsizing of the segment between Manhole Nos. 537 and 534 from 10 inches to 12 inches.

Given that Alternative 2 would develop 725 fewer units than the proposed Project, Alternative 2 would generate less sewage than the proposed Project. Since adequate capacity exists to serve the proposed Project as well as current uses at the San Jose Creek Water Reclamation Plant (WRP) for treatment, adequate capacity at this facility would also exist to accommodate Alternative 2. Mitigation measures applied to the proposed Project would also apply to Alternative 2. These include requiring the Project Applicant to submit a Sewer Area Study for approval and obtain a will-serve letter from LACDPW's Waterworks and Sewer Maintenance Division, and payment of the development's fair share of the costs associated with any required upgrades. Both Alternative 2 and the proposed Project would result in less than significant impacts related to the provision of wastewater services with implementation of mitigation. However, due to the reduction in the number of residential units, Alternative 2 would generate a lower annual quantity of sewage than the proposed Project. Therefore, impacts associated with sewage disposal would be less than those of the proposed Project.

Education

The 50 single-family residences proposed under Alternative 2 would directly generate approximately 36 new students in the Rowland Unified School District (RUSD), as shown in **Table 6.0-15**. Additionally, with the closure of the Southland Christian Schools, Alternative 2 may indirectly contribute to the addition of approximately 288 students (60 percent of the current maximum student enrollment at the Southland Christian Schools) to RUSD schools. Enrollment within the RUSD currently exceeds the district's permanent classroom capacity by 4,485 students district wide. Additionally, the three schools that currently serve the Project site (Ybarra Academy of the Arts and Technology, Alvarado Intermediate School, and Rowland High School) are currently operating above original design capacity and are using portable classrooms to accommodate the student population. The additional students indirectly and directly generated by Alternative 2 would add to the current deficit in permanent capacity that exists throughout the RUSD, such that impacts to schools would be potentially significant. However, Alternative 2 would be subject to the same mitigation measure applicable to the proposed Project. This mitigation requires the Applicant to pay school impact fees to the RUSD prior to the issuance of building permits, subject to the current fee schedule for residential development in place at the time of issuance of the building permit. With implementation of this mitigation, both the proposed Project and Alternative 2 would have less than significant impacts to schools. Since school impact fees are assessed per square foot and since Alternative 2 would develop 725 fewer units, and thus less overall square footage, than the proposed Project, fees paid to the RUSD under Alternative 2 would be substantially lower than under the proposed Project. The proposed Project would directly generate approximately 543 students in the RUSD. Since Alternative 2 would directly generate only 36 new students, the impact on schools would be less as compared to the proposed Project.

Table 6.0-15
Student Generation –Alternative 2

Dwelling Type	Units	Student Generation Factors[1]		Project Student Generation
Single-Family Residential Units	50	Grades K–6	0.38	19
		Grades 7–8	0.11	6
		Grades 9–12	0.21	11
			Total	**36**

[1] *Generation factors are from Section 1859.2, California School Facility Program, based on a district wide student generation rate of 0.7, which is then divided based on percentage of RUSD students in each grade level.*

Public Services (Fire Services)

Construction Impacts

During construction of Alternative 2, wood framing and other flammable construction materials would be present on the Project site. Construction would be subject to the Los Angeles County code and inspection by County personnel prior to installation of drywall. The use of flagmen, traffic detour plans, haul routes, protective devices, warning signs, and access to abutting properties would aid emergency vehicle response. Like the proposed Project, Alternative 2 would have a less than significant fire hazard impacts during construction. However, since Alternative 2 would require less construction, fire hazard impacts would be less than those of the proposed Project.

Operational Impacts

Under Alternative 2, operational impacts related to response time, emergency access, and location within a Very High Fire Hazard Severity Zone would be similar to those associated with the proposed Project. However, since Alternative 2 would reduce the number of on-site residents, it would generate fewer new fire service calls than the proposed Project. Additionally, since building heights across the site would be reduced to a two-story maximum, Alternative 2 could reduce the extent of local water pipe upgrades needed to meet fire flow requirements. Both the proposed Project and Alternative 2 would have less than significant fire hazard impacts. However, since Alternative 2 would reduce the number of residents and building heights, impacts would be less as compared to the proposed Project.

Public Services (Sheriff Services)

Construction Impacts

Under Alternative 2, cases of trespass, theft and/or vandalism on the construction site would require services from the County Sheriff's Department, but would not typically place undue demands on law enforcement services. The builder and contractor would use private security and flagmen at the construction site, practice general safekeeping of construction equipment, and implement other standard construction practices. Like the proposed Project, Alternative 2 would have less than significant impacts on sheriff services during construction. However, since Alternative 2 would require less construction, construction impacts on sheriff services would be less than those of the proposed Project.

Operational Impacts

Alternative 2 would introduce approximately 166 residents to the Project site.[10] This would result in a less than 1 percent increase in the existing population of Reporting District 2938, which encompasses the Project site.[11] In contrast, the proposed Project would result in a 1.4 percent increase. The County Sheriff's Department determined that the population increase due to the proposed Project would increase the number of calls for service within the reporting district; however, the Department further stated that it had no specific concerns about the proposed Project's impacts on staffing or other Sheriff's Department resources. As with the proposed Project, with implementation of the traffic and access mitigation measures, local roadways would continue to operate at levels consistent with County Department of Public Works and the Los Angeles County Sheriff's optimal response time standards would be maintained. Additionally, like the proposed Project, Alternative 2 would generate revenues from property and sales taxes that would be deposited in the County's General Fund and the State Treasury, a portion which would be allocated to maintain staffing and equipment levels for the Walnut/Diamond Bar Sheriff's Station for increased demands. Since Alternative 2 would result in a lower population increase than the proposed Project, it would also have a less than significant impact on sheriff services, and impacts would be less as compared to those of the proposed Project.

Water Service

As shown in **Table 6.0-16,** Alternative 2 would result in a net potable water demand of approximately 21 acre-feet per year (afy). A number of design features recommended by the Walnut Valley Water

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10 Rate (3.32 persons per household) is based on the 2000 average household size of an owner-occupied unit in Census Tract 4033.04, which encompasses the Project site.

11 Reporting District 2938 serves approximately 154,601 people.

District (Water District), including low-flow toilets and urinals, and water-saving faucets, would be incorporated to conserve water. The Water District projects an increased water demand of 4,972 afy between 2010 and 2030. Alternative 2's anticipated net potable water demand of approximately 21 afy constitutes less than 1 percent of the projected demand increase. Since the Water District has sufficient supplies available to meet the proposed Project's net potable water demand, impacts for Alternative 2 would be less than significant, and less than those associated with the proposed Project. The Water District has sufficient supplies available to meet this projected demand increase and Alternative 2 would have a less than significant impact on the Water District's potable water supply.

Table 6.0-16
Water Demand –Alternative 2

Land Use	Units	Demand Factor[1]	Annual Demand
Proposed			
Single-Family Residential	50 du	0.68 afy/du	34.0 afy
Gross Demand			**34.0 afy**
Existing			
Southlands Christian Church and Schools	--	--	13.2 afy
Net Demand			**20.8 afy**

1 *Walnut Valley Water District, 2002. Water System Master Plan, Table 3-7 and Table 3-13.*

Due to the reduction in development density, Alternative 2 would include more landscaping on the Project site than would the proposed Project. Plantings would be selected in accordance with the County's *Drought-Tolerant Landscaping Ordinance*, which requires 75 percent of the plants used to be drought-tolerant. However, unlike the proposed Project, it cannot be guaranteed that reclaimed water would be used to irrigate landscaped yards or public areas under Alternative 2 because neither the Water District nor the County require single family residences to irrigate with recycled water. Nonetheless, the Water District has sufficient supplies available to meet the proposed Project's potable water demand and, therefore, would be able to meet demand associated with Alternative 2. Alternative 2 would have a less than significant impact on the Water District's reclaimed water supply.

Utility Service

Electricity

As shown in **Table 6.0-17**, the Alternative 2 would result in a net decrease in annual electricity consumption of approximately 414 Megawatt-hours (MWh) compared to existing conditions. Even so,

Alternative 2 could require the installation of new facilities and equipment, such as transformers, on the Project site, and also could require minor alterations to off-site electrical transmission and distribution infrastructure in order to serve Alternative 2. Alternative 2 would have a less than significant impact related to electricity supply infrastructure with implementation of mitigation requiring the Applicant to incorporate modifications to the on-site electricity transmission/distribution system as needed.

Table 6.0-17
Electricity Demand – Alternative 2

Land Use	Quantity	Demand Factor (Megawatt-hours/year)	Annual Demand (Megawatt-hours)
Proposed			
Single-Family Residential	50 du	5.63[1]	281.5
Gross Demand			**281.5**
Existing			
Southlands Christian Schools and Church[3]	63,226 sf	0.011[2]	695.5
Net Demand			**(414.0)**

Consumption factor derived from SCAQMD CEQA Air Quality Handbook, *1993.*
sf = square foot; du = dwelling unit
[1] *Per Unit.*
[2] *Per Square Foot.*
[3] *Rate for church and school uses.*

Because of the reduction in the number of residential units compared to the proposed Project, the Alternative 2 would have a reduced demand for electricity and impacts would be less than those the proposed Project.

Natural Gas

As shown in **Table 6.0-18**, Alternative 2 would result in a net natural gas demand increase of 2.5 mcf per year. The Gas Company has sufficient gas supplies planned to accommodate the increase in gas demand by all of its market sectors, including residential, commercial, industrial, electric generation, and natural gas vehicle uses, through the current projection period (2008 to 2030). The supply from interstate pipelines is estimated to be 3,875 mcf per day in 2030. Alternative 2's demand would result in an additional 2.5 mcf per year or 0.007 mcf per day, which represents a nominal percent of the Gas Company's supply from interstate pipelines in 2030. Therefore, the Gas Company has adequate supply to serve Alternative 2 in addition to its existing commitments. Minor capacity-enhancing alterations to local

natural gas transmission and distribution infrastructure may be necessary to serve Alternative 2. Like the proposed Project, Alternative 2 would have a less than significant impact related to natural gas supply infrastructure with mitigation requiring the Applicant to incorporate modifications to the on-site natural gas conveyance system as needed.

Table 6.0-18
Natural Gas Demand – Alternative 2

Land Use	Quantity	Monthly Demand Factor[1]	Monthly Demand (cf)	Annual Demand (mcf)
Existing				
Single-Family Residential	50 du	6,665 cf/du	333,250	4.0
Gross Demand			**333,250**	**4.0**
Proposed				
Southlands Christian Church and Schools	63,226 sf	2.0 cf/sf[2]	126,452	1.5
Net Demand			**206,798**	**2.5**

[1] *Consumption factors derived from SCAQMD CEQA Air Quality Handbook, 1993.*
[2] *Consumption factor for school and church uses.*
du = dwelling units; sf = square foot; cf = standard cubic feet; mcf = million cubic feet

The proposed Project is estimated to result in a net natural gas demand of approximately 35.8 mcf per year. Due to the reduction in the number of residential units, Alternative 2 would have a lower natural gas demand than the proposed Project. Therefore, impacts for Alternative 2 would be less as compared to the proposed Project.

Solid Waste Service

Construction Impacts

Like the proposed Project, Alternative 2 would require the demolition of existing buildings and structures, which would generate approximately 5,000 cubic yards of debris (a minimum of 3,250 cubic yards would be recycled and a maximum of 1,750 cubic yards would be disposed of in a landfill). However, since Alternative 2 would not include subterranean parking, Alternative 2 would require substantially less excavation and soil removal than the proposed Project. Therefore, earthwork cut and fill volumes are expected to be minimal, whereas the proposed Project would generate approximately 55,000 cubic yards of earth that would need to be removed from the Project site.

The Applicant would prepare a Waste Management Plan to recycle, at a minimum, 65 percent of the construction and demolition debris. Waste generated during demolition and construction that is not recycled would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities generally within Los Angeles County. Trash and wood would be delivered to the Puente Hills Recovery Facility, which has the capacity to accommodate the approximately 3,250 tons of recyclable demolition and construction debris that would be delivered. Earth material and the remaining construction and demolition debris would be disposed of at the Puente Hills Landfill, which has the capacity to accommodate the 1,750 cubic yards of non-recycled construction demolition and debris. Since the landfill has the capacity to accommodate the 55,000 cubic yards of earth material generated by the proposed Project, it would have the capacity to accommodate the reduced earthwork volume exported under Alternative 2 and impacts would be less than significant. Because of the reduction in earthwork volume, construction impacts related to the export and disposal of soil would be less than those of the proposed Project.

Operational Impacts

As shown in **Table 6.0-19**, beginning in 2012, Alternative 2 would generate approximately 9.1 net new additional tons of solid waste per year, of which 4.5 tons would be disposed into landfills assuming a 50 percent waste diversion rate. Alternative 2 would recycle a minimum of 50 percent until 2015, when it would be required to recycle a minimum of 60 percent of the solid waste generated, in accordance with current state law and in compliance with the prepared Waste Management Plan. As shown in **Table 6.0-20**, Alternative 2 would reduce landfill disposal by 4.6 additional tons beginning in 2015. Alternative 2 would include a solid waste diversion program (e.g., adequate areas for collecting and loading recyclables) and would meet at least the minimum recycling level established by Los Angeles County in accordance with AB 939. Waste requiring disposal would be transported to the Puente Hills Landfill and, eventually, the Mesquite Regional Landfill. Waste generated by Alternative 2 would represent a nominal increase in the total volume of disposal at the Puente Hills Landfill, both before and after 2015.[12] This increase is not considered substantial. Alternative 2 would have less than significant operational impacts and impacts would be less than those of the proposed Project.

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12 Total disposal into the Puente Hills Landfill in 2006 was 3.823 million tons.

Table 6.0-19
Solid Waste Disposal until 2015 – Alternative 2

Land Use	Units	Generation Factor[1]	Daily Generation (lbs/day)	Annual Generation (tons/year)	Waste to be Diverted (50 Percent) (tons/year)	Remainder Disposed in Landfill (tons/year)
Proposed						
Single-Family Residential	50 du	10 lbs/du/day	500	91.3	45.6	45.6
Gross Generation				**91.3**	**45.6**	**45.6**
Existing Uses				82.2	41.1	41.1
Net Generation				**9.1**	**4.5**	**4.5**

du = dwelling unit

1 California Integrated Waste Management Board, Estimated Solid Waste Generation Rates for Residential Developments, http://www.calrecycle.ca.gov/wastechar/wastegenrates/Residential.htm. 2010.

Table 6.0-20
Solid Waste Disposal After 2015 – Alternative 2

Land Use	Units	Generation Factor	Annual Generation (tons/year)	Waste to be Diverted (60 Percent) (tons/year)	Remainder Disposed in Landfill
Proposed					
Single-Family Residential	50 du	10 lbs/du/day	91.3	54.8	36.5
Gross Generation			**91.3**	**54.8**	**36.5**
Existing Uses			82.2	41.1[a]	41.1
Net Generation:			**9.1**	**13.7**	**-4.6**

du = dwelling unit

[a] A 50 percent diversion rate was applied to waste generation by the existing uses on the Project site, consistent with the diversion rate mandated by the California Integrated Waste management Board through AB 939.

Parks and Recreation

Rowland Heights presently has a local parkland deficit of approximately 160 acres and a regional parkland deficit of approximately 30,692 acres. Based on the established standards of 4.0 acres of local parkland and 6.0 acres of regional parkland per 1,000 residents, the 166 residents associated with Alternative 2 would increase local and regional parkland deficits by less than 1 acre.

Alternative 2 would not include the same on-site recreational amenities proposed as part of the proposed Project. Individual home sites could be developed with pools and outdoor barbeque areas, but it is not likely that a central community facility or park-like common areas would be developed given the small number of residential units involved. However, as a residential subdivision, Alternative 2 would be subject to the Los Angeles County Parkland Dedication Ordinance (Los Angeles County Ordinance 21.24.340 et seq.), which is consistent with the Quimby Act. This ordinance specifies that residential subdivisions proposed within Los Angeles County are required to provide local park space to serve the project, pay a fee in lieu of the provision of such park land, provide local park space containing less than the required obligation but developed with amenities equal in value to the park fee, or do a combination of the above. Compliance with this ordinance would offset the increased demand for parks and recreational facilities and impacts would be less than significant.

Implementation of the proposed Project would increase the local parkland deficit by 8.6 acres, or 5.3, percent to 168.6 acres and would increase the regional parkland deficit by 13 acres, or 0.04 percent, to 30,705 acres. Since Alternative 2 would generate fewer new residents than the proposed Project, Alternative 2 would result in reduced increases in the local and regional parkland deficits, and therefore less impact on parks and recreation, compared to the proposed Project.

Library Service

Construction Impacts

Construction activities associated with the Project and Alternative 2 would not generate a permanent residential population. Therefore, no impacts to library services would occur as a result of the Project's and Alternative 2's construction.

Operational Impacts

Rowland Heights Library currently does not meet the standard of 0.50 gross square feet of library space per resident, 2.75 library items (books, magazines, periodicals, etc.) per capita, and 1 computer per 1,000 residents. Therefore, the additional demand for library resources created by residents of

Alternative 2 would be potentially significant. Like the proposed Project, Alternative 2 would have less than significant impacts on library services with implementation of mitigation requiring the Applicant to pay the library mitigation impact fee prior to issuance of building permits. Since Alternative 2 would generate fewer new residents than the proposed Project, impacts on library services would be less than those of proposed Project.

Population, Housing, and Employment

Operational Impacts

In 2000, the average household size of an owner-occupied single-family unit in Census Tract 4033.04, which encompasses the Project site, was 3.32 persons.[13] Based on an average household size of 3.32 persons per unit within Census Tract 4033.04, Alternative 2 would provide housing for approximately 166 residents. Therefore, the population increase under Alternative 2 would account for less than 1 percent of the expected increase from 2005 to 2010 (the data for the closest year to Project buildout) in the unincorporated San Gabriel Valley Council of Governments (SGVCOG) subregion population.[14] In addition, the housing increase from Alternative 2 would account for less than 1 percent of the expected increase in households between 2005 and 2010.[15] Both increases are within the 2010 unincorporated SGVCOG subregion projections of 389,267 residents and 105,914 households. Therefore, like the proposed Project, Alternative 2 is consistent with growth projections and impacts would be less than significant. The proposed Project would provide 775 dwelling units, housing approximately 2,139 residents. Therefore, Alternative 2 would add 1,973 fewer residents to the Rowland Heights community. Accordingly, Alternative 2 would result in less population and housing impacts as compared to the proposed Project.

As under the proposed Project, the addition of housing to the Rowland Heights community under Alternative 2 would contribute to the 2010 jobs/housing imbalance of 0.96:1 in the unincorporated SGVCOG subregion. However, this impact is not considered adverse since Rowland Heights is intended to be a residential community, as stated in the Rowland Heights Community General Plan. Additionally, the neighboring City of Industry plays a vital role as an employment hub and helps to offset any jobs/housing imbalance in Rowland Heights. Therefore, like the proposed Project, Alternative 2 would have less than significant impacts on the jobs/housing imbalance. However, since Alternative 2 would

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13 US Census Bureau, "2000 Census, Quick Tables - American Fact Finder for Census Tract 4033.04, Los Angeles County, California," http://factfinder.census.gov. 2008.

14 The Southern California Association of Governments (SCAG) estimates that the population of the SGVCOG subregion will increase by 24,431 residents between 2005 and 2010.

15 SCAG estimates that housing in the SGVCOG subregion will increase by 6,613 units between 2005 and 2010.

add 1,973 fewer residents than the proposed Project, Alternative 2 would result in a lower increase in the jobs/housing imbalance. Accordingly, Alternative 2 would have less impact on the jobs/housing imbalance as compared to the proposed Project.

Land Use

The Rowland Heights Community General Plan designates the Project site for "U1" Urban 1 uses, which include very low density (hillside) residential, large lot residential and single-family detached units. The U1 designation allows 1.1 to 3.2 dwelling units per gross acre. Additionally, the Project site is presently zoned A-1, Light Agriculture, by the County Zoning Ordinance. This designation allows single-family residences. Alternative 2 would be consistent with the existing land use and zoning designations. Therefore, no General Plan Amendment or Zone Change would be required. The proposed Project would require both a General Plan Amendment and Zone Change to allow multi-family uses on the Project site. Additionally, creation of a new site-specific land use designation to accommodate a higher development density would be required. Specifically, the proposed Project would require the creation of a new site-specific land use designation, U6, that would permit a density of 36 to 50 dwelling units per gross acre.

Unlike the Project, Alternative 2 would be consistent with Policy 4 of the Rowland Heights Community General Plan Land Use Element. This policy restricts multiple-family or attached housing to the U3, U4 and U5 categories. Additionally, unlike the Project, Alternative 2 would be consistent with Policy 15 of the Los Angeles County General Plan Land Use Element. This policy is to protect the character of residential neighborhoods by preventing incompatible uses. Because Alternative 2 would develop the site with single-family residences that are similar in density, height, and scale to some of the surrounding uses, it would be more compatible with surrounding uses than the proposed Project. However, Alternative 2 would also place low-density single-family residences directly adjacent to the commercial uses on Colima Road and to higher-density residential uses, including the senior housing complex on Colima Road and the multi-family residences along Drusilla Way, Esquiline Avenue, Bithynia Way, Ostia Way, and Latium Way. The proposed Project would introduce multi-family residences that represent a transitional land use between existing commercial uses north of the Project site and the multi-family housing east and south of the Project site, and lower-density residential uses west of Brea Canyon Cutoff Road.

Since Alternative 2 would not conflict with any policies of the Rowland Heights Community General Plan or Los Angeles County General Plan, and is consistent with the existing land use and zoning designations, Alternative 2 would have less than significant land use impacts. Alternative 2 would avoid the proposed Project's significant and unavoidable impacts due to creation of a new site-specific land use

designation and would not conflict with the above land use plans. For this reason, impacts associated with land use impacts would be less than those of the proposed Project.

Environmental Safety

Construction Impacts

Alternative 2 would involve demolition of all existing structures on the Project site. The earliest constructed structures on the proposed Project site contain asbestos (ACMs and ACCMs) and lead-based paint. This poses a potentially significant impact during demolition. However, all asbestos containing materials and lead based paints would be removed during construction in accordance with SCAQMD and mitigation measures similar to those of the proposed Project. Therefore, Alternative 2 would have less than significant impacts during construction. Since the same amount of demolition is required under Alternative 2, impacts would be similar to those of the proposed Project.

Operational Impacts

Similar to the proposed Project, the Alternative 2 would develop residential land uses that would not use or generate large quantities of hazardous and/or toxic materials. The handling of hazardous materials would be limited to the use and disposal of household substances such as unused paint, aerosol cans, cleaning agents (solvents), landscaping related chemicals, and automotive supplies (by products). These materials are generally disposed of at non-hazardous Class II and III landfills. Compliance with County regulations for the use, storage, and disposal of hazardous materials would result in less than significant impacts. The proposed Project would also result in less than significant operational impacts. However, since Alternative 2 would have a lower development density than the proposed Project, impacts associated with the handling of hazardous materials would be less as compared to the proposed Projects.

Relationship to Project Objectives

Under Alternative 2, the proposed Project would not be implemented. The majority of available housing opportunities in Rowland Heights are for-sale single-family residences. Therefore, many prospective residents seeking rental housing near the major employment centers of the City of Industry and other East San Gabriel Valley communities lack a diverse mix of housing opportunities if they wish to live in Rowland Heights. While the development of single-family residences would provide housing in the area, it would not add to the diversity of options, and would not meet the needs of a diverse mix of residents. Further, it would not contribute to meeting the housing shortage noted by the RHNA to the same extent as the proposed Project and would result in the underutilization of a uniquely large parcel of land (15.7 acres) in close proximity to commercial and retail uses that is a prime parcel for higher density residential

uses. For these reasons, implementation of Alternative 2 would not meet any of the following Key Residential Objectives, since no multi-family housing would be developed on the Project site:

Key Residential Objectives

1. Assist Los Angeles County in meeting the housing needs of its residents by contributing to the fulfillment of Los Angeles County's SCAG Regional Housing Needs Assessment (RHNA) allocation for moderate-income and above-moderate-income units, which requires the County to accommodate expected growth by ensuring the availability of residential sites at adequate densities and appropriate development standards in unincorporated areas, as stated in the Los Angeles County General Plan Housing Element.

2. Provide new multi-family rental housing in the unincorporated Los Angeles County Rowland Heights area that is presently underserved by lifestyle multi-family residential uses that include various leisure and recreational amenities for residents, and increase the diversity of housing options as recommended by the Housing Element of the Rowland Heights Community General Plan.

3. Provide high-quality multi-family housing options without displacing existing residential uses.

4. Provide a diverse multi-family residential unit mix to meet the needs of a variety of tenants.

Because it would dramatically reduce the number of dwelling units, and therefore development density, on the Project site, Alternative 2 would not meet any of the Key Sustainability Objectives, as follows:

Key Sustainability Objectives

1. Implement sustainable design features that incorporate the *California Build It Green Multi-Family GreenPoint Checklist* of sustainable, green design principles into site location, site design, building construction techniques, and building materials.

2. Locate multi-family housing on an urban infill site within an urban growth boundary and already served by existing infrastructure.

3. Provide multi-family housing in proximity to existing employment centers in the eastern San Gabriel Valley, including the City of Industry, the major employment center for the San Gabriel Valley, Diamond Bar, and Pomona.

4. Encourage pedestrian activity and minimize vehicle use by providing higher-density housing in proximity to existing neighborhood-serving retail and commercial uses.

5. Locate multi-family housing in an area well served by mass transit, including bus and rail, to reduce Project-related vehicle miles traveled.

6. Locate multi-family housing on a site well served by the local and regional roadway network.

Since it represents low-density development of the Project site, Alternative 2 would only meet three of the four Additional Project Objectives, as follows.

Additional Project Objectives

1. Utilize existing topography to minimize the visual impact of proposed buildings.
2. Build housing that is physically compatible with adjacent land uses.
4. Meet all Project-related parking demand on the Project site.

Alternative 2 would only partially meet the following Additional Project Objective, since single-family residential development is likely to discourage, rather than encourage, pedestrian activity within the Project site as well as between the Project site and nearby commercial land uses

3. Provide streetscape improvements that enhance the visual environment of the neighborhood and encourage pedestrian activity within the Project site as well as between the site and nearby retail and commercial land uses.

Overall, the majority of the basic Project Objectives would not be attained under Alternative 2, since it would not attain any of the five Key Residential Objectives or any of the Key Sustainability Objectives; and would only fully attain three of the four Additional Project Objectives.

3. Alternative 3 – Reduced Density Alternative – 537 Multi-family Residential Units

Description of Alternative 3

Under Alternative 3, the Project site would be redeveloped with multi-family residences and amenities comparable in quality to those proposed by the original Project. However, the number of proposed residential units would be reduced by more than 30 percent from 775 units to 537 units. This development density would be slightly less than the maximum number of residential units permitted under the Community Plan's "U5" Urban 5 land use designation (35 units per gross acre x 15.7 gross acres = 549 units). Development sitewide, including residential buildings and recreational facilities, would total approximately 924,250 gross square feet. Alternative 3 would provide housing for approximately 1,482 residents (537 units x 2.76 residents per unit),[16] compared to approximately 2,139 residents under the proposed Project.

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16 US Census Bureau, "2000 Census, Quick Tables - American Fact Finder for Census Tract 4033.04, Los Angeles County, California," http://factfinder.census.gov. 2008.

Under Alternative 3, the Podium and Wrap-Around buildings proposed under the original Project would be eliminated. The Project site would instead be developed with a mix of Garden Apartments, Townhome-style Apartments, and Townhome Flats. A total of eight three- and four-story Garden Apartment buildings containing 304 units would be constructed in the northern portion of the Project site. A total of 19 Townhome-style Apartment buildings containing 163 units and 10 Townhome Flat buildings containing 70 units would be constructed throughout the Project site. Parking for the Garden Apartments would be provided at-grade in a structure beneath the residences, while parking for the Townhome-style Apartments and Townhome Flats would provided in attached garages associated with each unit. Two indoor recreational facilities to be constructed in the northern and southern portions of the Project site would total approximately 6,600 square feet. The total developed square footage sitewide would be reduced under Alternative 3 to approximately 610,468 gross square feet. This would result in a reduced FAR of 0.88:1 (610,468/685,014 square feet), compared to 1.35:1 under the proposed Project.

A summary of the proposed development under Alternative 3 is provided in **Table 6.0-21.**

A conceptual site plan of Alternative 3 is provided in **Figure 6.0-1** and a conceptual landscape plan is provided in **Figure 6.0-2.** Detailed Garden Apartment site plans and conceptual elevations are shown in **Figures 6.0-3** through **6.0-6**, and detailed Townhome-style Apartment and Townhome Flat site plans and elevations are shown in **Figures 6.0-7** through **6.0-10**. Any infrastructure improvements necessary to serve Alternative 3 uses would be implemented, including water supply, wastewater, storm drain, and utility services. Alternative 3 is evaluated in sufficient detail such that it could be adopted by the County, if it so chooses, without additional environmental review.

Garden Apartment Buildings

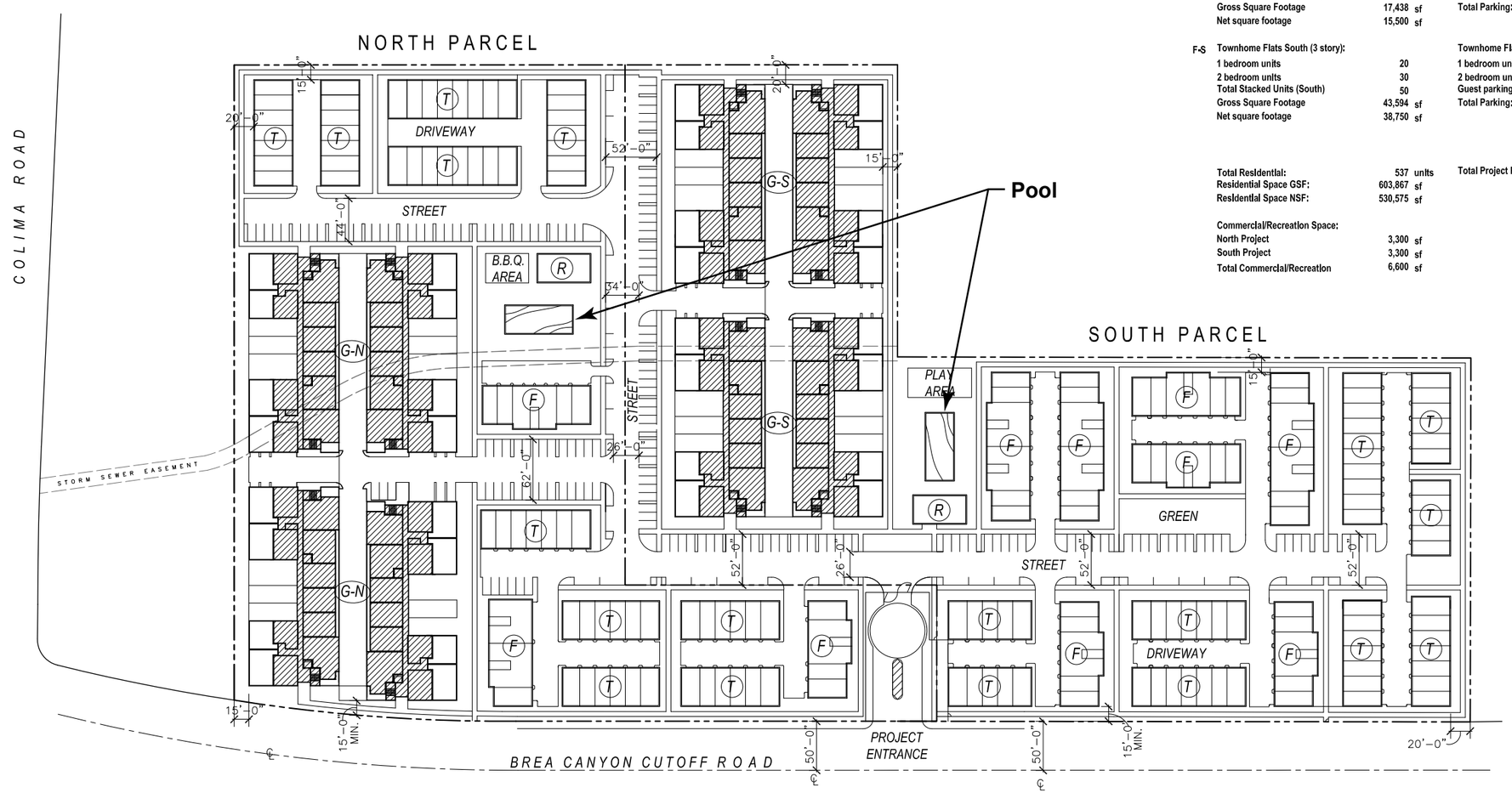
A total of eight Garden Apartment buildings are proposed in the northern portion of the Project site under Alternative 3. Four buildings would be located in the northwestern corner of the Project site, adjacent to Brea Canyon Cutoff Road and the property north of the Project site, and four buildings would be centrally located on the Project site adjacent to the Royal Vista Golf Course and Ostia Way. The Garden Apartment units would range in size from 625 to 1,425 square feet. The eight Garden Apartment buildings would total approximately 320,620 gross square feet and contain 304 units, including 184 one-bedroom units, 96 two-bedroom units, and 24 three-bedroom units.

	Project Summary:		Parking Summary:							Covered Parking:	
G-N	Garden Apartments North (3 & 4 story):		Garden Apartments North (3 & 4 story):						Parking located at:	Provided:	Required:
	1 bedroom units	92	1 bedroom units	@	1.5 stalls/unit	92 x 1.5	138		ground floor (covered)	138	138
	2 bedroom units	48	2 bedroom units	@	2 stalls/unit	48 x 2	96		ground floor (covered)	96	72
	3 bedroom units	12	3 bedroom units	@	2 stalls/unit	12 x 2	24		ground floor (covered)	24	18
	Total Garden Apts (North)	152	Guest parking	@	0.25 stalls/unit	152 x 0.25	38		grade (open)	0	0
	Gross Square Footage	160,310 sf	Total Parking:				296 stalls			258	228
	Net square footage	139,400 sf									
G-S	Garden Apartments South (3 & 4 story):		Garden Apartments South (3 & 4 story):						Parking located at:	Provided:	Required:
	1 bedroom units	92	1 bedroom units	@	1.5 stalls/unit	92 x 1.5	138		ground floor (covered)	138	138
	2 bedroom units	48	2 bedroom units	@	2 stalls/unit	48 x 2	96		ground floor (covered)	96	72
	3 bedroom units	12	3 bedroom units	@	2 stalls/unit	12 x 2	24		ground floor (covered)	24	18
	Total Garden Apts (South)	152	Guest parking	@	0.25 stalls/unit	152 x 0.25	38		grade (open)	0	0
	Gross Square Footage	160,310 sf	Total Parking:				296 stalls			258	228
	Net square footage	139,400 sf									

	Project Summary:		Parking Summary:							Covered Parking:	
T-N	Townhouses North (3 story):		Townhouses North (3 story):						Parking located at:	Provided:	Required:
	2 bedroom units	59	2 bedroom units	@	2 stalls/unit	59 x 2	118		ground floor (covered)	118	89
	3 bedroom units	17	3 bedroom units	@	2 stalls/unit	17 x 2	34		ground floor (covered)	34	26
	Total Townhouses (North)	76	Guest parking	@	0.25 stalls/unit	76 x 0.25	19		grade (open)	0	0
	Gross Square Footage	104,288 sf	Total Parking:				171 stalls			152	114
	Net square footage	92,700 sf									
T-S	Townhouses South (3 story):		Townhouses South (3 story):						Parking located at:	Provided:	Required:
	2 bedroom units	74	2 bedroom units	@	2 stalls/unit	74 x 2	148		ground floor (covered)	148	111
	3 bedroom units	13	3 bedroom units	@	2 stalls/unit	13 x 2	26		ground floor (covered)	26	20
	Total Townhouses (South)	87	Guest parking	@	0.25 stalls/unit	87 x 0.25	22		grade (open)	0	0
	Gross Square Footage	117,928 sf	Total Parking:				196 stalls			174	131
	Net square footage	104,825 sf									
F-N	Townhome Flats North (3 story):		Townhome Flats North (3 story):						Parking located at:	Provided:	Required:
	1 bedroom units	8	1 bedroom units	@	1.5 stalls/unit	8 x 1.5	12		ground floor (covered)*	12	12
	2 bedroom units	12	2 bedroom units	@	2 stalls/unit	12 x 2	24		ground floor (covered)*	24	18
	Total Stacked Units (North)	20	Guest parking	@	0.25 stalls/unit	20 x 0.25	5		grade (open)	0	0
	Gross Square Footage	17,438 sf	Total Parking:				41 stalls			36	30
	Net square footage	15,500 sf									
F-S	Townhome Flats South (3 story):		Townhome Flats South (3 story):						Parking located at:	Provided:	Required:
	1 bedroom units	20	1 bedroom units	@	1.5 stalls/unit	20 x 1.5	30		ground floor (covered)*	30	30
	2 bedroom units	30	2 bedroom units	@	2 stalls/unit	30 x 2	60		ground floor (covered)*	60	45
	Total Stacked Units (South)	50	Guest parking	@	0.25 stalls/unit	50 x 0.25	13		grade (open)	0	0
	Gross Square Footage	43,594 sf	Total Parking:				103 stalls			90	75
	Net square footage	38,750 sf									

*1.5 spaces covered, average per unit

Total Residential:	537 units	Total Project Parking:	1,103 stalls	968	806
Residential Space GSF:	603,867 sf			provided	required
Residential Space NSF:	530,575 sf				
Commercial/Recreation Space:					
North Project	3,300 sf				
South Project	3,300 sf				
Total Commercial/Recreation	6,600 sf				



Legend:

- (G-N) Garden Apartments Building - North
- (G-S) Garden Apartments Building - South
- (T) Townhome-Style Apartment Building
- (F) Townhome Flat Building
- (R) Recreational Facility
- 4-Story Height

120 60 0 120
APPROXIMATE SCALE IN FEET

SOURCE: Van Tilburg, Banvard & Soderbergh, AIA - February 2010

FIGURE **6.0-1**

Alternative 3 Conceptual Site Plan

291-006•04/10

PLANT LIST

SYMBOL	BOTANICAL NAME	COMMON NAME
STREET TREES		
	To be selected	
ON-SITE TREES		
	Lagerstroemia indica	Crape Myrtle
	Olea europaea	Olive
	Platanus acerifolia 'Bloodgood'	London Plane Tree
	Arbutus 'Marina'	Strawberry Tree
	Schinus molle	California Pepper Tree
	Quercus agrifolia	Coast Live Oak
	Tabebuia ipe	Purple Trumpet Tree
	Melaleuca quinquenervia	Paperbark Tree
	Pyrus calleryana 'Chanticleer'	Ornamental Pear
	Tristania conferta	Brisbane Box
	Magnolia g. 'DD Blanchard'	Magnolia
	Brachychiton populneus	Bottle Tree
	Magnolia grandiflora 'Little Gem'	Southern Magnolia
	Eriobotrya deflexa	Bronze Loquat
	Tupidanthus calyptratus	Tupidanthus
	Phoenix roebellenii	Pygmy Date Palm
	Trachycarpus fortunei	Windmill Palm
	Strelitzia nicholai	Giant Bird-of-Paradise
PALMS		
	Archontophoenix cunninghamiana	King Palm
	Phoenix dactylifera	Date Palm
	Syagarus romanzoffianum	Queen Palm

SYMBOL	BOTANICAL NAME	COMMON NAME
SHRUBS		
	Agapanthus africanus	Lily-of-the-Nile
	Agave attenuata	N.C.N
	Buxus m. japonica	Japanese Boxwood
	Callistemon v. 'LittleJohn'	Dwarf Weeping Bottlebrush
	Camellia japonica 'Debutante'	Camellia
	Carissa grandiflora 'Boxwood Beauty	Natal Plum
	Clivia miniata	Kaffir Lily
	Feijoa sellowiana	Pineapple Guava
	Hemerocallis 'Dwarf Yellow'	Day Lily
	Ligustrum japonicum 'Texanum'	Wax Leaf Privet
	Liriope muscari	Big Blue Lily Turf
	Moraea bicolor	Fortnight Lily
	Nandina d. 'Compacta'	Heavenly Bamboo 'Compacta'
	Nephrolepis cordifolia	Southern Sword Fern
	Philodendron selloum 'Xanadu'	Xanadu Philodendron
	Philodendron selloum	Big Leaf Philodendron
	Phormium tenax 'Bronze Baby'	New Zealand Flax (Reddish)
	Phormium tenax 'Gold Sword'	New Zealand Flax (Yellow)
	Pittosporum crassifolium 'Nana'	Dwarf Crassifolium Pittosporum
	Pittosporum tobira 'Variegata'	Variegated Tobira
	Podocarpus macrophyllus 'Maki'	Shrubby Yew Pine
	Raphiolepis indica 'Clara'	Dwarf Indian Hawthorne
	Rosa F. 'Ice Berg'	White Shrub Rose
	Rosa n. "Flower Carpet"	Flower Carpet Rose
	Rosemarinus o. 'Prostratus'	Trailing Rosemary
	Strelitzia reginae	Bird-of-Paradise
	Trachelospermum jasminoides	Star Jasmine
	Xylosma congestum	Xylosma
VINES & ESPALIERS		
	Calliandra inaequilatera	Pink Powder Puff
	Eriobotrya deflexa	Bronze Loquat
	Parthenocissus tricuspidata	Boston Ivy
GROUND COVER		
	Sod turf	Marathon II, Tall Fescue

IRRIGATION NOTE:
All planted areas are to be irrigated by a state-of-the-art irrigation system

NORTH PHASE	
LANDSCAPE AREAS:	69,285 SQ. FT.
TURF AREAS:	1,265 SQ. FT.
SOUTH PHASE	
LANDSCAPE AREAS:	41,495 SQ. FT.
TURF AREAS:	4,990 SQ. FT.
TOTAL:	117,035 SQ. FT.

64 32 0 64
APPROXIMATE SCALE IN FEET

SOURCE: Van Tilburg, Banvard & Soderbergh, AIA - January 2010

FIGURE **6.0-2**

Alternative 3 Conceptual Landscape Plan

291-006•03/10

Project Summary:

G-N	Garden Apartments North (3 & 4 story):		
	1 bedroom units	92	
	2 bedroom units	48	
	3 bedroom units	12	
	Total Garden Apts (North)	152	
	Gross Square Footage	160,310	sf
	Net square footage	139,400	sf

Parking Summary:

Garden Apartments North (3 & 4 story):							
1 bedroom units	@	1.5	stalls/unit	92	x	1.5	138
2 bedroom units	@	2	stalls/unit	48	x	2	96
3 bedroom units	@	2	stalls/unit	12	x	2	24
Guest parking	@	0.25	stalls/unit	152	x	0.25	38
Total Parking:							296 stalls

Covered Parking:		
Parking located at:	Provided:	Required:
ground floor (covered)	138	138
ground floor (covered)	96	72
ground floor (covered)	24	18
grade (open)	0	0
	258	228

SOURCE: Van Tilburg, Banvard & Soderbergh, AIA - February 2010

FIGURE **6.0-3**

Alternative 3 North Garden Apartment Buildings

291-006•03/10

Project Summary:

G-S **Garden Apartments South (3 & 4 story):**

1 bedroom units	92	
2 bedroom units	48	
3 bedroom units	12	
Total Garden Apts (South)	152	
Gross Square Footage	160,310	sf
Net square footage	139,400	sf

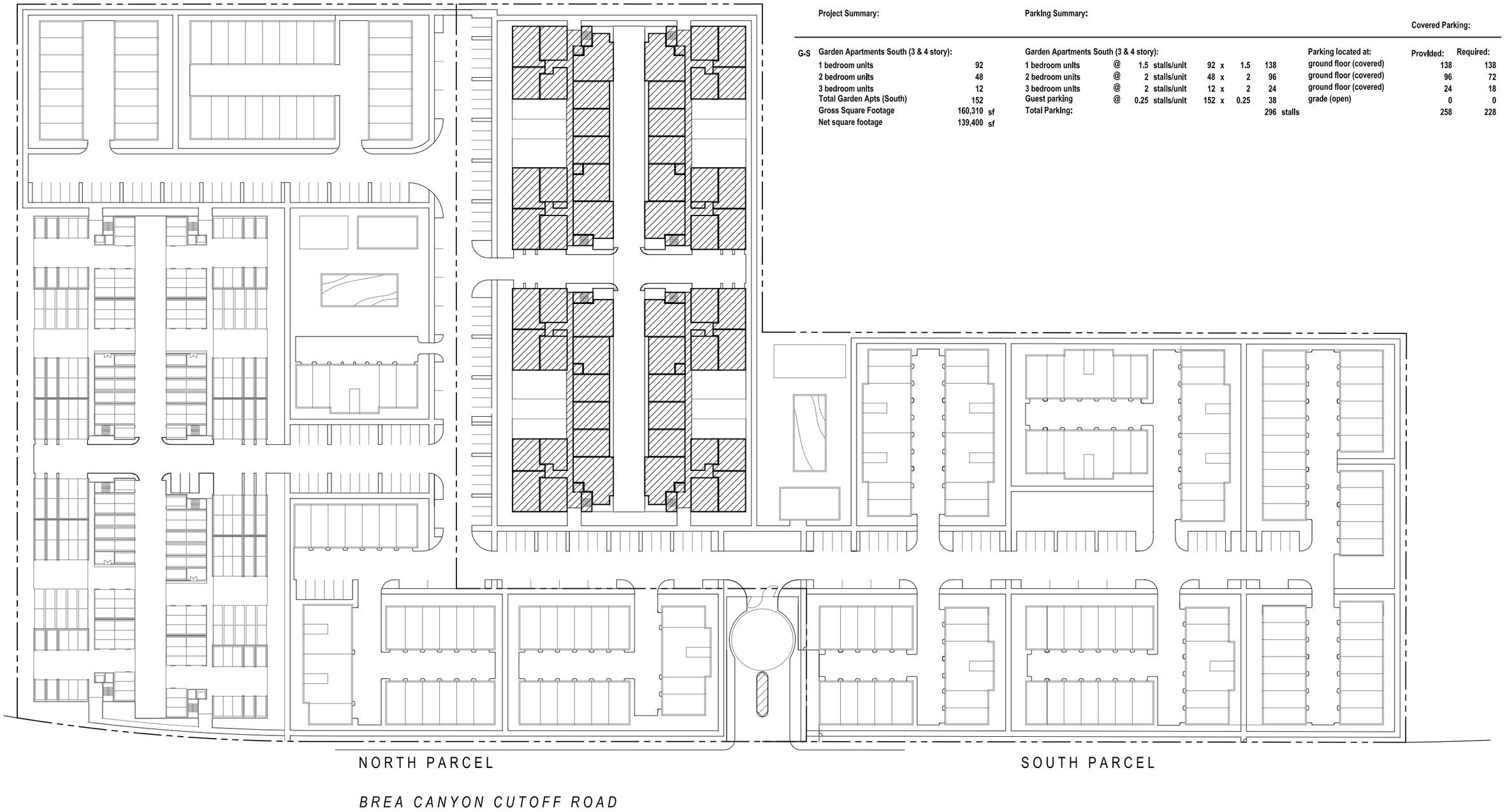
Parking Summary:

Garden Apartments South (3 & 4 story):

1 bedroom units	@	1.5	stalls/unit	92	x	1.5	138	
2 bedroom units	@	2	stalls/unit	48	x	2	96	
3 bedroom units	@	2	stalls/unit	12	x	2	24	
Guest parking	@	0.25	stalls/unit	152	x	0.25	38	
Total Parking:							296	stalls

Covered Parking:

Parking located at:	Provided:	Required:
ground floor (covered)	138	138
ground floor (covered)	96	72
ground floor (covered)	24	18
grade (open)	0	0
	258	228

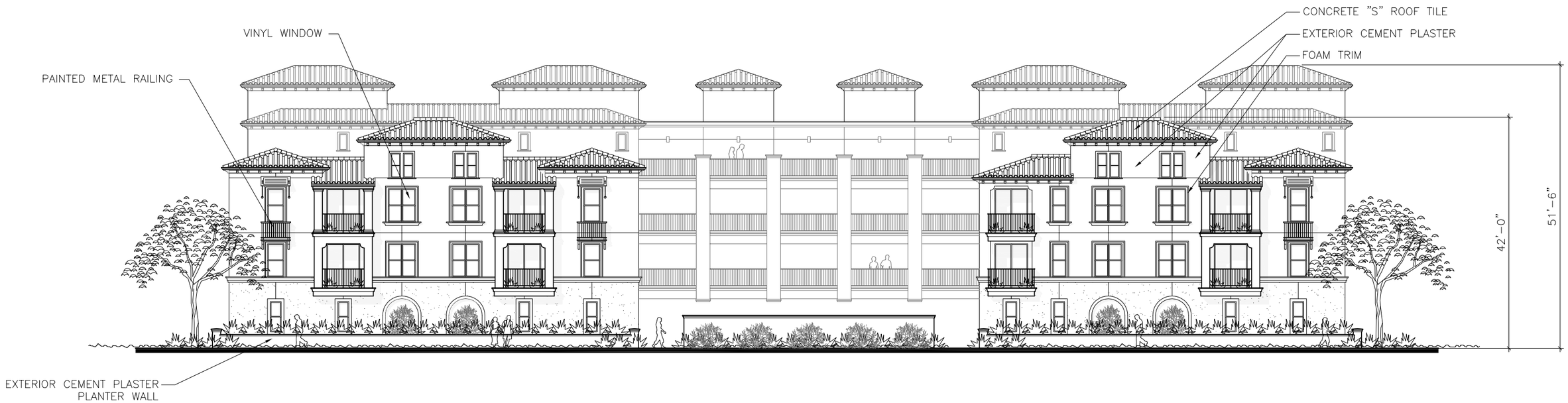


SOURCE: Van Tilburg, Banvard & Soderbergh, AIA - February 2010

FIGURE **6.0-4**

Alternative 3 South Garden Apartment Buildings

291-006•03/10



TYPICAL NORTH AND SOUTH ELEVATIONS

16 8 0 16

APPROXIMATE SCALE IN FEET

SOURCE: Van Tilburg, Banvard & Soderbergh, AIA - February 2010

FIGURE **6.0-5**

Alternative 3 Garden Apartments – North/South Elevation

291-006•03/10

16 8 0 16

APPROXIMATE SCALE IN FEET

SOURCE: Van Tilburg, Banvard & Soderbergh, AIA - December 2008

FIGURE **6.0-6**

Alternative 3 Garden Apartments –East/West Elevation

291-006•03/10

Project Summary:

T-N Townhouses North (3 story):

2 bedroom units	59	
3 bedroom units	17	
Total Townhouses (North)	76	
Gross Square Footage	104,288	sf
Net square footage	92,700	sf

F-N Townhome Flats North (3 story):

1 bedroom units	8	
2 bedroom units	12	
Total Stacked Units (North)	20	
Gross Square Footage	17,438	sf
Net square footage	15,500	sf

Parking Summary:

Townhouses North (3 story):

2 bedroom units	@	2	stalls/unit	59	x	2	118
3 bedroom units	@	2	stalls/unit	17	x	2	34
Guest parking	@	0.25	stalls/unit	76	x	0.25	19
Total Parking:							171 stalls

Townhome Flats North (3 story):

1 bedroom units	@	1.5	stalls/unit	8	x	1.5	12
2 bedroom units	@	2	stalls/unit	12	x	2	24
Guest parking	@	0.25	stalls/unit	20	x	0.25	5
Total Parking:							41 stalls

Covered Parking:

Parking located at:	Provided:	Required:
ground floor (covered)	118	89
ground floor (covered)	34	26
grade (open)	0	0
	152	114

Parking located at:	Provided:	Required:
ground floor (covered)*	12	12
ground floor (covered)*	24	18
grade (open)	0	0
	36	30

SOURCE: Van Tilburg, Banvard & Soderbergh, AIA - February 2010

FIGURE **6.0-7**

Alternative 3 North Townhome-Style Apartment and Townhome Flat Buildings

291-006•04/10

Project Summary:

T-S	**Townhouses South (3 story):**	
	2 bedroom units	74
	3 bedroom units	13
	Total Townhouses (South)	87
	Gross Square Footage	117,928 sf
	Net square footage	104,825 sf

F-S	**Townhome Flats South (3 story):**	
	1 bedroom units	20
	2 bedroom units	30
	Total Stacked Units (South)	50
	Gross Square Footage	43,594 sf
	Net square footage	38,750 sf

Parking Summary:

Townhouses South (3 story):							
2 bedroom units	@	2	stalls/unit	74	x	2	148
3 bedroom units	@	2	stalls/unit	13	x	2	26
Guest parking	@	0.25	stalls/unit	87	x	0.25	22
Total Parking:							196 stalls

Townhome Flats South (3 story):							
1 bedroom units	@	1.5	stalls/unit	20	x	1.5	30
2 bedroom units	@	2	stalls/unit	30	x	2	60
Guest parking	@	0.25	stalls/unit	50	x	0.25	13
Total Parking:							103 stalls

Covered Parking:

Parking located at:	Provided:	Required:
ground floor (covered)	148	111
ground floor (covered)	26	20
grade (open)	0	0
	174	131

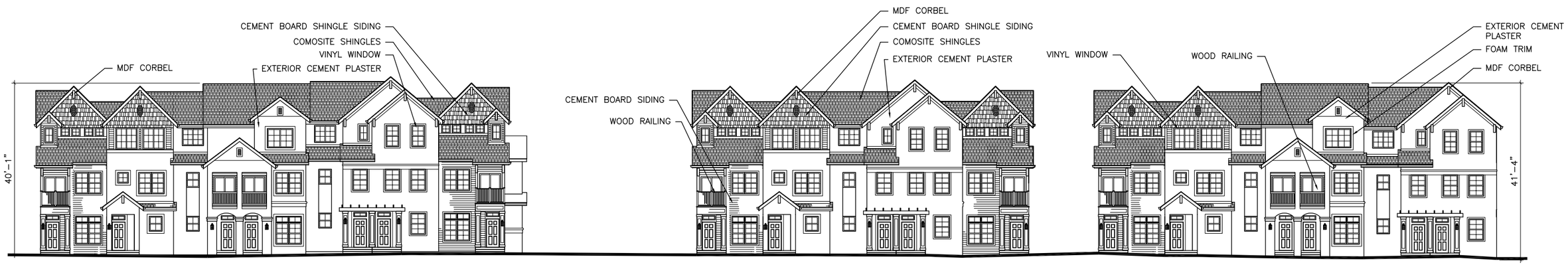
Parking located at:	Provided:	Required:
ground floor (covered)*	30	30
ground floor (covered)*	60	45
grade (open)	0	0
	90	75

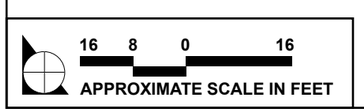
SOURCE: Van Tilburg, Banvard & Soderbergh, AIA - February 2010

FIGURE **6.0-8**

Alternative 3 South Townhome-Style Apartment and Townhome Flat Buildings

291-006•04/10



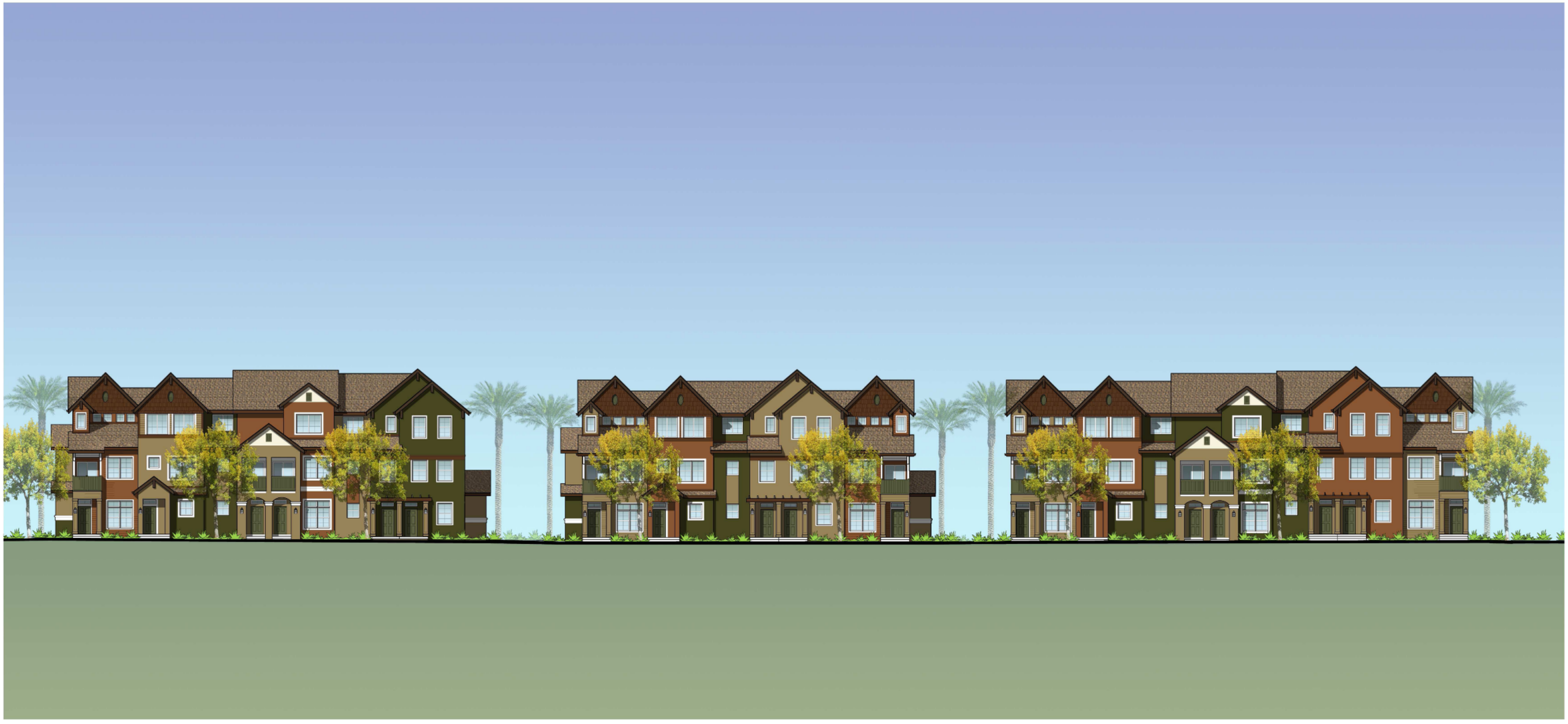


SOURCE: Van Tilburg, Banvard & Soderbergh, AIA - February 2010

FIGURE **6.0-9**

Alternative 3 Townhome-Style Apartment Buildings – South Parcel, South Elevation

291-006•04/10



16 8 0 16

APPROXIMATE SCALE IN FEET

SOURCE: Van Tilburg, Banvard & Soderbergh, AIA - December 2008

FIGURE **6.0-10**

Alternative 3 Townhome-Style Apartments Buildings – South Parcel, South Elevation

291-006•04/10

Each building would be arranged around a central courtyard and would step up from three stories (facing Project site boundaries or internal Project site roadways) to four stories. Resident parking would be provided on the ground level of the Garden Apartment buildings; guest parking would be provided on internal Project site streets. As under the proposed Project, Garden Apartment building heights would vary depending on the slope of the site, but would be a maximum of 51.6 feet above finished grade.

Table 6.0-21
Alternative 3: Reduced Density – 537 Residential Units
Summary of Proposed Development

Uses	Net Acres	No. of Units	Unit Mix	Gross Floor Area[a]	Parking Spaces[b, c]
North Parcel		248		282,036	508
Garden Apartment Units		152	1 Bedroom: 92	160,310	296
			2 Bedroom: 48		
			3 Bedroom: 12		
Townhome Flat Units		20	1 Bedroom: 8	17,438	41
			2 Bedroom: 12		
Townhome-Style Apartment Units		76	2 Bedroom: 59	104,288	171
			3 Bedroom: 17		
South Parcel		289		321,832	595
Garden Apartment Units		152	1 Bedroom: 92	160,310	296
			2 Bedroom: 48		
			3 Bedroom: 12		
Townhome Flat Units		50	1 Bedroom: 20	43,594	103
			2 Bedroom: 30		
Townhome-Style Apartment Units		87	2 Bedroom: 74	117,928	196
			3 Bedroom: 13		
Subtotal	15.7	**537**		**603,868**	**1,103**
Recreational Facilities				6,600	
Total				**610,468**	**1,103**

[a] *Gross floor area encompasses leasable building space plus "accessory" nonleasable space including mechanical/electrical/maintenance rooms, corridors, stairwells, elevators, storage, etc., but excludes parking.*

[b] *Parking requirements are calculated as follows: 1.50 spaces/unit for 1-bedroom units; 2.0 spaces/unit for 2- and 3-bedroom units; and 0.25 spaces/unit for guests. Garden Apartment resident parking would be provided on the ground level of the Garden Apartment buildings. Townhome-style apartment and Townhome flat parking would be provided in attached garages. All guest parking would be provided on internal Project site streets.*

Source: Van Tillburg, Banvard & Soderbergh, AIA, February 2010.

Townhome-Style Apartments and Townhome Flats

A total of 29 Townhome-style Apartment buildings and Townhome Flat buildings are proposed under Alternative 3. Townhome-style Apartment buildings house three-story units with entries and direct-access two-car garages on the first floor, living rooms and kitchens on the second floor, and bedrooms on the third floor. Townhome Flats are incorporated into buildings that look the same as the Townhome-style Apartment buildings from the exterior. A single Townhome Flat unit occupies either the second or the third floor of a given building. The second-floor Townhome Flats are served by direct access entries and one- and two-car garages on the first floor, similar to the Townhome-style Apartment units; their living rooms, kitchens, and bedrooms are all contained on the second floor. The third-floor Townhome Flat units are directly accessed by a stairway that bypasses the second-floor units.

The buildings would be located throughout the Project site, with 13 buildings (10 Townhome-style Apartment buildings and 3 Townhome Flat buildings) in the northern portion of the site and 16 buildings (9 Townhome-style Apartment buildings and 7 Townhome Flat buildings) in the southern portion of the site. The Townhome-style Apartment buildings would total approximately 222,216 square feet and the Townhome Flat buildings would total approximately 61,032 square feet, for a total of 283,248 square feet, and collectively would contain 233 units (163 Townhome-style Apartment units and 70 Townhome Flat units). The unit mix would consist of 28 one-bedroom units within the Townhome flat buildings, 175 two-bedroom units (133 units within the Townhome-style Apartment buildings and 42 within the Townhome Flat buildings), and 30 three-bedroom units within the Townhome-style Apartment buildings. Townhome-Style Apartment units would range in size from 1,175 square feet to 1,375 square feet and Townhome Flat units would range in size from 500 square feet to 925 square feet. Parking for the Townhome-Style Apartment and Townhome Flat units would be provided in attached garages; guest parking would be accommodated along internal Project site streets.

The Townhome-style Apartment and Townhome Flat buildings would be three stories tall, with building heights between 40 and 41.5 feet above finished grade. This is comparable to the Townhome-style Apartment building heights under the proposed Project, and a reduction of up to 18.5 feet in comparison with the Wrap-Around building proposed as part of the original Project in the southern portion of the Project site, facing Latium Way and Brea Canyon Cutoff Road.

Recreational Facilities and Amenities

As under the proposed Project, open space and recreational amenities for residents would be provided as part of Alternative 3. Two 3,300-square-foot recreational facilities would serve residents in the northern and southern portions of the Project site and would include amenities comparable to those of the proposed Project, including such facilities as a great room or community room, yoga/multipurpose room, fitness center, sports lounge, library-multipurpose room, conference room, and business center, as well as space for leasing offices. Two centrally located swimming pools would also be provided for resident use. A barbeque area would be provided by the pool on the northern portion of the Project site. A centrally located playground area would also be provided.

Public gathering spaces would also be incorporated into the site plan for Alternative 3, including courtyards within the Garden Apartment buildings and lawn areas within the Townhome-style Apartment building and Townhome Flat building clusters.

Open space on the Project site under Alternative 3, including landscape planters, landscaped quadrangles, and communal areas such as plazas, courtyards, playground areas, pools, and barbeque areas, totals 4.40 acres, or approximately 355 square feet per residential unit.

Landscaping

Project site landscape features would include lawn areas, ornamental landscape plantings along internal Project site roadways and within courtyards, and landscaped building setbacks from Project site boundaries. As under the proposed Project, street trees would be planted along Brea Canyon Cutoff Road to enhance the streetscape, and landscaping would provide a buffer between the Project site perimeter sidewalk and adjacent roadways.

Landscape features would include shade trees, shrubs, flowers, outdoor lighting, and amenities such as planter walls and decorative metal grilles and corbels at street level. Plantings on-site would comply with the County's *Drought-Tolerant Landscaping Ordinance*, which require 75 percent of the plantings on the Project site to be drought-tolerant and restricts turf area to no more than 5,000 square feet per lot or parcel. Since the Project site comprises two parcels (Assessor's Parcel Number 8764001132 and Assessor's Parcel Number 8764001131), up to 10,000 square feet of turf area are permitted site-wide.

Access and Circulation

Under Alternative 3, the Project site would be accessed by a single primary driveway centrally located along the site's western boundary, off Brea Canyon Cutoff Road. The driveway would provide access to

internal roadways leading to Garden Apartment building parking structures and attached garages in the Townhome-style Apartment buildings and Townhome Flat buildings. As under the proposed Project, internal roadways would be a minimum of 28 feet wide to allow emergency vehicle access.

Sustainability

The reduced residential population under Alternative 3 would reduce potable and reclaimed water demand compared to the proposed Project. Development proposed under Alternative 3 would implement environmentally sensitive and sustainable design features such that it may potentially qualify for Build It Green certification, and would comply with the County's Green Building Ordinance. Open space area on the Project site would total approximately 4.40 acres under Alternative 3, or 355 square feet per unit, compared to 4.46 acres, or 250 square feet per unit, under the proposed Project. Landscaping would be irrigated using reclaimed water, as under the proposed Project. The plant palette would comply with the County's *Drought-Tolerant Landscaping Ordinance*, which require 75 percent of the plantings to be drought-tolerant and allows a maximum of 5,000 square feet of turf area per lot or parcel. As discussed above, since the Project site is comprised of two parcels, the Project and Alternative 3 would be allowed up to 10,000 square feet of turf area.

Build It Green Features

Alternative 3 would incorporate measures for conserving natural resources, using water and energy wisely, and improving indoor air quality consistent with the GreenPoint checklist. As with the Project, Alternative 3 would meet or exceed state and local energy-saving requirements, including exceeding the Energy Efficiency Standards contained within Title 24 (2005), the California Building Standards Code, by a minimum of at least 15 percent by upgrading the envelope of the buildings with enhanced insulation and upgraded windows, and diverting a minimum 65 percent of all construction and demolition waste from landfills to recycling centers, as required by the Los Angeles County Green Building Ordinance. Energy-saving design features of Alternative 3 would also include: (1) reducing the amount of water usage by specifying drought tolerant plants and installing high-efficiency irrigation systems, 2-gallon-per-minute shower heads for bathrooms, flow limiters on all faucets, and high-efficiency toilets; and (2) reducing electrical demand by installing energy-efficient refrigerators and dishwashers, and garage ventilations fans that are controlled by carbon monoxide sensors. Additional measures fulfilled by, or to be incorporated into, Alternative 3 may include the following:

Planning and Design

- Infill Site
- The Project site is located within an urban growth boundary and avoids environmentally sensitive sites
- Alternative 3 proposes a housing density of 15 units per acre or more
- The Project site is located in an area that has sewer lines and utilities in place
- The Project site has pedestrian access within 0.25 mile to a range of neighborhood services
- The Project site is located within 0.5 mile of a major transit stop
- Social Gathering Places (an average of 50 square feet per unit or more; includes natural elements)
- Design for Safety and Vandalism Deterrence

Site

- Construction & Demolition Waste Management
- Performance of a two-week whole-building flushout of Volatile Organic Compounds (VOCs) prior to occupancy
- Recycled pieces of concrete and asphalt for use in new poured concrete
- "Cool Site" Techniques (Cool site techniques include: light-colored concrete and roofing materials).
- Drought-Tolerant Landscaping
- Light Pollution Reduction

Structure

- Acoustics: Noise and Vibration Control
- Recycled Materials (Slag or Flyash) Replace the Portland Cement Component of Concrete By a Minimum of 20 Percent
- High-Quality Insulation (01350 certified or contains no formaldehyde; recycled content of 75 percent or more)

Systems

- Water-Efficient Fixtures
- High Efficiency Toilets
- Air Conditioning with Non-HCFC Refrigerants
- Garage Ventilation
- Building Performance Exceeds Title 24

Finishes and Furnishings

- Low/No-VOC Paint and Other Coatings
- Low-VOC Adhesives and Sealants
- Low-Emitting Flooring

Operations and Maintenance

- Recycling and Waste Collection
- Operational and Maintenance Procedures
- Educational Signage

Geotechnical and Soil Resources

Construction Impacts

Alternative 3 would be subject to the same potential geotechnical hazards and site conditions as the proposed Project. These include potential hazards due to the depth of groundwater, liquefaction, subsidence and hydrocompaction, differential settlement, expansive soils, and slope instability, which constitute potentially significant impacts on the Project site. The mitigation measures required to reduce hazardous geological conditions potentially affecting the proposed Project would also be applicable to Alternative 3, with the exception of the requirement for permanent dewatering of subterranean structures under the proposed Project. With implementation of these mitigation measures, both Alternative 3 and the proposed Project would result in less than significant impacts. However, since Alternative 3 does not include any subterranean parking, whereas the proposed Project would construct a two-level subterranean structure as part of the Podium building, Alternative 3 would require less excavation than the proposed Project and would not require construction dewatering. Additionally, building heights across the site would generally be lower than those of the proposed Project, reducing the required depths of excavation for footings. For these reasons, construction of Alternative 3 would result in less impact with respect to geotechnical hazards and site conditions than the proposed Project.

Operational Impacts

Alternative 3 does not propose any subterranean parking, whereas the proposed Project would construct a two-level partially subterranean structure. Accordingly, Alternative 3 would not require permanent dewatering, as would the proposed Project. Alternative 3 would have less than significant operational impacts related to geotechnical and soil resources and impacts would be less than those of the proposed Project.

Cumulative Impacts

Geotechnical impacts tend to be site-specific rather than cumulative in nature and any development occurring within the County of Los Angeles would be subject to, at a minimum, uniform site development and construction standards relative to regional prevalent seismic and other geologic conditions. The proposed Project, Alternative 3, and each related project would be required to comply with recommendations contained in each project's geotechnical investigation report, or similar study, and be designed in accordance with the California Building Code (CBC), as well as proper engineering practices and the requirements of applicable portions of the Los Angeles County Code. As Alternative 3 would not require as much excavation or dewatering as the proposed Project, Alternative 3 would result in a less than considerable contribution to cumulatively significant geologic impacts, as well as less of a contribution to such impacts compared to the proposed Project.

Mitigation Measures

The following mitigation measures are applicable to the proposed Project and would also apply to Alternative 3:

6.0-1 Alternative 3 shall be designed and constructed in accordance with recommendations contained in the Geotechnical Investigation (attached as **Appendix 5.1**) prepared by Geocon West, Inc. and in accordance with all applicable local, state, and federal regulations, including the Uniform Building Code (UBC) and Title 26 of the Los Angeles County Code to the satisfaction of the Los Angeles County Department of Public Works. These recommendations include the following:

- A qualified dewatering consultant would be retained to assess flow rates during the design phase of Alternative 3. Temporary dewatering consisting of perimeter wells with interior well points may not be effective due to the presence of fine grained soils and bedrock as well as the inability of a well to produce groundwater draw-down in its vicinity. If wells are ineffective, the water may be collected and controlled within the excavation through the use of gravel-filled trenches (French drains). The number and locations of the French drains would be adjusted during excavation activities as necessary to collect and control any encountered seepage. The French drains would then direct the collected seepage to a sump where it will be pumped out of the excavation.

- If shoring piles are required, the design embedment of the shoring pile toes must be maintained during excavation activities. The toes of the perimeter shoring piles would be deepened to take into account any required excavations necessary to place an adjacent French drain system, or sub-slab drainage system

6.0-2 In order to provide more uniform support and minimize the potential for differential settlement, the existing earth materials underlying the structure shall be reengineered, which may require over-excavating exposed soil and bedrock in order to create a more uniform, competent fill blanket for foundation and floor slab support. Where supporting soils cannot be engineered and the potential for differential settlement is inherent, a more rigid structural foundation system (grade-beam system, mat foundation, piles) shall be implemented. Each structure shall be independently evaluated and designed based on the geologic conditions underlying each structure to the satisfaction of the Los Angeles County Department of Public Works.

- Where excavations exceed 10 feet, soldier piles will likely require lateral bracing utilizing drilled tie-back anchors or raker braces;

- For the design of rigid concrete or masonry retaining walls, triangular distribution of lateral earth pressure may be used;

- Continuous lagging between soldier piles;
- Tie-back friction anchors may be used to resist lateral loads; and
- Raker bracing may be used to internally brace the soldier.

Hydrology, Drainage, and Water Quality

Construction Impacts

Under Alternative 3, the removal of vegetation and other soil-stabilizing features during construction could accelerate wind- and water-driven erosion of soils that would increase sedimentation during storm events. During construction, dewatering would be achieved with temporary dewatering wells, storage tanks, and filters. The Applicant would obtain a National Pollutant Discharge Elimination System permit for demolition and construction, and would comply with all applicable requirements of the National Pollutant Discharge Elimination System program. The Applicant would also prepare a Stormwater Pollution Prevention Plan containing Best Management Practices, structural treatment and source control measures. Implementation of Best Management Practices would ensure that the Los Angeles Regional Water Quality Control Board water quality standards are met during construction activities. Like the proposed Project, Alternative 3 would have less than significant construction impacts related to hydrology, drainage, and water quality, and impacts would be less than those associated with the proposed Project.

Operational Impacts

Approximately 70 percent of the Project site is currently developed with buildings or paved, and is therefore impervious. Both Alternative 3 and the proposed Project would reduce pervious surface area on the Project site by an additional 20 percent, approximately, through the introduction of higher density development as well as hardscape areas as a component of outdoor open space. Both the proposed Project and Alternative 3 would therefore increase runoff volumes compared to existing conditions.

At proposed Project buildout, the calculated peak flow rate during a 50-year storm event was determined to be approximately 48.58 cubic feet per second, which is an increase of approximately 3.19 cubic feet per second over existing conditions (45.39 cubic feet per second). The proposed Project would be designed to hold and detain this 3.19 cubic-foot-per-second difference between pre- and Post-Project runoff volumes in perforated underground storage tanks. Accordingly, 50-year-storm event peak flows following Project buildout would be the same as peak flows under existing conditions. Peak flow runoff volumes under Alternative 3 would be comparable to those of the proposed Project.

The same storm drain improvements required for the proposed Project would be constructed for Alternative 3, including a network of above-ground curb gutters, catch basins, wet vaults, detention/retention storage tanks, and storm drain pipes that would direct and capture all surface runoff. Following filtration and/or detention, all runoff generated on the Project site would be discharged into the existing 72-inch storm drain beneath the site and conveyed north to the 63-inch storm drain beneath Colima Road. Alternative 3 impacts with respect to surface hydrology and drainage would be less than significant and comparable to those of the proposed Project.

With respect to water quality, in compliance with Los Angeles Regional Water Quality Control requirements, the Applicant would be required under both the proposed Project and Alternative 3 to implement a Standard Urban Storm Water Mitigation Plan to ensure that potential stormwater pollution is addressed by Best Management Practices incorporated into project design. Discharge from the permanent dewatering system associated with the proposed Project could contribute suspended solids and organic material, and therefore dewatering would require a National Pollutant Discharge Elimination System Permit for Groundwater Discharge. With compliance with National Pollutant Discharge Elimination and Standard Urban Storm Water Mitigation Plan requirements, the proposed Project's potential water quality impacts would be less than significant. However, since no subterranean parking would be developed under Alternative 3, no permanent dewatering of subterranean structures would be required. Therefore, a National Pollutant Discharge Elimination Permit for Groundwater Discharge would not be required under Alternative 3. For these reasons, operational water quality impacts under Alternative 3 would be less than significant and would be less than those of the proposed Project.

Cumulative Impacts

Under Alternative 3, the Project site would discharge to the same storm drains as under the proposed Project. None of the related projects would discharge to storm drains directly serving the Project site or reduce the capacity of those storm drains. With respect to water quality, the proposed Project, Alternative 3, and the related projects would be required to comply with National Pollutant Discharge Elimination System permits and prepare a Stormwater Pollution Prevention Plan for construction activities. As with the proposed Project and Alternative 3, the Stormwater Pollution Prevention Plans prepared for each related project would incorporate Best Management Practices by requiring controls of pollutant discharges that utilize best available technology to reduce pollutants. In addition, projects are required to submit and then implement a Standard Urban Stormwater Mitigation Plan containing design features and Best Management Practices appropriate and applicable to each project to reduce post-construction operational pollutants in stormwater discharges. Potential water quality impacts associated with the related projects would be less than significant with compliance with National Pollutant Discharge

Elimination System requirements, and the enforcement of these requirements by the County. As such, Alternative 3 would have a less than considerable contribution to cumulatively significant hydrology and water quality impacts. Additionally, since Alternative 3 would require less dewatering than the proposed Project, Alternative 3 would result in less of a contribution to cumulatively significant impacts than the proposed Project.

Mitigation Measures

Since surface water hydrology and water quality impacts would be less than significant under both the proposed Project and Alternative 3, no mitigation measures are required.

Noise

Noise impacts are evaluated for two categories: construction noise sources and operational noise sources. Construction-related noise sources are associated with construction activities such as demolition, earthmoving, and the use of construction equipment. Operational noise is primarily associated with stationary sources such as rooftop mechanical equipment, and mobile sources such as vehicles traveling to and from the Project site.

Construction Impacts

Under Alternative 3, the number of proposed residential units would be reduced from 775 to 537, a reduction of more than 30 percent. Given the reduced density of Alternative 3, the duration of excavation and construction phases for Alternative 3 would be reduced compared to the proposed Project. However, construction of Alternative 3 would require the use of the same equipment as the proposed Project, and therefore would generate similar levels of noise and groundborne vibration as the proposed Project. The Applicant would implement mitigation measures to reduce the impact from construction noise and vibration, and these are listed below. However, construction noise and vibration impacts for Alternative 3 would remain significant and unavoidable even after mitigation.

In addition to construction equipment noise, the movement of equipment and workers to and from the Project site during construction would temporarily increase noise levels along access routes to the Project site. The construction haul route for the Project and Alternative 3 would utilize only major traffic corridors, provide the most direct access to the Pomona Freeway, and minimize the use of roadways adjacent to residential or other sensitive uses wherever possible. Therefore, temporary noise impacts associated with the haul route for the proposed Project and Alternative 3 would be less than significant. Additionally, since it takes a doubling of average daily trips on roadways to increase noise by three dB(A) CNEL, and because the maximum number of construction workers traveling to the Project site would not

cause a doubling of average daily trips in the immediate area, noise level increases along major arterials surrounding the Project site would be less than three dB(A) due to construction traffic noise; therefore traffic noise generated by construction personnel trips would be less than significant. Because of the reduction in the amount of construction associated with Alternative 3, the maximum number of construction-related truck and worker trips would be less than those associated with the proposed Project. Thus, impacts for Alternative 3 related to the movement of equipment and workers to and from the Project site during construction would be less than significant and less than those associated with the proposed Project.

Operational Impacts

A supplemental Traffic Impact Analysis was prepared for Alternative 3 (KHR Associates, June 2009) and is appended to this EIR (see **Appendix 6.0, Supplemental Traffic Analysis**). Daily, AM and PM peak hour trip rates used for Alternative 3 were calculated and credit for traffic generated by the existing uses was applied to traffic generated by Alternative 3 since Southlands Christian Schools has indicated that they will be relocating to new facilities outside the study area. Alternative 3 is expected to generate a net decrease of 22 trips during the AM peak hour, and a net increase of 213 trips during the PM peak hour. Compared to the proposed Project, Alternative 3 would generate 1,599 fewer daily trips, 121 fewer AM peak hour trips, and 148 fewer PM peak hour trips.

Roadway noise increases associated with the proposed Project would be less than three dB(A) CNEL at all receptor locations, and thus no significant off-site noise impacts would occur as a result of Project operation. Given that Alternative 3 would generate fewer peak hour and overall daily trips than the proposed Project, off-site roadway noise impacts would be less than those associated with the proposed Project, and thus would remain less than significant.

As with the proposed Project, all HVAC equipment would be designed to not exceed the noise standards listed in Section 12.08.530 of the Los Angeles County Code, which specifically limit off-site noise level increases due to the operation of air conditioning and refrigeration equipment. Use of standard design features such as shielding, enclosures and parapets, proper selection and sizing of equipment, as well as locating rooftop equipment a suitable distance from sensitive receptors, would be incorporated as design features for Alternative 3 and would ensure compliance with the Los Angeles County Code. All other stationary noise sources associated with Alternative 3 would be subject to Section 12.08.390 of the Los Angeles County Code, which states that no person shall operate or cause to be operated any noise source that causes the noise level on an adjacent property to exceed the land use compatibility standards.

As with the proposed Project, buildings associated with Alternative 3 would be configured such that the components with the greatest potential for noise generation (e.g., parking areas, courtyards, and recreational centers) are located in the interior of the site and surrounded by buildings and structures that act as noise barriers. For this reason, Alternative 3 is not anticipated to substantially increase on-site noise levels. Operational noise impacts due to on-site point noise generation under Alternative 3 would be less than significant, and less than those associated with the proposed Project since fewer residential units would be developed.

Occupancy of the reduced number of residences proposed under Alternative 3 would generate temporary and periodic noise level increases typically associated with residential activities. These sounds may include people conversing in outdoor spaces, doors slamming, horns honking, HVAC equipment, operation of landscaping equipment, personal stereos audible through open doors and windows, vehicles entering and exiting the Project site, and domestic animals. These noise sources are discussed in greater detail above. Since such temporary and periodic noise level increases are common within residential areas and therefore not considered substantial. Therefore, noise impacts during operations under Alternative 3 would be less than significant and less than those associated with the proposed Project, since fewer residential units would be developed.

Cumulative Impacts

Noise level increases attributable to traffic generated by the proposed Project and related projects would be less than three dB(A) CNEL on all roadway segments. A noise level increase of less than three dB(A) is not typically noticed by the human ear. Since all roadway noise increases associated with the cumulative traffic volumes of the proposed Project and related projects would be less than three dB(A) CNEL, such roadway noise increases would not be perceptible and thus cumulative roadway noise impacts would be less than significant. Given that Alternative 3 would result in fewer daily trips than the proposed Project and that the proposed Project would not result in cumulatively considerable impact, Alternative 3 would have a less than considerable contribution to cumulatively significant noise impact, and would result in less potential cumulatively considerable impacts related to noise as compared to the proposed Project.

Mitigation Measures

The following mitigation measures are applicable to the proposed Project and would also apply to Alternative 3.

6.0-3 All construction equipment, fixed or mobile, that is utilized on the site for more than two working days shall be in proper operating condition and fitted with standard factory silencing features. To ensure that mobile and stationary equipment is properly

maintained and meets all federal, state, and local standards, the Applicant shall maintain an equipment log. The log shall document the condition of equipment relative to factory specifications and identify the measures taken to ensure that all construction equipment is in proper tune and fitted with an adequate muffling device. The log shall be made available to the Los Angeles County Department of Public Works for review and approval on a quarterly basis. In areas where construction equipment (such as generators and air compressors) is left stationary and operating for more than one day within 100 feet of residential land uses, temporary portable noise structures shall be built. These barriers shall be located between the piece of equipment and sensitive land uses.

6.0-4 All exterior construction activity, including grading, transport of material or equipment and warming up of equipment, shall be limited to between the hours of 7:00 AM and 7:00 PM, except for concrete pours, and shall not occur on Sundays or legal holidays unless approved by the Los Angeles County Department of Public Works. The work schedule shall be posted at the construction site and modified as necessary to reflect deviations approved by the Los Angeles County Building and Safety Division.

6.0-5 The Applicant shall post a notice at the construction site and along the proposed truck haul route. The notice shall contain information on the type of Project and anticipated duration of construction activity, and shall provide a phone number where people can register questions and complaints. The Applicant shall keep a record of all complaints and take appropriate action to minimize noise generated by the offending activity where feasible to the satisfaction of the Los Angeles County Department of Public Health. A monthly log of noise complaints shall be maintained by the Applicant and made available to the County of Los Angeles Department of Public Health.

6.0-6 All construction activity resulting in vibration that exceeds the County of Los Angeles groundborne vibration threshold of 0.01 inch/second PPV at or beyond the property boundary of an adjacent sensitive use shall be limited to Monday through Saturday, between the hours of 9:00 AM and 5:00 PM.

6.0-7 The Applicant shall incorporate building materials and techniques that reduce sound transmission through walls, windows, doors, ceilings, and floors of on-site residences in order to achieve interior noise levels that meet or are below the state land use guidelines standards for interior noise, which is 45 dB(A). Such building materials and techniques may include double-paned windows, staggered studs, or sound-absorbing blankets incorporated into building wall design, or outdoor noise barriers erected between noise

sources and noise-sensitive areas, such as berms made of sloping mounds of earth, walls and fences constructed of a variety of materials, or combinations of these materials.

Air Quality

Air quality impacts are evaluated for two categories: construction emissions and operational emissions. Construction-related emissions are associated with construction activities such as demolition, earthmoving, use of construction equipment, and application of coatings to surfaces. Operational emissions are primarily associated with mobile source emissions based on vehicle trips generated by the proposed Project.

Construction Impacts

Under Alternative 3, the Project site would be developed with 537 multi-family residential units. Compared to the proposed Project, Alternative 3 would reduce the number of multi-family residential units by over 30 percent. Similar to the proposed Project, Alternative 3 would involve demolition of Southlands Christian Church and the Southlands Christian Schools. However, since approximately 30 percent less new developed square footage is proposed under Alternative 3, total construction activity would likewise be reduced by approximately 30 percent. The amount of grading and excavation required would be reduced since no subterranean parking would be developed, resulting in fewer emissions associated with this construction phase. In addition, while building construction would likely occur at a daily rate that is similar to the proposed Project, less overall building construction would take place (i.e., shorter duration of construction). Therefore, Alternative 3 would generate less construction-related emissions compared with the proposed Project, as discussed in **Section 5.4, Air Quality**.

Alternative 3 could still result in NO_X emissions that exceed the SCAQMD's daily emissions thresholds during the grading phase of Project construction. Under the proposed Project, impacts would be reduced to less than significant with incorporation of **Mitigation Measures 6.0-8** through **6.0-16**. Alternative 3 would be required to implement the same mitigation measures to reduce the impacts to less than significant levels.

In addition, Alternative 3 could still result in emissions that exceed the LSTs for PM_{10} and $PM_{2.5}$, although the impact would be reduced compared to the proposed Project. Under the proposed Project, the LST impact would be reduced to a less than significant level with implementation of **Mitigation Measure 6.0-16**, with the exception of PM_{10} impacts, which would be reduced by implementation of mitigation but would remain significant and unavoidable. Alternative 3 would be required to implement the same mitigation measures as the proposed Project, further reducing emissions. Therefore, Alternative 3 would

result in less than significant impacts with implementation of the required mitigation measures, with the exception of PM_{10}, and less construction-related air quality impacts compared to the proposed Project.

Operational Impacts

As discussed in **Section 5.4**, vehicle trips associated with the proposed Project would generate net emissions that exceed the South Coast Air Quality Management District (SCAQMD) thresholds for Volatile Organic Compounds, or VOCs, an evaporative emission and a by-product of combustion that is a precursor to ozone formation, during both summer and winter. Therefore, Project-related operational emissions of VOC would result in a significant impact on air quality in the region. Alternative 3 would construct approximately 30 percent less residential units than the proposed Project and would therefore result in fewer vehicle trips. Specifically, Alternative 3 would have 3,609 daily trips, as opposed to the proposed Project's generation of 5,208 daily trips. As noted in **Table 6.0-22, Comparison of Proposed Project and Alternative 3: Unmitigated Operational Emissions,** operational emissions associated with Alternative 3 would not exceed the SCAQMD thresholds for any pollutant and impacts would therefore be less than significant, and would be less than those associated with the proposed Project.

Table 6.0-22, provides a comparison of the anticipated operational emissions from Alternative 3 to the emissions from the proposed Project. As shown in the table, the net operational emissions of Alternative 3 are less than those of the proposed Project and are less than all of the significance thresholds.

Table 6.0-22
Comparison of Proposed Project and Alternative 3: Unmitigated Operational Emissions

Pollutant	SCAQMD Threshold	Proposed Project	Proposed Project Exceeds Threshold?	Alternative 3	Alternative 3 Exceeds Threshold?
Net Summertime Emissions (pounds per day)[1]					
VOC	55	70.25	**YES**	43.23	NO
NO_X	55	47.47	NO	31.21	NO
CO	550	361.73	NO	232.58	NO
SO_X	150	0.44	NO	0.29	NO
PM_{10}	150	70.34	NO	46.76	NO
$PM_{2.5}$	55	13.72	NO	9.12	NO

Pollutant	SCAQMD Threshold	Proposed Project	Proposed Project Exceeds Threshold?	Alternative 3	Alternative 3 Exceeds Threshold?
Net Wintertime Emissions (pounds per day)[2]					
VOC	55	71.64	**YES**	46.01	NO
NO_X	55	55.25	**YES**	36.26	NO
CO	550	345.43	NO	224.52	NO
SO_X	150	0.36	NO	0.24	NO
PM_{10}	150	70.33	NO	46.75	NO
$PM_{2.5}$	55	13.71	NO	9.11	NO

Source: Impact Sciences, Inc., (2009). Emissions calculations are provided in ***Appendix 6.0****.*
Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations. Net emissions include credit for emissions from the existing land use.
[1] *"Summertime Emissions" are representative of the conditions that may occur during the ozone season (May 1 to October 31).*
[2] *"Wintertime Emissions" are representative of the conditions that may occur during the balance of the year (November 1 to April 30).*

Cumulative Impacts

The Project's construction emissions would exceed the Project-level significance threshold for NO_X, however, these NO_X impacts would be reduced to a less than significant level with implementation of **Mitigation Measure 6.0-10**. Therefore, with mitigation, the proposed Project would not result in a cumulatively considerable contribution to cumulatively significant impacts. As Alternative 3 would result in substantially fewer emissions due to reduced daily trip generation at buildout compared to the proposed Project, potential cumulatively considerable impacts would be less than the proposed Project and would not result in a considerable contribution to cumulatively significant air quality impacts.

Mitigation Measures

The following mitigation measures are applicable to the proposed Project, and would also apply to Alternative 3.

6.0-8 The Developer shall prepare a Construction Traffic Emission Management Plan to minimize emissions from vehicles including, but not limited to, scheduling truck deliveries to avoid peak hour traffic conditions, consolidating truck deliveries, and prohibiting truck idling in excess of 5 minutes.

6.0-9 The Contractor shall ensure that the use of all construction equipment is suspended during first-stage smog alerts.

6.0-10 The Contractor shall use electric or alternatively fueled mobile equipment for on-site uses instead of diesel equipment if suitable equipment is commercially available and the necessary power and refueling infrastructure can reasonably be installed on site.

6.0-11 The Contractor shall maintain construction equipment by conducting regular tune-ups according to the manufacturers' recommendations.

6.0-12 The Contractor shall use electric welders to avoid emissions from gas or diesel welders if suitable equipment is commercially available and the necessary power infrastructure can reasonably be installed on site.

6.0-13 The Contractor shall use on-site electricity or alternative fuels rather than diesel-powered or gasoline-powered generators if suitable equipment is commercially available and the necessary power and refueling infrastructure can reasonably be installed on site.

6.0-14 The Applicant shall require on-site off-road construction equipment to meet EPA Tier 3 emissions standards (Model Year 2006 or later) at a minimum. This requirement will apply to any piece of equipment which is expected to operate on site more than 15 days.

6.0-15 For equipment not covered by **Mitigation Measure 6.0-14** above, the Applicant shall evaluate the potential for reducing exhaust emissions from on-road and off-road construction equipment, and implement such measures. Control technologies to be considered may include particulate traps, selective catalytic reduction, oxidation catalysts, air enhancement technologies, and the use of alternatively (non-diesel) fueled engines. Considerations will include commercial availability of appropriate California Air Resources Board verified technologies.

6.0-16 General contractors shall implement a fugitive dust control program pursuant to the provisions of South Coast Air Quality Management District Rule 403. The requirements of Rule 403 are as follows:

Source Category	Control Measure	Guidance
Backfilling	01-1 Stabilize backfill material when not actively handling; and 01-2 Stabilize backfill material during handling; and 01-3 Stabilize soil at completion of activity.	• Mix backfill soil with water prior to moving • Dedicate water truck or high capacity hose to backfilling equipment • Empty loader bucket slowly so that no dust plumes are generated • Minimize drop height from loader bucket

Source Category	Control Measure	Guidance
Clearing and Grubbing	02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and 02-2 Stabilize soil during clearing and grubbing activities; and 02-3 Stabilize soil immediately after clearing and grubbing activities.	• Maintain live perennial vegetation where possible • Apply water in sufficient quantity to prevent generation of dust plumes
Clearing Forms	03-1 Use water spray to clear forms; or 03-2 Use sweeping and water spray to clear forms; or 03-3 Use vacuum system to clear forms.	• Use of high pressure air to clear forms may cause exceedance of Rule requirements
Crushing	04-1 Stabilize surface soils prior to operation of support equipment; and 04-2 Stabilize material after crushing.	• Follow permit conditions for crushing equipment • Pre-water material prior to loading into crusher • Monitor crusher emissions opacity • Apply water to crushed material to prevent dust plumes
Cut and Fill	05-1 Pre-water soils prior to cut and fill activities; and 05-2 Stabilize soil during and after cut and fill activities.	• For large sites, pre-water with sprinklers or water trucks and allow time for penetration • Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts
Demolition – mechanical/manual	06-1 Stabilize wind erodible surfaces to reduce dust; and 06-2 Stabilize surface soil where support equipment and vehicles will operate; and 06-3 Stabilize loose soil and demolition debris; and 06-4 Comply with AQMD Rule 1403.	• Apply water in sufficient quantities to prevent the generation of visible dust plumes
Disturbed Soil	07-1 Stabilize disturbed soil throughout the construction site; and 07-2 Stabilize disturbed soil between structures	• Limit vehicular traffic and disturbances on soils where possible • If interior block walls are planned, install as early as possible • Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes

Source Category	Control Measure	Guidance
Earth-moving Activities	08-1 Pre-apply water to depth of proposed cuts; and 08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and 08-3 Stabilize soils once earth-moving activities are complete.	• Grade each project phase separately, timed to coincide with construction phase • Upwind fencing can prevent material movement on site • Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
Importing/Exporting of Bulk Materials	09-1 Stabilize material while loading to reduce fugitive dust emissions; and 09-2 Maintain at least 6 inches of freeboard on haul vehicles; and 09-3 Stabilize material while transporting to reduce fugitive dust emissions; and 09-4 Stabilize material while unloading to reduce fugitive dust emissions; and 09-5 Comply with Vehicle Code Section 23114.	• Use tarps or other suitable enclosures on haul trucks • Check belly dump truck seals regularly and remove any trapped rocks to prevent spillage • Comply with track-out prevention/mitigation requirements • Provide water while loading and unloading to reduce visible dust plumes
Landscaping	10-1 Stabilize soils, materials, slopes	• Apply water to materials to stabilize • Maintain materials in a crusted condition • Maintain effective cover over materials • Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes • Hydroseed prior to rain season
Road Shoulder Maintenance	11-1 Apply water to unpaved shoulders prior to clearing; and 11-2 Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.	• Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs • Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs
Screening	12-1 Pre-water material prior to screening; and 12-2 Limit fugitive dust emissions to opacity and plume length standards; and 12-3 Stabilize material immediately after screening.	• Dedicate water truck or high capacity hose to screening operation • Drop material through the screen slowly and minimize drop height • Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point
Staging Areas	13-1 Stabilize staging areas during use; and 13-2 Stabilize staging area soils at project completion.	• Limit size of staging area • Limit vehicle speeds to 15 miles per hour • Limit number and size of staging area entrances/exists

Source Category	Control Measure	Guidance
Stockpiles/Bulk Material Handling	14-1 Stabilize stockpiled materials. 14-2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than 8 feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	• Add or remove material from the downwind portion of the storage pile • Maintain storage piles to avoid steep sides or faces
Traffic Areas for Construction Activities	15-1 Stabilize all off-road traffic and parking areas; and 15-2 Stabilize all haul routes; and 15-3 Direct construction traffic over established haul routes.	• Apply gravel/paving to all haul routes as soon as possible to all future roadway areas • Barriers can be used to ensure vehicles are only used on established parking areas/haul routes
Trenching	16-1 Stabilize surface soils where trencher or excavator and support equipment will operate; and 16-2 Stabilize soils at the completion of trenching activities.	• Pre-watering of soils prior to trenching is an effective preventive measure. For deep trenching activities, pre-trench to 18 inches soak soils via the pre-trench and resuming trenching • Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment
Truck Loading	17-1 Pre-water material prior to loading; and 17-2 Ensure that freeboard exceeds 6 inches (CVC 23114)	• Empty loader bucket such that no visible dust plumes are created • Ensure that the loader bucket is close to the truck to minimize drop height while loading
Turf Overseeding	18-1 Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and 18-2 Cover haul vehicles prior to exiting the site.	• Haul waste material immediately off-site
Unpaved Roads/Parking Lots	19-1 Stabilize soils to meet the applicable performance standards; and 19-2 Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	• Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements

Source Category	Control Measure	Guidance
Vacant Land	20-1 In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

Climate Change

Climate change impacts are evaluated for two categories: construction-related greenhouse gas (GHG) emissions and operational GHG emissions. While no state or local agency has formally adopted numerical significance thresholds related to GHG emissions, the Governor's Office of Planning and Research has released guidance for addressing climate change under CEQA and the Natural Resources Agency has adopted amendments to the *State CEQA Guidelines* establishing criteria for evaluating GHG emissions. CARB has also released the *Climate Change Scoping Plan*, which discusses the strategies and measures CARB is intending to adopt for the state to achieve the goals of AB 32.

Construction Impacts

Under Alternative 3, the Project site would be developed with 537 multi-family residential units. Some phases of construction activity associated with Alternative 3 would be similar to that of the proposed Project, since the site would require similar levels of demolition. Building construction would likely occur at a daily rate similar to the proposed Project; however, overall building construction would be reduced by approximately 30 percent, and no excavation for the construction of a subterranean parking structure would be required. Therefore, Alternative 3 would generate less construction-related GHG emissions than the proposed Project.

Operational Impacts

Alternative 3 would result in the occupancy of approximately 30 percent fewer residential units and would provide housing for a reduced population compared to the proposed Project, resulting in fewer average daily vehicle trips. Like the proposed Project, Alternative 3 would comply with the County of Los Angeles Green Building Ordinance and reduce energy consumption by a minimum of 15 percent beyond the Energy Efficiency Standards contained within Title 24 (2005), the California Building Standards Code, and would incorporate similar water efficient appliances, landscaping, and other

features. The estimated maximum annual GHG emissions associated with operation of the proposed Project and Alternative 3 are shown in **Table 6.0-23, Comparison of Proposed Project and Alternative 3: Unmitigated Annual GHG Emissions**. GHG emissions were calculated using the same method used in **Section 5.5, Climate Change**.

Table 6.0-23
Comparison of Proposed Project and Alternative 3: Unmitigated Annual GHG Emissions

Operational GHG Emission Source	Proposed Project GHG Emissions ($MTCO_2e$/Year)	Alternative 3 GHG Emissions ($MTCO_2e$/Year)
Construction (Annualized) Emissions	147.98	147.98
Operational (Mobile) Sources	7,853.77	4,745.73
Area Sources	1,479.82	959.42
Electrical Consumption	869.11	386.78
Solid Waste Generation	24.13	8.52
Water Supply	200.91	116.76
Wastewater Generation	58.03	36.49
Total Annual	**9,630.31**	**6,401.68**

Source: Impact Sciences, Inc. (2009). Emissions calculations are provided in ***Appendix 6.0.***

Based on the unmitigated GHG emissions presented in the table above, the net total annualized emissions for Alternative 3 would be reduced compared to the proposed Project. Alternative 3 would therefore result in impacts that would be less than those associated with the proposed Project. Alternative 3 would implement design features and mitigation measures that would be generally consistent with measures recommended by the *Climate Change Scoping Plan* for AB 32, OPR guidance, the *2006 Climate Action Team Report*, the County of Los Angeles Green Building Ordinance, and the Drought Tolerant Landscaping Ordinance. These measures would include energy-efficiency features, water conservation features, and drought-tolerant landscaping and would be identical to those measures listed in **Section 5.5, Climate Change** (refer to **Tables 5.5-10** through **5.5-12**). Therefore, Alternative 3 would be generally consistent with the overall goals, strategies, and control measures established under these guidelines and programs and this result in less than significant impacts. Because Alternative 3 involves less overall development, impacts would be less than the proposed Project and less than significant.

Cumulative Impacts

Compared to the estimated GHG for all sources in California, the contribution attributable to the proposed Project and Alternative 3 would be imperceptible. As discussed above, the proposed Project and Alternative 3 are generally consistent with the overall goals, strategies, and control measures established under AB 32, and with applicable measures set forth by the Attorney General, Office of Planning and Research, and 2006 Climate Action Team Report for the reduction of GHGs. No quantitative emission thresholds or similar criteria have been established to evaluate the contribution of a single project to cumulative impacts on global climate. However, the Project and Alternative 3 incorporate objectives and GHG reduction measures that are generally consistent with the overall goals, strategies, and control measures established under AB 32, Office of Planning and Research Guidance, the 2006 Climate Action Team Report, the Los Angeles County Green Building Ordinance, and the Los Angeles County Drought Tolerant Landscaping Ordinance. As with the proposed Project, Alternative 3 would have a less than considerable contribution to a cumulatively significant impact on global climate change.

Mitigation Measures

Although Alternative 3 would have a less than significant impact on global climate change, the following mitigation measures are recommended to ensure compliance with applicable policies.

6.0-17 The Project shall comply with the applicable provisions and requirements of the County of Los Angeles *Green Building Ordinance* and the *Drought-Tolerant Landscaping Ordinance*.

6.0-18 The Project shall comply with the applicable measures generally consistent with CARB's AB 32 Scoping Plan, the Attorney General's "project-level" measures, OPR's recommended measures, and the 2006 Climate Action Team Report, as listed in **Table 5.5-10, Table 5.5-11, Table 5.5-12, and Table 5.5-13**, respectively, of the EIR.

Aesthetics and Views

Construction Impacts

Visual Character

Construction of Alternative 3 would periodically subject the site and neighboring land uses to the presence of construction equipment, incomplete structures, stockpiled cut soil material, and areas in landscaping transition. Like the proposed Project, Alternative 3 would result in less than significant construction-related aesthetic impacts with implementation of mitigation requiring that the construction

site be screened from street-level view with appropriate fencing and barriers. However, since Alternative 3 would require less construction, impacts would be incrementally reduced.

Light and Glare

During construction of Alternative 3, nighttime lighting would only be required for security purposes since no nighttime construction would occur. Security lighting during construction would be limited to only those sites requiring illumination and all security lights would be properly shielded and projected downwards. Additionally, construction activities are not anticipated to create sources of glare that could affect visibility in the area since construction is not expected to involve bright light sources that would be visible from off site or other materials that could directly or indirectly generate glare. Both the proposed Project and Alternative 3 would have less than significant construction-related light and glare impacts with implementation of mitigation. However, since Alternative 3 would require less overall construction, impacts would be incrementally reduced impacts associated with light and glare would be less than those of the proposed Project.

Operational Impacts

Visual Character

The Project site is not visible from any state-designated scenic highways, but is visible from Brea Canyon Cutoff Road, which is designated as a limited secondary highway by the Rowland Heights Community General Plan, which is a classification intended to protect routes in rural areas. However, the Brea Canyon Cutoff Road corridor has been heavily urbanized since the designation was issued. Furthermore, the Project site is adjacent to Colima Road, which is a major highway and heavily developed commercial corridor. Views of the Project site from other vantage points are limited due to intervening residential tracts, vegetation, and topographical relief in the hillsides. Therefore, Alternative 3 would have less than significant impacts on scenic vistas.

Alternative 3 would modify the building configuration of the proposed Project in several ways. First, on the northern parcel, where the proposed Project proposes a four-story Podium building, Alternative 3 would include four three- and four-story Garden Apartment buildings in the northwest corner along Brea Canyon Cutoff Road and five three-story Townhome-style Apartment buildings in the northeastern corner, and four Townhome-style Apartment buildings and one Townhome Flat building adjacent to the Royal Vista Golf Course. Townhome-style Apartment buildings would occupy the rest of the northern parcel. On the southern parcel, along the Royal Vista Golf Course and Ostia Way, Alternative 3 would include four three- and four-story Garden Apartment buildings. Finally, under Alternative 3, the southern portion of the Project site, along Drusilla and Latium Ways and Brea Canyon Cutoff Road,

would be developed with three-story Townhome-style Apartment buildings and Townhome Flat buildings.

Based on the above, and as illustrated in **Figures 6.0-1** to **6.0-10**, overall building height, massing, and scale would be reduced under Alternative 3 compared to the proposed Project. Building heights would be comparable to those of the proposed Project on the eastern portion of the Project site, adjacent to the Royal Vista Golf Course and Ostia Way, and would vary from approximately 40 to 41.5 feet above finished grade.

Like the proposed Project, Alternative 3 would increase the development density on-site and increase building height compared to existing conditions. Therefore, both the proposed Project and Alternative 3 would have significant and unavoidable impacts on aesthetic character and views. However, compared to the proposed Project, Alternative 3 would result in building height reductions along the northern Project site boundary, where the senior housing complex is, and along Brea Canyon Cutoff Road, Latium Way, and Drusilla Way, and would therefore increase physical compatibility with off-site uses compared to the proposed Project. Building heights immediately adjacent to the senior housing complex north of the Project site would be reduced from 56.5 feet above adjacent grade under the proposed Project to 41.5 feet above adjacent grade under Alternative 3 (the height of the Townhome-style Apartment buildings), and would be reduced to between 42 and 51.5 feet above adjacent grade along the northwestern and north-central Project site boundary (the height of the Garden Apartments) under Alternative 3. Townhome-style Apartment buildings and Townhome Flats buildings in the southern portion of the Project site would be approximately 41 feet above adjacent grade under Alternative 3, compared to approximately 47 feet for the Wrap-Around building under the proposed Project. Therefore, impacts on aesthetics and views under Alternative 3 would be less than those associated with the proposed Project.

Light and Glare

During operation, neither the proposed Project nor Alternative 3 would introduce any sources of substantial light. Proposed lighting would be used to create a safe, adequately illuminated nighttime environment on the Project site by highlighting building entrances and illuminating public places where people are expected to congregate. However, the potential exists for intermittent gaps in intervening buildings and landscaping to permit light spillover off the site. Most sources of lighting would be shielded from off-site vantage points by surrounding structures and landscaping. With mitigation, exterior lighting would incorporate low-intensity downlights, louvers, shields, hoods or other screening devices, and all proposed light sources would be directed downward to limit light spillover and glare generation. Building setbacks and perimeter landscaping would also reduce the potential for glare and light spillover onto neighboring uses. Therefore, both the proposed Project and Alternative 3 would have

less than significant light impacts with implementation of mitigation. However, since Alternative 3 would result in a lower development density on the Project site, it would incrementally reduce the lighting impacts associated impacts associated with operational light and glare would be less than those of the proposed Project.

During operation, neither the proposed Project nor Alternative 3 would introduce any sources of substantial glare. Similar to the proposed Project, the exterior building materials proposed for structures on the site include painted cement plaster, concrete tile, composite shingles, cement board, painted metal and vinyl. These materials have minimal reflective properties and would generate minimal glare, if any. Alternative 3 does not propose the use of highly polished or glass surfaces for the building cladding of any structures. Furthermore, parking for the Garden Apartment units would be enclosed within the Garden Apartments buildings on the first floor and parking for the Townhome-style Apartments and Townhome Flats would be located within attached garages, precluding visible glare from off site. The remaining surface parking is generally located in the internal portion of the site. Therefore, both the proposed Project and Alternative 3 would have less than significant glare impacts with implementation of design features. However, since Alternative 3 would result in a lower development density on the Project site, it would incrementally reduce the impacts associated with glare impacts and would be less than those of the proposed Project.

Shade and Shadow

Shade-sensitive land uses in the Project site vicinity include multi-family residences along Ostia Way to the southwest, Drusilla Way to the east, and Latium Way to the south, and a senior housing complex north of the Project site. As discussed in **Section 5.6, Visual Quality**, of this EIR, shadow lengths in the Los Angeles area are longest around the Winter Solstice (December 21st) and shortest around the Summer Solstice (June 21st). Shadow length and bearing changes according to the time of year and time of day, but because of the location of the Project site (longitude and latitude), no shadows are cast to the south by buildings or structures. Shading of off-site shade-sensitive uses for 3 hours or more is generally considered a substantial, and therefore significant, impact that adversely affects those uses.

Some multi-family residences on Drusilla Way would be shaded for short durations during the day around the Winter Solstice by Townhome-Style Apartment buildings in the southern portion of the Project site. These buildings would be three stories tall, or 41.5 feet in height above finished grade, along the eastern Project site boundary, with a 15-foot setback from the property line. As shown in **Table 6.0-24**, shadows cast to the east by these buildings would be a maximum of 67 to 126 feet in length during the

Winter Solstice.[17] The multi-family residences along Drusilla Way would be shaded for less than 3 hours and impacts would be less than significant. Shading impacts on Drusilla Way would also be less than those of the proposed Project, which proposed a three- and four-story Wrap-Around building and parking structure up to 60 feet in height in the same location, with a 55-foot setback from the property line.

As with the proposed Project, multi-family residences along Ostia Way and Latium Way, south of the Project site, would not be shaded by Alternative 3 buildings.[18]

Garden Apartment buildings proposed at the northern end of the Project site would be three and four stories tall, or between 42 feet and 51.6 feet in height above adjacent grade, with a setback of 15 feet from the northern property line. As shown in **Table 6.0-24,** shadows cast by the four Garden Apartment buildings around the Winter Solstice would extend between up to 83 feet to the north and up to 156 feet to the west, shading portions of the senior housing complex, including south-facing balconies, for 3 hours or more; this would be a significant and unavoidable impact.[19]

However, impacts would be reduced compared to the proposed Project, since the proposed Podium buildings in the same location occupy larger footprints and would be up to four stories tall or 69 feet in height above adjacent grade. The Project's Podium buildings would cast larger and longer shadows around the Winter Solstice, up to 110 feet to the north and up to 210 feet to the west, both of which would shade portions of the senior housing complex for more than 3 hours.

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17 Townhome-Style Apartment buildings' shadow lengths are the lower numbers shown under "Alternative 3 Shadow Length." For example, 41.5 * 3.03 = 126 feet.

18 Shadow-sensitive uses located greater than 45 degrees west or east of due north would not be affected by winter shadows, regardless of the distance between the proposed building and the shadow-sensitive use. Similarly, shadow sensitive uses located greater than 85 degrees west or east of due north would not be affected by summer shadows. (City of Los Angeles, *L.A. CEQA Thresholds Guide*, (2006) A.3-5)

19 Garden Apartment buildings' shadow lengths are the higher numbers shown under "Alternative 3 Shadow Length." For example, 51.6 * 3.03 = 156 feet.

Table 6.0-24
Shadow Length and Bearing – Buildings on the North End of Project Site – Alternative 3

Time	Shadow Length Multiplier[1]	Proposed Project Shadow Length (Feet)	Alternative 3 Shadow Length (Feet)	Shadow Bearing[2]
Winter Solstice				
– 9 AM	3.03	170 – 210	126 – 156	45/West
– Noon	1.60	90 – 110	67 – 83	0/North
– 3 PM	3.03	170 – 210	126 – 156	45/East
Summer Solstice				
– 9 AM	2.18	123 – 150	92 – 112	85/West
– 1 PM	0.16	9 – 11	7 – 8	0/North
– 5 PM	2.18	123 – 150	92 – 112	85/East

Source: LA CEQA Thresholds Guide, 2006.

1 Shadow length is identified per unit of height; the height of the structure is multiplied by the shadow length multiplier. Therefore, a 100-foot building would cast a shadow 303 feet long during the Winter Solstice at 9 AM (e.g., 100 x 3.03).

2 Shadow bearing is identified in degrees from north. 45/West means 45 degrees west of north; 73/East means 73 degrees east of north, etc.

Cumulative Impacts

The related projects are too distant from the Project site to influence the visual character, shading, or lighting of the Project site, or its surroundings. Thus, no related projects in the Project area would contribute to a cumulatively significant increase in building height and density that would be incompatible with surrounding uses, or cause cumulatively significant shade or shadow impacts. Furthermore, while the proposed Project would result in significant impacts associated with visual incompatibility and shading, these impacts would be localized and would only affect adjacent uses. Based on these features, Project cumulative impacts would be less than significant. Since Alternative 3 would result in lower overall building heights and massing than the proposed Project and since the proposed Project would not result in a cumulative visual quality impact, Alternative 3 would have a less than considerable contribution to cumulatively significant visual quality impact, and would result in less potential cumulatively significant visual quality impacts than the proposed Project.

Additionally, as discussed above, the proposed Project and Alternative 3 would result in less than significant light and glare impacts. Given the distance to the nearest related projects and the fact that neither the Project nor Alternative 3 would result in significant impacts, the Project and Alternative 3 would not contribute to cumulatively significant light and glare impacts, and impacts would be less than significant.

Shade and shadow impacts would be significant and unavoidable for both the Project and Alternative 3. However, as discussed above, because of the distance to the nearest related projects, neither the proposed Project nor Alternative 3 would contribute to cumulatively significant shading of any single land use. Therefore, the Project and Alternative 3 would not result in a cumulative shade and shadow impact.

Mitigation Measures

Visual Character

The following mitigation measures are applicable to the proposed Project and would also apply to Alternative 3.

6.0-19 The Alternative 3 construction site, including equipment and supplies staged on site, shall be screened from street-level view throughout construction with appropriate fencing and barriers. The Applicant shall ensure, through appropriate postings and periodic visual inspections, that no unauthorized materials are posted on any temporary barriers, fencing, screens, or pedestrian walkways during construction.

Light and Glare

6.0-20 The use of security lighting during Alternative 3 construction shall be limited to only those locations on the construction site requiring illumination.

6.0-21 All security lights shall be properly shielded and projected downward during construction such that light is directed only onto the work site.

6.0-22 All outdoor lighting shall consist of low-intensity downlights or be equipped with louvers, shields, hoods or other screening devices.

6.0-23 All outdoor lighting shall be projected downwards to illuminate the intended surface and minimize light spillover and glare generation.

Shade and Shadow

Operational shade and shadow impacts would be significant and unavoidable under both the proposed Project and Alternative 3; there are no feasible mitigation measures that could reduce impacts to a less than significant level.

Traffic, Parking, Circulation and Access

This subsection summarizes the findings of the Supplemental Traffic Impact Analysis for Alternative 3 and was prepared by the Project's traffic consultant KHR Associates in December 2009. A complete copy of the supplemental traffic analysis is included in **Appendix 6.0** of this EIR.

Construction Impacts

As with the proposed Project, all construction equipment would be staged on the Project site for Alternative 3. Additionally, all of construction worker parking would be accommodated on the Project site.

Alternative 3's haul route would be identical to that of the proposed Project. Additionally, demolition under Alternative 3 would be of the same duration as the proposed Project. Given the reduced density of Alternative 3, excavation and construction for Alternative 3 would be shorter in duration compared to the proposed Project. Although the overall construction duration of Alternative 3 is shorter than that of the proposed Project, construction of Alternative 3 could cause similar traffic disruptions during peak construction activity as the proposed Project. Like the proposed Project, implementation of mitigation requirements outlined in **Mitigation Measure 6.0-24**, the Construction Management Plan, would reduce any potential traffic impacts associated with construction of Alternative 3 to less than significant.

As with the proposed Project, the majority of the construction workers would arrive to and depart from the Project site during off-peak hours (i.e., arrive prior to 6:30 AM and leave prior to 4:00 PM), thereby avoiding generating trips during the 7:00 to 9:00 AM and 4:00 to 6:00 PM peak traffic periods. Thus, like the proposed Project, construction worker traffic associated with development of Alternative 3 would have a negligible impact on peak hour traffic in the vicinity of the site. The maximum number of construction-related Project trips would be less than the vehicle trips currently generated on the Project site by existing uses. As such, worker trips occurring during construction of the proposed Project would have a less than significant traffic impact. Due to the reduction in the amount of construction associated with Alternative 3, the maximum number of construction-related trips under Alternative 3 would be less than the number of construction-related trips associated with the proposed Project. Therefore, construction traffic impacts under Alternative 3 would also be less than significant, and less than those associated with the proposed Project.

Operational Impacts

A supplemental Traffic Impact Analysis was prepared for Alternative 3 by the Project's traffic consultant KHR Associates in July 2009. Peak hour trip rates used for Alternative 3 were calculated based on the 7th

Edition of the *Trip Generation* manual, published by ITE,[20] which is the current industry standard for trip generation data. Credit for traffic generated by the existing uses was applied to traffic generated by Alternative 3 because the existing uses would cease to operate within the study area. Weekday trip rates for Alternative 3 are listed in **Table 6.0-25, Trip Generation Rates – Alternative 3**. Estimated trip generation for Alternative 3, which takes into account trip credit for existing uses, is provided in **Table 6.0-26, Trip Generation - Alternative 3.**

According to the weekday trip generation rates provided in **Table 6.0-25**, Alternative 3 is expected to generate a net decrease of 22 trips during the AM peak hour and a net increase of 213 trips during the PM peak hour, compared to the existing conditions. Trip distribution and trip assignments for Alternative 3 were assumed to be the same as with the proposed Project. Alternative 3 AM and PM peak hour trip assignments for each of the study intersections are presented in **Figures 6.0-11** and **6.0-12**, respectively.

Table 6.0-25
Trip Generation Rates – Alternative 3

Land Uses[1]	Quantity	Daily Trip Generation Rate	Total Daily Trips	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Apartments	537 du	6.72	3,609	20%[2]	80%[2]	0.51	65%[3]	35%[3]	0.62

Source: KHR Associates, 2010.
Notes: du = dwelling unit.
[1] *ITE Land Use Category 220 - Apartments was used.*
[2] *Percentage of total AM Peak Hour trips.*
[3] *Percentage of total PM Peak Hour trips.*

20 Institute of Transportation Engineers, *Trip Generation*, 7th Edition, Washington, D.C., 2004.

Table 6.0-26
Trip Generation – Alternative 3

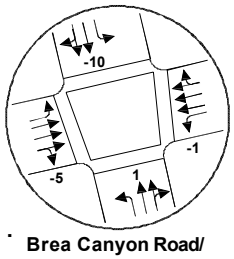
Land Uses	Quantity	Total Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Apartments	537 du	3,609	55	219	274	216	117	333
Existing Private School[1]	480 stds		79	217	296	56	64	120
Total Net Trips			**(24)**	**2**	**(22)**	**160**	**53**	**213**

Source: KHR Associates, 2010.
Notes: du = dwelling unit, stds = students capacity.
[1] Generation rates for the AM and PM peak hours are based on manual traffic counts conducted on February 14, 2008 at the driveways of the existing Southlands Christian Schools.

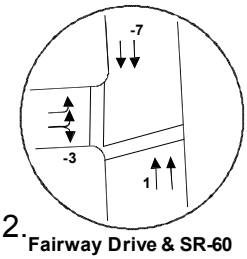
The proposed Project is expected to generate a net increase of 99 trips during the AM peak hour and a net increase of 361 trips during the PM peak hour. Consequently, Alternative 3 would generate 121 fewer net AM peak hour trips and 148 fewer net PM peak hour trips compared to the proposed Project.

Intersection Impacts

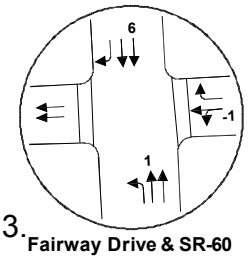
The net traffic volumes generated by Alternative 3, as determined above, were then added to the Existing Plus Ambient Growth traffic volumes to develop the "Existing Plus Ambient Growth With Alternative 3" traffic condition to determine traffic impacts directly attributable to Alternative 3. The results of the "Existing Plus Ambient Growth Without and With Alternative 3" intersection ICU analysis for peak hours are summarized in **Table 6.0-27, ICU and LOS Summary:** Future **Traffic Conditions Without and With Alternative 3**.



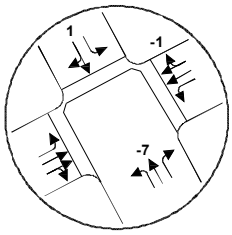
1. Brea Canyon Road/ Fairway Drive & Colima Rd



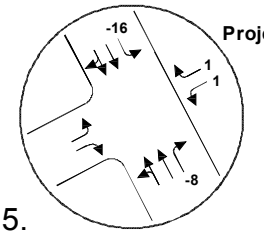
2. Fairway Drive & SR-60 Eastbound Off Ramp



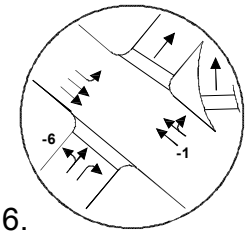
3. Fairway Drive & SR-60 Westbound Off Ramp



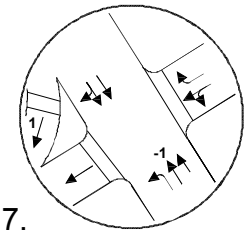
4. Brea Canyon Cutoff Road & Pathfinder Road



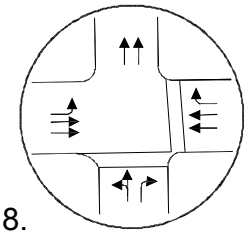
5. Brea Canyon Cutoff Road & Reedview Drive



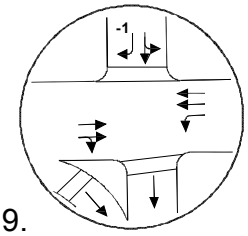
6. Brea Canyon Cutoff Road & SR-57 Northbound On/Off Ramps



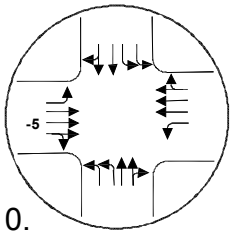
7. Brea Canyon Cutoff Road & SR-57 Southbound On/Off Ramps



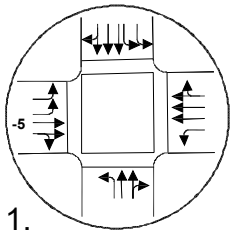
8. Pathfinder Road & SR-57 Northbound On/Off Ramps



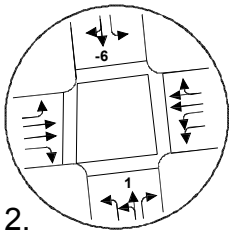
9. Pathfinder Road & SR-57 Southbound On/Off Ramps



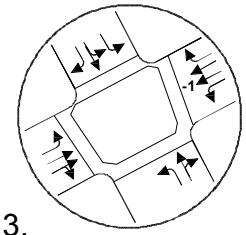
10. Colima Road & Fullerton Road



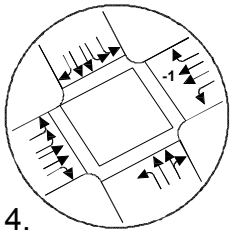
11. Colima Road & Nogales Street



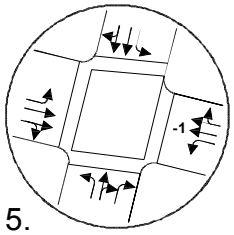
12. Fairway Drive & Valley Boulevard



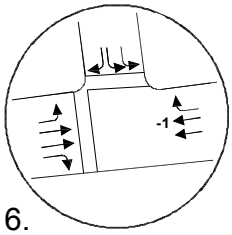
13. Golden Springs Drive & Lemon Avenue



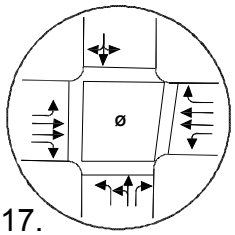
14. Golden Springs Drive & Brea Canyon Road



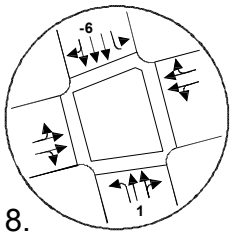
15. Brea Canyon Road & Diamond Bar Boulevard/ Brea Canyon Cutoff Road



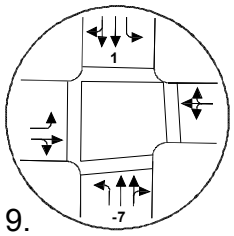
16. Pathfinder Road & Brea Canyon Road



17. Pathfinder Road & Brea Canyon Road/ Fern Hollow Drive



18. Fairway Drive & Walnut Drive



19. Brea Canyon Cutoff Road & Fallow Field Drive/ Diamond Canyon Road

NOT TO SCALE

SOURCE: KHR Associates - August 2009

FIGURE **6.0-11**

Alternative 3 - AM Peak Hour Trip Assignments

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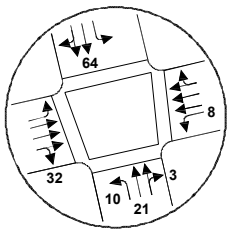
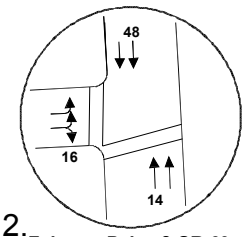
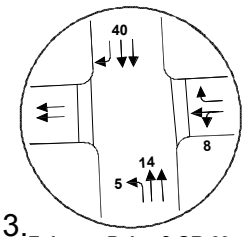


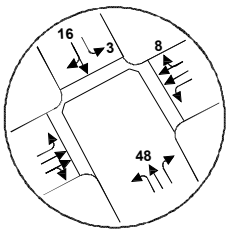
1. Brea Canyon Road/ Fairway Drive & Colima Rd



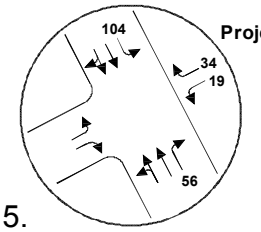
2. Fairway Drive & SR-60 Eastbound Off Ramp



3. Fairway Drive & SR-60 Westbound Off Ramp



4. Brea Canyon Cutoff Road & Pathfinder Road



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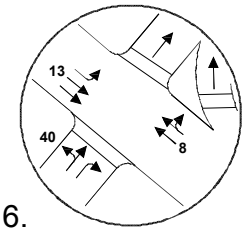
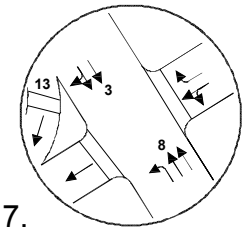
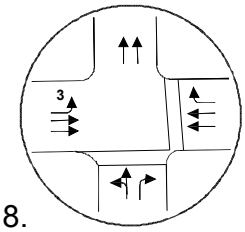


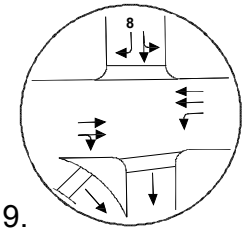
6. Brea Canyon Cutoff Road & SR-57 Northbound On/Off Ramps



7. Brea Canyon Cutoff Road & SR-57 Southbound On/Off Ramps



8. Pathfinder Road & SR-57 Northbound On/Off Ramps



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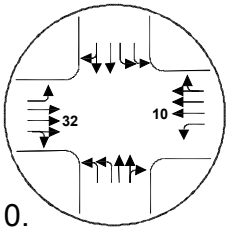
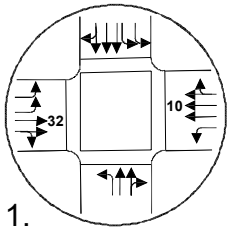


10. Colima Road & Fullerton Road



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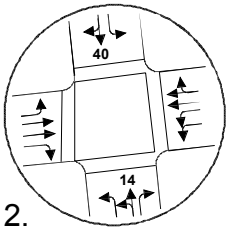
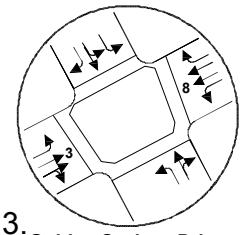
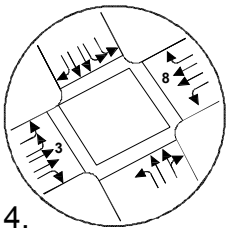


12. Fairway Drive & Valley Boulevard



13. Golden Springs Drive & Lemon Avenue



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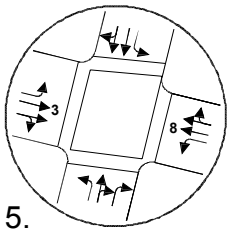
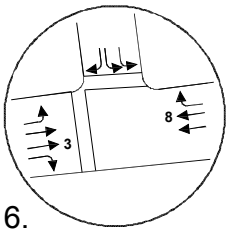
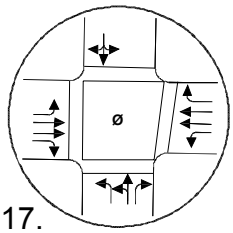


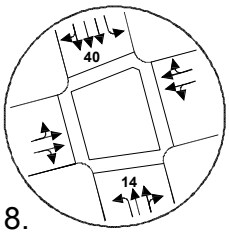
15. Brea Canyon Road & Diamond Bar Boulevard/ Brea Canyon Cutoff Road



16. Pathfinder Road & Brea Canyon Road



17. Pathfinder Road & Brea Canyon Road/ Fern Hollow Drive



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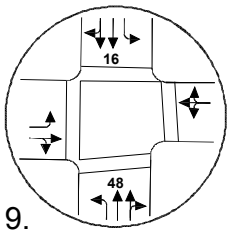

19. Brea Canyon Cutoff Road & Fallow Field Drive/ Diamond Canyon Road

NOT TO SCALE

SOURCE: KHR Associates - August 2009

FIGURE **6.0-12**

Alternative 3 - PM Peak Hour Trip Assignments

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Table 6.0-27
ICU and LOS Summary: Future Traffic Conditions
Without and With Alternative 3

Intersection	Peak Hour	Without Alternative		With Alternative		Impact Change in V/C
		V/C	LOS	V/C	LOS	
1. Brea Canyon Cutoff Road/Fairway Drive at Colima Road	AM	0.944	E	0.941	E	-0.003
	PM	0.870	D	0.896	D	**0.026**
2. Fairway Drive at SR-60 E/B Off Ramps	AM	0.524	A	0.523	A	-0.001
	PM	0.690	B	0.700	C	0.010
3. Fairway Drive at SR-60 W/B On/Off Ramps	AM	0.554	A	0.555	A	0.001
	PM	0.753	C	0.773	C	0.020
4. Brea Canyon Cutoff Road at Pathfinder Road	AM	0.703	C	0.704	C	0.001
	PM	0.875	D	0.885	D	0.010
5. Brea Canyon Cutoff Road at Reedview Drive	AM	0.344	A	0.345	A	0.001
	PM	0.347	A	0.451	A	0.104
6. Brea Canyon Cutoff Road at SR-57 N/B On/Off Ramps	AM	0.472	A	0.468	A	-0.004
	PM	0.515	A	0.543	A	0.028
7. Brea Canyon Cutoff Road at SR-57 S/B On/Off Ramps	AM	0.464	A	0.470	A	0.006
	PM	0.526	A	0.527	A	0.001
8. Pathfinder Road at SR-57 N/B On/Off Ramps	AM	0.638	B	0.638	B	0.000
	PM	0.596	A	0.598	A	0.002
9. Pathfinder Road at SR-57 S/B On/Off Ramps	AM	0.689	B	0.689	B	0.000
	PM	0.590	A	0.595	A	0.005
10. Colima Road at Fullerton Road	AM	0.988	E	0.988	E	0.000
	PM	0.901	D	0.907	E	0.006
11. Colima Road at Nogales Street	AM	1.152	F	1.150	F	-0.002
	PM	1.012	F	1.022	F	**0.010**
12. Fairway Drive at Valley Boulevard	AM	0.645	B	0.644	B	-0.001
	PM	0.854	D	0.864	D	0.010
13. Golden Springs Drive at Lemon Avenue	AM	0.730	C	0.730	B	0.000
	PM	0.708	C	0.711	B	0.003
14. Golden Springs Drive at Brea Canyon Road	AM	0.542	A	0.542	A	0.000
	PM	0.964	E	0.965	E	0.001
15. Brea Canyon Road at Diamond Bar Boulevard/Brea Canyon Cutoff Road	AM	0.622	B	0.622	B	0.000
	PM	0.671	B	0.671	B	0.000
16. Pathfinder Road at Brea Canyon Road	AM	0.508	A	0.508	A	0.000
	PM	0.642	B	0.644	B	0.002

Intersection	Peak Hour	Without Alternative		With Alternative		Impact Change in V/C
		V/C	LOS	V/C	LOS	
17. Pathfinder Road at Fern Hollow Drive/Brea Canyon Road	AM	0.874	D	0.874	D	0.000
	PM	0.626	B	0.626	B	0.000
18. Fairway Drive at Walnut Drive	AM	0.525	A	0.525	A	0.000
	PM	0.597	A	0.606	B	0.009
19. Brea Canyon Cutoff Road at Fallow Field Drive/Diamond Canyon Road	AM	0.359	A	0.357	A	-0.002
	PM	0.513	A	0.528	A	0.015

Source: KHR Associates, 2009.
Notes: E/B = eastbound, W/B = westbound, N/B = northbound, S/B = southbound.
Impacts in bold indicate that the Alternative-related increase in the volume to capacity ratio meets or exceeds the Los Angeles County significance threshold for intersections.

As indicated in **Table 6.0-27**, net Alternative 3 traffic is expected to increase the V/C ratio values at some of the study intersections during the weekday peak hour periods. As shown in **Table 6.0-28**, the addition of Alternative 3 traffic would not exceed the County's significance threshold criteria except at the following two intersections: Brea Canyon Cutoff Road/Fairway Drive at Colima Road during the PM peak hour and Colima Road at Nogales Street during the PM peak hour. Therefore, the addition of Alternative 3 traffic would result in significant impacts on these two study area intersections. In comparison, the addition of Project trips would result in significant impacts to these two intersections, Brea Canyon Cutoff Road/Fairway Drive at Colima Road and Colima Road at Nogales Street, as well as the intersection of Fairway Drive at Valley Boulevard.

Table 6.0-28
ICU and LOS Summary:
Future With Alternative 3 – Without and With Mitigation

Intersection	Peak Hour	Without Mitigation		With Mitigation		Change in V/C
		V/C	LOS	V/C	LOS	
1. Brea Canyon Cutoff Road/Fairway Drive at Colima Road	AM	0.941	E	0.859	D	-0.082
	PM	0.896	D	0.877	D	-0.019
11. Colima Road at Nogales Street	AM	1.150	F	1.150	F	0.000-0.044
	PM	1.022	F	0.978	E	

Source: KHR Associates, 2009.

Therefore, implementation of Alternative 3 would have fewer intersection impacts compared to the proposed Project. As with the proposed Project, implementation of **Mitigation Measures 6.0-25** through **6.0-26** listed below, would reduce impacts at the intersections of Brea Canyon Cutoff Road/Fairway Drive at Colima Road and Colima Road at Nogales Street to less than significant levels.

As indicated in **Table 6.0-29**, **HCM and LOS Summary – Future Traffic Conditions Without and With Alternative 3**, the Caltrans maintained-intersections and the single unsignalized intersection would operate at LOS C or better during both weekday peak hours for the "Existing Plus Ambient Growth" traffic condition. Also shown in **Table 6.0-29**, the addition of net traffic from Alternative 3 is expected to incrementally increase intersection delay during the weekday AM and PM peak hours at some intersections. However, the LOS would remain at acceptable levels, LOS C or better, at all of the intersections. Therefore, as with the proposed Project, the addition of Alternative 3 traffic would not result in a significant impact to the Caltrans maintained intersections or the one unsignalized intersection. However, overall the increase in delay associated with Alternative 3 would be less than the increase associated with the proposed Project since Alternative 3 would generate fewer trips.

Congestion Management Program

Traffic generated by the proposed Project would result in a less than significant impact during both peak hours at the two CMP monitoring intersections and the CMP mainline freeway segments. Alternative 3 would generate 121 fewer AM peak hour trips and 148 fewer PM peak hour trips than the proposed Project, traffic generated by Alternative 3 would result in a less than significant impact during both peak hours at the two CMP monitoring intersections and the CMP mainline freeway segments.

Hazardous Traffic Conditions

The main driveway along Brea Canyon Cutoff Road, as currently depicted on the proposed Project's site plan, is misaligned with Reedview Drive. In addition, left-turn movements into and out of the secondary driveways on the Project site could also result in traffic hazards. Therefore, impacts associated with the Project site driveways were determined to be significant; however, with implementation of Project **Mitigation Measures 5.7-5** and **5.7-6**, impacts would be reduced to a less than significant level for the proposed Project. As indicated in **Figure 6.0-1, Alternative 3 Conceptual Site Plan**, the only driveway associated with Alternative 3 along Brea Canyon Cutoff Road has been designed to align with Reedview Drive. Therefore, hazardous traffic impacts under Alternative 3 would be less than significant and proposed Project **Mitigation Measures 5.7-5** and **5.7-6** are not required.

Table 6.0-29
HCM and LOS Summary: Future Traffic Conditions
Without and With Alternative 3

Intersection	Peak Hour	Without Alternative		With Alternative		Alt. 3 Impact [2]
		Delay	LOS	Delay	LOS	
2. Fairway Drive at SR-60 E/B Off Ramps	AM	11.6	B	11.6	B	0.0
	PM	11.1	B	14.2	B	3.1
3. Fairway Drive at SR-60 W/B On/Off Ramps	AM	19.8	B	20.1	C	0.3
	PM	23.4	C	29.3	C	5.9
5. Brea Canyon Cutoff Road at Reedview Drive	AM	12.8	B	13.9	B	1.1
	PM	14.6	B	15.6	C	1.0
6. Brea Canyon Cutoff Road at SR-57 N/B On/Off Ramps	AM	12.3	B	12.2	B	-0.1
	PM	12.9	B	14.5	B	1.6
7. Brea Canyon Cutoff Road at SR-57 S/B On/Off Ramps	AM	11.5	B	11.6	B	0.1
	PM	12.3	B	12.3	B	0.0
8. Pathfinder Road at SR-57 N/B On/Off Ramps	AM	19.5	B	19.4	B	-0.1
	PM	23.3	C	23.6	C	0.3
9. Pathfinder Road at SR-57 S/B On/Off Ramps	AM	19.3	B	19.4	B	0.1
	PM	15.3	B	15.5	B	0.2

Source: KHR Associates, 2009
Notes: E/B = eastbound, W/B = westbound, N/B = northbound, S/B = southbound.
[1] *Average Intersection Delay per Vehicle (in seconds).*

Parking Impacts

As with the proposed Project, Alternative 3 would be developed as a residential planned development under County Code section 22.20.460. Residential planned developments are required to provide parking "in an amount adequate to prevent traffic congestion and excessive street parking" and in no event less than one covered parking space per dwelling unit. Section 22.52.1180 of the Los Angeles County Code specifies the parking ratios for general apartment uses. The general County Code parking requirement for the Alternative 3 unit mix would be 1,103 spaces, as shown in **Table 6.0-30**, below. Alternative 3 would provide a total of 1,103 spaces, which is in conformance with the general County Code parking requirements for multifamily residential units. Because the general County Code parking requirements units were established to ensure that an adequate number of spaces are available to accommodate anticipated parking demand in order to address traffic congestion and potential adverse impacts on

surrounding properties from parking (see County Code Section 22.52.1000), parking impacts under Alternative 3 would be less than significant and similar to impacts associated with the proposed Project.

Table 6.0-30
Alternative 3 Parking Requirement

Unit Type	No. of Units	Parking Ratio (stalls per unit)	No. of Stalls Provided
Garden Apartments Units: North			
One bedroom	92	1.5	138
Two bedrooms	48	2.0	96
Three bedrooms	12	2.0	24
Guest stalls	152	0.25	38
Garden Apartments Units: North Subtotal	**152**		**296**
Garden Apartments Units: South			
One bedroom	92	1.5	138
Two bedrooms	48	2.0	96
Three bedrooms	12	2.0	24
Guest stalls	152	0.25	38
Garden Apartments Units: South Subtotal	**152**		**296**
Townhome-Style Apartments: North			
Two bedrooms	59	2.0	118
Three bedrooms	17	2.0	34
Guest stalls	76	0.25	19
Townhome-Style Apartments: North – Subtotal	**76**		**171**
Townhome-Style Apartments: South			
Two bedrooms	74	2.0	148
Three bedrooms	13	2.0	26
Guest stalls	87	0.25	22
Townhome-Style Apartments: South – Subtotal	**87**		**196**

Unit Type	No. of Units	Parking Ratio (stalls per unit)	No. of Stalls Provided
Townhome Flats: North			
One-bedroom	8	1.5	12
Two bedrooms	12	2.0	24
Guest stalls	20	0.25	5
Townhome Flats: North – Subtotal	**20**		**41**
Townhome Flats: South			
One bedroom	20	1.5	30
Two bedrooms	30	2.0	60
Guest stalls	50	0.25	13
Townhome Flat Units: South Subtotal	**50**		**103**
Total	**537**		**1,103**

Source: Van Tilburg, Banvard & Soderbergh, AIA, February 2010.

Alternative Transportation

As with the proposed Project, Alternative 3 would not disrupt existing transit service or facilities. Similar to the proposed Project, Alternative 3 would provide bicycle racks on the Project site for residences and an alternative transportation information kiosk would be located in the leasing and recreation center. Further, transit service is provided by Foothill Transit in the immediate area of the Project site. Foothill Transit Routes 482 and 493 provide service along Colima Road, Route 286 provides service along Diamond Bar and Brea Canyon Road, and Route 497 provides express service along SR-60. The nearest bus stops to the Project site are provided along Foothill Routes 482 and 493. Given the location of the nearest bus stops to the Project site, which occur at the intersection of Colima Road at Brea Canyon Cutoff and Colima Road at Nogales Street, implementation of the proposed Project would not disrupt existing transit service or facilities. Regional transportation is provided by Foothill Transit Route 497, Orange County Transportation Authority, and the Metrolink Riverside Line (a commuter line). Foothill Transit Route 497 provides express service along SR-60. Orange County Transportation Authority provides express bus service along the SR-57 freeway for commuters into and out of Orange County. Metropolitan Transportation Authority also has established an extensive grid system of bus routes throughout the Los Angeles region. The Metrolink Riverside Line City of Industry Station is located near the intersection of Brea Canyon Road and Washington Drive, approximately 2.5 miles northeast of the Project site. This station also features a Park and Ride facility. In addition, other Park and Ride facilities are provided at interchanges along the SR-60 and SR-57 freeways, such as the Puente Hills Mall and the Pathfinder Road interchange, respectively. Lastly, the Metrolink commuter train station is located within 2.5 miles of the

Project site. As a result, Alternative 3 is consistent with adopted policies, plans, or programs supporting alternative transportation. Accordingly, Alternative 3 would result in a less than significant impact on alternative transportation and impacts would be comparable with those of the proposed Project.

Cumulative Construction Impacts

As with the proposed Project, if construction phases of Alternative 3 and the closest related project (which is a cafe/retail project located approximately 200 feet to the north of the Project site near the intersection of Brea Canyon Cutoff Road and Colima Road) were to overlap, cumulative construction-related traffic impacts could occur. The remaining related projects are located further from the proposed Project site. However, all construction activities would be subject to the requirements of the Section 12.08.440 of the Los Angeles County Code, which limits construction activities between the hours of 7:00 AM and 7:00 PM, with no construction allowed on Sundays or legal holidays. Alternative 3's compliance with the ordinance, as well as the incorporation of mitigation recommended as part of each individual project's environmental review, would reduce Alternative 3's contribution to any cumulative construction-related traffic impacts to less than significant, which is similar to impacts associated with the proposed Project.

Cumulative Impacts

The Future 2012 Without Alternative 3 traffic volumes were determined using the same methodology as with the proposed Project, by combining the area ambient traffic growth factor and the traffic generated by the nine identified related projects with the existing (2008) traffic volumes at the 19 study intersections. The Future 2012 With Alternative 3 traffic volumes were determined by combining the net traffic generated by the Alternative, as determined earlier, to the "Future 2012 Without Alternative 3" volumes to develop the "Future 2012 With Reduced Density Alternative" traffic condition**.** The results of the future year (2012) intersection analysis are summarized in **Table 6.0-31, ICU and LOS Summary – Future Traffic Conditions Without and With Alternative 3**.

Table 6.0-31
ICU and LOS Summary: Future Traffic Conditions
Without and With Alternative 3

Intersection	Peak Hour	Without Alternative		With Alternative		Alt. Impact[1]
		V/C	LOS	V/C	LOS	
1. Brea Canyon Cutoff Road/Fairway Drive at Colima Road	AM	0.985	E	0.982	E	-0.003
	PM	0.901	E	0.928	E	**0.027**
2. Fairway Drive at SR-60 E/B Off Ramps	AM	0.544	A	0.543	A	-0.001
	PM	0.720	C	0.730	C	0.010
3. Fairway Drive at SR-60 W/B On/Off Ramps	AM	0.557	A	0.558	A	0.001
	PM	0.781	C	0.802	D	0.021
4. Brea Canyon Cutoff Road at Pathfinder Road	AM	0.703	C	0.704	C	0.001
	PM	0.839	D	0.849	D	0.010
5. Brea Canyon Cutoff Road at Reedview Drive	AM	0.344	A	0.345	A	0.001
	PM	0.347	B	0.451	A	0.104
6. Brea Canyon Cutoff Road at SR-57 N/B On/Off Ramps	AM	0.460	A	0.456	A	-0.004
	PM	0.517	A	0.545	A	0.028
7. Brea Canyon Cutoff Road at SR-57 S/B On/Off Ramps	AM	0.472	A	0.472	A	0.000
	PM	0.528	A	0.528	A	0.000
8. Pathfinder Road at SR-57 N/B On/Off Ramps	AM	0.634	B	0.634	B	0.000
	PM	0.599	A	0.601	B	0.002
9. Pathfinder Road at SR-57 S/B On/Off Ramps	AM	0.692	B	0.692	B	0.000
	PM	0.597	A	0.597	A	0.000
10. Colima Road at Fullerton Road	AM	0.991	E	0.991	E	0.000
	PM	0.914	E	0.921	E	0.007
11. Colima Road at Nogales Street	AM	1.168	F	1.166	F	-0.002
	PM	1.032	F	1.042	F	**0.010**
12. Fairway Drive at Valley Boulevard	AM	0.649	B	0.646	D	-0.003
	PM	0.874	D	0.904	E	**0.030**
13. Golden Springs Drive at Lemon Avenue	AM	0.736	C	0.736	C	0.000
	PM	0.747	C	0.750	C	0.003
14. Golden Springs Drive at Brea Canyon Road	AM	0.565	A	0.565	A	0.000
	PM	0.984	E	0.985	E	0.001
15. Brea Canyon Road at Diamond Bar Boulevard/Brea Canyon Cutoff Road	AM	0.626	B	0.626	B	0.000
	PM	0.690	B	0.691	B	0.001
16. Pathfinder Road at Brea Canyon Road	AM	0.517	A	0.516	A	-0.001
	PM	0.649	B	0.651	B	0.002

Intersection	Peak Hour	Without Alternative		With Alternative		Alt. Impact[1]
		V/C	LOS	V/C	LOS	
17. Pathfinder Road at Fern Hollow Drive/Brea Canyon Road	AM	0.875	D	0.875	D	0.000
	PM	0.632	B	0.632	B	0.000
18. Fairway Drive at Walnut Drive	AM	0.538	A	0.538	A	0.000
	PM	0.610	B	0.618	B	0.008
19. Brea Canyon Cutoff Road at Fallow Field Drive/Diamond Canyon Road	AM	0.359	A	0.357	A	-0.002
	PM	0.514	A	0.529	A	0.015

Source: KHR Associates, 2009
Notes: E/B = eastbound, W/B = westbound, N/B = northbound, S/B = southbound.
Impacts in bold indicate that the proposed Project-related increase in the volume to capacity ratio meets or exceeds the Los Angeles County significance threshold for intersections.

As summarized in **Table 6.0-32**, three of the study intersections would operate at an unacceptable LOS during the Future 2012 With Reduced Density Alternative traffic condition. As shown in the table above, the following intersections meet or exceed the County significance threshold criteria due to the addition of traffic generated by Alternative 3 to cumulative traffic conditions: Brea Canyon Cutoff Road/Fairway Drive at Colima Road (during the PM peak hour), Colima Road at Nogales Street (during the PM peak hour), and Fairway Drive at Valley Boulevard (during the PM peak hour). Therefore, the addition of Alternative 3 traffic would result in a considerable contribution to cumulative impacts. However, as summarized in **Table 6.0-32**, with implementation of **Mitigation Measures 6.0-25** through **6.0-28** identified below, the Alternative 3 contribution to cumulative impacts at the three study intersections would be reduced to less than significant.

The addition of proposed Project traffic would result in significant impacts under cumulative traffic conditions to the following intersections: Brea Canyon Cutoff Road at Colima Road (during the AM and PM peak hours), Brea Canyon Cutoff Road at Pathfinder Road (during the PM peak hour), Colima Road at Fullerton Rd (during the PM peak hour), Colima Road at Nogales Street (during the PM peak hour), and Fairway Drive at Valley Boulevard (during the PM peak hour). Thus, Alternative 3 would impact fewer intersections compared to the proposed Project under cumulative conditions. However, with implementation of mitigation, the proposed Project's contribution to cumulative impacts at the five study intersections would also be reduced to less than significant.

Table 6.0-32
ICU and LOS Summary:
Future 2012 Traffic Conditions With Alternative 3 (Cumulative Impacts) – Without and With Mitigation

Intersection	Peak Hour	Without Mitigation V/C	Without Mitigation LOS	With Mitigation V/C	With Mitigation LOS	Change in V/C
1. Brea Canyon Cutoff Road/Fairway Drive at Colima Road	AM	0.982	E	0.900	E	-0.082
	PM	0.928	E	0.909	E	-0.019
11. Colima Road at Nogales Street	AM	1.166	F	1.166	F	0.00
	PM	1.042	F	0.999	E	-0.043
12. Fairway Drive at Valley Boulevard	AM	0.646	D	0.586	A	-0.060
	PM	0.904	E	0.860	D	-0.044

Source: KHR Associates, 2009

In order to determine cumulative impacts at the Caltrans-maintained intersections and the one unsignalized intersection, the "Future 2012 With Alternative 3" traffic condition has been compared to the forecast "Future 2012 Without Alternative 3" traffic condition. The results of the future year (2012) intersection analysis are summarized in **Table 6.0-33**, **HCM and LOS Summary – Future 2012 Traffic Conditions Without and With Alternative 3** below. As indicated in **Table 6.0-30**, the addition of net Alternative traffic to the "Future 2012 Without Reduced Density Alternative" traffic condition is expected to incrementally increase intersection delay during the weekday peak hour periods. However, intersections would remain at acceptable levels of service, LOS C or better. Therefore, as with the proposed Project, the addition of Alternative 3's traffic would not result in a significant cumulative impact to the Caltrans maintained intersections or the one unsignalized intersection. However, the overall increase in delay associated with Alternative 3 would be less than the increase associated with the proposed Project since Alternative 3 would generate fewer trips compared to the proposed Project.

Table 6.0-33
HCM and LOS Summary: Future 2012 Traffic Conditions
Without and With Alternative 3

Intersection	Peak Hour	Without Alternative		With Alternative		Alt. Impact
		Delay	LOS	Delay	LOS	
2. Fairway Drive at SR-60 E/B Off Ramps	AM	11.7	B	11.6	B	-0.1
	PM	13.2	B	14.2	B	1.0
3. Fairway Drive at SR-60 W/B On/Off Ramps	AM	20.0	B	20.1	B	0.1
	PM	26.4	C	29.3	C	2.9
5. Brea Canyon Cutoff Road at Reedview Drive	AM	12.8	B	13.9	B	1.1
	PM	14.6	B	15.6	C	1.0
6. Brea Canyon Cutoff Road at SR-57 N/B On/Off Ramps	AM	12.3	B	12.2	B	-0.1
	PM	12.9	B	14.5	B	1.6
7. Brea Canyon Cutoff Road at SR-57 S/B On/Off Ramps	AM	11.6	B	11.6	B	0.0
	PM	12.3	B	12.3	B	0.0
8. Pathfinder Road at SR-57 N/B On/Off Ramps	AM	19.5	B	19.4	B	-0.1
	PM	23.6	C	23.6	C	0.0
9. Pathfinder Road at SR-57 S/B On/Off Ramps	AM	19.4	B	19.4	B	0.0
	PM	15.4	B	15.5	B	0.1

Source: KHR Associates, 2009
Notes: E/B = eastbound, W/B = westbound, N/B = northbound, S/B = southbound.
[1] *Average Intersection Delay per Vehicle (in seconds).*

Construction Mitigation Measures

6.0-24 The Applicant and Construction Contractor shall prepare a Construction Management Plan to minimize traffic flow interference from construction activities. The Final Construction Management Plan shall be submitted to the County Department of Public Works and may include, but not be limited to, the following measures:

- Maintain existing access for land uses in the proximity of the Project site during Alternative 3 construction;
- Schedule deliveries and pick-ups of construction materials for non-peak travel periods, to the maximum extent feasible;
- Coordinate haul trucks, deliveries and pick-ups to reduce the potential for trucks waiting to load or unload for protracted periods of time;

- Construction equipment traffic from the contractors shall be controlled by flagman in order to minimize circulation conflicts and obstruction of through-traffic lanes specifically along Brea Canyon Cutoff Road;
- Designated transport routes for heavy trucks and haul trucks to be used over the duration of the proposed Alternative 3;
- Schedule vehicle movements to ensure that there are no vehicles waiting off site and impeding public traffic flow on the surrounding streets;
- Establish requirements for loading/unloading and storage of materials on the Project site, where parking spaces would be encumbered, length of time traffic travel lanes can be encumbered, sidewalk closings or pedestrian diversions to ensure the safety of the pedestrian and access to local businesses;
- Coordinate with adjacent businesses, land uses, and emergency service providers to ensure adequate access exists to the Project site and neighboring land uses; and
- Prohibit parking for construction workers except on the Project site, unless approval is obtained from the County of Los Angeles.
- The Final Construction Management Plan shall be submitted and approved by the County no later than 30 days prior to commencement of construction.

Operational Mitigation Measures

6.0-25 Prior to issuance of the final certificate of occupancy, the Applicant shall construct an additional southbound through lane at the intersection of Brea Canyon Cutoff Road and Colima Road, as shown in **Section 5.7, Traffic, Parking, Circulation, and Access, in Figure 5.7-15, Mitigation Improvements at Brea Canyon Cutoff Road & Colima Road**. This improvement can be accomplished by striping changes and minor median modifications.

6.0-26 Prior to issuance of the final certificate of occupancy, the Applicant shall construct a separate northbound right-turn lane at the intersection of Colima Road and Nogales Street as shown in **Section 5.7, Traffic, Parking, Circulation and, Access, in Figure 5.7-16**, **Mitigation Improvements at Colima Road and Nogales Street**. This improvement can be accomplished by striping changes within the existing right-of-way.

6.0-27 The Applicant shall install a traffic signal at the main Project driveway on Brea Canyon Cutoff Road at Reedview Drive to allow safe and convenient left turn movements into and out of the Project site.

Cumulative Mitigation Measures

This Alternative's contribution to cumulatively significant impacts at the intersections of Brea Canyon Cutoff Road at Colima Road, Colima Road at Nogales Street, and Fairway Drive at Valley Boulevard would be reduced to less than significant with implementation of the following mitigation measure in combination with previously identified **Mitigation Measures 6.0-25** and **6.0-26**.

6.0-28 Prior to issuance of the final certificate of occupancy, the Applicant shall construct a separate southbound through lane at the intersection of Fairway Drive and Valley Boulevard, as shown in **Section 5.7, Traffic, Parking, Access, and Circulation,** in **Figure 5.7-17, Mitigation Improvements at Fairway Drive and Valley Boulevard.** This improvement can be accomplished by striping changes to the north leg.

Sewage Disposal

Operational Impacts

Two sewage conveyance scenarios were analyzed for the proposed Project. Assuming the proposed Project's sewer laterals connected only to the 8-inch main line within Brea Canyon Cutoff Road, the proposed Project flows and existing flows would slightly exceed the design capacity of the Brea Canyon Cutoff Road 8-inch main line between Manhole Nos. 81 (on-site) and 74 (off-site within Brea Canyon Cutoff Road) and between Manhole Nos. 72 and 534 (i.e., between Brea Canyon Cutoff Road and Searls Drive). Project implementation may require upsizing approximately 2,300 feet of sewer line, including upsizing of the segment between Manhole Nos. 72 and 537 from 8 inches to 10 inches, and upsizing of the segment between Manhole Nos. 537 and 534 from 10 inches to 12 inches. Under the second scenario modeled for the proposed Project, it was assumed that sewer laterals for 103 units on the Project site would connect to the existing 8-inch main line within Sand Spring Drive, west of the Project site, while the remaining 674 units would connect to the 8-inch main line within Brea Canyon Cutoff Road at Reedview Drive. This would result in the exceedance of the design capacity of the 8-inch main line farther downstream of the Project site, between Manhole Nos. 72 and 534 (i.e., between Brea Canyon Cutoff Road and Searls Drive). Project implementation under this scenario may therefore require upsizing the approximately 2,300-foot sewer line segment between Manhole Nos. 72 and 537 from 8 inches to 10 inches, and upsizing of the segment between Manhole Nos. 537 and 534 from 10 inches to 12 inches.

Given that Alternative 3 would have 238 fewer units than the proposed Project, Alternative 3 would generate less wastewater. Alternative 3 would connect to the Brea Canyon Cutoff Road main line, and would have slightly less cumulative impacts on the existing sewer system. However, capacity would be exceeded between Manhole Nos. 72 and 534 (approximately 2,200 feet). As with the proposed Project,

gauging and flow monitoring would be undertaken to determine actual flow conditions, and upsizing of sewer pipes should be in accordance with the directives of the Department of Public Works.

Since adequate capacity to serve the proposed Project as well as current uses exists at the San Jose Creek Water Reclamation Plant (WRP) for treatment, adequate capacity at this facility would also exist to accommodate Alternative 3. Mitigation measures (described below) applied to the proposed Project would also apply to Alternative 3. These include requiring the Project Applicant to submit a Sewer Area Study for approval and to obtain a will-serve letter from LACDPW's Waterworks and Sewer Maintenance Division, and payment of the development's fair share of the costs associated with any required upgrades. Both the proposed Project and Alternative 3 would result in less than significant impacts related to the provision of wastewater services with implementation of mitigation. However, due to the reduction in the number of residential units, Alternative 3 would generate a lower annual quantity of sewage compared to the proposed Project. Therefore, Alternative 3 would incrementally reduce the sewage disposal impacts associated with the proposed Project.

Cumulative Impacts

The proposed Project plus related projects would result in a net increase of approximately 3.21 cubic feet per second (cfs) of wastewater. However, because of the distance of the Project site from the related projects, none of the related projects are in sub-areas that contribute wastewater to the same sewer line segments that serve the Project site. Therefore, when considered together with related projects, the Project's contribution to cumulatively significant impacts on wastewater infrastructure would be less than cumulatively considerable. The addition of the wastewater projected to be generated by the proposed Project in combination with the related projects would not exceed the treatment plant's available capacity. Adequate capacity exists to treat wastewater generated by the Project and related projects. As with the proposed Project, each related project would be required to pay the connection fee upon connection to the sewer system, which contributes to maintenance and any necessary expansions. The Project's cumulative impacts would be less than significant. Since Alternative 3 would generate less wastewater than the proposed Project and since the proposed Project would not result in cumulative sewer impacts, Alternative 3 would have a less than considerable contribution to cumulatively significant sewer impact, and would result in less potential cumulatively considerable sewer impacts compared to the proposed Project.

Mitigation Measures

The following mitigation measures are applicable to the proposed Project and would also apply to Alternative 3.

6.0-29 Prior to issuance of the final certificate of occupancy, the Applicant shall obtain approval from LACDPW's Sewer Maintenance Division of the Sewer Area Study, flow monitoring, and gauging of sewer pipes potentially exceeding design capacity, in order to demonstrate sufficient wastewater capacity for the proposed Project and facilitate annexation of the Project site into Consolidated Sewer Maintenance District 21.

6.0-30 Prior to issuance of a sewerage connection permit, the Applicant shall pay annexation and connection fees to Consolidated Sewer Maintenance District No. 21.

6.0-31 The Applicant shall pay for its fair share of the cost of any necessary upgrades to main sewer lines related to the proposed Project.

Education

The 537 units proposed under Alternative 3 would directly generate approximately 376 new students within the Rowland Unified School District (RUSD), as shown in **Table 6.0-34**. Additionally, with the closure of Southland Christian Schools, Alternative 3 may indirectly contribute the addition of approximately 288 students (60 percent of the maximum student enrollment at the Southland Christian Schools) to RUSD schools since approximately 60 percent of the students at Southlands Christian Schools reside within the Rowland Heights community. Enrollment within the RUSD currently exceeds the district's classroom capacity by 4,485 students. Additionally, the three schools that currently serve the Project site (Ybarra Academy of the Arts and Technology, Alvarado Intermediate School, and Rowland High School) are currently operating at above design capacity and are using portable classrooms. No permanent or portable classrooms operate under cramped conditions. The additional students indirectly and directly generated by Alternative 3 would increase the exceedance of design capacity at these schools, and would increase the current deficit in permanent capacity that exists throughout the RUSD, such that impacts to schools would be potentially significant. However, Alternative 3 would be subject to the same mitigation measure applicable to the proposed Project. This mitigation requires the Applicant to pay school impact fees to the RUSD prior to the issuance of building permits, subject to the current fee schedule for residential development in place at the time of issuance of the building permit. With implementation of this mitigation, both the proposed Project and Alternative 3 would have less than significant impacts to schools. However, the proposed Project would directly generate approximately 543 students in the RUSD. Since Alternative 3 would generate approximately 30 percent fewer new

students than the proposed Project, it would reduce the impacts to schools compared to the proposed Project.

Table 6.0-34
Alternative 3Student Generation

Dwelling Type	Units	Student Generation Factors[1]		Project Student Generation
Multi-Family	537	Grades K–6	0.38	204
		Grades 7–8	0.11	59
		Grades 9–12	0.21	113
			Total	**376**

[1] *Generation factors are from Section 1859.2, California School Facility Program, based on a district wide student generation rate of 0.7, which is then divided based on percentage of RUSD students in each grade level.*

Cumulative Impacts

An increase in student enrollment within the RUSD is anticipated with development of the proposed Project and related projects in Rowland Heights. This increase could result in a cumulatively significant impact to schools within the RUSD attendance area. According to Government Code Section 65995, the payment of school impact fees authorized by Senate Bill 50, and the fees required for residential and commercial development by the RUSD for each project, as with the proposed Project, would mitigate the impact of the proposed Project as well as the related projects to local schools from cumulative development. Therefore, with payment of these fees, the cumulative impact of the proposed Project in combination with the identified related projects would be reduced to a less than significant level. As with the proposed Project, Alternative 3 would be required to pay school impact fees and therefore, Alternative 3 would have a less than considerable contribution to cumulatively significant impacts related to schools. Since Alternative 3 would generate approximately 30 percent fewer new students than the proposed Project, it would result in less potential cumulatively considerable impacts to schools compared to the proposed Project.

Mitigation Measures

The following mitigation measure is applicable to the proposed Project, and would also apply to Alternative 3.

6.0-32 As authorized by Senate Bill 50, the Applicant shall pay school impact fees to the Rowland Unified School District (RUSD) prior to the issuance of building permits,

subject to the current fee schedule for residential development in place at the time of issuance of the building permit.

Public Services (Fire Services)

Construction Impacts

During construction of Alternative 3, wood framing and other flammable construction materials would be present on the Project site. Construction would be subject to the Los Angeles County code and inspection by County personnel prior to installation of drywall. The use of flagmen, traffic detour plans, haul routes, protective devices, warning signs, and access to abutting properties would aid emergency vehicle response. Alternative 3 would result in less than significant fire hazard impacts during construction. However, since Alternative 3 would require less construction, impacts would be less than those of the proposed Project.

Operational Impacts

Under Alternative 3, impacts related to response time, emergency access, and location within a Very High Fire Hazard Severity Zone would be similar to those associated with the proposed Project. Under Alternative 3, roadway widths and configuration would vary from the Project, but at-grade internal driveway widths would be a minimum of 28 feet wide.[21] However, since Alternative 3 would reduce the number of residents, it would generate fewer new fire service calls than the proposed Project. Additionally, since building heights across the site would generally be reduced, Alternative 3 could reduce need for local water pipe upgrades to meet fire flow requirements. Both the proposed Project and Alternative 3 would have less than significant fire hazard impacts. However, since Alternative 3 would reduce the number of residents and building heights on-site, fire service impacts would be less than those of the proposed Project.

Cumulative Impacts

Implementation of the proposed Project and other related projects would result in greater demands on existing Fire Department resources. As with the proposed Project, Alternative 3 and each related project within the County would be subject to County requirements relative to water availability and accessibility to fire fighting equipment and would be required to comply with all applicable code and ordinance requirements for access, water mains, fire flows, fire sprinkler systems, and fire hydrants. Increased demands from cumulative development would be met by increases in staffing and equipment,

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21 In a few places the roadway width is 26 feet adjacent to 8-foot wide parallel parking spaces (for a total width of 34 feet), however, these roadway widths are wide enough to accommodate fire trucks and emergency vehicles.

which would be funded by property tax, sales tax, and special tax revenues paid by new development. As such, the proposed Project's and cumulative development demands would have a less than significant fire service impact. Given that the proposed Project would not result in a cumulative impact and that Alternative 3 would result in fewer overall fire service impacts, Alternative 3 would have a less than considerable contribution to cumulatively significant fire service impact, and would result in less potential cumulatively considerable fire service impacts compared to the proposed Project.

Mitigation Measures

Since impacts on fire services would be less than significant under both the proposed Project and Alternative 3, no mitigation measures are required.

Public Services (Sheriff Services)

Construction Impacts

Under Alternative 3, cases of trespass, theft and/or vandalism on the construction site could increase demand for sheriff services, but would not typically place undue demands on those services. As under the proposed Project, the builder and contractor would use private security and flagmen at the construction site, practice general safekeeping of construction equipment, and implement other standard construction practices. Construction-related impacts on sheriff services would be less than significant and, since Alternative 3 would require less construction than the proposed Project.

Operational Impacts

Alternative 3 would introduce approximately 1,482 residents to the Project site. This would result in a 1 percent increase in the existing population of Reporting District 2938, which encompasses the Project site. In contrast, the proposed Project would result in a 1.4 percent population increase with the addition of 2,139 residents. The County Sheriff's Department determined that the population increase due to the proposed Project would increase the number of calls for service within the reporting district; however, the Department further stated that it had no specific concerns about the proposed Project's impacts on staffing or other Sheriff's Department resources. As with the proposed Project, with implementation of the traffic and access mitigation measures, local roadways would continue to operate at levels consistent with County Department of Public Works standards and the Los Angeles County Sheriff's optimal response time standards would be maintained. Additionally, like the proposed Project, Alternative 3 would generate revenues from property and sales taxes that would be deposited in the County's General Fund and the State Treasury, a portion which would be allocated to maintain staffing and equipment levels for the Walnut/Diamond Bar Sheriff's Station for increased demands. For these reasons, the

proposed Project would have less than significant impacts on sheriff services. Since Alternative 3 would result in a lower population increase than the proposed Project, impacts would be less than significant, and less than the proposed Project.

Cumulative Impacts

Related projects in and surrounding Rowland Heights would increase the demand for services from the Walnut/Diamond Bar Sheriff's Station. However, with increased revenues from ground lease rentals, property tax and special tax revenue from the related projects, an allotted portion of the General Fund could be used for increases in staffing and equipment. Furthermore, all projects are required to submit to the County Sheriff's Department project site designs during the planning and building plan-check process. Therefore, the proposed Project and Alternative 3 would have a less than considerable contribution to potential cumulatively significant sheriff service impacts. Given that Alternative 3 would result in fewer overall sheriff service impacts, Alternative 3 would result in less of a contribution to cumulatively considerable impacts on sheriff services than the proposed Project.

Mitigation Measures

Since impacts on Sheriff's services would be less than significant under both the proposed Project and Alternative 3, no mitigation measures are required.

Water Service

As shown in **Table 6.0-35**, Alternative 3 would result in a net potable water demand of 110.3 acre-feet per year (afy). A number of design features recommended by the Walnut Valley Water District (Water District), including low-flow toilets and urinals and water-saving faucets, would be incorporated into the proposed Project design to conserve water. The Water District projects an increased water demand of 4,972 afy between 2010 and 2030. Alternative 3's anticipated net potable water demand of approximately 110 afy constitutes 2.2 percent of the projected demand and 54.74 afy less than the proposed Project. As discussed in the Water Supply Assessment prepared for the proposed Project, the Water District has sufficient supplies available to meet proposed Project demand, and impacts on potable water service would be less than significant; impacts related to water service under Alternative 3 would, therefore, also be less than significant. Since Alternative 3 would require less water, impacts related to potable water service would be less than those of the proposed Project.

Table 6.0-35
Potable Water Demand – Alternative 3

Use	Units	Demand Factor	Annual Demand
Proposed			
Multi-family Units	537 du	0.23 afy/du	123.5 afy
Gross Demand			**123.5 afy**
Existing			
Southlands Christian Church and Schools	--	--	13.2 afy
Net Demand			**110.3 afy**

Source: Walnut Valley Water District, "Water Supply Assessment – The Canyon Residences," 2009.

Additionally, approximately 2.7 acres, or 117,035 square feet, of the Project site would be landscaped under Alternative 3, which includes 6,255 square feet of turf and 110,780 square feet of landscape plantings, while 3.4 acres, or 146,274 square feet, would be landscaped under the proposed Project, which includes 16,896 square feet of turf and 129,378 square feet of landscape plantings. Plantings would be selected in accordance with the County's *Drought-Tolerant Landscaping Ordinance*, which require 75 percent of the plants used to be drought-tolerant. Landscaping associated with the proposed Project is projected to require approximately 11.6 afy for irrigation (2.1 afy for turf and 9.51 afy for landscape plantings).[22] Based on the same methodology, landscaping associated with Alternative 3 is projected to require approximately 10.82 afy for irrigation (0.93 afy for turf and 9.89 afy for landscaped plantings). Reclaimed water would be used to irrigate on-site landscaping. Both the proposed Project and Alternative 3's anticipated reclaimed water demand would represent less than 1 percent of the projected reclaimed water supply for 2010. The Water District has sufficient supplies available to meet the projected demand increase under either scenario. Alternative 3 would have a less than significant impact on the Water District's reclaimed water supply, and impacts would be less than under the proposed Project since a smaller area would be landscaped.

Cumulative Impacts

Buildout of the proposed Project plus related projects would result in a water demand of 2,902 afy per year or 58 percent of the Water District's projected increase in water demand. The Water District has sufficient supplies to accommodate this increased demand when buildout of the proposed Project and related projects is expected. Buildout of Alternative 3 and other related projects within the Water

22 The landscape water demand calculations are contained in Appendix I of the Water Supply Assessment contained in **Appendix 5.11**.

District's service area would consume an estimated 2,847.12 afy of water. Similar to the proposed Project, the Water District has sufficient supplies to accommodate this increased demand when buildout of Alternative 3 and related projects is expected. Water demand for Alternative 3 plus related projects within the Water District's service area would represent approximately 57 percent of the Water District's projected increase in demand for water by 2030. Therefore, the water demand of Alternative 3 and related projects are accounted for within the current planning period, which projects use through the year 2030. Accordingly, Alternative 3 would have a less than considerable contribution to cumulatively significant water service and demand impacts, and, given that Alternative 3 would use less water than the proposed Project, less of an impact than the proposed Project.

Mitigation Measures

Since impacts on water service would be less than significant under both the proposed Project and Alternative 3, no mitigation measures are required.

Utility Service

Electricity

As shown in **Table 6.0-36**, Alternative 3 would result in a net electricity demand of approximately 2,326.2 Megawatt-hours (MWh) per year. Southern California Edison (SCE) will have an available supply of approximately 123,675 gigawatt-hours (GWh)[23] of power in 2018 to meet a projected demand of 121,400 GWh within its service area. Thus, Alternative 3 would require less than 0.01 percent of the total 2018 supply. Additionally, Alternative 3 would comply with the energy efficiency standards of the County of Los Angeles' Green Building Ordinance, which require exceedance of the Energy Efficiency Standards contained within Title 24 (2005), the California Building Standards Code. Since current projections forecast that electricity generation would meet statewide demand throughout the current planning horizon, Alternative 3 is not anticipated to result in a substantial increase in electricity demand relative to the available supply. The Alternative could require the installation of new facilities and equipment, such as transformers, on the site, and also could require minor alterations to off-site electrical transmission and distribution infrastructure. Like the proposed Project, Alternative 3 would have a less than significant impact related to electricity supply infrastructure with mitigation requiring the Applicant to incorporate modifications to the on-site electricity transmission/distribution system as needed.

The proposed Project is estimated to result in a net electricity demand of approximately 3,665.1 MWh per year. Due to the reduction in the number of residential units, Alternative 3 would have a lower electricity

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23 One GWh is equivalent to 1,000 mWh.

demand than the proposed Project. Therefore, Alternative 3 would result in less than significant impacts, and have less electricity impacts compared to the proposed Project.

Table 6.0-36
Electricity Demand –Alternative 3

Land Use	Quantity	Demand Factor (Megawatt-hours/du or sf/year)	Annual Demand (Megawatt-hours)
Proposed			
Multi-family Housing	537 du	5.627[1]	3,021.7
Gross Demand			**3,021.7**
Existing			
Southlands Christian Schools (School and Church)[3]	63,226 sf	0.011[2]	695.5
Net Demand			**2,326.2**

Consumption factor derived from SCAQMD CEQA Air Quality Handbook, *1993.*
sf = square foot; du = dwelling unit
[1] *Per Unit.*
[2] *Per Square Foot.*
[3] *Rate for church and school uses.*

Natural Gas

As shown in **Table 6.0-37**, Alternative 3 would result in an estimated net natural gas demand of 24.4 mcf per year. The Gas Company has sufficient gas supplies planned to accommodate the increase in gas demand by all of its market sectors, including residential, commercial, industrial, electric generation, and natural gas vehicle uses, through the current projection period (2008 to 2030). The supply from interstate pipelines is estimated to be 3,875 million cubic feet per day (mcf/d) in 2030. The demand generated by Alternative 3 would result in an additional 24.4 million cubic feet (mcf) per year or 0.067 mcf per day, which represents less than 0.00002 percent of the Gas Company's supply from interstate pipelines in 2030. Therefore, the Gas Company has adequate supply to serve Alternative 3 in addition to its existing commitments. Minor capacity-enhancing alterations to local natural gas transmission and distribution infrastructure may be necessary to serve Alternative 3. Like the proposed Project, Alternative 3 would have a less than significant impact related to natural gas supply infrastructure with mitigation requiring the Applicant to incorporate modifications to the on-site natural gas conveyance system as needed.

Table 6.0-37
Natural Gas Demand –Alternative 3

Land Use	Quantity	Monthly Demand Factor[1]	Monthly Demand (cf)	Annual Demand (mcf)
Proposed				
Multi-family Housing	537 du	4,011.5 cf/du	2,154,175.5	25.9
Gross Demand			**2,154,175.5**	**25.9**
Existing				
Southlands Christian Schools (School and Church)	63,226 sf	2.0 cf/sf[2]	126,452.0	1.5
Net Demand			**2,027,723.5**	**24.4**

[1] Consumption factors derived from SCAQMD CEQA Air Quality Handbook, 1993.
[2] Consumption factor for school and church uses.
du = dwelling units; sf = square foot; cf = standard cubic feet; mcf = million cubic feet

The proposed Project is estimated to result in a net natural gas demand of approximately 35.8 mcf per year. Due to the reduction in the number of residential units, Alternative 3 would have a lower natural gas demand compared to the proposed Project. Therefore, Alternative 3 would result in less than significant impacts related to natural gas, and less impact compared to the proposed Project.

Cumulative Impacts

As with the proposed Project, Alternative 3 and each related project would be required to comply with energy efficiency standards under Title 24 of the California Code of Regulations. Additionally, County of Los Angeles projects that would obtain a building permit on or after January 1, 2009 would be required to comply with the Green Building Ordinance and therefore would be designed to consume at least 15 percent less Time Dependent Valuation than the energy usage permitted by the 2005 California Energy Efficiency Standards. Based on projections by SCE and the Gas Company, sufficient electricity and natural gas supplies are available to meet the demands of the proposed Project and each of the identified related projects. Therefore, the proposed Project's cumulative utility impacts would be less than significant. Given that sufficient electricity and natural gas supplies exist and that Alternative 3 would result in a reduced demand compared to the proposed Project, Alternative 3 would have a less than considerable contribution to cumulatively significant utility service impact, and would result in less potential cumulatively considerable impacts related to utility service compared to the proposed Project.

Mitigation Measures

The following mitigation measure is applicable to the proposed Project, and would also apply to Alternative 3.

Electricity

6.0-33 Prior to submittal of final plans for approval by the County Department of Building and Safety, the Applicant shall incorporate modifications to the electricity transmission/distribution system as needed to serve the Project site, to the specifications of Southern California Edison (SCE). Upon finalizing these specifications, the Applicant shall fund the cost of infrastructure installation resulting from the Project-related impact(s), as applicable.

Natural Gas

6.0-34 Prior to submittal of final plans for approval by the County Department of Building and Safety, the Applicant shall incorporate modifications to the natural gas conveyance system as needed to serve the site, to the specifications of the Gas Company. Upon finalizing these specifications, the Applicant shall fund its fair share of the cost of infrastructure installation resulting from the Project-related impact(s), as applicable.

Solid Waste Service

Construction Impacts

Like the proposed Project, Alternative 3 would require the demolition of existing structures, which would generate approximately 5,000 cubic yards of debris (a minimum of 3,250 cubic yards would be recycled and a maximum of 1,750 cubic yards would be disposed of in a landfill). However, since it would not include subterranean parking, Alternative 3 would require substantially less excavation and soil removal than the proposed Project. Alternative 3 would generate 42,024 cubic yards of cut soil and 25,987 cubic yards of fill, and would generate 16,037 cubic yards of earth that would require export from the Project site, whereas the proposed Project would generate approximately 55,000 cubic yards of earth for export.

The Applicant would prepare a Waste Management Plan to recycle, at a minimum, 65 percent of the construction and demolition debris and utilize methods to promote recycling and re-use of materials, as well as safe disposal. Waste generated during demolition and construction that is not recycled would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities generally within Los Angeles County. Trash and wood would be delivered to the

Puente Hills Recovery Facility, which has the capacity to accommodate the approximately 3,250 cubic yards of recyclable demolition and construction debris that would be delivered. Earth material and the remaining construction and demolition debris would be disposed of at the Puente Hills Landfill. Since this landfill has the capacity to accommodate the 55,000 cubic yards of earth material removed by the proposed Project, it would also have the capacity to accommodate the 16,037 cubic yards of soil that requires export under Alternative 3, in addition to the 1,750 cubic yards of non-recycled construction demolition and debris generated by demolition of existing uses. Like the proposed Project, Alternative 3 would have less than significant construction impacts. However, since Alternative 3 would remove substantially less soil from the site, construction impacts related to solid waste would be less than those of the proposed Project.

Operational Impacts

As shown in **Table 6.0-38**, beginning in 2012 Alternative 3 would generate approximately 310 tons of solid waste per year, of which 155 tons would be disposed into landfills assuming a 50 percent waste diversion rate. Alternative 3 would be required to recycle a minimum of 50 percent until 2015, when it would be required to recycle a minimum of 60 percent of the solid waste generated, in accordance with current state law and in compliance with the prepared Waste Management Plan. As shown in **Table 6.0-39**, Alternative 3 would reduce net annual landfill disposal to 116 tons beginning in 2015. Alternative 3 would include a solid waste diversion program (e.g., adequate areas for collecting and loading recyclables) and would result in Alternative 3 meeting at least the minimum recycling level established by Los Angeles County in accordance with AB 939. Waste requiring disposal would be transported to the Puente Hills Landfill and, eventually, the Mesquite Regional Landfill. Waste generated under Alternative 3 would result in an approximately 0.004 percent increase in total disposal to Puente Hills Landfill, until 2015, and 0.003 percent increase in total disposal to Puente Hills Landfill after 2015. As such, this increase in outflow is not considered substantial, and, like the proposed Project, Alternative 3 would have less than significant operational impacts.

Table 6.0-38
Solid Waste Disposal until 2015 – Alternative 3

Land Use	Units	Generation Factor[1]	Daily Generation (lbs/day)	Annual Generation (tons/year)	Waste to be Diverted (50 Percent) (tons/year)	Remainder Disposed in Landfill
Proposed						
Multi-family Residential	537 du	4 lbs/du/day	2,148.0	392.0	196.0	196.0
Gross Generation				**392.0**	**196.0**	**196.0**
Existing Uses				82.2	41.1	41.1
Net Generation				**309.8**	**154.9**	**154.9**

du = dwelling unit

[1] *California Integrated Waste Management Board, Estimated Solid Waste Generation, http://www.ciwmb.ca.gov/wastechar/wastegenrates/default.htm. 2010.*

Table 6.0-39
Solid Waste Disposal After 2015 – Alternative 3

Land Use	Units	Generation Factor	Annual Generation (tons/year)	Waste to be Diverted (60 Percent) (tons/year)[a]	Remainder Disposed in Landfill
Proposed					
Multi-family Residential	537 du	4 lbs/du/day	392.0	235.2	156.8
Gross Generation			**392.0**	**235.2**	**156.8**
Existing Uses			82.2	41.1	41.1
Net Generation			**309.8**	**194.1**	**115.7**

du = dwelling unit

[a] *A 50 percent diversion rate was applied to waste generation by the existing uses on the Project site, consistent with the diversion rate mandated by the California Integrated Waste management Board through AB 939*

The proposed Project would generate a net increase of approximately 242 tons of solid waste per year, assuming a 50 percent diversion rate, and 185 tons per year, assuming a 60 percent diversion rate. As with the proposed Project, Alternative 3 would provide recycling for residents. Due to the reduction in the number of residential units, Alternative 3 would generate a lower annual quantity of solid waste than

the proposed Project. Therefore, Alternative 3 would result in less solid waste impacts compared to the proposed Project.

Cumulative Impacts

The proposed Project combined with other related projects would generate an increase in solid waste of approximately 4,946.37 tons of solid waste to be disposed. County landfills have the capacity to accommodate solid waste projections through 2015 under business as usual. The County would meet future disposal capacity requirements by successfully permitting and developing all in-County landfill expansions, utilizing available or planned out-of-County disposal capacity, developing the necessary infrastructure to facilitate exportation of waste to out-of-County landfills, and developing conversion/alternative technology facilities. As such, the Project's cumulative impacts to solid waste services would be less than significant. Alternative 3 combined with other related projects, would generate an increase in solid waste of approximately 10,195.55 tons per year. Based on the County's 2004 solid waste diversion rate of 53 percent, approximately 5,403.64 tons of solid waste would be diverted annually leaving approximately 4,791.91 tons of solid waste to be disposed. Given that Alternative 3 would result in the generation and disposal of less solid waste than the proposed Project and that County landfills have capacity to accommodate the proposed Project and related project's solid waste projections, Alternative 3 would have a less than considerable contribution to cumulatively significant solid waste impact, and would result in less potential cumulatively considerable impacts related to solid waste compared to the proposed Project.

Mitigation Measures

Since impacts on solid waste service would be less than significant under both the proposed Project and Alternative 3, no mitigation measures are required.

Parks and Recreation

Construction Impacts

Construction activities, including demolition, associated with the Project and Alternative 3 would result in the removal of the existing Southlands Christian Church and Southlands Christian School. The existing private recreational facilities located on the Project site, including a gymnasium and athletic field, would be removed. Impacts associated with the loss of privately held recreational land through construction activities would be less than significant, however, since no public local or regional parkland or recreational facilities are being removed as a result of Project construction; impacts associated with construction of Alternative 3 would be less than significant.

Operational Impacts

Rowland Heights presently has a local parkland deficit of approximately 160 acres and a regional parkland deficit of approximately 30,692 acres. Based on a standard of 4.0 acres of local parkland per 1,000 residents, the population increase associated with Alternative 3 (1,482 residents) would increase the local recreational parkland deficit by 5.90 acres, or 3.7 percent, to 165.9 acres, which is a potentially significant impact. Based on a standard of 6.0 acres of regional parkland per 1,000 residents, Alternative 3 would increase the regional parkland deficit by approximately 8.90 acres, or 0.029 percent, to 30,700.9 acres.

The demand for local recreational opportunities by residents of Alternative 3 would be partially offset by the planned provision of on-site open space and recreational amenities, as indicated in **Figure 6.0-13, Alternative 3 Open Space and Recreational Amenities**. Open space on the Project site under Alternative 3, including landscape planters, landscaped quadrangles, and communal areas such as plazas, courtyards, playground areas, pools, and barbeque areas, totals 4.4 acres, or approximately 355 square feet per residential unit. Recreational amenities would be comparable to those of the proposed Project, and would include such facilities as a great room or community room, yoga/multipurpose room, fitness center, sports lounge, library-multipurpose room, and conference room. Two centrally located swimming pools and a playground area would also be provided for resident use. As under the proposed Project, the value of recreational amenities proposed as part of Alternative 3 partially offsets demand for local parkland and reduces impacts on parks and recreation.

The value of the proposed on-site amenities under Alternative 3 was determined to be approximately $1.2 million, which considerably exceeds the required Parkland Dedication Ordinance fee (which would be required if Alternative 3 were a subdivision) for the 1.50-acre unmet local park space obligation under this Alternative (5.90 acres of calculated demand under Alternative 3 less 4.40 acres of proposed on-site open space and recreational amenities = 1.50 acres). Therefore, on-site amenities were determined by the County Department of Parks and Recreation to further offset Project demand for recreational facilities.[24]

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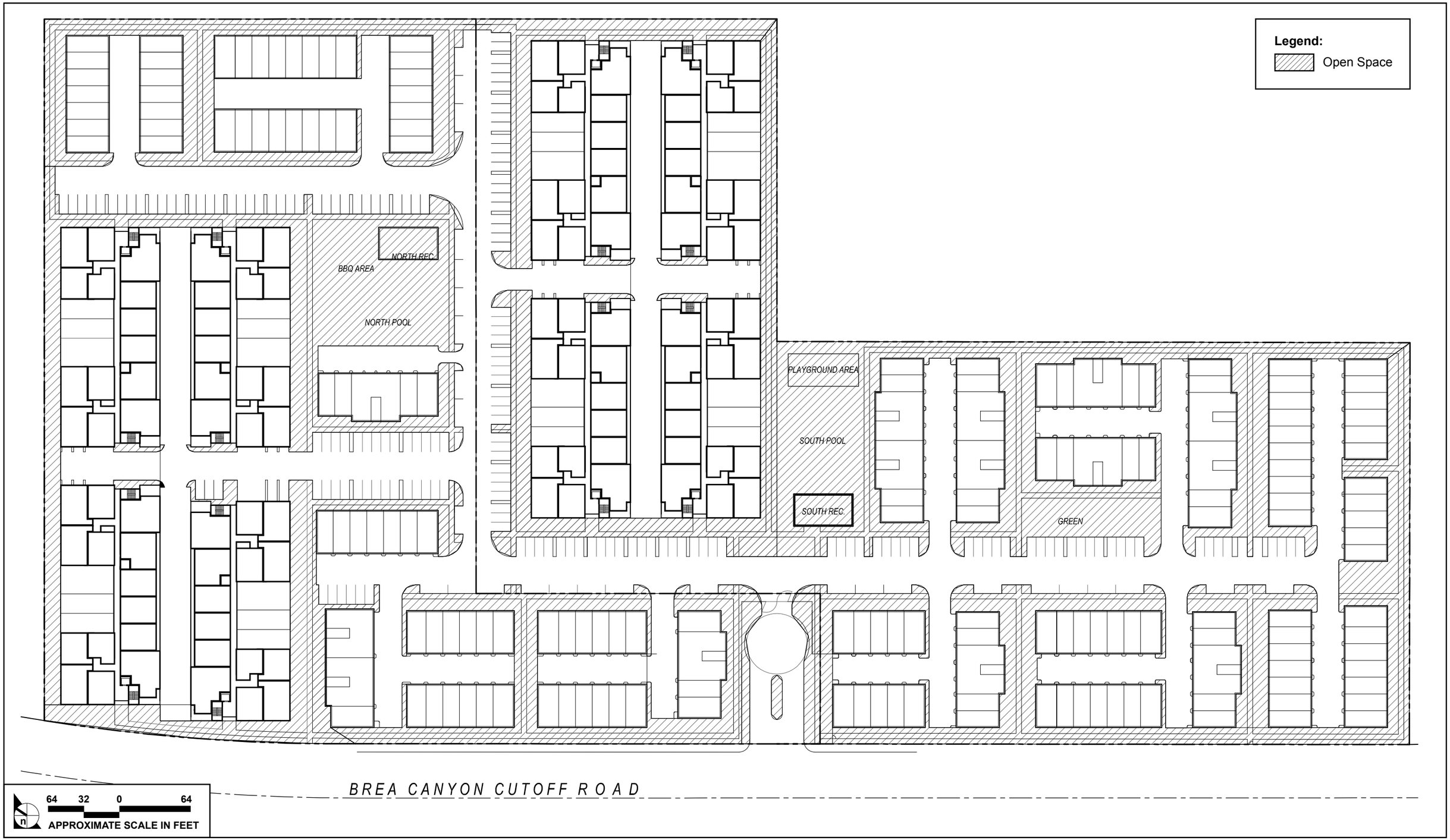
24 Joan Rupert, Section Head, Environmental, Los Angeles County Parks and Recreation Department, personal communication with Trammell Crow Residential and Impacts Sciences, October 5, 2009.



SOURCE: Van Tilburg, Banvard & Soderbergh, AIA - December 2009

FIGURE **6.0-13**

Alternative 3 Open Space and Recreational Amenities

291-006•03/10

However, as under the proposed Project, it is expected that residents under Alternative 3 would still use local parks when athletic courts and playing fields are required, since these amenities are not proposed on the Project site. Moreover, recreational amenities on the Project site under Alternative 3 are intended for the use of Project residents and would not be accessible to the general public. Therefore, Alternative 3 still would result in potentially significant impacts related to the need for new or expanded recreational facilities in local parks to serve Alternative 3's residents. With implementation of mitigation that requires funds for, or improvements to, the Rowland Heights Park Baseball Field to the satisfaction of the County Parks and Recreation Department, this impact would be reduced to a less than significant level. Since Alternative 3 would generate fewer new residents than the proposed Project, impacts on local parkland and recreational amenities would be less than under the proposed Project.

Implementation of the proposed Project would increase the regional parkland deficit by 8.90 acres, or 0.029 percent, to 30,700.9 acres. As with the proposed Project, this is considered a minor increase; moreover, although regional parkland demand is assessed on a regional basis, the Rowland Heights General Community Plan Area contains two regional parks totaling 669 acres. Impacts on regional parkland and recreational amenities are considered less than significant and, since Alternative 3 would generate fewer new residents than the proposed Project, impacts would be less than those of the proposed Project.

Cumulative Impacts

Residential subdivisions proposed within Rowland Heights would be required to meet County and Quimby Act local parkland standards through dedication of land, fees in lieu of the dedicated parkland, construction of amenities on dedicated parkland, or a combination of the three. Application of this ordinance to subdivision projects within Rowland Heights and other local and County standards to non-subdivision projects would ensure that the demand for parks and recreational facilities are met as new residential developments are constructed. Therefore, cumulative impacts on park and recreational facilities from the Project would be less than significant. Since Alternative 3 would result in a smaller increase in demand for parks and recreational amenities than the proposed Project, Alternative 3 would have a less than considerable contribution to cumulatively significant parks and recreation impacts, and would result in less of an impact than the proposed Project.

Mitigation Measures

The following mitigation measure would reduce impacts associated with Alternative 3 on local parkland to a less than significant level:

6.0-35 The Applicant shall either provide funds for, or implement improvements within, the Rowland Heights Park Baseball Field in the amount of $20,000 to the satisfaction of the County Department of Parks and Recreation. If the Applicant implements the improvements, no permissions or permits shall be required beyond the approval of the County Department of Parks and Recreation to comply with the requirements of the County Department of Parks and Recreation. Funds or improvements shall be directed towards the Baseball Field since these amenities are not proposed as part of the Project. Funds shall be provided or improvements initiated upon issuance of a building permit for the Project, as follows:

- Dugouts (4) shading structures or covers: $4,000; and
- Batting cages (2): $16,000.

Library Service

Construction Impacts

Construction activities associated with the Project and Alternative 3 would not generate a permanent residential population. Therefore, no impacts to library services would occur as a result of the Project's and Alternative 3's construction.

Operational Impacts

Rowland Heights Library currently does not meet the standard of 0.50 gross square feet of library space per resident, 2.75 library items (books, magazines, periodicals, etc.) per capita, and 1 computer per 1,000 residents. Therefore, the additional demand for library resources created by residents of Alternative 3 would be potentially significant. Like the proposed Project, Alternative 3 would have less than significant impacts to library services with implementation of mitigation requiring the Applicant to pay the library mitigation impact fee in effect at the time building permits are issued. However, since Alternative 3 would generate fewer new residents than the proposed Project, Alternative 3 would result in less impact on the County of Los Angeles Public Library system compared to the proposed Project.

Cumulative Impacts

Given that the Alternative 3's contribution to cumulative impacts would be mitigated to a less than significant level with payment of the library mitigation impact fee, Alternative 3 would not contribute to a significant library service cumulative impact and given that Alternative 3 would result in fewer resident's than the proposed Project, Alternative 3's contribution to potential cumulatively significant library service impacts would be less than the proposed Project.

Mitigation Measures

The following mitigation measure is applicable to the proposed Project, and would also apply to Alternative 3.

6.0-36 The Applicant shall pay the library mitigation impact fee in effect at the time building permits are issued for the Project ($788 per residential unit as of July 1, 2008). Fees are paid to Los Angeles County to offset the demand for library items, building square footage, and computers generated by the proposed Project.

Population, Housing, and Employment

Operational Impacts

In 2000, the average household size of a renter-occupied unit in Census Tract 4033.04, which encompasses the Project site, was 2.76 persons.[25] Based on an average household size of 2.76 persons per unit within Census Tract 4033.04, Alternative 3 would provide housing for approximately 1,482 residents. Therefore, the population increase from Alternative 3 would account for approximately 6 percent of the expected increase from 2005 to 2010 (the data for the closest year to Project buildout) in the unincorporated San Gabriel Valley Council of Governments (SGVCOG) subregion population. In addition, the housing increase from Alternative 3 would account for approximately 8 percent of the expected increase from 2005 to 2010 in households. Both increases are within the 2010 unincorporated SGVCOG subregion projections of 389,267 residents and 105,914 households. Therefore, like the proposed Project, Alternative 3 is consistent with growth projections and impacts would be less than significant. The proposed Project would provide 775 dwelling units housing approximately 2,139 residents. Therefore, Alternative 3 would add 657 fewer residents to the Rowland Heights community. Accordingly, Alternative 3 would result in less population and housing impacts than the proposed Project.

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25 US Census Bureau, "2000 Census, Quick Tables - American Fact Finder for Census Tract 4033.04, Los Angeles County, California," http://factfinder.census.gov. 2008.

As under the proposed Project, the addition of housing to the Rowland Heights community under Alternative 3 would contribute to the minor 2010 jobs/housing imbalance of 0.96:1 in the unincorporated SGVCOG subregion. However, this impact is not considered adverse since Rowland Heights is intended to be a residential community, as stated in the Rowland Heights Community General Plan. Additionally, the neighboring City of Industry plays a vital role as an employment hub and helps to offset any jobs/housing imbalance in Rowland Heights. Therefore, like the proposed Project, Alternative 3 would have less than significant impacts on the jobs/housing imbalance. However, since Alternative 3 would add 657 fewer residents than the proposed Project, Alternative 3 would result in a lower increase in the jobs/housing imbalance. Accordingly, Alternative 3 would have less of an impact on the jobs/housing imbalance as compared to the proposed Project.

Cumulative Impacts

The proposed Project plus related projects would increase the population and housing supply in unincorporated Rowland Heights as well as within the cities of Diamond Bar and Industry. Increases in population, dwelling units, and employment resulting from the proposed Project plus related projects would be within 2020 projections. Therefore, the Project and related projects are consistent with growth projections and would not directly induce population growth that is substantially higher than expected population growth in the area. Therefore, impacts would be less than significant. Implementation of the proposed Project and related projects encompassing the unincorporated portions of the San Gabriel Valley Council of Governments subregion plus the Cities of Diamond Bar and Industry would result in a job/housing ratio of 1.627:1 in 2012, which is considered an imbalance in the jobs/housing ratio. The related projects and the proposed Project would account for approximately 2.8 percent of the year 2030s expected increase in vehicle miles traveled (VMT) within the Southern California Association of Governments' six-county region. Therefore, impacts would be less than cumulatively considerable. Since Alternative 3 would add 657 fewer residents than the proposed Project, it would result in fewer population and housing impacts and fewer VMT. As such, Alternative 3 would have a less than considerable contribution to cumulatively significant population, housing and employment impacts, and would result in less impact than the proposed Project.

Mitigation Measures

Since impacts on population, housing, and employment would be less than significant under both the proposed Project and Alternative 3, no mitigation measures are required.

Land Use

A Zone Change would be required under Alternative 3 to change the zoning designation of the site from A-1, Light Agriculture to Residential Planned Development (RPD), as would be the case under the proposed Project. The Rowland Heights Community General Plan designates the Project site for "U1" Urban 1 uses, which include very low density (hillside) residential, large lot residential and single-family detached units. The U1 designation allows 1.1 to 3.2 dwelling units per gross acre. Alternative 3 proposes multi-family residential units at a density of approximately 35 dwelling units per gross acre; this density would not be consistent with the existing U1 designation, but would be consistent with the Community General Plan "U5" Urban 5 designation, which permits multi-family uses at a density of 35 dwelling units per gross acre. As a result, Alternative 3 would require a General Plan Amendment. In contrast to the proposed Project, Alternative 3 would not require the creation of a new site-specific land use designation to accommodate the proposed development density. Nonetheless, the inconsistency of Alternative 3 with the property's existing zoning and Community General Plan designations constitute significant and unavoidable land use impacts, as is the case for the proposed Project. However, as discussed in more detail below, Alternative 3 is compatible with surrounding land uses, and is consistent with the land use policies that are also applicable to the proposed Project. See **Section 5.17, Land Use and Planning**, of this Draft EIR for a detailed consistency analysis of these land use plans and policies. Further, Alternative 3 would also comply with two policies that the Project is inconsistent with (Policy 4 of the Rowland Heights Community General Plan and Policy 15 of the Los Angeles County General Plan), and with approval of a proposed zone change to RPD 35U and plan category U5, Alternative 3 would be consistent with the zoning and Community Plan designation for the Project site.

Compatibility with Surrounding Uses

Alternative 3 would be compatible with surrounding uses and located on a property with similar characteristics as other higher density residential uses in Rowland Heights. Land use patterns and characteristics in the Project site's immediately surrounding area have changed over the years, and the Project site's existing A-1 zoning predates the establishment of the Community Plan nearly 27 years ago. While agricultural uses previously existed in this immediate area, the neighborhood has shifted toward a predominantly residential and commercial neighborhood and the land use pattern in and around the Project site is fairly urbanized.

Alternative 3 would implement an infill project within an urbanized area of Rowland Heights. For example, immediately south and east of the Project site is a townhouse development on property designated U4. The U4 designation allows up to 22 dwelling units per acre. Although that site is zoned RPD-10000-13U, which limits site development to 13 dwelling units per acre, a portion of the site is

undevelopable due to drainage issues, and thus the effective density of the developed area is approximately 20 dwelling units per acre. The multi-family residential development on this U4 property provides a substantial buffer between the Project site and the single family uses further south of the Project site. To the north, the Project site is bordered by higher density residential and commercial uses, including a senior housing complex and three commercial buildings along Colima Road. Further north and within several hundred feet of the Project site is the major intersection of Colima Road and Brea Canyon Cutoff Road, where three of the four corners of the intersection are zoned for commercial uses and occupied by shopping centers that provide neighborhood-serving commercial uses, including various retail stores, shops, a grocery store, and restaurants. Also to the east, the Project site is buffered from other single family development by the Royal Vista Golf Course. Lastly, single family residences to the west of the Project site are buffered by Brea Canyon Cutoff Road, a major four-lane roadway with a center turn lane. The street is approximately 80 feet in width.

Further, Alternative 3 also implements several design features to promote compatibility with the surrounding land uses, including incorporating open space areas and setbacks to minimize potential impacts from increased density. Alternative 3 is designed to step back from adjacent development to minimize perceived height impacts. For example, buildings in the northern portion of the Project site that shares common boundaries with the multi-family property to the north will be limited to 40-41.5 feet in height, and these buildings will be set-back at least 20 feet from the bordering property. Because of the grade difference between the two properties, as well as this proposed set-back, height differences between the two properties will be reduced. Design plans also include a building setback of 15 feet in width that will further buffer the Project site from the multi-family residential development to the north. In addition, Alternative 3 places the Townhome-Style Apartment Buildings and Flats along the eastern portion of the property adjacent to Brea Canyon Cutoff Road. These buildings create less massing along Brea Canyon Cutoff Road, and thus an appearance more consistent with surrounding properties along Brea Canyon Cutoff Road. Lastly, Alternative 3 places buildings with denser massing and greater height in the southern portions of the property. Such location utilizes the Project site's grade change from north to south to minimize perceived height differences, while also placing Alternative 3's larger buildings closer to the commercial uses north of the Project site and away from other nearby single-family residential uses.

Lastly, the Project site also shares characteristics of other sites in the Community Plan area that are zoned and classified for higher density. For example, similar to the Project site, most U4 and U5 properties in the Community Plan area occur south of Colima Road, and most of these sites occur along or within very close proximity (approximately 1,000 feet) to Colima Road, the primary commercial arterial roadway in Rowland Heights. Further, as with the Project site, these existing U4 and U5 properties are in close

proximity to commercially zoned properties, neighborhood-serving retail uses, bus routes and mass transit, and the Orange (Route 57) and Pomona (Route 60) Freeways. While the hillside areas further south of Colima Road and Pathfinder Road consist mostly of single-family residential uses, all of the U4 and U5 properties, as well as the Project site, remain in the northern portion of the Rowland Heights Community Plan area where development of new multi-family housing is more suitable and in closer proximity to jobs, services, and public transit. Thus, similar to the Project site, such higher density uses are consistently placed in more pedestrian-friendly, densely developed areas.

Consistency with Land Use Plans

Alternative 3 is consistent with and promotes several land use policies that are also applicable to the proposed Project. See **Section 5.17, Land Use and Planning**, of this Draft EIR for a detailed consistently analysis of these land use plans and policies. For example, Alternative 3 meets the goal of encouraging the provision of an adequate supply of housing in close proximity to jobs. According to the San Gabriel Valley Economic Partnership, there currently are over 600,000 jobs in the San Gabriel Valley. The Los Angeles County Economic Development Corporation's 2007–2008 Economic Overview and Forecast reports that Rowland Heights alone is home to over 2,022 business establishments, and the San Gabriel Valley as a whole housed over 42,416 businesses in 2005. Several large companies and corporations are also housed in nearby cities such as City of Industry, Diamond Bar, Pomona, and Brea. A major jobs corridor exists near the Project site in the City of Industry between Interstate 605 to the west and the proposed NFL Stadium site on the east. Thus, the Project site's location provides residents convenient access to local employment.

Further, Alternative 3 will encourage the use of buses and other forms of mass transit, and promotes the efficient use of land through a more concentrated pattern of urban development by focusing new urban growth in an area well-served by mass transit and local services. The Project site is close to public bus service (within 0.5 mile of the closest transit stop) and within 2.5 miles of the Metrolink commuter rail station. This proximity of Alternative 3 to several public transit options including Metro Bus, Foothill Transit and Metrolink will encourage the use of public transportation. Commuters also will have close access to the Orange (Route 57) and Pomona (Route 60) Freeways via Brea Canyon Cutoff Road and Fairway Drive. The Project site's location also enables new residents to walk to neighborhood-serving commercial and retail uses. Landscaped areas and streetscape upgrades provide a pedestrian-friendly environment that will encourage walking between adjacent uses and provide an important pedestrian linkage to the businesses on Colima Road. In addition, the Project site is close to several community services and recreational options. Ybarra Elementary, a K–8 school, is within walking distance of the site; Rowland High School, Rowland Heights Library and Fire Station #145 are all located within 1.6 miles. A number of large local parks, including Pathfinder Regional Park, Schabarum Regional Park and Rowland

Heights County Park serve the area, and the Project site is adjacent to the Los Angeles Royal Vista Golf Course.

Lastly, Alternative 3 would encourage the provision of adequate supplies of diverse rental housing in Rowland Heights and greater Los Angeles County by providing 537 multi-family residential units. The proposed residential community will help the County meet the housing needs identified in the recent Regional Housing Needs Assessment and Los Angeles County Housing Element Update. The need for housing in the area and within the region has increased over the last several years, and the Housing Element states that between the years 2000 and 2007, the population in the County increased at a much higher rate than the number of housing units, suggesting a shortage of housing. In addition, the Housing Element states that housing in the unincorporated areas consists predominantly of single-family homes, with only 20 percent of the housing stock being multi-family, and that such "lack of housing diversity in many unincorporated areas emerged as a common theme from community members during the Housing Element meetings held in November 2007."

For these reasons, Alternative 3 would be consistent with the same policies and goals as the proposed Project, as discussed in more detail **in Section 5.17, Land Use and Planning,** of this Draft EIR. Further, Alternative 3 would comply with two policies that the proposed Project does not comply with. First, unlike the proposed Project, Alternative 3 would comply with Policy 4 of the Rowland Heights Community General Plan Land Use Element, which restricts multi-family or attached housing to the U3, U4 and U5 categories. The Project proposes a General Plan Amendment to the Rowland Heights Community General Plan to apply the U6 designation to the site to permit a density of 36 to 50 dwelling units per gross acre, whereas Alternative 3 proposes a plan amendment to allow for multi-family housing on a property designated as U5.

Further, Alternative 3 would be more consistent with Policy 15 of the Los Angeles County General Plan Land Use Element, which protects the character of residential neighborhoods by preventing the intrusion of incompatible uses. Alternative 3 would comply with Policy 15, unlike the proposed Project, because it would decrease the development density from 50 to 35 dwelling units per gross acre, would develop the site at a reduced height and scale compared to the proposed Project, and as described in more detail above, would incorporate design features to promote compatibility with surrounding land uses.

Because Alternative 3 would provide the same benefits as the proposed Project with a density that is more compatible with nearby uses, potential impacts related to land use would be less than those impacts under the proposed Project.

Cumulative Impacts

Related projects in Rowland Heights include a 14-acre commercial development located at 18880 Railroad Street north of the Pomona Freeway, an 11-unit multi-family residential project at 19280 Colima Road, and several smaller projects. All projects proposed within Rowland Heights would be required to comply with the Rowland Heights Community General Plan, Los Angeles County General Plan, and County Zoning Ordinance, or approval of a General Plan Amendment, Zone Change or variance would be required. As discussed above, Alternative 3 would require a General Plan Amendment, rather than the creation of a new General Plan land use designation as proposed by the Project. Since Alternative 3 would result in slightly reduced land use impacts as compared to the proposed Project, and given that the proposed Project would not result in cumulatively considerable land use impacts, Alternative 3 would have a less than considerable contribution to cumulatively significant land use impact, and would result in less potential cumulatively considerable impacts related to land use as compared to the proposed Project.

Mitigation Measures

Land use impacts would be significant and unavoidable under both the proposed Project and Alternative 3; no mitigation measures are applicable. However, both the proposed Project and Alternative 3 would become consistent with the land use and zoning designation with the adoption of the proposed General Plan Amendment and Zone Change.

Environmental Safety

Construction Impacts

Alternative 3 would necessitate demolition of all existing buildings and structures on the Project site. The oldest buildings on the Project site contain asbestos (ACMs and ACCMs) and lead-based paint, which would result in a potentially significant impact during demolition. However, all asbestos-containing materials and lead-based paints would be removed prior to demolition in accordance with SCAQMD and mitigation measures similar to those of the proposed Project. Therefore, Alternative 3 would have less than significant construction-related impacts. Since the same amount of demolition is required under Alternative 3 and the proposed Project, impacts would be similar.

Operational Impacts

Similar to the proposed Project, Alternative 3 would develop land uses that would not use or generate large quantities of hazardous and/or toxic materials. The handling of hazardous materials would be

limited to the use and disposal of household substances such as unused paint, aerosol cans, cleaning agents (solvents), landscaping related chemicals, and automotive supplies (by products). These materials are generally disposed of at non-hazardous Class II and III landfills. Compliance with County regulations for the use, storage, and disposal of hazardous materials would result in less than significant impacts. The proposed Project would also result in less than significant operational impacts. However, since Alternative 3 proposes a lower development density as compared to the proposed Project, impacts associated with the handling of hazardous materials would be less than under the proposed Project.

Cumulative Impacts

Environmental safety impacts associated with a proposed project tend to occur on a project-by-project basis, rather than cumulatively. As with the proposed Project, the Applicant would comply with applicable regulatory controls during Alternative 3's implementation to abate any site-specific hazards prior to demolition activities, so that Alternative 3 would have a less than considerable contribution to the cumulatively significant release of harmful substances. Since Alternative 3 and the proposed Project would both require demolition of all on-site building and structures, Alternative 3 would be comparable to the proposed Project with respect to contributions to cumulatively significant environmental safety impacts.

Mitigation Measures

The following mitigation measures are applicable to the proposed Project, and would also apply to Alternative 3.

6.0-37 Any ACMs and ACCMs identified at the site, which may be disturbed during renovation/demolition activities, shall be removed by a licensed asbestos abatement contractor utilizing state-of-the-art work procedures and in accordance with all federal, state, and local regulations.

6.0-38 Any suspected lead-based paint shall be sampled prior to any renovations or demolition activities. Any identified lead based paint located within buildings scheduled for renovation or demolition, or noted to be damaged, shall be abated by a licensed lead based paint abatement contractor, and disposed of according to all state and local regulations.

6.0-39 The sampling of all suspect ACMs such as roofing, wall finishes and non-friable floor finishes, shall be conducted prior to demolition. If the suspect ACMs are confirmed to

contain asbestos, their removal in accordance with applicable regulations shall be necessary prior to impact by renovation or demolition activities.

6.0-40 Construction activities shall comply with SCAQMD Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities. This rule is intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of ACMs generated or handled during these activities. The rule requires that SCAQMD be notified before demolition or renovation activity occurs. This notification includes a description of structures and methods utilized to determine the presence or absence of asbestos. All ACMs found on the site shall be removed prior to demolition or renovation in accordance with the requirements of Rule 1403.

Relationship to Project Objectives

Alternative 3 would be similar to the proposed Project in terms of land use (multi-family housing) and amenities, with the primary difference being a more than 30 percent reduction in the number of dwelling units, and therefore development density, compared to the proposed Project. For these reasons, Alternative 3 would meet all five Key Residential Objectives. Those objectives, followed by a brief discussion of the relationship of Alternative 3 to each objective, are listed below.

Key Residential Objectives

1. Assist Los Angeles County in meeting the housing needs of its residents by contributing to the fulfillment of Los Angeles County's SCAG Regional Housing Needs Assessment (RHNA) allocation for moderate-income and above-moderate-income units, which requires the County to accommodate expected growth by ensuring the availability of residential sites at adequate densities and appropriate development standards in unincorporated areas, as stated in the Los Angeles County General Plan Housing Element.

Alternative 3 would provide approximately 70 percent of the housing units planned under the proposed Project, and therefore would still contribute substantially toward meeting housing needs in Los Angeles County. This development density would be consistent with the maximum number of residential units permitted under the Community General Plan's "U5" Urban 5 land use designation (35 units per gross acre x 15.7 gross acres), and therefore represents an "adequate density" consistent with SCAG's Regional Housing Needs Assessment allocation for the County. A Zone Change would still be necessary for implementation of Alternative 3, as is the case for the proposed Project, but as stated in the County's General Plan Housing Element, rezoning is recommended for vacant sites that are appropriate for multi-family uses and already adequately served by sewer and water infrastructure.

The Regional Housing Needs Assessment also recommends "ensuring … appropriate development standards in unincorporated areas." Alternative 3 would include amenities comparable to those of the proposed Project and would be required to comply with the County's Green Building Ordinance. Furthermore, Alternative 3 would implement environmentally sensitive and sustainable design features such that it may potentially qualify for Build It Green certification, similar to the proposed Project. For these reasons, Alternative 3 would partially attain this objective.

2. Provide new multi-family rental housing in the unincorporated Rowland Heights Los Angeles County area that is presently underserved by lifestyle multi-family residential uses that include various leisure and recreational amenities for residents, and increase the diversity of housing options as recommended by the Housing Element of the Rowland Heights Community General Plan.

As is the case with the proposed Project, Alternative 3 would provide a substantial number of new rental housing units in an area underserved by this type of housing. Although Alternative 3 would reduce the number of units provided, it would still permit development of one of the only large centrally located properties of its type (e.g., larger than 15 acres and within close proximity to numerous commercial and retail uses) in the area with the maximum number of units permitted under the County General Plan's "U5" Urban 5 land use designation.

Moreover, as is the case with the proposed Project, Alternative 3 would include amenities such as recreational facilities for residents, with facilities comparable to those of the proposed Project, two centrally located swimming pools, a playground area, and public gathering spaces including landscaped courtyards and lawn areas, landscaped building setbacks, and street trees and other improvements along Brea Canyon Cutoff Road. Further, Alternative 3 would be required to comply with the County's Green Building Ordinance, and would furthermore implement environmentally sensitive and sustainable design features such that it may potentially qualify for Build It Green certification, similar to the proposed Project. For these reasons, Alternative 3 would further the goals of this objective.

3. Provide high-quality multi-family housing options without displacing existing residential uses.

The Project site is presently occupied by buildings and faculties owned by the Southlands Christian Church, which relocated in early 2009. The site is currently used by the Southlands Christian Schools, whose lease terminates in July 2010. Implementation of Alternative 3, as is the case with the proposed Project, would not displace any existing residential uses.

4. Provide a diverse multi-family residential unit mix to meet the needs of a variety of tenants.

Alternative 3 would provide a range of housing types, including one-, two-, and three-bedroom units within Garden Apartments buildings (three- to four-story buildings around a courtyard) and one-, two-,

and three-bedroom Townhome-style Apartment units and Townhome Flat units with attached garages. All unit types would be accompanied by amenities comparable to those of the proposed Project. The proposed Project's Podium buildings, with four stories of apartment units above a partially subterranean parking structure, and the Wrap-Around buildings, with four stories of units around a central above-grade parking structure), would not be implemented under Alternative 3, but this would not substantially alter or reduce the range of unit types offered.

5. Provide sufficient outdoor gathering spaces and recreational amenities on the Project site to meet the needs of Project residents and reduce demand for off-site park and recreational facilities.

As is the case with the proposed Project, Alternative 3 would include amenities such as recreational facilities for residents, with facilities comparable to those of the proposed Project, two centrally located swimming pools, a playground area, barbeque area, and public gathering spaces including landscaped courtyards and lawn areas, landscaped building setbacks, and street trees and other improvements along Brea Canyon Cutoff Road. Moreover, Alternative 3 would be required to comply with the County's Green Building Ordinance, and would furthermore implement environmentally sensitive and sustainable design features such that it may potentially qualify for Build It Green certification, similar to the proposed Project. For these reasons, Alternative 3 would attain this objective.

Key Sustainability Objectives

Alternative 3 would attain all of the Key Sustainability Goals, as discussed below.

1. Implement sustainable design features that incorporate the *California Build It Green Multi-family GreenPoint Checklist* of sustainable, green design principles into site location, site design, building construction techniques, and building materials.

Alternative 3 would include amenities comparable to those of the proposed Project, including recreational facilities for residents, with facilities comparable to those of the proposed Project, two centrally located swimming pools, a playground area, and public gathering spaces including landscaped courtyards and lawn areas, landscaped building setbacks, and street trees and other improvements along Brea Canyon Cutoff Road. Moreover, Alternative 3 would be required to comply with the County's Green Building Ordinance, and would furthermore implement environmentally sensitive and sustainable design features such that it may potentially qualify for Build It Green certification, similar to the proposed Project. The Alternative would meet or exceed state and local energy-saving requirements including exceeding the Energy Efficiency Standards contained within Title 24 (2005), the California Building Standards Code, by a minimum of at least 15 percent by upgrading the envelope of the buildings with enhanced insulation and upgraded windows, and diverting a minimum 65 percent of all construction and demolition waste from landfills to recycling centers, as required by the Los Angeles

County Green Building Program. Energy-saving design features of the development would also include: (1) reducing the amount of water usage by specifying drought tolerant plants and installing high-efficiency irrigation systems, 2-gallon-per-minute shower heads for bathrooms, flow limiters on all faucets, and high efficiency toilets; and (2) reducing electrical demand by installing energy-efficient refrigerators and dishwashers, and garage ventilations fans that are controlled by carbon monoxide sensors. For these reasons, Alternative 3 would attain this objective.

2. Locate multi-family housing on an urban infill site within an urban growth boundary and already served by existing infrastructure.

The proposed Project site constitutes an infill site located along a limited secondary highway, Brea Canyon Cutoff Road, and close to Colima Road, the major commercial corridor through Rowland Heights. The proposed Project site is bordered by commercial uses to the north, multi-family housing to the east and south, and single-family housing to the west, as well as a senior living facility to the north. It is already served by sewer and water infrastructure, including reclaimed water infrastructure. Rowland Heights, traditionally a residential community, is also close to the City of Industry, the major employment center of the eastern San Gabriel Valley. A Zone Change would still be necessary for implementation of Alternative 3, as is the case for the proposed Project, but as stated in the County's General Plan Housing Element, rezoning is recommended for sites that are appropriate for multi-family uses and already adequately served by sewer and water infrastructure. For these reasons, Alternative 3 attains this Key Sustainability Objective.

3. Provide multi-family housing in proximity to existing employment centers in the eastern San Gabriel Valley, including the City of Industry, the major employment center for the San Gabriel Valley, Diamond Bar, and Pomona.

Alternative 3 would redevelop the same property as the proposed Project, and although it proposes a reduced number of units, would attain this objective to the same degree as the proposed Project. For example, according to the San Gabriel Valley Economic Partnership, there currently are over 600,000 jobs in the San Gabriel Valley. The Los Angeles County Economic Development Corporation's 2007–2008 Economic Overview and Forecast reports that Rowland Heights alone is home to over 2,022 business establishments, and the San Gabriel Valley as a whole housed over 42,416 businesses in 2005. Several large companies and corporations are also housed in nearby cities such as City of Industry, Diamond Bar, Pomona, and Brea. Thus, the site's location adjacent to Colima Road, a major roadway and public transportation corridor running the length of Rowland Heights, will give residents easy access to local employment. Further, its proximity to the two major freeways via Brea Canyon Cutoff Road and Fairway Drive will allow access to jobs in the broader San Gabriel Valley and Northern Orange County areas with minimal impact to local streets.

4. Encourage pedestrian activity and minimize vehicle use by providing higher-density housing in proximity to existing neighborhood-serving retail and commercial uses.

Alternative 3 would place multi-family housing on the same site as the proposed Project, which is adjacent to the numerous neighborhood-serving and commercial retail uses at the intersection of Brea Canyon Cutoff Road and Colima Road. In fact, shopping centers occupy three of the four corners of the Brea Canyon Cutoff Road and Colima Road intersection. As with the proposed Project, Alternative 3 would provide a pedestrian-friendly environment and encourage walking to adjacent retail uses. The site is also well-served by mass transit, as the site is in proximity to several public transit options including Metro Bus, Foothill Transit and Metrolink.

5. Locate multi-family housing in an area well served by mass transit, including bus and rail, to reduce Project-related vehicle miles traveled.

6. Locate multi-family housing on a site well served by the local and regional roadway network.

Alternative 3 would place multi-family housing on the same site as the proposed Project. The site is located on Brea Canyon Cutoff Road, a limited secondary highway, and is near the intersection of Brea Canyon Cutoff Road with Colima Road, the major commercial roadway that runs through Rowland Heights. The Project site is also located approximately 0.5 mile from the Pomona Freeway (SR-60) (with site access from the freeway provided to the site by Fairway Drive) and approximately 0.75 mile from the Orange Freeway (SR-57).

The proposed Project site is also well-served by mass transit. Transit service is provided by Foothill Transit in the immediate area of the Project site. Foothill Transit Routes 482 and 493 provide service along Colima Road, Route 286 provides service along Diamond Bar and Brea Canyon Road, and Route 497 provides express service along SR-60. The nearest bus stops to the Project site are provided along Foothill Routes 482 and 493. Further, the nearest Metrolink commuter train station is approximately 2.5 miles away in the City of Industry.

For these reasons, Alternative 3 would attain Key Sustainability Objectives 3 and 4.

Additional Project Objectives

Alternative 3 would attain all of the proposed Project's Additional Project Objectives, as discussed below.

1. Utilize existing topography to minimize the visual impact of proposed buildings.

2. Build housing that is physically compatible with adjacent land uses.

Alternative 3 would reduce the development density on the site compared to the proposed Project by constructing approximately 30 percent fewer dwelling units and eliminating the four-story Podium and Wrap-Around buildings on the Project site. This would reduce the proposed Project's shading impacts on the senior residential facility north of the Project site and reduce the visibility of on-site buildings, which would reduce visual impacts and the perception of high density on-site from off-site locations. More Townhome-style Apartment units and Townhome Flat units with attached garage parking would be constructed compared to the proposed Project, and parking for the Garden Apartments buildings would be provided in enclosed at-grade structures occupying the first floor of the buildings, eliminating any views of partially subterranean Podium building parking from off-site. For these reasons, Alternative 3 is consistent with these Project Objectives.

3. Provide streetscape improvements that enhance the visual environment of the neighborhood and encourage pedestrian activity within the proposed Project site as well as between the site and nearby retail and commercial land uses.

As with the proposed Project, Alternative 3 would provide a pedestrian-friendly environment and encourage walking to adjacent retail uses and would include bicycle racks on the site and an Alternative transportation kiosk in a central location on site. Amenities proposed are comparable to those of the proposed Project and include public gathering spaces including landscaped courtyards and lawn areas, landscaped building setbacks, and street trees and other improvements along Brea Canyon Cutoff Road.

4. Meet all proposed Project-related parking demand on the Project site.

Alternative 3 would meet all of the Alternative 3-related parking demand on-site by providing a total of 1,103 spaces, which is in conformance with the general County Code parking requirements (. Further, parking impacts under Alternative 3 would be less than significant, as parking would be provided in an amount adequate to prevent traffic congestion and excessive street parking, as required by RPD zoning.

In summary, Alternative 3 would attain all of the proposed Project Objectives, while resulting in less impact than the proposed Project.

4. Alternative 4 – Mixed Use: Residential and Commercial

Description of Alternative 4

Under Alternative 4, the Project site would be redeveloped with a mix of residential uses and general commercial uses similar to those on nearby Colima Road, instead of solely with residential uses as under the proposed Project. The southernmost portion of the northern parcel and the entire southern parcel, totaling approximately 60 percent of the Project site, would be developed with Townhome-Style

Apartments and a Wrap-Around building, identical to the proposed Project. However, the two Podium buildings proposed for the northern parcel under the proposed Project, containing a total of 450 residential units, would not be constructed, and that portion of the site would instead be developed with commercial uses. Development of a 4.2-acre parking lot would also occur under Alternative 4. Project characteristics for Alternative 4 are summarized in **Table 6.0-40**.

Mixes of residential and commercial uses are not permitted under the current Community Plan designation or the current zoning. Thus, similar to the proposed Project, a Zone Change, General Plan Amendment, and other necessary entitlements would also be required for Alternative 4. Further, it appears that the Rowland Heights Community General Plan does not have a designation that permits both commercial and residential uses, and thus Alternative 4 would also potentially require a text amendment to the plan in order to allow for Alternative 4's proposed uses.

The 108 Townhome-Style Apartment units and the 217 Wrap-Around building units planned under the proposed Project would still be built in the central and southern portions of the Project site. The 325 residential units, totaling 416,900 square feet, would house 897 residents, or approximately 1,242 fewer residents than the proposed Project. A unit mix of 119 one-bedroom units, 160 two-bedroom units, and 46 three-bedroom units is proposed under Alternative 4.

Table 6.0-40
Summary of Project Characteristics – Alternative 4

Unit Type	One Bedroom Units	Two Bedroom Units	Three Bedroom Units	Total No. of Units	Height (feet)	No. of Stories	Gross Floor Area [a]
Townhome-Style Apartments	--	78	30	108	39.5	3	150,900
Wrap-Around Buildings	119	82	16	217	44 to 60	3 & 4	266,000
Subtotal							**416,900**
Recreational Facility					39	2	7,850
Commercial Uses	--	--	--	--	30	1	140,000
Total	**119**	**160**	**46**	**325**	--	--	**564,750**

[a] *Gross floor area encompasses leasable building space plus "accessory" nonleasable space including mechanical/electrical/maintenance rooms, corridors, stairwells, elevators, storage, etc., but excludes parking. The FAR (floor area ratio), a measure of the proposed Project's density, is the ratio of gross floor area to total lot gross square footage: 924,250/685,014=1.35).*

Source: Van Tilburg, Banvard & Soderbergh, AIA, March 2008

As under the proposed Project, a two-story, 7,850-square-foot recreational facility for residents, swimming pool, and barbecue area serving residents would be centrally located on the Project site. Recreational amenities planned under the proposed Project for the Townhome-Style Apartments would remain unchanged, and would include two landscaped quadrangles, one containing a playground area and one containing a barbecue area. Recreational amenities associated with the Wrap-Around buildings under the proposed Project would also remain unchanged for Alternative 4 and would include a swimming pool within each building and a spa in the northern building, and two landscaped gardens south of the southern building.

Landscaping within the residential portion of the Project site would include lawns, landscape plantings along internal streets and within courtyards, and landscaped building setbacks. As under the proposed Project, street trees would be planted along Brea Canyon Cutoff Road to enhance the streetscape and provide a buffer between the sidewalk and roadway. The landscaping program would include shade trees, flowers, and outdoor lighting.

The northernmost portion of the Project site (approximately 40 percent of the Project site) would be developed with approximately 140,000 square feet of neighborhood-serving commercial uses, which could include such uses as a supermarket, drug store, clothing boutiques, and specialty shops.

A total of 1,1,232 parking spaces would be required for all on-site uses, which includes 140, 000 square feet of commercial uses and 325 residential units. Under Alternative 4, 672 parking spaces would be provided for the residential development. Resident parking would be provided for the Townhome-Style Apartments in attached garages, with guest parking provided along internal Project site roadways. Resident and guest parking for the Wrap-Around buildings would be provided within a single above-grade parking structure surrounded by the buildings, as under the proposed Project. In accordance with the Los Angeles County Code, parking for the commercial uses would be provided at a ratio of 4 cars per 1,000 square feet of commercial uses, for a total of 560 parking spaces. Parking for the commercial uses would be provided in a surface lot of approximately 182,000 square feet, or 4.2 acres, in size.

Under Alternative 4, the site would be accessed by three driveways off Brea Canyon Cutoff Road, all located on the site's western boundary. Access to the commercial portion of the site would include a primary driveway near the northern boundary and a secondary driveway located south of the primary driveway, which would provide direct access for delivery trucks to on-site loading zones. Residential uses would be accessed by a single primary driveway into the central portion of the site; this driveway would connect with an internal roadway that would, in turn, provide access to the parking structure and garages. The site's driveways would each contain one inbound lane and one outbound lane. At-grade

internal driveway widths would be at a minimum of 28 feet to allow access to the site for fire trucks and emergency vehicles.

The commercial buildings in the northern portion of the site would be approximately 30 feet in height above finished grade. Residential building heights would be unchanged from the proposed Project, with the Townhome-Style Apartment buildings approximately 39 feet in height above finished grade and the Wrap-Around buildings a maximum of 47 feet in height above finished grade along the southern elevations.

Infrastructure improvements necessary to serve the uses proposed under Alternative 4, including water supply, wastewater, storm drain, and utility services, would be implemented.

Geotechnical and Soil Resources

Construction Impacts

Alternative 4 would be subject to the same geotechnical hazards and site conditions as the proposed Project. These include hazards due to groundwater level, liquefaction, subsidence and hydrocompaction, differential settlement, expansive soils, and slope instability, which pose potentially significant impacts on the Project site. Several of the mitigation measures designed to remove hazardous geological conditions for the proposed Project would also be applicable to Alternative 4. With mitigation, both Alternative 4 and the proposed Project would have less than significant impacts. However, since Alternative 4 would not require the construction of any subterranean parking structure, whereas the proposed Project would construct a partially subterranean structure as part of the Podium building, implementation of Alternative 4 would require less excavation and construction dewatering as the proposed Project. Additionally, building heights across the site would generally be lower than those of the proposed Project, reducing the required depth of excavation for footings. Therefore, construction of Alternative 4 would result in less impact related to geotechnical and soil resources as compared to the proposed Project.

Operational Impacts

Alternative 4 does not propose any subterranean parking, whereas the proposed Project would construct a two-level partially subterranean structure as part of the Podium building. Therefore, Alternative 4 would not require permanent dewatering. Alternative 4 would have less than significant operational impacts related to geotechnical and soil resources and impacts would be less than those of the proposed Project.

Hydrology, Drainage and Water Quality

Construction Impacts

Under Alternative 4, the removal of vegetation and other soil-stabilizing features during construction could accelerate wind and water driven erosion of soils that would increase sedimentation during storm events. During construction, dewatering would be achieved with temporary dewatering wells, storage tanks, and filters. The Applicant would obtain a National Pollutant Discharge Elimination System permit for demolition and construction, and would comply with all applicable requirements of the National Pollutant Discharge Elimination System program. The Applicant would also prepare a Stormwater Pollution Prevention Plan containing Best Management Practices, structural treatment and source control measures. Implementation of Best Management Practices would ensure that the Los Angeles Regional Water Quality Control Board water quality standards are met during construction activities. Alternative 4 would have less than significant construction impacts related to hydrology, drainage, and water quality. However, since Alternative 4 would require less construction (i.e., no excavation for subterranean parking would be required), impacts would be incrementally less than those of the proposed Project.

Operational Impacts

Currently, approximately 70 percent of the Project site is developed with buildings and pavement. Both Alternative 4 and the proposed Project would result in the reduction of pervious surfaces on the Project site. Under the proposed Project, drainage facilities on the site would be designed to hold and detain the increase in flows, such that impacts related to post-occupancy surface runoff volume would be less than significant. However, Alternative 4 would develop a 4.2-acre surface parking lot on the Project site that would increase coverage of impervious surfaces compared to the proposed Project and result in higher flows. Therefore, impacts related to surface runoff volumes would be potentially significant, and greater than those associated with the proposed Project.

Regarding compliance with Los Angeles Regional Water Quality Control Board requirements, the Applicant would be required under both Alternative 4 and the proposed Project to implement a Standard Urban Storm Water Mitigation Plan to ensure that potential stormwater pollution is addressed by Best Management Practices incorporated into Project design. Discharge from the permanent dewatering system associated with the proposed Project could contribute suspended solids and organic material, and therefore dewatering would require a Permit for Groundwater Discharge. With compliance with National Pollutant Discharge Elimination System and Standard Urban Storm Water Mitigation Plan requirements, the proposed Project's potential water quality impacts would be less than significant. Parking under Alternative 4 would be provided in attached garages, in a parking structure and on-grade, and no

subterranean parking structures would be developed. Therefore, minimal or no permanent dewatering would be required. Therefore, a National Pollutant Discharge Elimination System Permit for Groundwater Discharge would not be required under Alternative 4. For this reason, water quality impacts would be less as compared to the proposed Project.

Noise

Noise impacts are evaluated in two categories: construction noise sources and operational noise sources. Construction-related noise sources are associated with construction activities such as demolition, earthmoving, and the use of construction equipment. Operational noise is primarily associated with stationary sources such as rooftop mechanical equipment and mobile sources such as vehicles traveling to and from the Project site.

Construction Impacts

Under Alternative 4, the number of proposed residential units would be reduced from 775 multi-family units to approximately 325 multi-family residential units. Alternative 4 would also include a 7,850-square-foot recreational facility for residents and 140,000 square feet of commercial uses. Although Alternative 4 would reduce the number of multi-family units proposed, commercial and recreational land uses are proposed on the remaining portion of the Project site. Therefore, the overall construction duration under Alternative 4 would be slightly reduced compared to the proposed Project since no excavation for subterranean parking would be required. Alternative 4 would use similar pieces of construction equipment as the proposed Project. The level of noise and groundborne vibration generated during construction of Alternative 4 would remain the same as the Project; however, the duration would be incrementally reduced compared to the proposed Project. Given the proximity of the Project site to residences, impacts would remain significant and unavoidable even with mitigation.

Operational Impacts

Although Alternative 4 would reduce the number of multi-family units proposed, commercial and recreational land uses are proposed on the remaining portion of the Project site. As indicated in **Table 6.0-44**, Alternative 4 would generate a net increase 16 trips during the AM peak hour and a net increase of 607 trips during the PM peak hour over existing conditions. The proposed Project is expected to generate a net increase of 99 trips during the AM peak hour and a net increase of 361 trips during the PM peak hour. Consequently, Alternative 4 would generate 83 fewer net trips during the AM peak hour trips and 246 more net trips during the PM peak hour than the proposed Project. However, the increase in trips generated by Alternative 4 would not result in a doubling of existing trips in the study area. Given that it takes a doubling of average daily trips on roadways to increase noise by 3 dB(A) CNEL and that

Alternative 4 would not cause a doubling of average daily trips in the immediate area, the noise level increases along major arterials surrounding the Project site would be less than 3 dB(A). Therefore, traffic noise generated by Alternative 4 would be less than significant, but would be greater during the PM peak hour than under the proposed Project.

Occupancy of Alternative 4 at buildout would generate temporary and periodic noise level increases typical of those associated with residential and commercial activities. These sounds may include people conversing in outdoor spaces, doors slamming, horns honking, HVAC equipment, operation of landscaping equipment, personal stereos audible through open doors and windows, music from dining uses, delivery and private vehicles entering and exiting the Project site, and domestic animals. Since such temporary and periodic noise level increases are common within residential and commercial areas and therefore not considered substantial, impacts during operation under Alternative 4 would be less than significant. However, although the number of units would be reduced compared to the proposed Project, the addition of commercial uses to the Project site would result in greater operational noise impacts than under the proposed Project.

Air Quality

Air quality impacts are evaluated for two categories: construction emissions and operational emissions. Construction-related emissions are associated with construction activities such as demolition, earthmoving, use of construction equipment, and application of coatings to surfaces. Operational emissions are primarily associated with mobile source emissions based on vehicle trips generated by the proposed Project.

Construction Impacts

Under Alternative 4, the Project site would be developed with 325 multi-family residential units, 140,000 square feet of commercial space, and a 4.2 acre parking lot. Compared to the proposed Project, Alternative 4 would reduce the number of multi-family residential units by approximately 60 percent; however, it would add 140,000 square feet of commercial space. Similar to the proposed Project, Alternative 4 would involve demolition of the Southlands Christian Church and the Southlands Christian Schools. While the site would require similar levels of demolition, grading would be reduced since no excavation for subterranean parking would be required. In addition, building construction would likely occur at a daily rate that is similar to the proposed Project, although less overall building construction would take place. Therefore, Alternative 4 would generate construction-related emissions that are less than the proposed Project, which is discussed in **Section 5.4, Air Quality**. Alternative 4 could still result in NO_X emissions that exceed the SCAQMD's daily emissions thresholds during the grading phase of Project construction. Since Alternative 4 does not require excavation, it is likely that the PM_{10} and $PM_{2.5}$

emissions would be substantially reduced compared to the proposed Project, which is discussed in **Section 5.4, Air Quality**, and would result in a substantially less impact with respect to the LSTs. Under the proposed Project, the LST impact would be reduced to less than significant with incorporation of the recommended **Mitigation Measure 6.0-16,** with the exception of PM_{10} impacts, which would be reduced by implementation of mitigation but would remain significant and unavoidable. While Alternative 4 would result in fewer overall construction emissions compared to the proposed Project, it is likely that Alternative 4 would be required to implement the same mitigation measures as the proposed Project, further reducing the emissions. Therefore, Alternative 4 would have construction-related air quality impacts that are less as compared to the proposed Project.

Operational Impacts

As discussed in **Section 5.4**, vehicle trips associated with the proposed Project would generate net emissions that exceed the SCAQMD thresholds for Volatile Organic Compounds, or VOCs, an evaporative emission and a by-product of combustion that is a precursor to ozone formation, during both summer and winter. Therefore, Project-related operational emissions of VOC would result in a significant impact on air quality in the region. Alternative 4 would construct approximately 60 percent less residential units than the proposed Project but would construct 140,000 square feet of commercial space resulting in more vehicle trips (8,196 daily trips compared to 5,208 daily trips associated with the proposed Project). Trip distances associated with commercial land uses are shorter than residential land uses, according to approved air quality models, which tends to reduce the overall contribution of emissions from commercial land uses. Operational emissions associated with Alternative 4 would exceed the SCAQMD thresholds for VOC and NO_X during the winter and, thus impacts would be significant prior to mitigation.

Table 6.0-41, Comparison of Proposed Project and Alternative 4: Unmitigated Operational Emissions, provides a comparison of the anticipated operational emissions from Alternative 4 to the emissions from the proposed Project. As shown in the table, the net operational emissions of Alternative 4 are generally higher than those of the proposed Project and are greater than the significance thresholds for VOC and NO_X in the winter. Thus, air quality impacts under Alternative 4 would be higher as compared to the proposed Project.

Climate Change

Climate change impacts are evaluated for two categories: construction-related greenhouse gas (GHG) emissions and operational GHG emissions. While no state or local agency has formally adopted numerical significance thresholds related to GHG emissions, the Governor's Office of Planning and

Research has released guidance on addressing climate change in CEQA and the Natural Resources Agency has adopted amendments to the State *CEQA Guidelines* establishing criteria for evaluating GHG emissions. CARB has also released the *Climate Change Scoping Plan* that discusses the strategies and measures CARB is intending to adopt for the state to achieve the goals of AB 32.

Table 6.0-41
Comparison of Proposed Project and Alternative 4: Unmitigated Operational Emissions

Pollutant	SCAQMD Threshold	Proposed Project	Proposed Project Exceeds Threshold?	Alternative 4	Alternative 4 Exceeds Threshold?
Net Summertime Emissions (pounds per day)[1]					
VOC	55	70.25	**YES**	50.15	NO
NO_X	55	47.47	NO	48.71	NO
CO	550	361.73	NO	398.55	NO
SO_X	150	0.44	NO	0.47	NO
PM_{10}	150	70.34	NO	75.99	NO
$PM_{2.5}$	55	13.72	NO	14.83	NO
Net Wintertime Emissions (pounds per day)[2]					
VOC	55	71.64	**YES**	56.60	**YES**
NO_X	55	55.25	**YES**	57.42	**YES**
CO	550	345.43	NO	389.36	NO
SO_X	150	0.36	NO	0.39	NO
PM_{10}	150	70.33	NO	75.99	NO
$PM_{2.5}$	55	13.71	NO	14.83	NO

Source: Impact Sciences, Inc., (2009). Emissions calculations are provided in ***Appendix 6.0****.*
Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations. Net emissions include credit for emissions from the existing land use.
[1] *"Summertime Emissions" are representative of the conditions that may occur during the ozone season (May 1 to October 31).*
[2] *"Wintertime Emissions" are representative of the conditions that may occur during the balance of the year (November 1 to April 30).*

Construction Impacts

Under Alternative 4, the Project site would be developed with 325 multi-family residential units and 140,000 square feet of commercial space, and a 4.2 acre parking lot. Similar to the proposed Project, Alternative 4 would involve demolition of the Southlands Christian Church and the Southlands Christian Schools. While the site would require similar levels of demolition, grading would be reduced since no excavation for subterranean parking would be required. In addition, building construction would likely

occur at a daily rate that is similar to the proposed Project, although less overall building construction would take place. Therefore, Alternative 4 would generate construction-related emissions that are less than the proposed Project, as discussed in **Section 5.5, Climate Change**. Therefore, Alternative 4 would generate less construction-related GHG emissions compared to the proposed Project.

Operational Impacts

Alternative 4 would result in the occupancy of approximately 60 percent fewer residential units and would provide housing for a reduced population as compared to the proposed Project. However, Alternative 4 would add 140,000 square feet of commercial space and associated daily vehicle trips. Like the proposed project, Alternative 4 would comply with the County of Los Angeles Green Building Ordinance and reduce energy consumption by a minimum of 15 percent beyond the Energy Efficiency Standards contained within Title 24 (2005), the California Building Standards Code, and would incorporate similar water efficient appliances, landscaping, and other features. The estimated maximum annual GHG emissions associated with operation of the proposed Project and Alternative 4 are shown in **Table 6.0-42, Comparison of Proposed Project and Alternative 4: Unmitigated Annual GHG Emissions**.

Table 6.0-42
Comparison of Proposed Project and Alternative 4: Unmitigated Annual GHG Emissions

Pollutant	Proposed Project	Alternative 4
Net Annual Emissions (metric tons per year)		
CO_2e	9,630.30	9,341.45

Source: Impact Sciences, Inc., (2009). Emissions calculations are provided in ***Appendix 6.0****.*
Totals in table may not appear to add exactly due to rounding.

Based on the unmitigated GHG emissions presented in the table above, the net total annualized emissions for Alternative 4 would be slightly reduced compared to the proposed Project. Alternative 4 would therefore result in impacts that would be slightly less than those associated with the proposed Project. Similar to the proposed Project, Alternative 4 would implement design features and mitigation measures that would be generally consistent with measures recommended by the *Climate Change Scoping Plan* for AB 32, OPR guidance, the *2006 Climate Action Team Report*, and the County of Los Angeles Green Building Program. These measures would include energy efficiency features, water conservation features, and drought-tolerant landscaping and would be similar to those measures listed in **Section 5.5, Climate Change**. Therefore, Alternative 4 would be generally consistent with the goals, strategies, and control measures established under these guidelines and programs.

Cumulative Impacts

Compared to the estimated GHG for all sources in California, the Project's and Alternative 4's contribution to global climate would be imperceptible. As discussed above, the proposed Project and Alternative 4 are generally consistent with the overall goals, strategies, and control measures established under AB 32, and with applicable Attorney General, Office of Planning and Research, and 2006 Climate Action Team Report recommended measures for the reduction of GHGs. No quantitative emission thresholds or similar criteria have been established to evaluate the cumulative impact of a single project on global climate. However, based on the findings that the Project and Alternative 4 incorporate objectives and GHG reduction measures generally consistent with the County of Los Angeles Green Building Ordinance that would reduce the contribution to cumulative GHG emissions, the Project and Alternative 4 are generally consistent with the overall goals, strategies, and control measures established under AB 32, Office of Planning and Research Guidance, the 2006 Climate Action Team Report, and the Los Angeles County Green Building Program. As with the proposed Project, Alternative 4 would have a less than significant cumulative impact on global climate change. Since Alternative 4 would result in slightly less GHG emissions as compared to the proposed Project, Alternative 4 would result in a less than considerable contribution to cumulatively significant global climate change impacts.

Visual Quality

Aesthetics and Views

Construction Impacts

Construction of Alternative 4 would periodically subject the site and neighboring land uses to the presence of construction equipment, incomplete (under construction) buildings and structures, stockpiled cut soil material, and areas in landscaping transition. Alternative 4 would result in less than significant construction-related aesthetic impacts with implementation of mitigation requiring that the construction site be screened from street-level view with appropriate fencing and barriers. However, since Alternative 4 would require less construction, impacts would be less than those associated with the proposed Project.

Operational Impacts

The Project site is not visible from any State-designated scenic highways, but is visible from Brea Canyon Cutoff Road, which is designated as a limited secondary highway by the Rowland Heights Community General Plan (a classification intended to protect routes in rural areas). However, the Brea Canyon Cutoff Road corridor has been heavily urbanized since the designation was issued. Furthermore, the Project site is adjacent to Colima Road, which is a major highway and heavily developed commercial corridor. Views

of the Project site from other off-site vantage points are limited due to intervening residential development, vegetation, and hillside topography. Therefore, like the proposed Project, Alternative 4 would have less than significant impacts on scenic vistas.

Alternative 4 would modify the building configuration and uses of the proposed Project in several ways. First, on the northernmost portion of the northern parcel on the Project site, where the Project proposes a four-story Podium building, Alternative 4 would place approximately 140,000 square feet of neighborhood serving commercial uses and 4.2 acres of associated surface parking. The southernmost portion of the northern parcel and the entire southern parcel, totaling approximately 60 percent of the Project site, would be developed with Townhome-Style Apartment buildings and a Wrap-Around building. The Project proposes three-story Townhome-Style Apartment buildings and a three- to four-story Wrap-Around building in these locations. Due to the elimination of the two Podium Buildings, and the reduction of development square footage, overall building height, massing, and scale would be lower under Alternative 4 than under the proposed Project.

Similar to the proposed Project, Alternative 4 would increase the intensity of uses, introduce residential uses, and increase existing building heights on the Project site. Therefore, both the proposed Project and Alternative 4 would have significant and unavoidable aesthetics and view impacts. Additionally, Alternative 4 would introduce commercial uses. The 4.2-acre parking lot associated with Alternative 4 would feature an aesthetic quality similar to nearby parking lots along Colima Road but would be inconsistent with the immediately adjacent uses. However, compared to the proposed Project, Alternative 4 would decrease building heights near adjacent residential uses and along Brea Canyon Cutoff Road, Latium Way, and Drusilla Way, and would therefore be more visually consistent with surrounding building heights. Therefore, aesthetic and view impacts under Alternative 4 would be less than those associated with the proposed Project.

Light and Glare

Construction Impacts

During construction of Alternative 4, nighttime lighting would only be required for security purposes since no nighttime construction would occur. Security lighting during construction would be limited to only those sites requiring illumination and all security lights would be properly shielded and projected downwards. Additionally, construction activities are not anticipated to create sources of glare that could affect visibility in the area since construction is not expected to involve bright light sources or highly reflective surfaces that would be visible from off site or other materials that could directly or indirectly generate glare. Both the proposed Project and Alternative 4 would have less than significant

construction-related light and glare impacts with implementation of mitigation, which includes the limitation of security lighting, the shielding of lighting, the use of low intensity lighting, and the projection of lighting downwards. However, since Alternative 4 would require less construction, impacts would be less than those of the proposed Project.

Operational Impacts

During operation, neither the proposed Project nor Alternative 4 would introduce any sources of substantial light or highly reflective materials that would produce glare. Proposed lighting would be used to create a safe, adequately illuminated nighttime environment on the Project site. Most sources of lighting would be shielded from off-site vantage points by surrounding structures and landscaping. Exterior lighting would incorporate low-intensity downlights, louvers, shields, hoods or other screening devices, and all proposed light sources would be directed downward to limit light spillover and glare generation. Building setbacks and perimeter landscaping would also reduce the potential for glare and light spillover onto neighboring uses. Lighting associated with the proposed commercial uses, including the associated 4.2 acre surface parking lot, would be similar to that found along Colima Road. Given that the Project site is adjacent to sensitive residential uses, Alternative 4, and specifically the 4.2 acre parking lot, could result in significant nighttime lighting impacts. However, as with the proposed Project, Alternative 4 would use low-intensity downlights or be equipped with louvers, shields, hoods or other screening devices. Therefore, both the proposed Project and Alternative 4 would have less than significant light and glare impacts with implementation of mitigation. Since Alternative 4 would result in fewer residential units and lower overall development intensity on the Project site, but would introduce a 4.2-acre, lighted-surface parking lot to the site, impacts would be similar to those of the proposed Project.

Shade and Shadow

As with the proposed Project, it is anticipated that portions of the multi-family residences to the east of the Project site would be seasonally shaded by a Wrap-Around building and/or the Townhome-Style Apartment buildings proposed under Alternative 4. Therefore, Alternative 4's shading impacts to the east of the Project site would remain significant and unavoidable, and would be similar to those of the proposed Project. Additionally, under the proposed Project, the Podium Building on the northern portion of the Project site would cast shadows approximately 90 to 110 feet to the north over the senior housing complex on Colima Road. Therefore, shade and shadow impacts to the north of the Project site would be significant and unavoidable under the proposed Project. However, because the northern portion of the site would instead be developed with a surface parking lot and commercial buildings approximately 30 feet in height under Alternative 4, shadows cast to the north would be substantially shorter. Furthermore, shading impacts to the north would be avoided if the site is configured such that the surface parking lot

separates the senior housing complex from the commercial buildings. Therefore, Alternative 4 would reduce or avoid the proposed Project's significant shading impacts to the north.

Traffic, Parking, Circulation and Access

Under Alternative 4, the Applicant would reduce the residential component of the proposed Project from approximately 775 multi-family units to approximately 325 residential units and add a 7,850-square-foot recreational facility for residents, 140,000 square feet of commercial uses, and a 4.2-acre parking lot.

Construction Impacts

Although Alternative 4 would reduce the number of multi-family units proposed, commercial and retail land uses are proposed on the remaining portion of the Project site. Therefore, the overall construction duration of Alternative 4 would be similar to the construction duration of the proposed Project. However, construction of Alternative 4 could cause incrementally fewer traffic disruptions due to slightly reduced construction activities as compared to the proposed Project, since no excavation for subterranean parking would be required. Implementation of mitigation requiring a Construction Management Plan would reduce traffic impacts associated with construction of Alternative 4 to less than significant.

As with the proposed Project, Alternative 4 would result in less than significant parking impacts during construction since construction worker parking would be accommodated on site. Overall, Alternative 4 could result in less construction-related transportation impacts as compared to the proposed Project.

Operational Impacts

Peak hour trip rates used for Alternative 4 were calculated based on the 7th Edition of the *Trip Generation* manual, published by the ITE,[26] which is the current industry standard for trip generation data. Credit for traffic generated by the existing uses was applied to traffic generated by Alternative 4 because the existing uses would cease to operate within the study area. Weekday trip rates for Alternative 4 are listed in **Table 6.0-43, Trip Generation Rates – Alternative 4**. Estimated trip generation for Alternative 4, which takes into account trip credit for existing uses, are provided in **Table 6.0-44, Trip Generation – Alternative 4.**

26 Institute of Transportation Engineers, *Trip Generation*, 7th Edition, Washington, D.C., 2004.

Table 6.0-43
Trip Generation Rates – Alternative 4

Land Uses[1]	Quantity	Daily Trip Generation Rate	Total Daily Trips	AM Peak Hour Total	PM Peak Hour Total
Apartments	325 du	6.72/du	2,184	0.51	0.62
Commercial/Retail Uses	140.0 ksf	42.94/1,000 sf	6,012	1.04	3.75
Total			8,196		

Source: Impact Sciences, Inc., 2009
Notes: du = dwelling unit, ksf = thousand square feet.
[1] *ITE Land Use Category 220 - Apartments was used.*

According to the weekday trip generation rates provided in **Table 6.0-44**, Alternative 4 is expected to generate a net increase 16 trips during the AM peak hour and a net increase of 607 trips during the PM peak hour. The proposed Project is expected to generate a net increase of 99 trips during the AM peak hour and a net increase of 361 trips during the PM peak hour. Consequently, Alternative 4 would generate 83 fewer net trips during the AM peak hour trips and 246 more net trips during the PM peak hour than the proposed Project. Given that Alternative 4 would result in more PM peak hour trips than the proposed Project, Alternative 4 could still result in significant traffic impacts prior to implementation of mitigation as with the proposed Project. Because of the additional trips during the PM peak hour under Alternative 4, and because total daily trips under Alternative 4 would be higher than under the proposed Project, traffic impacts are considered greater than those of the proposed Project.

Table 6.0-44
Trip Generation – Alternative 4

Land Uses[1]	Quantity	Total Daily Trips	AM Peak Hour Total	PM Peak Hour Total
Alternative 4				
Apartments[1]	325 du	2,184	166	202
Commercial/Retail Uses	140,000 sf		146	525
	Alternative 4 Subtotal	8,196	*312*	*727*
Existing Private School[2]	480 stds		296	120
	Total Net Trips		**16**	**607**

Source: Impact Sciences, Inc., 2009
Notes: du = dwelling unit, sf = square feet, std = students.
[1] *ITE Land Use Category 220 - Apartments was used.*
[2] *Generation rates for the AM and PM peak hours are based on manual traffic counts conducted on February 14, 2008 at the driveways of the existing Southlands Christian Schools.*

Sewage Disposal

Two scenarios were analyzed for the proposed Project. Assuming the proposed Project's sewer laterals connected only to the 8-inch main line within Brea Canyon Cutoff Road, the proposed Project's flow plus the existing flows would slightly exceed the design capacity of the Brea Canyon Cutoff Road 8-inch main line between Manhole Nos. 81 (on-site) and 74 (off-site within Brea Canyon Cutoff Road) and between Manhole Nos. 72 and 534 (i.e., between Brea Canyon Cutoff Road and Searls Drive). Project implementation may require upsizing approximately 2,300 feet of sewer line, including upsizing of the segment between Manhole Nos. 72 and 537 from 8 inches to 10 inches, and upsizing of the segment between Manhole Nos. 537 and 534 from 10 inches to 12 inches. Under the second scenario modeled for the proposed Project, it was assumed that sewer laterals for 103 units on the Project site would connect to the existing 8-inch main line within Sand Spring Drive, west of the Project site, while the remaining 674 units would connect to the 8-inch main line within Brea Canyon Cutoff Road at Reedview Drive. This would result in the exceedance of the design capacity of the 8-inch main line farther downstream of the Project site, between Manhole Nos. 72 and 534 (i.e., between Brea Canyon Cutoff Road and Searls Drive). Project implementation under this scenario may therefore require upsizing the approximately 2,300-foot sewer line segment between Manhole Nos. 72 and 537 from 8 inches to 10 inches, and upsizing of the segment between Manhole Nos. 537 and 534 from 10 inches to 12 inches.

Alternative 4 would likely result in less sewage generation given the reduced development intensity. As with the proposed Project, gauging and flow monitoring would be undertaken to determine actual flow conditions, and upsizing of sewer pipes should be in accordance with the directives of the Department of Public Works.

Since adequate capacity to serve the proposed Project as well as current uses exists at the San Jose Creek Water Reclamation Plant (WRP) for treatment, adequate capacity at this facility would also exist to accommodate Alternative 4. Mitigation measures applied to the proposed Project would also apply to Alternative 4. These include requiring the Project Applicant to submit a Sewer Area Study for approval and obtain a will-serve letter from LACDPW's Waterworks and Sewer Maintenance Division, and payment of the development's fair share of the costs associated with any required upgrades. Both the proposed Project and Alternative 4 would result in less than significant impacts related to the provision of wastewater services with implementation of mitigation. However, due to the reduction of residential units and overall development intensity on-site, Alternative 4 would generate a lower annual quantity of sewage as compared to the proposed Project. Therefore, Alternative 4 would incrementally reduce the sewage disposal impacts associated with the proposed Project.

Education

The 325 units proposed under Alternative 4 would directly generate approximately 228 new students within the Rowland Unified School District (RUSD), as shown in **Table 6.0-45**. Additionally, with the closure of Southland Christian Schools, Alternative 4 may indirectly contribute the addition of approximately 288 students (60 percent of the maximum student enrollment at the Southland Christian Schools) to RUSD schools. District-wide enrollment within the RUSD currently exceeds the district's classroom capacity by 4,485 students. Additionally, the three schools that currently serve the Project site (Ybarra Academy of the Arts and Technology, Alvarado Intermediate School, and Rowland High School) are currently operating above design capacity and are using portable classrooms. The additional students indirectly and directly generated by Alternative 4 would increase the current deficit in permanent capacity that exists throughout the RUSD, such that impacts to schools would be potentially significant. However, Alternative 4 would be subject to the same mitigation measure applicable to the proposed Project. This mitigation requires the Applicant to pay school impact fees to the RUSD prior to the issuance of building permits, subject to the current fee schedule for residential development in place at the time of issuance of the building permit. With implementation of this mitigation, both the proposed Project and Alternative 4 would have less than significant impacts to schools. The proposed Project would directly generate approximately 543 students in the RUSD. Since Alternative 4 would generate 315 fewer new students than the proposed Project, impacts on schools would be less as compared to the proposed Project.

Table 6.0-45
Student Generation –Alternative 4

Dwelling Type	Units	Student Generation Factors[1]		Project Student Generation
Multi-Family	325	Grades K–6	0.38	124
		Grades 7–8	0.11	36
		Grades 9–12	0.21	68
			Total	**228**

1 *Generation factors are from Section 1859.2, California School Facility Program, based on a district wide student generation rate of 0.7, which is then divided based on percentage of RUSD students in each grade level.*

Public Services (Fire Services)

Construction Impacts

During construction of Alternative 4, wood framing and other flammable construction materials would be present on the Project site. Construction would be subject to the Los Angeles County code and inspection by County personnel prior to installation of drywall. The use of flagmen, traffic detour plans, haul routes, protective devices, warning signs, and access to abutting properties would aid emergency vehicle response. Impacts under Alternative 4 would be less than significant and, since this Alternative would require less construction because it would not require excavation for subterranean parking, impacts would be as compared to the proposed Project.

Operational Impacts

Under Alternative 4, impacts related to response time, emergency access, and location within a Very High Fire Hazard Severity Zone would be similar to those associated with the proposed Project. However, since Alternative 4 would reduce the number of residents and overall development intensity on the Project site, it would generate fewer new fire service calls as compared to the proposed Project. Additionally, since building heights across the site would generally be reduced, Alternative 4 could reduce the need for local water pipe upgrades to meet fire flow requirements. Both the proposed Project and Alternative 4 would have less than significant fire hazard impacts. However, since Alternative 4 would reduce the number of residents, development intensity, and building heights on site, impacts would be less as compared to those of the proposed Project.

Public Services (Sheriff Services)

Construction Impacts

Under Alternative 4, cases of trespass, theft and/or vandalism on the construction site would require services from the County Sheriff's Department, but would not typically place undue demands on law enforcement services. The builder and contractor would use private security and flagmen at the construction site, practice general safekeeping of construction equipment, and implement other standard construction practices. Alternative 4 would have less than significant impacts on sheriff services during construction. However, since Alternative 4 would require less construction, impacts would be less than those of the proposed Project.

Operational Impacts

The County Sheriff's Department commonly considers an officer-to-population ratio of one officer to every 1,000 residents as a desired level of service within a service area. Presently, the officer-to-residential population ratio in Rowland Heights is one officer for every 1,227 residents, which is below the desired ratio. Alternative 4 would introduce commercial uses in addition to residential uses; however, impacts to Sheriff services are based on increases in residential population.[27] Alternative 4 would introduce approximately 897 residents to the Project site. This would result in a less than 1 percent increase in the existing population of Reporting District 2938, which encompasses the Project site.[28] In contrast, the proposed Project would result in a 1.4 percent increase. The County Sheriff's Department determined that the population increase due to the proposed Project would increase the number of calls for service within the reporting district; however, the Department further stated that it had no specific concerns about the proposed Project's impacts on staffing or other Sheriff's Department resources. As with the proposed Project, with implementation of the traffic and access mitigation measures, local roadways would continue to operate at levels consistent with County Department of Public Works standards and the Los Angeles County Sheriff's optimal response time standards would be maintained. Additionally, Alternative 4 would generate revenues from property and sales taxes that would be deposited in the County's General Fund and the State Treasury, a portion which would be allocated to maintain staffing and equipment levels for the Walnut/Diamond Bar Sheriff's Station for increased demands. For these reasons, operation of the proposed Project would have less than significant impacts on sheriff services. Since Alternative 4 would result in a reduced on-site population compared to the proposed Project, it

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27 Furthermore, given the proximity to commercial uses along Colima Road and that service in the Project area is currently considered functionally adequate according to the Sheriff's Department, the commercial uses proposed by Alternative 4 would not place undue demands on Sheriff's Department resources.

28 Reporting District 2938 serves approximately 154,601 people.

would have a less than significant impact and impacts on sheriff services would be less than those of the proposed Project.

Water Service

As shown in **Table 6.0-46**, Alternative 4 would result in a net potable water demand of 65.4 acre-feet per year (afy). A number of design features recommended by the Walnut Valley Water District (Water District), including high-efficiency toilets and urinals, and water-saving faucets, would be incorporated to conserve water. The Water District projects an increased water demand of 4,972 afy between 2010 and 2030. Alternative 4's anticipated net potable water demand of approximately 65.4 afy constitutes 1.3 percent of the projected demand. The Water District has sufficient supplies available to meet this projected demand increase. Alternative 4 would have less than significant impacts on the Water District's potable water supply and impacts would be less than those of the proposed Project.

Table 6.0-46
Potable Water Demand – Alternative 4

Use	Quantity	Demand Factor	Annual Demand
Proposed			
Multi-family Units	325 du	0.23 afy/du[1]	74.8 afy
Commercial Uses	140,000 sf (3.2 acres[2])	1,068 gal/day/acre[3]	3.8 afy
Gross Demand			**78.6 afy**
Existing			
Southlands Christian Church and Schools	--	--	13.2 afy
Net Demand			**65.4 afy**

1 Walnut Valley Water District, "Water Supply Assessment – The Canyon Residences," 2009.
2 One acre = 43,560 feet
3 Walnut Valley Water District, 2002. Water System Master Plan, Table 3-7 and Table 3-13.1 acre-foot = 325,851 gallons.

Due to the incorporation of a surface parking lot, Alternative 4 would include less landscaping on the Project site than would the proposed Project. Plantings would be selected in accordance with the *Drought-Tolerant Landscaping Ordinance*, which require 75 percent of the plants used to be drought-tolerant. Like the proposed Project, landscaping associated with Alternative 4 would use reclaimed water to irrigate on-site landscaping. Alternative 4's anticipated net reclaimed water demand would be incrementally less than that of the proposed Project, and would thus represent less than 1 percent of the projected reclaimed water supply for 2010. The Water District has sufficient supplies available to meet

this projected demand increase. As with the proposed Project, Alternative 4 would have a less than significant impact on the Water District's reclaimed water supply.

Due to the reduction in residential units and overall development intensity on the Project site, Alternative 4 would result in lower annual potable and reclaimed water demand as compared to the proposed Project. Impacts related to water supply would be less than under the proposed Project

Utility Service

Electricity

As shown in **Table 6.0-47**, Alternative 4 would result in a net electricity demand of approximately 3,030.3 Megawatt-hours (MWh) per year. Southern California Edison (SCE) will have an available supply of approximately 123,675 gigawatt-hours (GWh)[29] of power in 2018 to meet a projected demand of 121,400 GWh within its service area. Alternative 4 would require less than 0.01 percent of the total 2018 supply. Additionally, Alternative 4 would comply with the energy efficiency standards of the County of Los Angeles' Green Building Ordinance, which require exceedance of the Energy Efficiency Standards contained within Title 24 (2005), the California Building Standards Code. Since current projections forecast that electricity generation would meet statewide demand throughout the current planning horizon, Alternative 4 is not anticipated to result in a substantial increase in electricity demand relative to the available supply. Alternative 4 could require the installation of new facilities and equipment, such as transformers, on the site, and also could require minor alterations to off-site electrical transmission and distribution infrastructure in order to serve Alternative 4. Like the proposed Project, Alternative 4 would have a less than significant impact related to electricity supply infrastructure with mitigation requiring the Applicant to incorporate modifications to the on-site electricity transmission/distribution system as needed.

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29 One GWh is equivalent to 1,000 mWh.

Table 6.0-47
Electricity Demand – Alternative 4

Land Use	Quantity	Demand Factor (Megawatt-hours/year)	Annual Demand (Megawatt-hours)
Proposed			
Multi-family Housing	325 du	5.627[1]	1,828.8
Commercial Uses	140,000 sf	0.01355[2]	1,897.0
Gross Demand			**3,725.8**
Existing			
Southlands Christian Schools (School and Church)[3]	63,226 sf	0.011[2]	695.5
Net Demand			**3,030.3**

Consumption factor derived from SCAQMD CEQA Air Quality Handbook, *1993.*
sf = square foot; du = dwelling unit
[1] *Per Unit.*
[2] *Per Square Foot.*
[3] *Rate for church and school uses.*

The proposed Project is estimated to result in a net electricity demand of approximately 3,665.1 MWh per year. Due to the reduction in residential units and total development intensity, Alternative 4 would have a lower electricity demand as compared to the proposed Project. Therefore, Alternative 4 would result in less electricity impacts as compared to the proposed Project.

Natural Gas

As shown in **Table 6.0-48**, Alternative 4 would result in a net natural gas demand of 19.0 mcf per year. The Gas Company has sufficient gas supplies planned to accommodate the increase in gas demand by all of its market sectors, including residential, commercial, industrial, electric generation, and natural gas vehicle uses, through the current projection period (2008 to 2030). The supply from interstate pipelines is estimated to be 3,875 million cubic feet per day (mcf/d) in 2030. The demand generated by Alternative 4 would result in an additional 19 million cubic feet (mcf) per year or 0.052 mcf per day, which represents less than 0.00002 percent of the Gas Company's supply from interstate pipelines in 2030. Therefore, the Gas Company has adequate supply to serve Alternative 4 in addition to its existing commitments. Minor capacity-enhancing alterations to local natural gas transmission and distribution infrastructure may be necessary to serve Alternative 4. Like the proposed Project, Alternative 4 would have a less than

significant impact related to natural gas supply infrastructure with mitigation requiring the Applicant to incorporate modifications to the on-site natural gas conveyance system as needed.

Table 6.0-48
Natural Gas Demand – Alternative 4

Land Use	Quantity	Monthly Demand Factor[1]	Monthly Demand (cf)	Annual Demand (mcf)
Proposed				
Multi-family Housing	325 du	4,011.5 cf/du	1,303,737.5	15.6
Commercial Uses	140,000 sf	2.9 cf/sf	406,000	4.9
Gross Demand			**1,709,737.5**	**20.5**
Existing				
Southlands Christian Schools (School and Church)	63,226 sf	2.0 cf/sf/[2]	126,452	1.5
Net Demand			**1,583,285**	**19.0**

[1] *Consumption factors derived from SCAQMD CEQA Air Quality Handbook, 1993.*
[2] *Consumption factor for school and church uses.*
du = dwelling units; sf = square foot; cf = standard cubic feet; mcf = million cubic feet

The proposed Project is estimated to result in a net natural gas demand of approximately 35.8 mcf per year. Due to the reduction in residential units and overall development intensity, Alternative 4 would have a lower natural gas demand as compared to the proposed Project. Therefore, impacts on natural gas would be less than those of the proposed Project.

Solid Waste Service

Construction Impacts

Like the proposed Project, Alternative 4 would require the demolition of existing structures, which would generate approximately 5,000 cubic yards of debris (a minimum of 3,250 cubic yards would be recycled and a maximum of 1,750 cubic yards would be disposed of in a landfill). However, since it would not include subterranean parking, Alternative 4 would require substantially less excavation and soil removal than the proposed Project. Therefore, earthwork cut and fill volumes are expected to be minimal, whereas the proposed Project would generate approximately 55,000 cubic yards of earth that would need to be removed from the Project site.

The Applicant would prepare a Waste Management Plan to recycle, at a minimum, 65 percent of the construction and demolition debris and contain methods to promote recycling and re-use of materials, as well as safe disposal. Waste generated during demolition and construction that is not recycled would result in an incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities generally within Los Angeles County. Trash and wood would be delivered to the Puente Hills Recovery Facility, which has the capacity to accommodate the approximately 3,250 tons of recyclable demolition and construction debris that would be delivered. Earth material and the remaining construction and demolition debris would be disposed of at the Puente Hills Landfill. Since this landfill has the capacity to accommodate the 55,000 cubic yards of earth material generated by the proposed Project, it would have the capacity to accommodate the lesser amount of earth exported by Alternative 4 in addition to the 1,750 cubic yards of non-recycled construction demolition and debris that would be delivered. Like the proposed Project, Alternative 4 would have less than significant construction impacts. However, since Alternative 4 would remove substantially less soil from the site, construction impacts would be less than those of the proposed Project.

Operational Impacts

As shown in **Table 6.0-49**, Alternative 4, beginning in 2012, would generate approximately 219 additional tons per year, of which 110 tons would be disposed into landfills assuming a 50 percent waste diversion rate. Alternative 4 would recycle a minimum of 50 percent until 2015, when it would be required to recycle a minimum of 60 percent of the solid waste generated, in accordance with current state law and in compliance with the prepared Waste Management Plan. As shown in **Table 6.0-50**, Alternative 4 would reduce landfill disposal to approximately 79.4 tons beginning in 2015. Alternative 4 would include a solid waste diversion program (e.g., adequate areas for collecting and loading recyclables) and would result in Alternative 4 meeting at least the minimum recycling level established by Los Angeles County in accordance with AB 939. Waste requiring disposal would be transported to the Puente Hills Landfill and, eventually, the Mesquite Regional Landfill. Waste generated under Alternative 4 would represent a nominal increase in total volume of disposal at the Puente Hills Landfill, both before and after 2015.[30] As such, this increase in outflow is not considered substantial, and, like the proposed Project, Alternative 4 would have less than significant operational impacts.

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30 Total disposal into the Puente Hills Landfill in 2006 was 3.823 million tons.

Table 6.0-49
Solid Waste Disposal until 2015 – Alternative 4

Land Use	Units	Generation Factor[1]	Daily Generation (lbs/day)	Annual Generation (tons/year)	Waste to be Diverted (50 Percent) (tons/year)	Remainder Disposed in Landfill
Proposed						
Multi-family Housing	325 du	4 lbs/du/day	1,300	237.3	118.6	118.6
Commercial Uses	140,000 sf	2.5 lb/1000 sq ft/day	350	63.9	32.0	32.0
Gross Generation				**301.2**	**150.6**	**150.6**
Existing Uses				82.2	41.1	41.1
Net Generation				**219.0**	**109.5**	**109.5**

du = dwelling unit; sf = square feet
[1] *California Integrated Waste Management Board, Estimated Solid Waste Generation, http://www.ciwmb.ca.gov/wastechar/wastegenrates/default.htm. 2010.*

Table 6.0-50
Solid Waste Disposal After 2015 – Alternative 4

Land Use	Units	Generation Factor	Annual Generation (tons/year)	Waste to be Diverted (60 Percent) (tons/year)[a]	Remainder Disposed in Landfill
Proposed					
Multi-family Residential	325 du	4 lbs/du/day	237.3	142.4	94.9
Commercial Uses	140,000 sf	2.5 lb/1000 sq ft /day	63.9	38.3	25.6
Gross Generation			**301.2**	**180.7**	**120.5**
Existing Uses			82.2	41.1	41.1
Net Generation			**219**	**139.6**	**79.4**

du = dwelling unit; sf = square feet
[a] *A 50 percent diversion rate was used for the existing uses, since they would cease to operate upon Project implementation and therefore would not exist in 2015 when the 60 percent diversion rate is to take effect.*

Parks and Recreation

Rowland Heights presently has a local parkland deficit of 160 acres and a regional parkland deficit of approximately 30,692 acres. Based on the established standard of 4.0 acres of local parkland per 1,000 residents, the 897 residents associated with Alternative 4 would increase the local recreational parkland deficit by 3.60 acres, or 2.3 percent, to 163.6 acres. Based on a standard of 6.0 acres of regional parkland per 1,000 residents, Alternative 4 would increase the regional parkland deficit by approximately 5.4 acres, or 0.018 percent, to 30,697.4 acres. The demand for recreational opportunities by residents of Alternative 4 would be partially offset by the inclusion of on-site recreational amenities comparable to those of the proposed Project, including a two-story, 7,850-square-foot recreational facility, swimming pool, barbecue area, landscaped quadrangles, playground area, swimming pool, spa, and gardens. Therefore, like the proposed Project, Alternative 4 would have less than significant impacts related to parks and recreation.

Implementation of the proposed Project would increase the local recreational parkland deficit by 8.60 acres, or 5.3 percent, to 168.6 acres and would increase the regional parkland deficit by 13.0 acres, or 0.04 percent, to 30,705 acres. Since Alternative 4 would generate fewer new residents as compared to the proposed Project, it would result in lower increases in local and regional recreational parkland deficiencies, and therefore less of an impact on parks and recreational resources as compared to the proposed Project.

Library Service

Construction Impacts

Construction activities associated with the Project and Alternative 4 would not generate a permanent residential population. Therefore, no impacts to library services would occur as a result of the Project's and Alternative 4's construction.

Operational Impacts

Rowland Heights Library currently does not meet the standard of 0.50 gross square feet of library space per resident, 2.75 library items (books, magazines, periodicals, etc.) per capita, and 1 computer per 1,000 residents. Therefore, the additional demand for library resources created by residents of Alternative 4 would be potentially significant. Like the proposed Project, Alternative 4 would have less than significant impacts to library services with implementation of mitigation requiring the Applicant to pay the library mitigation impact fee in effect at the time building permits are issued. However, since

Alternative 4 would generate fewer new residents than the proposed Project, Alternative 4 would result in less impact the County of Los Angeles Public Library system as compared to the proposed Project.

Population, Housing, and Employment

In 2000, the average household size of a renter-occupied unit in Census Tract 4033.04, which encompasses the Project site, was 2.76 persons. Based on an average household size of 2.76 persons per unit within Census Tract 4033.04, Alternative 4 would provide housing for approximately 897 residents. Therefore, the population increase from Alternative 4 would account for approximately 3.7 percent of the expected increase from 2005 to 2010 (the data for the closest year to Project buildout) in the unincorporated San Gabriel Valley Council of Governments (SGVCOG) subregion population. In addition, the housing increase from Alternative 4 would account for approximately 4.9 percent of the expected increase from 2005 to 2010 in households. Both increases are within the 2010 unincorporated SGVCOG subregion projections of 389,267 residents and 105,914 households. Therefore, like the proposed Project, Alternative 4 is consistent with population and housing growth projections and impacts would be less than significant. The proposed Project would provide 775 dwelling units housing approximately 2,139 residents. Therefore, Alternative 4 would add 1,242 fewer residents to the Rowland Heights community.

In addition to residential uses, Alternative 4 would develop approximately 140,000 square feet of neighborhood serving commercial uses. Based on an employment generation factor of 424 square feet per employee, implementation of Alternative 4 would generate approximately 330 jobs.[31] When the associated employee increase is added to the 2008 unincorporated SGVCOG subregion number of employees (101,082), the resulting total is 101,412 employees. Thus, the employment growth associated with Alternative 4 is within the 2012 unincorporated SGVCOG subregion projection of 102,581 employees. Therefore, impacts due to employment growth would be less than significant.

The addition of housing to the Rowland Heights community under the proposed Project would contribute to the 2010 jobs/housing imbalance of 0.96:1. Since Rowland Heights is intended to be a residential community and the jobs/housing imbalance is offset by employment in the neighboring City of Industry, this impact would not be adverse and would be less than significant. Since Alternative 4 would add 450 fewer new dwelling units than the proposed Project, Alternative 4 would result in a lower increase in the jobs/housing imbalance. Additionally, the commercial component of Alternative 4 would introduce 330 jobs to Rowland Heights, which would partially offset the jobs/housing imbalance increase

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31 Generation factors from SCAG's Employment Density Study, Summary Report, dated October 31, 2001. Available online at http://www.scag.ca.gov/pdfs/Employment_Density_Study.pdf.

generated by its residential component. Accordingly, Alternative 4 would have less impact on the jobs/housing imbalance as compared to the proposed Project.

Since Alternative 4 would reduce the proposed Project's population and housing increase, while increasing employment opportunities in Rowland Heights consistent with SGVCOG subregion projections, Alternative 4 would result in less impact on population and housing as compared to the proposed Project.

Land Use

Similar to the proposed Project, a Zone Change would be required under Alternative 4 to change the zoning designation of the Project site. However, Alternative 4 would require a change from A-1, Light Agriculture to MXD, Mixed Use Development Zone, to allow for mixed uses. The proposed Project would require a change from A-1, Light Agriculture to RPD, Residential Planned Development. The Rowland Heights Community General Plan designates the Project site for "U1" Urban 1 uses, which include very low density (hillside) residential, large lot residential and single-family detached units. The U1 designation allows 1.1 to 3.2 dwelling units per gross acre. Alternative 4 proposes multi-family residential units at a density of approximately 21 dwelling units per gross acre, which would not be consistent with the existing U1 designation. Additionally, the proposed commercial uses on the Project site would not be consistent with the existing U1 designation. The Community General Plan "U5" Urban 5 designation permits multi-family uses at a density of 21 dwelling units per gross acre and does not permit commercial uses. Similar to the proposed Project, a Zone Change, General Plan Amendment, and other necessary entitlements would also be required for Alternative 4. Further, the Rowland Heights Community General Plan does not have a designation that permits both commercial and residential uses, and thus Alternative 4 would also potentially require a text amendment to the plan in order to allow for Alternative 4's proposed uses. The inconsistency of Alternative 4 with the property's existing zoning and Community General Plan designations constitute significant and unavoidable land use impacts, as is the case for the proposed Project. However, the inconsistencies with the existing land use designations and zoning are primarily administrative and do not constitute physical environmental effects. Further, both the proposed Project and Alternative 4 would become consistent with the land use and zoning designation with the adoption of the proposed site-specific General Plan Amendment and proposed Zone Change.

Alternative 4 would introduce commercial uses along Brea Canyon Cutoff Road south of Colima Road, which is presently a residential corridor. Therefore, like the proposed Project, Alternative 4 would be inconsistent with Policy 15 of the Los Angeles County General Plan Land Use Element, which protects the character of residential neighborhoods by preventing the intrusion of incompatible uses. However,

Alternative 4 would not conflict with Policy 4 of the Rowland Heights Community General Plan Land Use Element, which restricts multi-family or attached housing to the U3, U4, and U5 categories. In contrast, the proposed Project would conflict with Policy 4 due to the creation of a new site-specific land use category to permit higher density.

The introduction of commercial uses to the Project site under Alternative 4 would generally result in greater land use impacts as compared to the proposed Project because these commercial uses would not be consistent with the residential character of the Brea Canyon Cutoff Road corridor south of Colima Road. In contrast, the proposed Project is entirely residential, which is more consistent with the existing land use pattern than Alternative 4. Therefore, land use impacts would generally be greater under Alternative 4 than under the proposed Project.

Environmental Safety

Construction Impacts

Alternative 4 would necessitate demolition of all existing buildings and structures on the Project site. The oldest buildings on the Project site contain asbestos (ACMs and ACCMs) and lead-based paint, which would result in a potentially significant impact during demolition. However, all asbestos-containing materials and lead-based paints would be removed prior to demolition in accordance with SCAQMD and mitigation measures similar to those of the proposed Project. Therefore, like the proposed Project, Alternative 4 would have less than significant construction-related impacts. Since the same amount of demolition is required under Alternative 4 and the proposed Project, impacts would be similar.

Operational Impacts

Similar to the proposed Project, Alternative 4 would develop land uses that would not use or generate large quantities of hazardous and/or toxic materials, although Alternative 4 would introduce commercial uses in addition to residential uses. The handling of hazardous materials would be limited to the use and disposal of household and commercial substances such as unused paint, aerosol cans, cleaning agents (solvents), landscaping related chemicals, and automotive supplies (byproducts). These materials are generally disposed of at non-hazardous Class II and III landfills. Compliance with County regulations for the use, storage, and disposal of hazardous materials would result in less than significant impacts. The proposed Project would also result in less than significant operational impacts. However, since Alternative 4 proposes a lower development density than the proposed Project, impacts associated with the handling of hazardous materials would be less as compared to under the proposed Project.

Relationship to Project Objectives

Because Alternative 4 would result in the implementation of multi-family housing and amenities, notwithstanding an approximately 58 percent reduction in dwelling units compared to the proposed Project, it would meet four of the five Key Residential Objectives, as follows:

Key Residential Objectives

2. Provide new multi-family rental housing in the unincorporated Los Angeles County Rowland Heights area that is presently underserved by lifestyle multi-family residential uses that include various leisure and recreational amenities for residents, and increase the diversity of housing options as recommended by the Housing Element of the Rowland Heights Community General Plan.

3. Provide high-quality multi-family housing options without displacing existing residential uses.

4. Provide a diverse multi-family residential unit mix to meet the needs of a variety of tenants.

5. Provide sufficient outdoor gathering spaces and recreational amenities on the Project site to meet the needs of Project residents and reduce demand for off-site park and recreational facilities.

Because of the reduction in the number of residences to be built compared to the proposed Project, Alternative 4 would meet the following Key Residential Objective, but not to the same extent as the proposed Project:

1. Assist Los Angeles County in meeting the housing needs of its residents by contributing to the fulfillment of Los Angeles County's SCAG Regional Housing Needs Assessment (RHNA) allocation for moderate-income and above-moderate-income units, which requires the County to accommodate expected growth by ensuring the availability of residential sites at adequate densities and appropriate development standards in unincorporated areas, as stated in the Los Angeles County General Plan Housing Element.

Alternative 4 would attain all of the Key Sustainability Goals and all of the Additional Project Objectives.

Overall, Alternative 4 would attain the majority of the Project Objectives, with only the substantial reduction in the number of proposed units, compared to the proposed Project, preventing full attainment of the key Residential Objective concerning alleviation of the housing shortage in the Project area and region. However, no Project objectives address commercial uses, which are proposed under Alternative 4. The Project site is already well served by nearby neighborhood-serving commercial uses, and therefore this is not a desirable use of the Project site. Moreover, a number of impacts would be greater than those of the proposed Project, including land use and operational air quality, noise, hydrology, and traffic impacts.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6(e)(2) of the *State CEQA Guidelines* indicates that an analysis of alternatives to the proposed project shall identify one alternative as the environmentally superior alternative. Furthermore, if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives. For the proposed Project, based on the analysis included herein, Alternative 3 would be considered the environmentally superior alternative to the proposed Project because it would avoid and/or substantially reduce more of the significant impacts associated with implementing the proposed Project than the remaining alternatives, while also meeting all of the Project objectives. Alternative 3 would also result in implementation of a project similar to the proposed Project in terms of land use (multi-family housing) and amenities, with the primary difference being a more than 30 percent reduction in the number of dwelling units, and therefore development density, compared to the proposed Project. For these reasons, Alternative 3 would meet all of the Project Objectives while resulting in less significant impacts and less than the Project.

7.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

INTRODUCTION

This section of the Environmental Impact Report (EIR) provides information regarding impacts of the proposed Canyon Residences Project that were determined to be less than significant by the County of Los Angeles during the Project scoping process, pursuant to Section 15128 of the *California Environmental Quality Act (CEQA) Guidelines*, as amended. According to the *State CEQA Guidelines*:

> *An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.*

The following presents a brief summary of the effects found not to be significant, including reasons why they would not be significant.

EFFECTS FOUND NOT TO BE SIGNIFICANT

The Notice of Preparation (NOP) for the Project is included in **Appendix 1.0**. The Initial Study prepared for the NOP determined that the Project would result in no impact for a range of specific topics associated with agricultural resources; air quality; archaeological/historical/paleontological resources; biological resources; energy, geotechnical and soil resources; hydrology and drainage; land use and planning; mineral resources; noise; population and housing; traffic/access; and visual quality. As identified in the Initial Study, the thresholds of significance for which the Project would have no impact are discussed below.

Geotechnical and Soil Resources

- Is the Project site located in an active or potentially active fault zone, Seismic Hazards Zone, or Alquist-Priolo Earthquake Fault Zone?

The Project site is not within the currently established Alquist-Priolo Earthquake Fault Zone. No active or potentially active faults are known to pass directly beneath the Project site.[1] The closest active fault to the Project site is the Whittier Fault, located 2.8 miles (4.5 kilometers [km]) south of the Project site, and the closest potentially active fault is the San Jose Fault, located 4.3 miles (6.92 km) north of the Project site.

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1 Geocon West, Inc., "Geotechnical Investigation – New Multi-Family Residential Development, 1920 Brea Canyon Cut Off Road, Rowland Heights, California," (2007). An active fault is one that has had surface displacement within Holocene time (about the last 11,000 years). A potentially active fault has demonstrated surface displacement during Quaternary time (approximately the last 1.6 million years), but has had no known Holocene movement.

Further, the buildings would be constructed in compliance with the County's Building Code (Title 26 of the Los Angeles County Code), and would include mandatory seismic safety features in the design. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Is the Project site located in an area containing a major landslide(s)?

According to the Los Angeles County Seismic Safety Element and the California Geological Survey, the Project site is not within an area identified as having a potential for landslides.[2] There are no known landslides near the Project site, nor is the Project site in the path of any known or potential landslides. Therefore, the Project would not place structures or people in a landslide hazard area. As such, a less than significant impact would occur, and no mitigation measures would be required.

Hydrology and Drainage

- Is a major drainage course, as identified on USGS [U.S. Geological Society] quad sheets by a dashed line, located on the Project site?

Brea Canyon Cutoff Road channels storm water runoff from the hills to the south of the Project site. Additionally, according to the ALTA/ACSM Land Title Survey conducted for the Project site in October 2007, a storm drain runs north-south through the Project site. A second storm drain easement runs along the southeastern property boundary of the Project site. However, the USGS quad sheet on which the Project site is located does not identify a major drainage course on the Project site.[3] Consequently, site development with the proposed residential uses would not impact a defined major drainage course. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Is the Project site located in or subject to high mudflow conditions?

The Project site is located within an existing urbanized area and is surrounded by residential and commercial uses, as well as an adjacent golf course. Due to the urbanized nature of the Project site and the surrounding area, as well as the fact that storm flows are channeled away from on-site uses, the Project site is not subject to high mudflow conditions. As such, a less than significant impact would occur, and no mitigation measures would be required.

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2 Geocon West, Inc., "Geotechnical Investigation – New Multi-Family Residential Development, 1920 Brea Canyon Cut Off Road, Rowland Heights, California," (2007). An active fault is one that has had surface displacement within Holocene time (about the last 11,000 years). A potentially active fault has demonstrated surface displacement during Quaternary time (approximately the last 1.6 million years), but has had no known Holocene movement.

3 USGS, Yorba Linda Quadrangle.

- Could the Project contribute or be subject to high erosion and debris deposition from run off?

The Project would increase the portion of the Project site currently covered by pavement, building footprints and other non-erodible surfaces. The remainder of the Project site would be landscaped. Therefore, the Project would not contribute to high erosion or debris deposition from run off. The Project would not be subject to high erosion or debris deposition from runoff since the Project site is buffered by residential uses south (uphill) of the Project site. Additionally, a retaining wall is proposed along the portion of the Project site down slope of the adjacent golf course. The Project would also be subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) permit during both construction and operation. As a part of this permit process, the Applicant would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) as well as comply with the Standard Urban Stormwater Mitigation Plan (SUSMP) requirements for treating the first 0.75 inch of rainfall over a 24-hour period. The Applicant is required to comply with the permit requirements through incorporation of design features and use of best management practices (BMPs) appropriate and applicable to the Project. The County of Los Angeles will review the Project plans for compliance with NPDES requirements as part of the Project review and approval process. Accordingly, less than significant impacts are anticipated.

- Is the Project site located in an area having known water quality problems and proposing the use of individual water wells?

No water wells are located on site. The Walnut Valley Water District (WVWD) currently provides domestic water service to the Project site and would serve the Project. The WVWD obtains its water supply from the Metropolitan Water District (MWD). Therefore, no local groundwater sources with potential water quality problems would be used. All water imported by the MWD, including groundwater, is treated by the MWD and meets all federal and state drinking water standards.[4] Since the Project is not proposing the use of local groundwater sources or individual water wells, a less than significant impact would occur and no mitigation measures are required.

- Will the proposed Project require the use of a private sewage disposal system? If the answer is yes, is the Project site located in an area having known septic tank limitations due to high groundwater or other geotechnical limitations or is the Project proposing on-site systems located in close proximity to a drainage course?

The County of Los Angeles Department of Public Works currently provides sanitary sewer service to the Project site and would serve the Project. Since the Project would discharge to the existing sewage system,

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4 WVWD, "Annual Water Quality Report: Water Testing Performed in 2006," http://www.wvwd.com/. 2008.

no private sewage disposal system is required. Impacts are anticipated to be less than significant and no mitigation would be necessary.

- Other factors (e.g., dam failure)?

The Los Angeles County Seismic Safety Element indicates that the Project site is not located within the inundation boundaries of up gradient dams or reservoirs. As such, a less than significant impact would occur, and no mitigation measures would be required.

Fire Protection

- Is the Project site in a high fire hazard area and served by inadequate access due to lengths, widths, surface materials, turnarounds or grade?

While the Project site is located in a high fire hazard area, the Project site is developed with adequate access for fire fighting equipment. The Project site is located on a stretch of Brea Canyon Cutoff Road that is four lanes, and is within 250 feet of the centerline of Colima Road, which is a major highway. In addition, final building plans will be submitted to the Los Angeles County Fire Department for review and approval, and the Project will comply with all County standards, including those related to roadway geometrics and access, and must be reviewed against County standards by staff as part of the standard development review process to ensure compliance. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Does the Project site have more than 75 dwelling units on a single access in a high fire hazard area?

The Project proposes approximately 775 dwelling units; however, the Project site is not served by a single access. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Is the Project site located in close proximity to potential dangerous fire hazard conditions/uses (such as refineries, flammables, explosives manufacturing)?

The Project site is not located in close proximity to potential dangerous fire hazard conditions or uses such as refineries, flammables, and explosives manufacturing. The Project site is surrounded by residential and neighborhood-serving commercial uses. The closest industrial uses to the Project site are located approximately 0.75 mile north of the Pomona Freeway. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Does the proposed use constitute a potentially dangerous fire hazard?

The Project proposes residential uses that do not constitute a potentially dangerous fire hazard. No manufacturing, refining, or other industrial use that would consume, emit, or store potentially hazardous chemicals are associated with the Project. As such, a less than significant impact would occur, and no mitigation measures would be required.

Noise

- Is the Project site located near a high noise source (airports, railroads, freeways, industry)?

The Project site is not located in close proximity to any high noise sources such as airports, railroads, freeways, or industrial uses. The Project site is approximately 0.75 mile south of the Pomona Freeway (State Route [SR]-60), and the closest industrial uses are located north of the freeway. As such, a less than significant impact would occur, and no mitigation measures would be required.

Air Quality

- Is the proposal considered a sensitive use (schools, hospitals, parks) and located near a freeway or heavy industrial use?

The Project proposes residential uses. The Project site is located approximately 0.75-mile south of SR-60 and is not located near a heavy industrial use. The Project is not a sensitive use, as defined by the threshold above, and is not located near a freeway or heavy industrial use. As such, a less than significant impact would occur, and no mitigation measures would be required.

Biological Resources

- Is the Project site located within a Significant Ecological Area (SEA), SEA Buffer, or coastal Sensitive Environmental Resource (ESHA, etc.), or is the site relatively undisturbed and natural?

The Project site is not located within a SEA, SEA Buffer, or coastal Sensitive Environmental Resource area. The Project site, which is located within a predominantly urbanized area of Rowland Heights, has been developed with institutional uses since the 1970s and contains no areas that could be considered undisturbed or natural. As a result, a less than significant impact would occur, and no mitigation measures would be required.

- Will grading, fire clearance, or flood related improvements remove substantial natural habitat areas?

No substantial natural habitat areas occur on the Project site or in the immediately surrounding area. Since the Project site is presently developed and surrounded by residential and commercial uses,

implementation of the proposed Project would not remove substantial natural habitat areas. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Does the Project site contain a major riparian or other sensitive habitat (e.g., coastal sage scrub, oak woodland, sycamore riparian woodland, wetland, etc.)?

The Project site, which is presently developed, does not contain a major riparian or other sensitive habitat. No coastal sage scrub, oak woodland, sycamore riparian woodland, or wetland habitats are present on site. Additionally, no sensitive habitats are present in the Project vicinity. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Does the Project site contain oak or other unique native trees (specify kinds of trees)?

The Project site contains three coast live oak trees (*Quercus agrifolia*), one of which is a heritage tree (i.e., greater than 36 inches in diameter measured at breast height). No other "special status" trees are present on the Project site. All other vegetation on the Project site, including trees, is ornamental and dates to construction of the church and school buildings (since 1970). The three oak trees located on the Project site would be removed as part of the Project. However, consistent with the requirements outlined in the Oak Tree Report for the Project, this impact shall be mitigated through compliance with County Code Section 22.56.2050 et seq., which provides for the replacement of affected oak trees at a ratio of at least 2:1 (County Code Section 22.56.2180) or a payment into the Oak Forestry Special Fund in an amount equivalent to the oak resource loss if the County Forester determines that replacement or relocation on site is inappropriate (County Code Section 22.56.2140). Therefore, with implementation of **Mitigation Measure BIO-1**, impacts related to removal of the three oak trees on the Project site would be less than significant.

- Is the Project site habitat for any known sensitive species (federal or state listed Endangered, etc.)?

The Project site, which is located within an urbanized area, does not contain habitat for any known sensitive species. The Project site is currently developed with the Southlands Christian Church and Southlands Christian School, which spans grades Pre-K through 12. Nine single-story buildings, two paved surface parking lots and an athletic field currently occupy the site. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Other factors (e.g., wildlife corridor, adjacent open space linkage)?

The Project site, which is located within an urbanized area, is not within a wildlife corridor or adjacent to an open space linkage area. Nine single-story buildings, two paved surface parking lots and an athletic

field currently occupy the site. As such, a less than significant impact would occur, and no mitigation measures would be required.

Mitigation Measures

BIO-1: The Project Applicant shall provide for the replacement of affected oak trees at a ratio of at least 2:1 and the replacement of heritage-sized oak trees at a ratio of 10:1 (County Code Section 22.56.2180), or a payment into the Oak Forestry Special Fund in an amount equivalent to the oak resource loss if the County Forester determines that replacement or relocation on site is inappropriate (County Code Section 22.56.2140).

Archaeological/Historical/Paleontological

- Is the Project site in or near an area containing known archaeological resources or containing features (drainage course, spring, knoll, rock outcroppings, or oak trees) which indicate potential archaeological sensitivity?

Although three oak trees and one covered drainage course exist on the Project site, no other features such as springs, knolls, or rock outcroppings that indicate archaeological sensitivity are present. No archaeological sites or isolates were identified on the Project site or within a 0.5-mile radius of the Project site. Surface grading and shallow excavations on the Project site are unlikely to encounter significant archaeological isolates. Therefore, the Project site is not considered archaeologically sensitive.[5] However, although the Project site is currently developed, there is still potential for surface and/or buried prehistoric or historic resources to be uncovered during construction activities. Human remains, agricultural remains, foundations, trails, hearths, trash dumps, privies, changes in soil colorations, pottery, and chipped stone are all potential indications of an archaeological site.

A comment letter was received in response to the Notice of Preparation from a former maintenance supervisor for Southlands Christian Schools, asking that the potential for archaeological resources on the Project site be evaluated in the EIR, and providing photographs of items the author stated he had found on the property. The letter and photographs were provided for consideration to the South Coastal Information Center, which operates under contract to the State Office of Historic Preservation and accumulates and distributes archaeological and historical information in the form of archaeological site records, maps, reports, and electronic data for the region. The Center indicated that the items were not verifiable archaeological artifacts, nor was there evidence to prove they were found on the Project site, since no reports were filed with the Center at the time. Moreover, the records search and "Quick Check"

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5 Thomas Shackford, Lead Staff Researcher, South Central Coastal Information Center, personal communication with Betty Sears, Project Planner, Impact Sciences, Inc., April 15, 2008.

commissioned from the Center for purposes of EIR analysis of archaeological resource potential on the Project site revealed low potential and no known archaeological sites in the Project vicinity.[6] At the center's recommendation, the commenter's letter and photos were forwarded for review to the Native American Heritage Center; the Native American Heritage Center did not provide a response.

Nonetheless, as required by **Mitigation Measure ARCH-1**, in the event an archaeological resource is encountered during construction of the Project, all construction activity in the immediate vicinity would halt and the isolate would be professionally removed. Therefore, impacts to archaeological resources would be less than significant.

- Does the Project site contain rock formations indicating potential paleontological resources?

Surficial deposits in the Project area consist of younger Quaternary Alluvium, derived either as fan deposits from the hills to the south and east or as fluvial deposits from the Brea Canyon drainage on the eastern side of the Project area. These younger Quaternary deposits typically do not contain significant vertebrate fossils, at least in the uppermost layers, and no vertebrate fossil localities have been identified from such deposits in the Project area. The surrounding hills, however, have exposures of the marine late Miocene Puente Formation that also may occur as subsurface deposits in the proposed Project area.

The closest vertebrate fossil localities in the Puente Formation have been found between Valley Boulevard and La Puente Road east of Nogales Street to the northwest of the Project site. These localities have produced several fossil marine vertebrates. No paleontological resources were identified on the Project site. While various fossil marine vertebrates have been found within the Project area, surface grading, and shallow excavations on the Project site are unlikely to encounter significant vertebrate fossils.[7] As required by **Mitigation Measure ARCH-2**, in the event a paleontological resource is encountered during construction of the Project, all construction activity in the immediate vicinity would halt and the isolate would be professionally removed. Therefore, impacts to paleontological resources would be less than significant.

- Does the Project site contain known historic structures or sites?

A review of the California Points of Historical Interest, California Historical Landmarks, California Register of Historical Resources, National Register of Historic Places, and the California State Historic Resources Inventory listings was conducted to identify historic resources within the Project area. No

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6 South Coastal Information Center, Stacy St, James, personal communication with Impact Sciences, October 2008.

7 Samuel McLeod, Ph.D., Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County, personal communication with Betty Sears, Project Planner, Impact Sciences, Inc., April 10, 2008.

historical sites are listed on the Project site or within a 0.5-mile radius of the Project site.[8] Additionally, existing structures on the Project site were constructed between 1970 and 2002. Since these structures are less than 45 years of age, they are not considered potentially eligible for listing as historical buildings.[9] No known historically significant events have occurred on the Project site. Therefore, the Project site does not contain known historic structures or sites. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Would the Project cause a substantial adverse change in the significance of a historical or archaeological resource as defined in 15064.5?

As previously discussed, no historical or archaeological sites and isolates were identified on the Project site or within a 0.5-mile radius of the Project site. As required by **Mitigation Measure ARCH-3**, in the event a prehistoric or historic resource is encountered during construction of the Project, all construction activity in the immediate vicinity would halt and the isolate would be professionally removed. Therefore, the Project would not cause a substantial adverse change in the significance of a historical or archaeological resource. As such, a less than significant impact would occur.

- Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As previously discussed, no paleontological resources or unique geologic features were identified on the Project site. While various fossil marine vertebrates have been found within the Project area, surface grading, and shallow excavations on the Project site are unlikely to encounter significant vertebrate fossils.[10] As required by **Mitigation Measure ARCH-2**, in the event a paleontological resource is encountered during construction of the Project, all construction activity in the immediate vicinity would halt and the isolate would be professionally removed. Therefore, the Project would not directly or indirectly destroy a unique paleontological resources or unique geologic feature. As such, a less than significant impact would occur, and no mitigation measures would be required.

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8 Thomas Shackford, Lead Staff Researcher, South Central Coastal Information Center, personal communication with Betty Sears, Project Planner, Impact Sciences, Inc., April 15, 2008.

9 Thomas Shackford, Lead Staff Researcher, South Central Coastal Information Center, personal communication with Betty Sears, Project Planner, Impact Sciences, Inc., April 15, 2008.

10 Samuel McLeod, Ph.D., Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County, personal communication with Betty Sears, Project Planner, Impact Sciences, Inc., April 10, 2008.

Mitigation Measures

ARCH-1: In the event an archaeological resource is encountered during construction of the Project, all construction activity in the immediate vicinity of the resource shall halt and the isolate shall be professionally removed.

ARCH-2: In the event a paleontological resource is encountered during construction of the Project, all construction activity in the immediate vicinity of the resource shall halt and the isolate shall be professionally removed.

ARCH-3: In the event a prehistoric or historic resource is encountered during construction of the Project, all construction activity in the immediate vicinity of the resource shall halt and the isolate shall be professionally removed.

Mineral Resources

- Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

According to USGS maps which delineate known mineral resources in the State of California, the Project site, which is currently developed with church and school uses, is not located within a locally important mineral resource discovery site. Therefore, Project implementation would not result in the loss of availability of a known mineral resource.[11] As such, a less than significant impact would occur, and no mitigation measures would be required.

- Would the Project result in the loss of availability of a locally important mineral resource discovery site delineated on a local general plan, specific plan, or other land use plan?

According to the Los Angeles County General Plan and the Rowland Heights Community General Plan, the Project site, which is currently developed with church and school uses, is not located within a locally important mineral resource discovery site. Further, the Rowland Heights Community General Plan does not designate any locally important mineral resource discovery sites. As such, a less than significant impact would occur, and no mitigation measures would be required.

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[11] United States Geological Survey, "Mineral Resources On-Line Spatial Data," http://mrdata.usgs.gov/website/MRData-US/viewer.htm. 2008.

Agricultural Resources

- Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.[12] The Project site is located in an urbanized area. Nine single-story buildings, two paved surface parking lots, and an athletic field currently occupy the Project site. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The Project site is zoned Light Agriculture, but is designated Low Density Residential by the County General Plan and Urban-1 by the Rowland Heights Community General Plan. The Project site is currently developed with non-agricultural uses including a church and school. Nine single-story buildings, two paved surface parking lots and an athletic field currently occupy the Project site. No Williamson Act contract applies to the Project site. Therefore, the Project would not conflict with existing zoning for agricultural uses. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

The Project site is bordered by residential and commercial uses, and is located within 250 feet of Colima Road, a heavily developed commercial corridor. No agricultural uses are present on the Project site or in the Project area and the Project would not result in the conversion of farmland to non-agricultural use. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Will the Project result in a significant reduction in the amount of agricultural land?

The Project site, which is currently developed with a church and school, is located in an urbanized area and is not being used for agricultural production. Therefore, the Project would not result in a reduction in agricultural land. As such, a less than significant impact would occur, and no mitigation measures would be required.

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12 Los Angeles County Important Farmland Map.

Visual Quality

- Is the Project site located in an undeveloped or undisturbed area, which contains unique aesthetic features?

The Project site, which is presently developed with nine single-story buildings, two paved surface parking lots and an athletic field and surrounded by urban uses, is not located within, nor does it contain, an undeveloped or undisturbed area. The Project vicinity is already developed with a mix of residential and commercial uses. The Project is not expected to affect any undeveloped or undisturbed areas or any unique aesthetic features. As such, a less than significant impact would occur, and no mitigation measures would be required.

Traffic/Access

- Will the Project result in any hazardous traffic conditions?

The design of the Project, and the internal circulation systems on site, take traffic safety into consideration. All development must comply with the County standards including those related to sight distance, roadway width, and turning radius. Site plans for the Project will be reviewed by County staff as part of the standard development review process to ensure compliance with County standards. Accordingly, the Project design would not result in hazardous traffic conditions for vehicles entering and/or exiting the Project site. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Will inadequate access during an emergency (other than fire hazards) result in problems for emergency vehicles or residents/employees in the area?

Brea Canyon Cutoff Road, a four-lane roadway, would continue to provide primary access to the Project site. Modifications to existing Project site access and on-site circulation are proposed. Building and site plans will be provided to the Los Angeles County Fire Department for review and approval. Through Department review and approval, adequate emergency access designs will be incorporated into the Project. Since Brea Canyon Cutoff Road would provide adequate emergency access to the Project site and on-site emergency access would be incorporated into Project design, a less than significant impact would occur, and no mitigation measures would be required.

Energy

- Will the Project result in an inefficient use of energy resources?

The Project is expected to exceed the energy efficiency standards required by the 2005 edition of Title 24 of the California Code of Regulations. Additionally, the Project would implement design features that incorporate the "California Build It Green Multifamily GreenPoint Checklist." Additionally, the Project would comply with the applicable ordinances adopted by the County pertaining to green building techniques and drought tolerant landscaping. Specific energy-conserving features of the Project have not been finalized at this time, but may include such features as permeable pavement surfaces; energy-efficient heating and air conditioning systems; energy-efficient lighting; reuse of gray water for on-site landscaping irrigation; recycled water in on-site water features; insulated building walls and roof; and timer controls for lighting, power and water features. Therefore, the Project would not result in an inefficient use of energy resources. As such, a less than significant impact would occur, and no mitigation measures would be required.

Environmental Safety

- Are any pressurized tanks to be used or any hazardous wastes stored on site?

Construction and operation of the proposed residential uses do not require the extensive or ongoing use of hazardous materials or pressurized tanks that would create a significant hazard to the public. The occasional use or disposal of hazardous materials generally associated with residential uses include unused paint, aerosol cans, cleaning agents, automotive fluids, landscaping-related chemicals, and other common household substances. These materials are generally disposed of at non-hazardous Class II and III landfills (along with traditional solid waste). Therefore, the impact of the Project on the environment through the routine transport, use, or disposal of hazardous materials is less than significant, given that appropriate procedures and guidelines are followed during Project construction and throughout Project operation.[13]

- Are any residential units, schools, or hospitals located within 500 feet and potentially adversely affected?

Residences are located within 500 feet of the Project site. However, these uses would not be adversely affected by the Project, which would utilize the same substances commonly used in households. As such, a less than significant impact would occur, and no mitigation measures would be required.

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[13] LFR, *Phase I Environmental Site Assessment, Southlands Church International, 1920 Brea Canyon Cut Off Road, Rowland Heights, California, 91789* (2007).

- Have there been previous uses that indicate residual soil toxicity of the site or is the site located within 2 miles downstream of a known groundwater contamination source within the same watershed?

Prior to construction of the existing structures on the Project site, the site was used for agricultural purposes. Groundwater and soil gas samples were collected from the Project site as part of a limited Phase II investigation conducted on November 1, 2007, to assess the potential subsurface presence of volatile organic compounds (VOCs) from a nearby dry cleaning facility. Tests indicate that VOCs are not present above the laboratory detection limit, with the exception of very low concentrations of toluene and m,p-xylene, which were considered likely to be associated with automobile parking on the site. The concentrations of these substances were below the California Department of Health Services maximum contaminant levels and are not considered an environmental concern. No additional subsurface investigation is required. Therefore, the Project site is not subject to residual soil toxicity.[14] As such, impacts would be less than significant impact, and no mitigation measures would be required.

- Would the Project emit hazardous emissions or handle hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

While the Project site is currently developed with a school, Project implementation would result in the removal of the existing school. The Project would not be located within 0.25 mile of any existing or proposed school. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or environment?

An environmental database report for local, state, and federal listings for the Project site and properties within 1 mile of the Project site compiled pursuant to Government Code Section 65962.5 was reviewed. The Project site is not listed on any environmental databases that would indicate a potentially significant hazard to the public or environment. Several off-site facilities are listed within either federal or state databases. According to the conclusions within the Phase I prepared for the Project site, none of the listed facilities would present an environmental concern for the Project site.[15] As such, a less than significant impact would occur, and no mitigation measures would be required.

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14 LFR, *Limited Phase II Environmental Site Assessment, Southlands Church International, 1920 Brea Canyon Cutoff Road, Walnut, California* (2007).

15 LFR, *Phase I Environmental Site Assessment, Southlands Church International, 1920 Brea Canyon Cutoff Road, Rowland Heights, California, 91789* (2007).

- Would the Project result in a safety hazard for people in a Project area located within an airport land use plan, within 2 miles of a public or public use airport, or within the vicinity of a private airstrip?

The Project site is not located within an airport land use plan, or within 2 miles of a public or public use airport, or within the vicinity of a private airstrip. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Project site would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. As such, a less than significant impact would occur, and no mitigation measures would be required.

Land Use and Planning

- Can the Project be found to be inconsistent with the following applicable land use criteria:
  - Hillside Management Criteria?

The Project site is not located within a Hillside Management Area. As such, a less than significant impact would occur, and no mitigation measures would be required.

  - SEA Conformance Criteria?

The Project site is not located within a designated Significant Ecological Area. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Would the Project physically divide an established community?

The Project would limit development to the Project site and would not modify any off-site properties or roadways as to physically divide an established community. As such, a less than significant impact would occur, and no mitigation measures would be required.

Population and Housing

- Could the Project displace existing housing, especially affordable housing?

The Project site is currently developed with a church and school, which would be removed as part of the Project. Therefore, no housing would be displaced with implementation of the Project. As such, a less than significant impact would occur, and no mitigation measures would be required.

- Would the Project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The Project would not displace any existing housing or residents. As such, the Project would not result in the displacement of residents such that new replacement housing would need to be constructed. As such, a less than significant impact would occur, and no mitigation measures would be required.

8.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) of the *California Environmental Quality Act (CEQA) Guidelines* requires that an environmental impact report (EIR) evaluate significant irreversible environmental changes that would be caused by implementation of a proposed project to ensure that such changes are justified. Irreversible changes include the use of nonrenewable resources during construction and operation of a project to such a degree that the use of the resource thereafter becomes unlikely. A significant environmental change can result from a primary and/or secondary impact that generally commits future generations to similar uses. Irreversible environmental change can also result from environmental accidents associated with the project.

Construction of the proposed Project would require the use of nonrenewable resources, such as the raw materials in steel; metals, such as copper and lead; aggregate materials used in concrete and asphalt, such as sand and stone; water; petrochemical construction materials, such as plastic; and petroleum-based construction materials. In addition, fossil fuels used to power construction vehicles would also be consumed.

Operation of the proposed Project would involve the ongoing consumption of nonrenewable resources, such as electricity, petroleum-based fuels, fossil fuels, and water, which are commonly consumed in the existing surrounding urban environment. Energy resources would be used for heating and cooling of buildings, lighting, and transporting residents and patrons to and from the Project site. Operation of the proposed Project would occur in accordance with Title 24, Part 6, of the *California Code of Regulations*, which sets forth conservation practices that limit the amount of energy consumed by the proposed project. Operation of the proposed Project would also result in an increased commitment of public maintenance services, such as waste disposal and treatment, as well as increased commitment of the infrastructure that serves the Project site.

The limited use of potentially hazardous materials contained in typical cleaning agents and pesticides for landscaping would occur on the site. Such materials would be used, handled, stored, and disposed of in accordance with applicable government regulations and standards, which would serve to protect against a significant and irreversible change resulting from accidental release of hazardous materials.

The commitment of the nonrenewable resources required for the construction and operation of the proposed Project would limit the availability of resources and the Project's building site for future generations or for other uses during the life of the proposed Project. However, use of such resources would be of a relatively small scale in relation to the Project's fulfillment of regional and local urban design goals for the area. Further, use of such resources would be consistent with regional and local growth forecasts in the area and region, and the loss of such resources would not be highly accelerated as compared to current conditions. As such, the use of such resources would not be considered significant, and while some irreversible environmental changes may result from the Project, such impacts would be considered less than significant.

9.0 GROWTH-INDUCING IMPACTS

INTRODUCTION

The purpose of this section is to evaluate the Project's growth-inducing potential and impact. Section 15126.2(d) of the *California Environmental Quality Act (CEQA) Guidelines*, as amended, requires the discussion of the ways in which a project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Specifically, section 15126.2(d) of the *State CEQA Guidelines* states that an Environmental Impact Report (EIR) should:

> *Discuss 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. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment*

GROWTH-INDUCING POTENTIAL

Section 15126(d) of the *State CEQA Guidelines* requires an EIR to discuss the ways in which a project could be growth-inducing and to "discuss the characteristics of some projects that may encourage activities that could significantly affect the environment." However, the *State CEQA Guidelines* do not require that an EIR predict (or speculate) specifically where such growth would occur, in what form it would occur, or when it would occur. Attempting to determine the environmental impacts created by growth that could be induced is speculative in that the precise size, type, and location of specific future projects in the Project area which may be induced by the proposed Project are unknown at the present time. To the extent that specific related projects are known at this time, those projects either have already been or will be subject to their own environmental analysis. Furthermore, it is speculative to state conclusively that implementation of the Project alone would induce growth in the surrounding area, as there are many variables that must be considered when examining the mechanics of urban growth (e.g., market forces, demographic trends, etc.). Impacts associated with growth in the Rowland Heights community can be found in the cumulative analyses for each environmental topic analyzed in **Section 5.0**, **Environmental Impact Analysis**, of this EIR.

Removal of an Impediment to Growth

Growth in an area may result from the removal of physical impediments or restrictions to growth, as well as the removal of planning impediments resulting from land use plans and policies. In this context, physical growth impediments could include nonexistent or inadequate access to an area or the lack of essential public services (e.g., water service), while planning impediments may include restrictive zoning and/or general plan designations. The Project is located in the Rowland Heights community, where, according to the Community Plan governing land use within Rowland Heights, the Urban 5 (U5) land use designation allows up to 35 dwelling units per gross acre, which is the maximum allowable residential density in Rowland Heights.

Physical Growth Impediments

The Project area contains established commercial, institutional, recreational, retail, and residential land uses and supporting infrastructure. Potable and reclaimed water, wastewater, storm drain, and energy (electricity and natural gas) infrastructure are currently in place and serve the Project site. Construction of the proposed 775 for-lease residential units on the Project site would require some modifications, upgrades, and/or replacement of existing infrastructure on the Project site and, potentially, off site in order to support the increased land use intensity associated with the Project. Such modifications and upgrades to existing infrastructure are discussed in the pertinent sections of this EIR, including **Section 5.2, Hydrology, Drainage, and Water Quality**; **Section 5.8, Sewage Disposal;** and **Section 5.12, Utilities**. However, all infrastructure upgrades needed for Project implementation would be designed to accommodate the uses proposed by the Project only. On-site service lines would be sized to meet the demands of the proposed Project and off-site infrastructure improvements would be defined by the County of Los Angeles (wastewater conveyance), Walnut Valley Water District (water supply), and service providers (Southern California Edison, the Gas Company, etc) based on the proposed Project and known related projects or already-planned growth in the proposed Project area. Accordingly, any necessary infrastructure improvements, therefore, would accommodate the Project under construction, not induce new projects. Therefore, the Project is not expected to remove physical growth impediments and induce growth beyond the Project site. In addition, the Project would not require any major upgrade of existing or development of new facilities, such as wastewater treatment plants, landfills, or power plants, and thus would not create additional utilities that would allow for more construction or development to take place in the Rowland Heights community.

An established infrastructure and transportation network does exist in the area that offers local and regional access to the Project site, since it is located within a developed area of Rowland Heights that is well served by existing roadways and other regional infrastructure. The existing regional infrastructure

and the established roadway network generally are sufficient to serve the Project's projected residential population, and the Project area is supported by sufficient public services.

Existing roadways that provide access to the Project site include Brea Canyon Cutoff Road and Colima Road, and the site is located in close proximity to the Pomona (State Route 60) and Orange (State Route 57) freeways. As discussed in **Section 5.7, Traffic, Parking, Circulation, and Access**, of this Draft EIR, the existing roadways and intersections can accommodate anticipated Project-related traffic, with Project impacts mitigable at the four potentially significantly affected intersections in the study area evaluated in the analysis of traffic impacts, and no new roads would be constructed as part of the Project. Parking for all Project residents and guests would be provided on the Project site itself. The Project area is also well served by various public transportation means, including city and commuter buses and a nearby Metrolink commuter rail station. As such, on-site improvements to the Project site, proposed off-site improvements, and proposed Project mitigation measures would not necessarily remove physical impediments to growth or induce growth within the area. That is, the Project would not result in substantial infrastructure growth that would in turn facilitate additional development in the Rowland Heights community.

Planning Impediments

The Project proposes a General Plan Amendment to the Community Plan that would change the current land use designation of Urban 1 (U1) to allow for higher density on the Project site. The Project Applicant is requesting a General Plan Amendment to the Rowland Heights Community General Plan to apply the U6 designation to the site to permit a density of 36 to 50 dwelling units per gross acre. The proposed new category would only apply to the Project site based on compliance with specific criteria related to the property's size and location. Compliance with these specific criteria would allow greater density with minimal impacts, and thus would justify a density of up to 50 acres per unit.[1]

The proposed U6 category would not be available for other property owners in the Rowland Heights community, since the U6 category is site-specific based on the narrow site-specific criteria. As a result, no other property owners in Rowland Heights would be able to obtain density beyond the maximum currently allowed in the Rowland Heights Community General Plan (35 units per acre), and any changes

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1 The Project site and proposed Project meet the following criteria: the Project is a large parcel of approximately 15.7 acres, providing a rare opportunity for infill development nearby neighborhood serving commercial uses. As recognized in the County Housing element, which noted the difficulty in assembling large parcels of land for infill development, such a large parcel available for infill development presents a unique opportunity for smart growth development. The Project site is also within 200 feet of commercial/retail uses situated at the corner of Brea Canyon Cutoff Road and Colima Road intersection, is situated within 0.25 miles from bus stops along Colima Road, is approximately 2.5 miles of a Metrolink Station, and is situated 0.75 miles south of the Pomona Freeway (SR-60). The Project site also is situated on a four-lane roadway (Brea Canyon Cutoff Road,) which has a turn lane and right-of-way totaling approximately 80 feet in width, and this four-lane roadway buffers the Project site from the closest single-family residences.

in density for other properties would require a discretionary approval. The specific criteria would include the following:

U6 [Urban 6]

- 36 to 50 dwelling units per gross acre
- 15-acre minimum lot size
- Situated on a minimum four-lane roadway with a minimum 80-foot right-of-way
- Located within 250 feet of neighborhood serving commercial/retail uses
- Located within 0.25 mile of a public transit stop
- Located within 0.75 mile of a freeway
- Not adjoining single-family residences
- Urban high-density residential apartments
- Assessor Parcel Numbers 8764-001-131 and 8764-001-132

Given that the U6 land use designation is site-specific criteria, the General Plan Amendment would not result in the removal of planning impediments for the Rowland Heights community.

Summary

The design and construction of internal Project circulation and access, and the provision of water, solid waste, electrical, natural gas, and wastewater infrastructure needed to accommodate the Project would not necessarily remove impediments to, or induce, growth within the few undeveloped areas surrounding the Project area. Although Project entitlements sought include a new zoning designation and the creation of a new site-specific land use designation within the Community Plan to allow for the construction of up to 50 residential dwelling units per acre, the County would still maintain full jurisdiction and control over which other properties, if any, would be allowed to receive a General Plan Amendment. Further, since the U6 category is site-specific based on narrow site-specific criteria, it would not be generally available for other property owners in the Rowland Heights community. As previously stated, no other property owners in Rowland Heights would be able to obtain density beyond the maximum currently allowed in the Rowland Heights Community General Plan (35 units per acre), and any changes in density for other properties would require a discretionary process. Moreover, any property owner seeking a General Plan Amendment would be subject to any conditions imposed by the

County, would have to undergo a complete environmental analysis, and would be required to mitigate any significant impacts.

Economic Growth

The proposed Project includes the development of 775 for-lease residential units within the relatively small U.S. Census Tract 4033.04 (5,474 residents and a housing supply of 1,675 units).[2] Based on an average household size of 2.76 persons per unit within this Census Tract, the Project would provide housing for approximately 2,139 residents.

The population increase from the Project would account for approximately 8 percent of the expected increase from 2005 to 2010 (the data for the closest year to Project buildout) in the unincorporated SGVCOG subregion population. In addition, the housing increase from the Project would account for approximately 11.7 percent of the expected increase from 2005 to 2010 in households (6,613 households). Both increases are within the 2010 unincorporated SGVCOG subregion projections of 389,267 residents and 105,914 households and thus account for a minor amount of the total increase in the unincorporated SGVCOG subregion. The Project would provide housing to accommodate a portion of the expected population growth in the unincorporated subregion. For this reason, the Project is consistent with growth projections and would not directly induce population growth that is substantially higher than expected population growth in the area. Therefore, impacts would be less than significant.

The Project would also help accommodate the existing need for 23,862 above-moderate-income housing units within Los Angeles County, as discussed in **Section 5.16, Population, Housing, and Employment,** of this Draft EIR. Due to the population growth, the proposed Project also would be expected to generate increased demand for goods and services. This demand would be met through existing retail services and dining opportunities in the Project site vicinity. Surrounding urban uses would also partially accommodate the additional demand of increased goods and services generated by the proposed Project.

Future residents of the proposed Project would constitute an incremental increase in the local labor force. Given the location of the Project site, it is expected that the residents seeking employment within the County and in neighboring communities could primarily be absorbed by the existing employment opportunities in the Project area. According to the San Gabriel Valley Economic Partnership, there currently are more than 600,000 jobs in the San Gabriel Valley. The Los Angeles County Economic Development Corporation's 2007–2008 Economic Overview and Forecast reports that Rowland Heights alone is home to over 2,022 business establishments and the San Gabriel Valley as a whole housed over

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2 US Census Bureau, "2000 Census, Quick Tables - American Fact Finder for Census Tract 4033.04, Los Angeles County, California," http://factfinder.census.gov. 2008.

42,416 businesses in 2005. In addition, several large companies and corporations are also housed in nearby cities such as City of Industry, Diamond Bar, Pomona, and Brea.

Precedent-Setting Action

Changes associated with a given project that could be considered precedent-setting include (among others) a change in zoning, General Plan designation, General Plan text, or approval of exceptions to regulations that could have implications for other properties or that could make it easier for other properties to develop.

The Project site is located within the County of Los Angeles and in the Rowland Heights community. As discussed above, according to the Rowland Heights Community General Plan the Project site is currently zoned A-1 and has a land use designation of Urban 1. Under the General Plan, the maximum allowable buildout of a site within Rowland Heights is Urban 5 (U5), which allows a maximum density of 35 units per acre. The proposed Project involves the construction of approximately 50 units per acre. As such, a General Plan Amendment would be required in order to implement the Project as proposed. As discussed above, the Project Applicant is requesting a General Plan Amendment to the Rowland Heights Community General Plan to apply the U6 designation to the site to permit a density of 36 to 50 dwelling units per gross acre. The proposed new category would only apply to the Project site based on compliance with specific criteria related to property size and location. Compliance with these specific criteria would allow greater density with minimal impacts, and thus would justify a density of up to 50 acres per unit.[3] The proposed U6 category would not be available for other property owners in the Rowland Heights community, as the U6 category is site-specific based on the narrow site-specific criteria. As a result, no other property owners in Rowland Heights would be able to obtain density beyond the maximum currently allowed in the Rowland Heights Community General Plan (35 units per acre), and any changes in density for other properties would require a discretionary process.

In order to qualify for increased density at other properties in Rowland Heights, property owners would need to request a General Plan Amendment and the County would have to approve such a change in density based on good planning principles. That is, creating a new site-specific land use category that would allow for increased density in the Rowland Heights community would not automatically provide

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[3] The Project site and proposed Project meet the following criteria: the Project is a large parcel of approximately 15.7 acres, providing a rare opportunity for infill development nearby neighborhood serving commercial uses. As recognized in the County Housing element, which noted the difficulty in assembling large parcels of land for infill development, such a large parcel available for infill development presents a unique opportunity for smart growth development. The Project site is also within 200 feet of commercial/retail uses situated at the corner of Brea Canyon Cutoff Road and Colima Road intersection, is situated within 0.25 miles from bus stops along Colima Road, is approximately 2.5 miles of a Metrolink Station, and is situated 0.75 miles south of the Pomona Freeway (SR-60). The Project site also is situated on a four-lane roadway (Brea Canyon Cutoff Road) which has a turn lane and right-of-way totaling approximately 80 feet in width, and this four-lane roadway buffers the Project site from the closest single-family residences.

any property owner a right to increase density, especially since the proposed U6 category would be site-specific. The County would still maintain full jurisdiction and control over which properties, if any, would be allowed to receive a General Plan Amendment. Further, any property owner seeking such a General Plan Amendment would be subject to conditions imposed by the County, would have to undergo a complete environmental analysis, and would be required to mitigate any significant impacts to less than significant with feasible mitigation measures. Such controls would ensure that any potential growth occurs in a controlled and regulated fashion.

Because a new General Plan designation would be created and applied only to the Project site, and because discretionary approvals are needed, approval and implementation of the Project on the proposed site and within the Rowland Heights community does not have the potential to be precedent setting. Further, the County would still maintain full jurisdiction and control over which properties, if any, would be approved for a General Plan Amendment, and any property owner seeking such an amendment would be subject to conditions imposed by the County, undergo the appropriate environmental analysis, and mitigate any significant impacts.

Development of or Encroachment on Isolated Open Space

Development can be considered growth-inducing when it is not contiguous to existing urban development and "leaps" over open space areas. The proposed Project site is currently developed with the Southlands Christian Church and Southlands Christian Schools and is located in an urbanized area of Rowland Heights; as such, Project implementation would constitute an urban redevelopment and infill project. Presently, commercial, institutional, recreational, retail, and residential land uses surround the Project site on all sides. While implementation of the proposed Project would extend this existing pattern of development, it would not "leap frog" over any undeveloped areas or introduce development into an area which has not been previously developed. Therefore, this Project does not have the potential to result in growth-inducement through the development of, or encroachment into, isolated or open space areas.

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