3.6.5 MITIGATION PROGRAM

Project Design Features

No project design features have been identified.

Standard Conditions and Requirements

There are no applicable standard City requirements.

Mitigation Measures

MM 3.6-1 Prior to the issuance of grading permits, the Applicant shall retain a qualified Archaeologist to monitor grading and excavation activities. The Archaeologist shall be present at the pre-grade conference and shall submit to the City of Fullerton for review and approval, a written plan with procedures for archaeological resources monitoring. This plan shall include procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the resources as appropriate. If the archaeological resources are found to be significant, the Archaeologist will determine appropriate actions—in cooperation with the City of Fullerton—for preservation or data recovery. The Archaeologist shall prepare any excavated material to the point of identification. Following the completion of evaluation and data recovery, the Archaeologist shall prepare a report detailing the results of the program to be presented to the City of Fullerton Community Development Department for approval. The report shall follow guidelines of the California Office of Historic Preservation (1990). Excavated finds shall be offered for curatorial purposes to the City of Fullerton, or its designee, on a first refusal basis. Curation of recovered materials at a facility meeting the standards set forth in 36 CFR 79 shall be mandated.

MM 3.6-2 Prior to issuance of a grading permit, the Applicant shall submit a Paleontology Monitoring Plan, prepared by an Orange County-certified Paleontologist to the City of Fullerton that ensures that the following actions are implemented:

a. Paleontologic monitoring shall be conducted as determined necessary by the Orange County-certified Paleontologist during grading and other excavation work. Recommended hours for monitoring activities shall be established by the Orange County-certified Paleontologist and shall be outlined in the monitoring plan. It shall be the responsibility of the Orange County-certified Paleontologist to demonstrate, to the satisfaction of the City, the appropriate level of monitoring necessary based on the tentative map level grading plans, when available. Because of the potential for producing small fragments of vertebrate microfossils, periodic screening of sands from cuts in these units will be done by the Orange County-certified Paleontologist. Such material may be removed in bulk and screened off site to minimize interference with grading operations.

b. Any paleontological work at the site shall be conducted under the direction of an Orange County-certified Paleontologist.

c. If a fossil discovery occurs during grading operations when an Orange County-certified Paleontologist is not present, grading shall be diverted around the area until the Monitor can survey the area.

d. Any fossils recovered during the development, along with their contextual stratigraphic data, shall be donated to the County of Orange, or other appropriate institution with an educational and research interest in the materials. A final report detailing findings and disposition of specimens shall be submitted to the Community Development Department.

MM 3.6-3 If human remains are encountered during ground-disturbing activities, *State Health and Safety Code,* §7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition of the materials pursuant to *Public Resources Code* §5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC). The NAHC will determine and notify a Most Likely Descendent (MLD). With the permission of the Landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD must complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

3.6.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Potentially significant impacts to cultural resources (archaeological and paleontological) would be reduced to a level considered less than significant with implementation of MMs 3.6-1, 3.6-2, and 3.6-3. No impacts to historic resources have been identified.

3.7 POPULATION, HOUSING, AND EMPLOYMENT

3.7.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

Local and Regional Population, Housing, and Employment

The project area's demographics are best examined in the context of existing and projected population for the Orange County region and the City of Fullerton. Information on population, housing, and employment for the project area is available from several sources, including U.S. Census data and Orange County Projections, among others.

U.S. Census Data

The United States Bureau of the Census publishes population, housing, and employment data gathered through the decennial census. This data provides a record of historic growth rates in Orange County and the city. Table 3.7-1 presents Orange County's population, housing, and employment growth since 1990. Table 3.7-2 presents Fullerton's population, housing, and employment growth since 1990.

TABLE 3.7-1
ORANGE COUNTY POPULATION, HOUSING, AND EMPLOYMENT: 1990–2005

	1990	2000	2005
Population	2,410,556	2,846,289	3,059,950[a]
Housing Units	875,072	969,484	1,014,331[a]
Employment	1,806,597	2,153,952	1,615,936[a]

[a] OCP-2006

Source: U.S. Census Bureau 2006.

TABLE 3.7-2
CITY OF FULLERTON POPULATION, HOUSING, AND EMPLOYMENT: 1990–2005

	1990	2000	2005
Population	114,144	126,003	135,339[a]
Housing Units	42,956	44,771	46,693[a]
Employment	87,796	97,722	67,489[a]

[a] OCP-2006

Source: U.S. Census Bureau 2006.

Orange County Projections

The Center for Demographic Research at California State University, Fullerton provides projections of the population, housing, and employment numbers for Orange County. The data, compiled into a publication called the Orange County Projections, is periodically updated. The Orange County Projections 2006 (OCP-2006) was approved by the Orange County Council of Governments (OCCOG) on November 30, 2006 (CDR 2007). The OCP-2006 represents the tenth in a series of projections dating back to 1978. The OCP-2006 was developed as a collaborative process involving Orange County cities, the County of Orange, and the Southern California Association of Governments (SCAG).

Table 3.7-3 presents projections for Orange County and Fullerton based on OCP-2006 projections. The projections cover a period of 32 years, extending from the base year of 2003 to a horizon year of 2035. As indicated, both the county and the city are forecasted to continue to increase in population, housing, and employment.

TABLE 3.7-3
OCP-2006 PROJECTIONS FOR ORANGE COUNTY AND CITY OF FULLERTON: 2003–2035

	2003	2005	2010	2015	2020	2025	2030	2035
Total Population								
County	2,999,319	3,059,950	3,314,948	3,451,757	3,533,935	3,586,285	3,629,540	3,653,988
Fullerton	133,198	135,339	142,939	146,194	148,862	150,411	152,495	153,397
Total Housing Units								
County	997,614	1,014,331	1,073,751	1,106,607	1,122,905	1,136,564	1,144,314	1,151,587
Fullerton	46,218	46,693	48,062	48,728	48,889	49,088	49,519	49,779
Total Employment								
County	1,568,407	1,615,936	1,755,167	1,837,771	1,897,352	1,933,058	1,960,633	1,981,901
Fullerton	68,507	67,489	73,016	73,821	75,385	75,774	76,499	76,628

Source: CDR 2007.

Population: Historic Trends, Existing Population, and Current Projections

Orange County Population

Since 1990, the County of Orange has experienced positive growth. Between 1990 and 2005, the population has increased by approximately 649,394 persons (U.S. Census Bureau 2006). The population increased to an average of 42,732 annually between 2000 and 2005 (U.S. Census Bureau 2006). According to OCP-2006 projections, Orange County's population is projected to grow by an average of 19,800 persons per year between 2005 and 2035. The OCP-2006 projects that the rate of population growth within the County will decline over time from an annual rate of 1.5 percent during 2005 to 2010 to approximately 0.6 percent during 2010 to 2020. The final full decade of projections, 2020 to 2030, will decrease to approximately 0.3 percent, decreasing 0.13 percent from 2030 to 2035. While these projections indicate a declining rate of population growth in the County over the next 30 years, population would continue to increase as a result of a continuing increase in the population base.

City of Fullerton Population

The City of Fullerton's population increased an average of 1,186 persons per year between 1990 and 2000 and 1,867 persons per year between 2000 and 2005 (U.S. Census Bureau 2006). OCP-2006 projections indicate that Fullerton's population will experience an average increase of approximately 602 persons per year between 2005 and 2035 for a total population increase of approximately 18,058 for the same time period.

Project Site Population

The project site includes 2 apartment complexes with a total of 79 residential units occupied by a mix of student and non-student residents. Using an estimate of 2.37 persons per dwelling unit for residential development in Area 4, Northeast Fullerton (Fullerton 1997, Table H-10), the project site has 187 existing residents.

Housing: Historic Trends, Existing Housing, and Current Projections

Orange County Housing

Although the number of housing units within Orange County has historically experienced positive growth, the rate of housing increases has been less than population increases. Specifically, the number of housing units within the County increased approximately 1 percent annually with an average of 9,441 units annually between 1990 and 2000 (U.S. Census Bureau 2006). Between 2000 and 2005, the housing stock increased by an average of 8,969 units per year (U.S. Census Bureau 2006).

According to OCP-2006 projections, approximately 154,000 new housing units are forecasted to be added to the existing housing stock within Orange County from 2003 to 2035. The projected increase would add approximately 4,812 units per year on average during this same time period.

City of Fullerton Housing

During 1990s, the City's housing increased at an annual average rate of 182 units (U.S. Census Bureau 2006). Between 2000 and 2005, the number of housing units increased by an average of 384 units per year (U.S. Census Bureau 2006). According to OCP-2006, this rate of housing growth is forecasted to increase to an average annual increase of 111 units between 2003 and 2035 (totaling approximately 3,561 units between 2003 and 2035).

In 2000, Fullerton's housing stock represented approximately 4.6 percent of Orange County's total dwelling units (U.S. Census Bureau 2006). In 2030, the City's share of housing units is forecasted at approximately 4.3 percent of the County total (CDR 2007).

The City's Housing Element was adopted in December 2001, and contains an analysis of existing and projected housing needs and goals, policies, quantified objectives, and scheduled programs to meet those needs. Based on the information presented in the 2001 Fullerton Housing Element, SCAG's *1998–2005 Regional Housing Needs Assessment* identified a need for 1,706 residential units in the City between 1998 and 2005 (SCAG 2000a). SCAG's 2006–2014 Draft RHNA indicates that Fullerton currently needs 1,910 housing units (SCAG 2007a).

Project Site Housing

As previously noted, the project site has 2 apartment complexes with a total of 79 residential units occupied by a mix of approximately 187 student and non-student residents.

Employment: Historic Trends, Existing Employment, and Current Projections

Orange County Employment

From 1990 to 2000, employment within the County increased by approximately 1.6 percent annually, adding an average of 34,736 jobs annually (U.S. Census Bureau 2006). Between 2000 and 2005, employment decreased by an average of 107,603 jobs annually with an approximate decrease of 25 percent over the 5-year time period. OCP-2006 projects that between 2003 and 2035; employment will increase by an average of approximately 12,922 jobs per year totaling 413,494 over the same period.

City of Fullerton Employment

Fullerton has experienced a slow down of new jobs resulting, in part, to closure of two large industrial facilities. The City's 2001 Housing Element states that over 25 percent of employed residents work within the City. During the 1990s, the City's jobs experienced an average annual increase of approximately 993 jobs (U.S. Census Bureau 2006). Between 2000 and 2005, the City experienced a reduction in employment (U.S. Census Bureau 2006). Between 2003 and 2035, OCP-2006 projects a gain of 8,121 additional jobs and an annual average rate of 254 jobs (CDR 2007).

Project Site Employment

The project site currently includes 103,515 square feet (sf) of office space used by various office tenants, the largest being Hope International University. The remaining office space is occupied by various tenants in small individual offices. There are approximately 211 employees in the three buildings.

Related Planning Programs

The following adopted projections, plans, and policies address the future of this area and provide benchmarks for evaluating the potential population, housing, and employment effects of the proposed project. Determination of the proposed project's impacts would be based on a combination of these factors.

State of California Fair Share Housing Requirements

California housing law calls upon local jurisdictions to provide their fair share of very-low, low, and moderate income housing. In implementing this law, the California Department of Housing and Community Development (HCD) assigns fair share housing targets to each jurisdiction, and requires local General Plan Housing Elements to address how these fair share housing targets can be achieved during a five-year timeframe given local demographics, land use, and zoning. State law requires local jurisdictions to submit Housing Elements for HCD review and approval. New targets are set for subsequent five-year increments. As such, the 2006–2014 Draft RHNA targets have been used in this EIR analysis.

Regional Growth Management Policies

The SCAG is recognized by the State and federal agencies as the regional planning agency for the six-county south coast region that includes Orange County. SCAG adopted a package of advisory growth policies in its 1995 Regional Comprehensive Plan and Guide (RCPG). The policies aim to better coordinate infrastructure development with projected population, housing, and employment growth. In its efforts to develop a regional transportation network that maximizes access and mobility, minimizes congestion, and protects the quality of life, SCAG focuses particular attention on the relationship between jobs and housing.

SCAG policies encourage local jurisdictions to balance job and housing opportunities. SCAG policies also encourage job growth to be concentrated near transit services and transit nodes and near existing freeways and toll roads in order to reduce vehicle miles traveled (VMT), traffic congestion, and the resulting air pollution. RCPG jobs and housing growth policies relevant to the proposed project are identified later in this section (please see Table 3.7-4) with an analysis of the proposed project's consistency with it.

Orange County Projections

In February 2007, OCP-2006 was adopted as an update to and replacement of OCP-2004. The OCP-2006 was prepared to reflect population, housing, and employment statistics at the jurisdiction, regional statistical area, community analysis area, and census tract levels. OCP-2006 provides the best available estimate of existing demographics and projection of anticipated growth in Orange County. The information presented is based on information about growth trends, development, and local land use provided by Orange County jurisdictions and public agencies, utility and service providers, and the private sector.

The City of Fullerton General Plan

The *City of Fullerton General Plan* was adopted in 1997 and has subsequently been revised to reflect adopted General Plan Amendments. The General Plan is the long-range guide for growth and development in the City. Each element of the Fullerton General Plan contains goals, policies and implementation programs that are designed to guide the various aspects of future land use, development, and revitalization decisions. Two components of the General Plan—the Housing Element and the Land Use Element—are particularly relevant to assessing the potential growth impacts of the proposed project.

Housing Element: The City's Housing Element contains an analysis of existing and projected housing needs and goals, policies, quantified objectives, and scheduled programs to meet those needs as described above in "Environmental Setting/Existing Conditions." Housing Element policies relevant to the proposed project address the need for additional housing opportunities to meet continued demand (refer to Table 3.7-4).

Land Use Element: The Land Use Element presents the City's land use designations. In addition, this Element contains goals and policies aimed at providing compatible and balanced land uses within the city. Land Use Element Goal LU-2 and supporting Policies LU-2.1 and LU-2.6 address these issues. These policies are identified in Table 3.7-4 with a discussion of the proposed project's consistency with it.

3.7.2 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are based on the City's Initial Study Checklist. The proposed project would result in a significant impact related to population and housing if it would:

Threshold 3.7.1 Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure).

Threshold 3.7.2 Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

Threshold 3.7.3 Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Threshold 3.7.4 Conflict with applicable plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigation an environmental effect.

3.7.3 ENVIRONMENTAL IMPACTS

Methodology

The project was analyzed for consistency with the *City of Fullerton General Plan*, the City's 2001 Housing Element, and SCAG's regional projections for population, housing, and employment.

Impact Analysis

Threshold 3.7.1: Would the proposed project induce substantial population growth in the area, either directly (for example by proposing new homes and businesses) or indirectly (for example through extension of roads or other infrastructure)?

The project site is located in an urbanized area in the eastern portion of the City with existing residential and office uses on the site. The proposed project would not require the extension of roads or other infrastructure into undeveloped portions of the City and would not induce growth beyond that already planned in the region.

The proposed project is proximate to five higher education schools and universities within a two-mile radius of the project site: California State University, Fullerton; Hope International University; the Southern California School of Optometry; Fullerton College; and Western State School of Law. The majority of the surrounding land uses are those that cater to or support the academic environment including office, retail, and restaurant uses.

By providing increased housing opportunities close to existing educational institutions, employment opportunities and transportation facilities, the proposed project responds to General Plan Housing and Land Use goals and policies that seek to balance housing and job opportunities, thus addressing local and regional policies aimed at matching housing and job opportunities and reducing trips and associated emissions.

The proposed project would be consistent with the Fullerton Housing Element's ongoing effort to increase housing production in order to meet its fair share of regional housing needs, as required by State law. The 375 dwelling units would fall within the OCP-2006 housing growth projections for the County of Orange from 2003 to 2035 (Table 3.7-3). In addition, the residential units proposed as part of the project would be marketed to the student population and would assist the City in meeting student housing demand in this area of Fullerton. Consequently, potential impacts related to housing are less than significant.

Using the number of beds that are proposed in the 375-unit student-oriented project, the proposed project would generate approximately 1,300 residents or a net increase of 1,113 residents. The proposed project's population growth is consistent with the population projections identified by OCP-2006 for Fullerton, which forecasts a population increase of 20,199 between 2003 and 2035. It is unlikely that all project residents would be new residents to the City; current City residents could relocate to the project site. Therefore, the project's potential contribution to population growth in Fullerton is within the adopted local and regional population growth projects provided in the City's Housing Element of the General Plan and in SCAG's RCPG, respectively. Therefore, the project impact related population would be less than significant.

The proposed project would provide limited jobs related to the commercial components of the project (retail/commercial uses). In addition, because the project would be marketed to the student population, it is assumed that the resident student population would not be employed in the

traditional sense (i.e., full-time 9:00 AM to 5:00 PM traditional work week). OCP-2006 projections show that the City of Fullerton could support an additional 8,121 jobs by 2035. The project's proposed 30,000 sf of retail/commercial development is within the adopted projected job growth for 2035. Therefore, the project's impact to employment would be less than significant.

As previously stated, there is currently a total of 103,515 sf of office space occupying the project site. Hope International University is the largest occupant of the office space; the remaining office space is occupied by various tenants in small individual offices. These businesses would be affected by the proposed project and would need to vacate the project site. According to Table LU-3 of the City's General Plan, the expected increase in general office space is 203,251 sf at General Plan buildout (Year 2025). Therefore, there is sufficient office space in the City for these businesses to relocate. The project's impact related to displaced businesses would be less than significant.

Impact 3.7.1: The provision of housing would induce population growth associated with the proposed 375 student-oriented housing units. However, the housing increase and resultant increase in population would serve to promote a balance of jobs and housing within the City and the region. In addition, the proposed project would provide additional housing opportunities in the northeastern portion of the City where student housing is in demand. Therefore, impacts related to population growth would be considered less than significant. There is sufficient office space in the City for displaced businesses to relocate. Therefore, the project's impact related to displaced businesses not be significant.

Threshold 3.7.2: ***Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?***

Threshold 3.7.3: ***Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?***

As previously stated, the 2 apartment complexes have 79 residential units with an estimated population of 187 people. The two apartment complexes would be demolished as part of the proposed project resulting in the displacement of existing residents. In 2006, the City of Fullerton had a population of approximately 136,428 (DOF 2007). The 187 residents located on the project site represent approximately 0.001 percent of the City's current population. While the project would displace these residents, the City of Fullerton is projected to add approximately 111 housing units annually between 2003 and 2035 (totaling approximately 3,561 between 2003 and 2035) including the 375 units proposed for the project site. Therefore, there are existing housing opportunities within the City to serve the displaced residents.

Impacts 3.7.2 and 3.7.3: While the proposed project would displace existing residents, the percentage based on citywide population numbers is not considered substantial. In addition, there is available housing within the City to relocate the mix of student and non-student residents of the 79 residential units elsewhere within the City. Implementation of the proposed project would not require the construction of replacement housing elsewhere in the City. Therefore, the proposed project would result in a less than significant impact.

Threshold 3.7.4: ***Would the project conflict with applicable plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigation an environmental effect?***

Table 3.7-4 provides a summary of the project's consistency with applicable goals and policies from both the City of Fullerton's General Plan and SCAG's Regional Comprehensive Plan and Guide.

TABLE 3.7-4
CONSISTENCY OF THE PROPOSED PROJECT WITH POPULATION, HOUSING, AND EMPLOYMENT-RELATED GOALS AND POLICIES

Goals and Policies	Consistency Analysis
City of Fullerton General Plan	
2001 Housing Element	
Goal H-1: A housing stock of sufficient quantity composed of a variety and range of housing types and costs that enable those citizens who work in Fullerton the opportunity to live here if they choose.	
Policy H-1.1: Encourage the development of a variety of housing types and costs, for both owners and renters, whereby the widest economic range of housing choice is available.	The proposed project includes the development of 375 student-oriented residential units that would be available as rental units. While the project does not include residential units for sale it does offer student-oriented housing in the "educational" area of the City of Fullerton. The proposed development is located proximate to educational institutions, employment opportunities, and a wide range of transportation options.
Policy H-3: Housing throughout the City, suitable and conveniently located for household having special needs, such as the elderly, students, the homeless and those of Very Low and Low Income. **Policy H-3.2:** Encourage student residential arrangement which will reduce the conflict between student and non-student populations.	The proposed project includes the development of 375 student-oriented residential units that would be available as rental units. This would assist the City in meeting its housing demand. The project site is located proximate to five higher education schools and universities within a two-mile radius of the project site, including California State University, Fullerton; Hope International University; the Southern California School of Optometry; Fullerton College; and Western State School of Law. While the project does not propose the inclusion of subsidized low or moderate-low income housing or housing for households with special needs, it would provide housing in the northeastern portion of the City where student housing is in demand.
Land Use Element	
Goal LU-2: Compatible and balanced land uses which are well maintained or revitalized, provide pleasant environments, and adequately serve present and future populations.	
Policy LU-2.1: Plan for a balanced development pattern that includes diversity in employment opportunities, goods and services, residential choices, and open spaces.	As part of the proposed project, the City of Fullerton will consider a General Plan Amendment to change the Commercial (Office) General Plan Designation to Residential (High Density) and add SPD (Specific Plan District) as a Zoning Classification consistent with a General Plan Designation of Residential (High Density). The proposed project consists of higher density residential uses and retail and commercial uses. The Jefferson Commons project would combine these uses as described in Section 2, Project Description. Consistent with this policy, the proposed project maintains a land use balance by placing student-oriented housing proximate to educational institutions, employment opportunities, and retail/commercial uses.

TABLE 3.7-4 (Continued)
CONSISTENCY OF THE PROPOSED PROJECT WITH POPULATION, HOUSING, AND EMPLOYMENT-RELATED GOALS AND POLICIES

Goals and Policies	Consistency Analysis
Policy LU-2.6: Encourage the development of multiple-family dwellings near employment opportunities, shopping areas, public parks, and transit lines.	The proposed project includes 375 multi-family residential units developed with the intention of marketing towards students attending one of the five higher education schools and universities within a two-mile radius of the project site. It is located in the northeastern area of the City of Fullerton which includes employment opportunities and commercial uses. The Fullerton Transportation Center is located approximately 2.5 miles southwest of the project site. In addition, non-vehicular modes of transportation, such as walking and biking, would be easily used to travel between the nearby universities and the project site.
SCAG Regional Comprehensive Plan and Guide	
Policy 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.	The proposed project involves the development of 375 residential units and 30,000 sf of retail/commercial uses thereby providing student-oriented housing opportunities, employment opportunities, and commercial uses. As discussed above, the OCP-2006 projections were used in the EIR analysis. The projections cover a period of 32 years, extending from the base year of 2003 to a horizon year of 2035. The OCP-2006 was developed as a collaborative process involving Orange County cities, the County of Orange, and SCAG.
Policy 3.04: Encourage local jurisdictions' efforts to achieve a balance between the types of jobs they seek to attract and housing prices.	As noted, the project would provide residential and retail uses. The multi-family residential units would be available for rent and would assist the City in meeting its housing demand. In addition, the residential units proposed as part of the project would be marketed to the student population and would assist the City in meeting student housing demand in this area.
Policy 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.	The proposed project is a student-oriented development located within two miles of five higher education institutions. The Fullerton Transportation Center is located approximately 2.5 miles southwest of the project site. Non-vehicular modes of transportation, such as walking and biking, could easily be used to travel between the universities and colleges and the project site.
Policy 3.24: Encourage efforts of local jurisdictions in the implementation of programs that increase the supply and quality of housing and provide affordable housing as evaluated in the Regional Housing Needs Assessment.	As discussed above, the residential units proposed as part of the project would be available for rent, would be marketed to students to assist the City in meeting its housing demand, and would provide needed housing proximate to universities and colleges. While the project does not propose subsidized low or moderate-low income housing, it would provide housing in the northeastern portion of the City where student housing is in demand.
SCAG Growth Vision Report	
Principle 1: Improve mobility for all residents. • Locate housing near existing jobs and new jobs near existing housing. • Encourage transportation investments and land use decisions that are mutually supportive. • Locate new housing near existing jobs and new jobs near existing housing. • Encourage transit-oriented development.	The project involves development of a mixed-use project with 375 units and limited commercial development in the form of retail uses. Due to the nature of the mixed-use development, the project would locate housing near educational opportunities and jobs. Additionally, the project site is located in an area of the City which is dominated by higher education institutions. Therefore, the provision of student-oriented housing units associated with the project would also serve to locate land uses in an

TABLE 3.7-4 (Continued)
CONSISTENCY OF THE PROPOSED PROJECT WITH POPULATION, HOUSING, AND EMPLOYMENT-RELATED GOALS AND POLICIES

Goals and Policies	Consistency Analysis
• Promote a variety of travel choices.	area that would promote a variety of travel choices.
Principle 2: Foster livability in all communities • Promote infill development and redevelopment to revitalize existing communities. • Promote developments that provide a mix of uses. • Promote "people-scaled," pedestrian-friendly communities. • Support the preservation of stable, single-family neighborhoods.	The project proposes development of student-oriented housing with retail/commercial uses. The project design, as described in Section 3.0, would incorporate pedestrian walkways linking the different elements of the project together with surrounding land uses. Additionally, the majority of the commercial components would front East Chapman Avenue and Commonwealth Avenue providing visibility to passing motorists and pedestrians.
Principle 3: Enable prosperity for all people • Provide a variety of housing types in each community to meet the housing needs of all income levels. • Support educational opportunities that promote balanced growth. • Ensure environmental justice regardless of race, ethnicity, or income class. • Support local and state fiscal policies that encourage balanced growth. • Encourage civic engagement	Consistent with Growth Visioning Principle 3, the proposed project would provide residential units and would assist the City in meeting its housing demand. While the project is not anticipated to provide subsidized low or moderate-low income housing, it would provide housing in the northeastern portion of the City where student housing is in demand. In addition, the proposed project would support educational opportunities that promote balanced growth by providing student-oriented housing proximate to educational institutions.
Principle 4: Promote Sustainability for Future Generations • Preserve rural, agricultural, recreational, and environmentally sensitive areas. • Focus development in urban centers and existing cities. • Develop strategies to accommodate growth that use resources efficiently, eliminate pollution, and significantly reduce waste. • Utilize "green" development techniques	The proposed project would involve the reuse of approximately 6.8 acres in a highly urbanized area. SR-57 is located approximately 0.25 mile to the east of the project site. Development would be within walking and biking distance to numerous universities and colleges. The proposed project is consistent with Growth Visioning principles regarding land use and growth strategies, in that student-oriented housing adjacent to concentrated educational centers and non-vehicular transportation options would promote the sustainability.

Impact 3.7.4: The proposed project is consistent with the identified goals and policies.

3.7.4 CUMULATIVE IMPACTS

The cumulative study area for population and housing would encompass all of Orange County. The proposed project would directly increase the number of housing units within the city by an additional 296 units, resulting in a net population increase of 1,113 residents and a nominal amount of jobs related to the commercial components of the project. Although the project would result in the loss of 103,515 sf of office space on the project site, there is an expected increase in general office space in the city and the surrounding area. Therefore, there is sufficient office space for businesses to relocate. The project's impact related to displaced businesses would be less than significant. Each of the components of population, employment, and housing would be within the projections provided OCP-2006. These regional projections were compiled based on anticipated growth statistics provided by individual jurisdictions in Orange County, and the projections take into account future anticipated projects and related changes in population, housing, and employment. Therefore, this proposed project would not cause any significant

adverse cumulative growth impacts related to population, housing, and employment beyond those accounted for in the Orange County Projections.

3.7.5 MITIGATION PROGRAM

Project Design Features

No project design features have been identified.

Standard Conditions

No standard conditions are applicable.

Mitigation Measures

The proposed project would not result in significant impacts related to population, housing, or employment; therefore no mitigation measures are required.

3.7.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Based on the thresholds of significance set forth in this EIR, no significant population, housing, or employment impacts would result from implementation of the proposed project.

3.8 GEOLOGY AND SOILS

A *Preliminary Geotechnical Investigation* was prepared by Leighton and Associates, Inc. for the proposed project (2006). The preliminary geotechnical report is summarized below and is provided in its entirety in Appendix F of this EIR.

3.8.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

Regional Geology and Seismicity

The project site is in southern California, a known seismically active region. The Alquist-Priolo (AP) Earthquake Fault Zoning Act (AP Act) was adopted by the State of California in 1972 to mitigate the hazard of surface fault rupture along active faults. For the purpose of this act, the State has defined an “active” fault as having “had surface displacement during Holocene time” (i.e., during the previous 11,000 years). In accordance with the Act, the State has delineated “Earthquake Fault Zones” along “active” faults throughout the California. Based on the Geotechnical Report, the project site is not located within an Alquist-Priolo Earthquake Fault Zone and no active or potentially active faults have been mapped or are known traverse the project site.

The project site is located southeast of Coyote Hills within the northeastern Los Angles basin, a structural trough located at the juncture of the three primary physiographic provinces of coastal southern California. The Los Angeles basin formed on the margin of the Pacific plate near the San Andreas Fault in southern California. Located at the northern end of the Peninsular Ranges, it abuts the southern margin of the central Transverse Ranges. Today the basin consists of a deep central basin with marine and fluvial sediments. The Los Angeles basin forms a transition zone between the strike slip tectonics of the Peninsular Ranges and the convergent tectonics of the Transverse Ranges. Both strike-slip and compressional structures exist within this transition zone.

Subsurface Conditions

Geological mapping of the area indicates that the near-surface native soils on the project site consist of Pleistocene-age non-marine alluvium comprised of varying proportions of sand, gravel, silt, and clay deposited by fluvial systems. These deposits are anticipated to be on the order of several hundred feet in thickness, where they are subsequently underlain by a thick sequence of sedimentary rock formations. Subsurface investigation was conducted by Leighton and Associates. The results of the boring tests revealed that the near-surface soils at the project site consist of sand and silt with varying proportions of silt, clay, and gravel. Clay layers with thickness ranging from 5 to 10 feet were also encountered in some of the borings and were generally below 20 feet.

Groundwater Conditions

Groundwater was encountered in 1 of the borings at a depth of 94 feet below current ground surface corresponding to an approximate elevation of 126 feet above mean sea level (msl). The shallowest recorded groundwater depth in the project vicinity is approximately 75 to 80 feet below existing ground surface.

Regulatory Environment

Uniform Building Code/International Building Code

The UBC and the International Building Code (IBC) are "model building codes," that are developed and maintained by a standards organization independent of the jurisdiction responsible for enacting the building code. Both these codes apply to development throughout California. Since the early 1900s, the system of building regulations in the United States was based on model building codes developed by three regional model code groups. The regional model code applied to the west coast is the Uniform Building Code (UBC) and was published by the International Conference of Building Officials (ICBO). The most recent edition of the UBC was published in 1997 (referred to as the 1997 UBC). In 1994, the nation's three model code groups combined to form the International Code Council (ICC) to develop a single coordinated set of national model building codes. The resulting national model code is the IBC. The first edition was published in 1997 with a revised edition in 2000. With publication of the 2000 IBC, the three regional code groups have ceased publication of their respective codes in favor of the IBC.

Model building codes are either adopted (accepted without modifications) or adapted (modified) to a particular jurisdiction and then enforced by the adopting authority. When a jurisdiction adopts a model building code, it adopts a specific edition of the model code (for example, the 1997 UBC or the 2000 IBC). As a result of this practice, new editions of model codes are not automatically updated. Each jurisdiction reviews the new code and determines whether or not to adopt it into law.

California Building Code

The California Building Code (CBC) is promulgated under *California Code of Regulations* (CCR), Title 24, Parts 1 through 12; is also known as the California Building Standards Code; and is administered by the California Building Standards Commission (BSC). The BSC is responsible for administering California's building codes, including adopting, approving, publishing, and implementing codes and standards. The CBC is a compilation of three types of building standards from three different origins:

- Standards adopted by State agencies without change from the national model codes.
- Standards adopted and adapted from the national model code standards to meet California conditions.
- Standards authorized by the California legislature that constitute extensive additions not covered by the national model codes and adopted to address concerns particular to California.

The national model code standards adopted into Title 24 apply to all occupancies in California except for modifications adopted by State agencies and local governing bodies. The current version of the code was published in 2007.

Seismic Hazards Mapping Act of 1990

The Seismic Hazards Mapping Act (Act) of 1990 (*Public Resources Code*, Chapter 7.8, §2690–2699.6) directs the State Department of Conservation to identify and map areas subject to earthquake hazards such as liquefaction, earthquake-induced landslides, and amplified ground shaking. Passed by the State legislature after the 1989 Loma Prieta earthquake, the Act was aimed at reducing the threat to public safety and minimizing potential loss of life and property in

the event of a damaging earthquake event. A product of the resultant Seismic Hazards Mapping Program, Seismic Zone Hazard Maps are developed which identify Zones of Required Investigation; most developments designed for human occupancy within these zones must conduct site-specific geotechnical investigations to identify the hazard and develop appropriate mitigation measures prior to permitting by local jurisdictions.

Regional Planning Programs

Fullerton General Plan, Community Health & Safety Element

The *City of Fullerton General Plan*, Community Health & Safety Element addresses hazards and disasters, and sets forth the policy basis for the City's response, both in preventing damage and injuries and in responding to disasters. Applicable goals and policies from the Safety Element that are related to geology and soils are provided in Table 3.8-1 with a project consistency analysis.

3.8.2 THRESHOLDS OF SIGNIFICANCE

The criteria used to determine the significance of potential impacts to geology and soils are based on the City's Initial Study Checklist. The project would result in a significant impact related to geology and soils if it would:

Threshold 3.8.1 Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii. Strong seismic ground shaking.

iii. Seismic-related ground failure, including liquefaction

Threshold 3.8.2 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Threshold 3.8.3 Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Threshold 3.8.4 Conflict with any applicable plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

3.8.3 ENVIRONMENTAL IMPACTS

Methodology

The project's geotechnical investigation included site reconnaissance; review of published geologic and seismic data related to the project area; and review of pertinent geotechnical reports for the project site. Soil conditions were analyzed by logging and sampling six borings to depths of approximately 61 to 101 feet below existing grade, collecting representative soil

samples, and conducting relevant geotechnical engineering laboratory tests on selected samples to characterize engineering properties of the soils.

Impact Analysis

Threshold 3.8.1: ***Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:***

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

ii) Strong seismic ground shaking?

The proposed project site is located in southern California, which is considered a tectonically active area. The type and severity of earthquake hazards which may potentially impact the project site are dependent on the distance of future earthquakes from the project site, the magnitude of those earthquakes, the earth materials along the travel paths of waves generated by those events, and the properties of the soil and rock underlying the site. Potential hazards as a result of local and regional earthquakes could include primary effects (such as surface ground rupture and ground motion) or secondary effects (such as liquefaction and/or seismically induced slope failures). Because the project site is not located within a designated Alquist-Priolo Fault Zone and there are no known active or potentially actives faults on the project site, the potential for surface ground rupture at the project site is considered low.

Although there are no active faults on the site according to the Alquist-Priolo Earthquake Fault Zoning Map, Exhibit CHS-1 of the City's General Plan (Public Safety Map), indicates the "Norwalk or Related Fault" range traverses the City in an east-west direction and is located south of the project site. The Norwalk Fault is considered a potentially active fault. The primary seismic hazard for the project site, as with all of southern California, is ground shaking due to the proximity of major active faults. Known active faults capable of producing strong ground shaking at the site include, but are not limited to the Whittier-Elsinore, Newport-Inglewood (Los Angeles Basin and offshore portions), Sierra Madre/San Fernando/Santa Susana, and San Andreas. The closest active fault is the Whittier-Elsinore fault located northeast of the project site.

Implementation of the proposed project would not change the intensity of ground shaking that would occur on the project site during a seismic event. Potential impacts related to ground shaking would be reduced through compliance with State and local regulations and standards, and established engineering procedures. Future buildings and structures would be designed in accordance with the City of Fullerton Building Code and the most recent California Building Code (CBC), and would be consistent with the recommendations outlined in the Geotechnical Report prepared for the proposed project. The CBC contains provisions that regulate the design and construction of excavations, foundations, retaining walls, and other building elements to control the effects of seismic ground shaking and adverse soil conditions. Based on the geotechnical analysis, the project site is geotechnically suitable for the proposed structures based on compliance with the CBC and proper grading/design/building construction methods (as outlined in the Geotechnical Report). With implementation of SC 3.8-1 and SC 3.8-2, impacts as a result of strong seismic ground shaking at the proposed project site would be considered less than significant.

Impacts 3.8.1i and 3.8.1ii: The project site is located in a seismically active region, and people and structures could be exposed to seismic ground shaking. This potentially significant impact would be mitigated to a level considered less than significant with implementation of SC 3.8-1 and SC 3.8-2.

Threshold 3.8.1 ***Would the project expose people or structures to potential substantial adverse effect, including the risk of loss, injury, or death involving:***

iii) Seismic-related ground failure, including liquefaction?

Liquefaction is a phenomenon in which earthquake-induced cyclic stresses generate excess pore water pressure in low density (loose), saturated, sandy soils and soft silts below the water table. This causes a loss of shear strength and, in many cases, ground settlement. For liquefaction to occur three conditions must be simultaneously present: high groundwater; relatively loose, cohesionless (sandy) soil; and earthquake-generated seismic waves.

The project site has not been mapped as being in an area that is potentially susceptible to liquefaction (CDMG 1998). In addition, according to Exhibit CHS-1, Public Safety Map, of the *City of Fullerton General Plan*, the project site is not located within an area identified as being liquefiable. The historic high groundwater level at the project site is approximately 75 to 80 feet below ground surface. Groundwater was encountered in 1 of the borings at a depth of 94 feet below current ground surface, which corresponds to an approximate elevation of 126 feet above msl. Therefore, due to the absence of shallow groundwater at the project site, the liquefaction potential is considered low and would not result in adverse effects to the proposed project.

Impact 3.8.1iii: Seismic-related ground failure related to liquefaction on the project site is considered low; therefore, impacts are considered to be less than significant.

Threshold 3.8.2: ***Would the project be located in a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?***

Subsidence is defined as settlement of under-consolidated soils and occurs during earthquake shaking. Due to predominately dense nature of the soils encountered at the project site, seismically-induced settlement at the project site is not considered significant. In addition, the project site is not located in an area subject to subsidence (Fullerton 1997, Exhibit CHS-1). Liquefaction may also cause lateral spreading. For lateral spreading to occur, the liquefiable zone must be continuous, unconstrained laterally, and free to move along gently sloping ground toward an unconfined area. As discussed above, the project site is not located in an area subject to liquefaction. The potential for lateral spreading at the project site is therefore considered to be low. Additionally, the site is flat. Therefore, there is no potential impact related to landslides.

Impact 3.8.2: Seismic ground-shaking impacts resulting in subsidence and/or lateral spreading are considered less than significant.

Threshold 3.8.3: ***Would the project be located on expansive soil, as defined by Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?***

Expansive soils are materials that, when subject to a constant load, are prone to expand when exposed to water. The formational soil encountered within the upper five feet at the project site consist predominately of fine grained granular soils and typically exhibit a low expansion potential. The proposed project is expected to require 504 cubic yards (cy) of cut and 18,924 cy of fill for a net import of 18,420 cy of fill material. A majority of the fill material would be used for the retaining wall along the sidewalk fronting the residential building on East Chapman Avenue. Further soils samples would be required to determine the actual potential for soil expansion. With implementation of MM 3.8-1, impacts related to expansive soils are considered to be less than significant.

Impact 3.8.3: The impact related to location of the project on potentially expansive soils would be considered less than significant with the incorporation of MM 3.8-1.

Threshold 3.8.4: ***Would the proposed project conflict with any applicable plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?***

An EIR must discuss the consistency between the proposed project and applicable general and regional plans. As previously noted, the *City of Fullerton General Plan*, Community Health and Safety Element applies to the proposed project. Table 3.8-1, Consistency of the Proposed Project with Soils and Soils-related Goals and Policies, addresses the consistency of the project with the relevant goals and policies.

TABLE 3.8-1
CONSISTENCY OF THE PROJECT WITH GEOLOGY AND SOILS-RELATED GOALS AND POLICIES

Goals and Policies	Consistency Analysis
Community Health and Safety Element	
Goal CHS-5: A Community with maximum feasible protection from seismic hazards.	
Policy CHS-5.2: Take reasonable measures to protect the public from earthquakes through building activities.	Future buildings and structures would be designed in accordance with the City of Fullerton Building Code and the most recent CBC and would be consistent with the recommendations outlined in the Geotechnical Report prepared for the proposed project. The CBC contain provisions that regulate the design and construction excavations, foundations, retaining walls and other building elements to control the effects of seismic ground shaking and adverse soils conditions. Based on the Geotechnical Report, the project site is geotechnically suitable for the proposed structures based on compliance with the CBC and proper grading/design/building construction methods (as outlined in the Geotechnical Report).

Impact 3.8.4: As identified in Table 3.8-1, the proposed project would be considered consistent with applicable goals.

3.8.4 CUMULATIVE IMPACTS

Environmental impacts related to geology and soils are generally site specific. Therefore, although there is a cumulative impact on geologic conditions as the proposed project and the other related projects are built out, because each site would be required to comply with adopted building codes and regulations and address any unique site specific conditions, when considered together the cumulative impacts are considered less than significant. While geotechnical impacts may be associated with other developments in the City of Fullerton, by the very nature of the impacts (e.g., unstable soil units, expansive soils, seismic hazards), the constraints are site specific and need to be addressed on a project-specific basis. The proposed project, as well as other development projects, would be required to comply with the applicable State and local requirements including, but not limited to, the CBC and the City of Fullerton Municipal Code. As such, project-specific impacts, as well as the potential impacts associated with other projects, would be reduced to a less than significant level. Seismic impacts are a regional issue and are also addressed through compliance with applicable codes and design standards. Therefore, the project's contribution to cumulative geotechnical and soils impacts is less than significant.

3.8.5 MITIGATION PROGRAM

Project Design Features

No project design features have been identified.

Standard Conditions and Requirements

SC 3.8-1 Design, grading, and building construction methods shall comply with all recommendations of the Geotechnical Report prepared by Leighton and Associates, Inc. The Geotechnical Report identifies the geotechnical review required to be implemented prior to site development, and requires that any identified measures be implemented. Grading Plans shall incorporate recommendations of the Geologic and Soils Engineering Reports and shall be reviewed and approved by the preparer of the reports prior to verification of the City of Fullerton Building Official.

SC 3.8-2 Prior to the issuance of a building permit, the Soils Engineer and Engineering Geologist must certify the suitability of the graded site, as required in the *City of Fullerton Building Code* (Title 14, Buildings and Construction). Future buildings and structures shall be designed in accordance with the City of Fullerton Building Code and the most recent California Building Code. Compliance with this measure shall be verified by the City of Fullerton Building Official.

Mitigation Measures

MM 3.8-1 Subsequent to rough grading and prior to excavation of foundations and other concrete work, the Applicant shall be responsible for soil testing by a registered Professional Geotechnical Engineer to determine soil expansiveness. Any unstable soils on the project site shall be removed and recompacted in accordance with the California Building Code. Compliance with this measure shall be verified by the City of Fullerton Building Official.

3.8.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of SC 3.8-1, SC 3.8-2, and MM 3.8-1 would reduce impacts to a level considered less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

A *Phase I Environmental Site Assessment* (ESA) was prepared by Qore, Inc. (2006) and a *Limited Asbestos Identification Survey Report* (2006) was prepared by CITY Services, Inc. for the proposed project. These assessments are summarized below and are provided in Appendix G of this document. The appendices to the Phase I ESA are on file and available for review at the City of Fullerton, Community Development Department.

3.9.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

Hazardous Materials

Hazardous materials generally include petroleum products (including oil and gasoline), automotive fluids (antifreeze, hydraulic fluid), paint, cleaners (dry cleaning solvents, cleaning fluids), and pesticides from agricultural uses (if in significant concentrations). Byproducts generated as a result of activities using hazardous materials (such as dry cleaning solvents, oil, and gasoline) are considered hazardous waste. Contamination usually takes the form of a hazardous materials or waste spill into soil. Such contamination can penetrate soils into the groundwater table, resulting in the pollution of a local water supply. Commercial uses, particularly those using underground storage tanks (USTs), commonly create such contamination. With the remediation techniques currently in practice, soil contamination typically does not pose a serious health risk, unlike groundwater contamination.

Recognized environmental conditions (RECs) are defined as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or a materials threat of a release of hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

Asbestos-containing Materials (ACMs)

Asbestos, a naturally occurring fibrous material, was used for years in many building materials for its fire-proofing and insulating properties, and could potentially occur in the apartment complexes and office buildings on the site. In general, buildings constructed prior to 1980 have the potential for Asbestos-containing Materials (ACMs). Asbestos is a known human carcinogen and there is no known threshold level of exposure at which adverse health effects are not anticipated (SCAQMD 2005). Given this, the U.S. Environmental Protection Agency (USEPA) has identified asbestos as a hazardous air pollutant pursuant to Section 12 of the Federal Clean Air Act. Further, the California Air Resources Board (CARB) has identified asbestos as a Toxic Air Contaminant (TAC) pursuant to the California *Health and Safety Code* (§39650 et seq.). Asbestos is also regulated as a potential worker safety hazard under the authority of the California Occupational Safety and Health Administration (CalOSHA). These rules and regulations: (1) prohibit emissions of asbestos from asbestos-related demolition or construction activities; (2) require medical examinations and monitoring of employees engaged in activities that could disturb asbestos; (3) specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers; and (4) require notice to federal and local government agencies prior to any renovation or demolition activities that could disturb asbestos.

Lead-based Paint

Lead is a naturally occurring metallic element. Among its numerous uses and sources, lead can be found in paint, water pipes, solder in plumbing systems, soils around buildings, and structures painted with lead-based paint. In 1978, the federal government required the reduction

of lead in house paint to less than 0.06 percent (600 parts per million). However, some paints manufactured after 1978 for industrial uses or marine uses legally contain more than 0.06 percent lead. Because of its toxic properties, lead is regulated as a hazardous material. Inorganic lead is also regulated as a toxic air contaminant.

In California, asbestos and lead abatement must be performed and monitored by contractors with appropriate certifications from the California Department of Health Services (DHS). In addition, CalOSHA has regulations concerning the use and management of such hazardous materials. CalOSHA enforces the hazard communication program regulations. All demolition that could result in the release of lead and asbestos must be conducted according to CalOSHA standards. These standards have been developed to protect the general population and construction workers from hazards associated with exposure to these materials.

Polychlorinated Biphenyls (PCBs)

Polychlorinated biphenyls (PCBs) are mixtures of up to 209 individual chlorinated compounds (known as congeners). There are no known natural sources of PCBs. PCBs are either oily liquids or solids that are colorless to light yellow. Some PCBs can exist as a vapor in air. PCBs have no known smell or taste.

PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they do not burn easily and are good insulators. The manufacture of PCBs was stopped in the U.S. in 1977 because of evidence that PCBs build up in the environment and can cause harmful health effects. Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures, electrical devices containing PCB capacitors, and old microscope and hydraulic oils.

Radon

Radon is a naturally occurring inert, colorless, odorless, radioactive gas that is derived from the decay of radium (R^{226}). Radium occurs in geologic formations containing uranium, granite, shale, phosphate, or pitchblende and was commercially used in luminescent products. Radium decays into reactive, radioactive daughter particles that attach themselves to other particles such as dust and are a lung cancer risk. Radon can move through permeable rocks and soils and can eventually seep into buildings. The movement of radon into buildings is controlled largely by the soil permeability under a foundation and access to the interior of buildings through openings in the foundation.

According to the USEPA, Orange County is located in Radon Zone 3. Zone 3 counties have a predicted average indoor radon screening level of less than 2 pico Curies per liter of air (pCi/L). This indicates that there is a low potential for elevated indoor radon levels (USEPA 2007). Given the low risk level and that the site is currently occupied by typical office and residential tenants; no radon testing was performed.

Current Uses of the Project Site

The project site is approximately 6.8 acres and contains 3 office buildings (Terraces West, Terraces East, and Terraces Center) and 2 apartment complexes (College Place and Commonwealth Apartments). The Terraces West office building was constructed in 1963, Terraces East in 1964, and Terraces Center in 1967.

Based on a site reconnaissance conducted as part of the Phase I ESA, there is no evidence of existing or previously existing aboveground storage tanks (ASTs) or USTs on the project site. The project site was not identified on the State or federal databases for facilities with ASTs or

USTs. No evidence of concern related to the storage or handling of hazardous substances was observed.

Due to the age of the buildings, it was suspected that building materials found (i.e., flooring materials, mastics, sealants, finish textures, ceiling tiles, non-fiberglass thermal and other insulation roofing components and fireproofing materials) may contain asbestos. Lead may also be present on the project site in the form of lead-based paints and lead plumbing fixtures and pipes. As such, a limited asbestos survey was conducted at the office buildings and apartment complexes. A lead-based paint investigation was conducted at the apartment complexes.

Asbestos-containing Materials (ACMs)

Asbestos surveys were conducted at the office buildings and apartment complexes. A limited asbestos survey was conducted as part of the Phase I ESA on April 25, 2006. This survey consisted of a walk through of limited building areas, and the collection and analysis of 116 samples of suspect ACMs. These samples consist of wall and ceiling systems, floor tile and floor tile mastic, spray-applied fire proofing, ceiling tiles, and pipe insulation. Laboratory analysis of the sampled suspect building materials confirmed the presence of ACMs in 48 of the 116 samples collected. The laboratory results can be found in the Phase I ESA in Appendix G of this document.

A second asbestos survey of 14 small structures' heating, ventilation, and air conditioning (HVAC) filters was conducted by CITY Services on August 1, 2006, for ACMs, presumed ACMs (PACMs), and asbestos-containing construction materials (ACCMs). This survey was limited to interior/exterior walls, insulation on interior walls, and caulking material around doors of the 14 small structures. ACCMs were discovered on the stucco on the exterior walls of the HVAC filters. No friable[1] or nonfriable[2] ACMs were discovered at the tested sites. In addition, the caulking, insulation, and felt material on the interior walls were confirmed not to contain asbestos (Appendix G).

Lead-based Paint

As part of the Phase I ESA, a lead-based paint inspection was conducted on June 13, 2006. The survey included assessment of nine apartment units and the building exteriors at the College Place and Commonwealth Apartments. Lead in amounts greater than or equal to 1.0 milligrams per centimeter (mg/cm) were found as a result of the lead-based paint screening. At that level, painted surfaces are considered positive for lead-containing materials. Some of these painted surfaces may contain concentrations of lead between 0.1 and 1.0 mg/cm, which could create lead dust or lead-contaminated soil hazards if the paint is turned to dust during construction activities.

Polychlorinated Biphenyls (PCBs)

Three hydraulic elevators are located in the seven-story Terraces Center office building on the project site. The elevator system is serviced by a single hydraulic oil reservoir located in a nearby maintenance room. The Phase I ESA determined that the elevator components are original and from 1960s. The presence of hydraulic elevator systems of this age represents a recognized environmental condition (REC) due to potential releases of hydraulic fluid which may contain PCBs.

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1 Friable: Materials which can be crumbled, pulverized, or reduced to powder by hand pressure when dry.

2 Nonfriable: Materials which, if used as intended, cannot be broken, crumbled, pulverized, or reduced to powder by hand pressure when dry, but can be made friable by mechanical means such as sanding, sandblasting, cutting, scraping, or improper handling and disposal.

The hydraulic elevators pit pump system experienced mechanical failure in April 2004 causing the release of approximately 110 gallons of hydraulic oil into the elevator equipment room; no oil was reportedly released into the individual elevator pits. The oil was reportedly vacuumed from the floor of the equipment room when the release was discovered. During the site reconnaissance (2006), Qore observed that approximately two square feet of the concrete floor had been cut out of the equipment room floor and surfaced with gravel. Maintenance staff and the elevator technician indicated that the gravel area was likely underlain by soil rather than the building foundation, providing a potential conduit to the subsurface. It was not known what quantity of oil, if any, was released during the pit pump failure that could have reached the gravel area of the floor. To assess potential releases, Qore conducted limited soil sampling. Based on information obtained during the Phase I ESA and results of the limited soil samples, releases of hydraulic fluid that exceed generally applied regulatory criteria have occurred and have impacted shallow soil in the elevator pits and maintenance room. However, laboratory analysis of the impacted soil did not indicate the presence of PCBs. Based on the assessment data, the hydraulic lifts are considered to be an REC.

There are two Southern California Edison pad-mounted transformers located on the project site which may include equipment with PCBs. However, the transformers are in good condition and there was no visual evidence of leakage or staining on or around the transformers. The transformers do not pose a significant environmental concern and no further analysis is required.

Past Uses of the Project Site and Surrounding Area

Prior tenants of the on-site office buildings included a bank, dental and medical offices, insurance and financial companies, engineering companies, attorneys, advertising companies, security firms, and various administrative offices for Hope International University. The Phase I ESA did not indicate former tenants that would have been expected to use or store significant quantities of chemicals or generate hazardous wastes such as dry cleaners or printers.

From the time prior to 1927 to the 1960s, the project site and surrounding area was occupied by orange groves and a single-family residence. The historical use of the project area for agricultural purposes indicates a potential for the application of agricultural chemicals from the 1920s to the 1960s. On cultivated land where agricultural chemicals have been applied, it is not uncommon to find residual fertilizers, pesticides, herbicides, or related compounds in the soil and groundwater. No evidence of row crops, bulk chemical storage, herbicide/pesticide/fertilizer loading areas, or other indications of bulk product storage or handling areas was observed on or near the project site from review of aerial photographs. No evidence of former agricultural use was observed on the project site.

Related Planning Programs

City of Fullerton General Plan, Regional Coordination Element

Regional Coordination Element of the *City of Fullerton General Plan* addresses urban issues which are regional in nature. These issues include air quality, traffic, and waste management. This element recognizes the need to participate in and influence the plans and programs operating on a regional level. Applicable goals and policies from the Regional Coordination Element related to hazards and hazardous materials which are applicable to the proposed project are provided later in this section (Table 3.9-1) with a project consistency analysis.

3.9.2 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are based on the City's Initial Study Checklist for public health and safety. The project would have a potentially significant impact if it would:

Threshold 3.9.1 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Threshold 3.9.2 Conflict with any applicable plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

3.9.3 ENVIRONMENTAL IMPACTS

Methodology

A Phase I ESA was prepared for the project site, which consisted of field observations; review of federal and State regulatory databases (for the project site and the surrounding area); and review of historical property use information (i.e., topographic maps and aerial photographs). Local regulatory agencies and other sources were contacted to identify any known or suspected contamination sites or incidents of hazardous waste storage or disposal which might have resulted in soil or groundwater contamination. Additionally, a limited ACM analysis and a lead-based paint analysis were prepared.

Impact Analysis

Threshold 3.9.1: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Asbestos-containing Materials (ACMs)

As previously addressed, a limited asbestos survey of the office buildings and apartment complexes was conducted of wall and ceiling systems, floor tile and floor tile mastic, spray-applied fire proofing, ceiling tiles, pipe insulation, and 14 small structures that house the HVAC filters. ACCMs were discovered in 48 samples of building materials and on the stucco on the exterior walls of the HVAC filters. No friable or nonfriable ACMs were discovered at the tested sites. The caulking, insulation, and felt material on the interior walls did not contain asbestos.

All buildings on site would be demolished as part of the proposed project, thus disturbing known and potential ACMs. Demolition of the buildings could expose construction personnel to these materials unless proper precautions are taken to minimize exposure. The potential for asbestos release would be considered a significant impact. Because exposure to such materials can result in adverse health effects in uncontrolled situations, several regulations and guidelines pertaining to abatement of and protection from exposure to asbestos have been developed for demolition activities. As described in SC 3.9-1, prior to demolition of the on-site structures, ACMs would be removed and disposed of by qualified contractors. Adherence to applicable requirements discussed in SC 3.9-1 and MM 3.9-1 would reduce potential impacts related to the removal and disposal of ACMs to a level considered less than significant.

Lead-based Paint

As part of the Phase I ESA, a lead-based paint inspection was conducted on June 13, 2006, at the apartment complexes. Some of the painted surfaces may contain concentrations of lead between 0.1 and 1.0 mg/cm, which could create lead dust or lead-contaminated soil hazards if the paint is turned to dust during construction activities. Because exposure to lead dust generated during construction activities could result in adverse health effects in uncontrolled situations, several regulations and guidelines pertaining to abatement of and protection from exposure to lead-containing materials have been developed for demolition activities. Prior to demolition of the on-site structures, lead-containing materials would be removed and disposed of by qualified contractors. Adherence to MM 3.9-2 would reduce potential impacts associated with the removal and disposal of lead-containing materials to a level considered less than significant.

Polychlorinated Biphenyls (PCBs)

As previously noted, the presence of hydraulic elevator systems in the Terraces Center building since the 1960s represents a suspect environmental condition due to potential releases of hydraulic fluid which may contain PCBs from the system. Although laboratory analysis of the impacted soil did not indicate the presence of PCBs, based on the assessment data, the hydraulic lifts are considered to be an REC at the project site. Releases associated with the elevator equipment would be addressed at demolition with sampling to confirm that impacted soil has been removed. MM 3.9-3 identifies appropriate procedures to follow in the event significant soil contamination is encountered during construction.

Aboveground and Underground Storage Tanks (ASTs and USTs)

Based on the Phase I ESA performed for the project site (included in Appendix G and discussed previously in 3.9.1), no evidence of existing or previously existing ASTs and USTs were found on the project site which would create a significant hazard. However, MM 3.9-4 identifies appropriate procedures to follow in the event previously unidentified USTs are discovered during construction activities.

Impact 3.9.1: Demolition activities of the existing structures on site would result in potential short-term exposure of construction workers to ACMs and lead-containing materials, which would be considered a potentially significant impact. In addition, there is a potential for soil contamination related to release of hydraulic oil which may contain PCBs. These impacts would be reduced to levels considered less than significant with implementation of SC 3.9-1 and MMs 3.9-1 through 3.9-4.

Threshold 3.9.2: ***Would the proposed project conflict with any applicable plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?***

An EIR must discuss the consistency between the proposed project and applicable general and regional plans. As previously noted, the Regional Coordination Element of the *City of Fullerton General Plan* applies to the proposed project. Table 3.9-1, Consistency of the Proposed Project with Hazards and Hazardous Materials Related Goals and Policies, addresses the consistency of the project with the relevant goals and policies.

TABLE 3.9-1
CONSISTENCY OF THE PROPOSED PROJECT WITH HAZARDS AND HAZARDOUS MATERIALS-RELATED GOALS AND POLICIES

Goals and Policies	Consistency Analysis
Regional Coordination Element	
Goal RC-3: Protect the health and welfare of the public and quality of the environment, through safe and efficient management of hazardous wastes.	
Policy RC-3.1: Ensure that Fullerton hazardous waste management activities are in compliance with State and Federal laws and regulations, while maintaining local control in decision-making.	As addressed in this section, the proposed project would comply with all applicable federal, State, and local regulations, including SCAQMD's Rule 1403 and CalOSHA guidelines.

Impact 3.9.2: As identified in Table 3.9-1, the proposed project would be considered consistent with applicable goals.

3.9.4 CUMULATIVE IMPACTS

The cumulative study area associated with hazardous materials is typically site-specific except where past, present, and/or proposed project site uses would impact off-site land uses and persons or where past, present, or foreseeable future development in the surrounding area would cumulatively expose a greater number of persons to hazards (e.g., hazardous materials and/or waste contamination). With respect to the project site, identified impacts represent site-specific impacts which would be remediated to levels considered less than significant. There is no evidence of off-site contamination associated with existing land uses. The proposed project as well as potential future projects would be required to comply with applicable federal, State, and local requirements concerning hazardous materials. Therefore, the proposed project would not contribute to any potential significant cumulative hazardous materials impacts.

3.9.5 MITIGATION PROGRAM

Project Design Features

No project design features have been identified.

Standard Conditions and Requirements

SC 3.9-1 Demolition shall be conducted in accordance with the remediation and mitigation procedures established by all federal, State, and local standards including the federal and State Occupation Safety and Health Administration (OSHA and CalOSHA) and South Coast Air Quality Management District (SCAQMD) regulations for the excavation, removal, and proper disposal of the asbestos-containing materials (SCAQMD Regulation X – National Emission Standards For Hazardous Air Pollutants, Subpart M – National Emission Standards For Asbestos). The materials shall be disposed of at a certified asbestos landfill. The Asbestos-abatement Contractor shall comply with notification and asbestos-removal procedures outlined in SCAQMD Rule 1403 to reduce asbestos-related health risks. SCAQMD Rule 1403 applies to any demolition or renovation activity and the associated disturbance of asbestos-containing materials. These requirements shall be included on the contractor specifications and verified by the City of Fullerton's Community Development Department in conjunction with the issuance of a Demolition Permit.

Mitigation Measures

MM 3.9-1 Prior to commencement of any activities with the potential to disturb asbestos-containing materials (ACMs), the Applicant shall retain a certified Asbestos-abatement Contractor to abate the ACMs in accordance with all applicable regulations, including California Occupational Safety and Health Administration (CalOSHA) guidelines and South Coast Air Quality Management District Rule 1403 (refer to SC 3.9-1).

MM 3.9-2 The Applicant shall conduct a demolition waste characterization assessment. If lead-based paint is peeling or flaking, the Applicant shall have removed the lead-based paint from all buildings and structures on the project site and shall have disposed of it in accordance with all applicable federal, State, and local regulations, including California Occupational Safety and Health Administration (CalOSHA) guidelines.

MM 3.9-3 Prior to issuance of the first grading permit, the Applicant shall complete soil sampling for the project site in the vicinity of the hydraulic elevator systems, and the results shall be submitted to the City of Fullerton Community Development Department. Samples from potential areas of concern shall be collected and submitted for laboratory analysis to confirm the nature and extent of potential impacts. If hazardous materials are identified during the site assessments, the appropriate response/remedial measures shall be implemented in accordance with the directives of the applicable oversight agency(ies). If suspected contaminated soil is encountered during site development, work shall be halted and the Applicant shall notify the City of Fullerton Fire Department and City of Fullerton Community Development Department, and shall retain a qualified Hazardous Materials Engineer who will assess the impacts and prepare a response plan using risk-based cleanup standards applicable to the proposed use. Upon approval of the response plan by the Fire Department or other applicable oversight agency, the Engineer shall obtain any required permits, oversee the removal of hazardous materials, and/or conduct the response work to the satisfaction of the Fire Department or other oversight agency, as applicable, until all specified requirements are implemented.

MM 3.9-4 Based on the Phase I Environmental Site Assessment performed for the project site, it is not anticipated that any underground storage tanks or associated significant soil contamination would be encountered during construction. In the event these subsurface features or contaminated soils are encountered during site grading, work shall immediately cease in the area and the Applicant shall notify the City of Fullerton Fire Department and shall retain a qualified Hazardous Materials Engineer to assess the impacts and prepare a response plan using risk-based cleanup standards applicable to residential land use. Upon approval of the response plan by the Fire Department or other agency, as applicable, the Engineer shall obtain any required permits, oversee the removal of such features, and/or conduct the response work to the satisfaction of the Fire Department or other agency, as applicable, until closure status is attained.

3.9.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of SC 3.9-1 and MMs 3.9-1 through 3.9-4 would reduce potential hazardous materials impacts to a level considered less than significant.

3.10 BIOLOGICAL RESOURCES

Based on the finding in the Initial Study prepared for the project and included in Appendix A, the City of Fullerton determined that impacts related to the following were less than significant and did not require further analysis (refer to Section 1.5, EIR Focus and Effects Determined Not to Be Significant): riparian habitat or other sensitive community; federally protected wetlands; movement of native resident migratory fish or wildlife species; local policies or ordinances protecting biological resources; and Habitat Conservation Plan, Natural Community Conservation Plan, or other Habitat Conservation Plans. The analysis in this section discusses existing vegetation which may have the potential to be used by nesting birds and identifies appropriate mitigation.

3.10.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

In conjunction with previous development, the entire 6.8-acre project site has been subject to grading and is relatively flat with no distinguishing topographical features such as hillsides or canyons. The site ranges from approximately 222 to 225 feet above mean sea level (msl). The site is developed with office buildings and apartment complexes with associated paved asphalt parking areas. The site consists of landscaping that is typical of an urban environment including gum trees, pine trees, and palm trees.

The project site is entirely surrounded by development that consists of educational institutions, commercial, retail, office space, and residential uses. The Hope International University campus, including dormitories and the Student Center, are located north of the project site (north of East College Place). California State University, Fullerton is located further north of the project site. An apartment complex is located immediately north of the project site and south of East College Place. High-density residential uses are located to the northwest and to the east of the site. Commercial and office uses are also located to the west, southwest, and east of the project site. Single-family residential units are located south of the project site across East Chapman Avenue.

Related Planning Programs

City of Fullerton General, Resource Management Element

The City's Resource Management Element establishes goals, policies, and actions for preserving open space and natural and cultural resources. This Element also addresses scenic corridors, parks, recreational trails, historic sites, and energy conservation. The Natural Resources sections of this Element describe significant vegetation, wildlife and other natural resources and key issues related with each. Goals and policies from the Resource Management Element related to biological resources which are applicable to the proposed project are provided in Table 3.10-1 with a project consistency analysis.

3.10.2 THRESHOLDS OF SIGNIFICANCE

The criteria used to determine the significance of potential impacts related to biological resources is taken from the City of Fullerton Initial Study Checklist. The project would result in a significant impact if it would:

Threshold 3.10.1 Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Threshold 3.10.2 Conflict with any applicable plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

3.10.3 ENVIRONMENTAL IMPACTS

Methodology

The project site was surveyed by BonTerra Consulting Senior Botanist, Sandra Leatherman, in January 2007.

Impact Analysis

Threshold 3.10.1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Project implementation would require the demolition of all on-site land uses including the existing landscaping. The existing gum trees, pine trees, and palm trees may have the potential to be used by migratory birds including raptors for nesting. Migratory birds are protected under the Migratory Bird Treaty Act (MBTA). Regulations prohibit activities that "take, possess, or destroy" any migratory bird or raptor nest or egg (*Fish and Game Code* §§3503, 3503.5, and 3513). Although there are multiple interpretations of the intent of the MBTA, local and/or State agencies may consider disturbances of migratory bird nests to be in conflict with this regulation. If construction or tree removal is initiated during the nesting season for raptors (typically February 1 to June 30) or migratory birds (typically March 1 to July 30), a pre-construction nest survey would be required.

Impact 3.10.1: If construction or tree removal is initiated during the raptor nesting season (February 1 to June 30) or migratory bird nesting season (March 1 to July 30), a pre-construction survey is required. With incorporation of MM 3.10-1 below, no significant impacts would result.

Threshold 3.10.2: Would the proposed project conflict with any applicable plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?

An EIR must discuss the consistency between the proposed project and applicable general and regional plans. As previously noted, the Resource Management Element of the *City of Fullerton General Plan* applies to the proposed project. Table 3.10-1, Consistency of the Proposed Project with Biological Resources-related Goals and Policies, addresses the consistency of the project with the relevant goals and policies.

TABLE 3.10-1
CONSISTENCY OF THE PROPOSED PROJECT WITH BIOLOGICAL RESOURCES-RELATED GOALS AND POLICIES

Goals and Policies	Consistency Analysis
Resource Management Element	
Goal RM-1: Recognized natural and developed resources such as water, land, flora and fauna and historical and cultural landmarks, to be conserved, enhanced, and otherwise protected.	
Policy RM-1.2: Conserve sensitive species, plant communities, and wildlife habitats to the maximum extent feasible through open space dedication and easements, creative site design, and other workable mitigation actions.	All existing buildings and existing landscaping on site would be demolished/removed as part of the proposed project, but trees and landscaping would be replaced. However, existing gum trees, pine trees, and palm trees may have the potential to be used by nesting raptors and migratory birds. Compliance with Mitigation Measure 3.10-1 would ensure nesting birds would not be impacted.

Impact 3.10.2: As identified in Table 3.10-1, the proposed project would be considered consistent with applicable goals.

3.10.4 CUMULATIVE IMPACTS

Although potential cumulative impacts related to construction and/or tree removal during the migratory bird and raptor nesting season are site-specific, impacts related to construction or tree removal initiated during the raptor and migratory bird nesting season may be associated with other development in the city. The proposed project, as well as other development projects, would be required to comply with regulations prohibiting activities that “take, possess, or destroy” any raptor nest or egg (MBTA and *Fish and Game Code* §§3503, 3503.5, and 3513). As such, projects in the vicinity must complete similar measures to mitigate any impacts. Therefore, project-specific impacts and impacts associated with other projects would be reduced to a less than significant level. The project’s contribution to cumulative biological impacts is less than significant.

3.10.5 MITIGATION PROGRAM

Project Design Feature

No project design features have been identified.

Standard Conditions

No standard conditions have been identified.

Mitigation Measure

MM 3.10-1 If construction is scheduled to proceed between February 1 to July 30, no more than seven days prior to the onset of construction activities that would impact trees on the project site, a qualified Biologist shall conduct a pre-construction bird nesting survey within the limits of project disturbance and adjacent areas for the presence of any active raptor and migratory bird nests.

If a bird nest is found, the following restrictions on construction will be required between February 1 to July 30 (or until nests are no longer active, as determined by a qualified Biologist): (1) clearing limits will be established with a minimum of 300 feet in any direction from any active raptor and migratory bird nest and

(2) access and surveying will not be allowed within 100 feet of any active raptor and migratory bird nest, or as otherwise determined by a qualified Biologist. Any encroachment into the 300-/100-foot buffer area around the known active nest is allowed only if a qualified Biologist determines that the proposed activity shall not disturb the nest occupants.

3.10.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Potentially significant impacts related to construction or tree removal during the raptor and migratory bird nesting season would be reduced to a level considered less than significant with adherence to MM 3.10-1.

3.11 HYDROLOGY AND WATER QUALITY

3.11.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

Hydrologic Setting

Watershed

The City of Fullerton is located within portions of the Coyote Creek Watershed and the Carbon Creek Watershed both of which are under the jurisdiction of the Santa Ana Region of the State Water Resources Control Board (SWRCB). The SWRCB sets statewide policy and implements State and federal laws and regulations related to water quality. The Coyote Creek Watershed covers 41.3 square miles in the northwestern corner of Orange County. The Carbon Creek Watershed covers 21.4 square miles in western Orange County. Both these watersheds ultimately empty into the San Gabriel River. More specifically, the project site is located in the Coyote Creek Watershed; this watershed is drained by Coyote Creek and two principal tributaries: Fullerton Creek and the Brea Creek. Coyote Creek is a concrete-lined trapezoidal channel that drains into the San Gabriel River, which eventually drains into the Pacific Ocean.

Site Drainage

The approximate 6.8-acre project site is developed with 3 office buildings, 2 apartment complexes and their associated paved parking areas. On-site vegetation is limited to non-native ornamental species associated with landscaping typical in urban settings and does not constitute a large portion of the project site. The project site is a primarily impervious surface.

The project site slopes gently to the southwest toward Fullerton Creek, which is located approximately one mile west of the project site. Surface water runoff from the project site drains toward existing storm water drain inlets located within the parking lots, driveways, and landscaped areas; it then enters the municipal storm drain located in the south side of Chapman Avenue.

Regulatory Setting

Federal and State Programs

In 1972, the Federal Water Pollution Control Act (later referred to as the Clean Water Act [CWA]) was amended to require that the discharge of pollutants to waters of the United States from any point source be effectively prohibited unless the discharge was in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In 1987, the CWA was again amended to require that the U.S. Environmental Protection Agency (USEPA) establish regulations for permitting of storm water discharges (as a point source) by municipal and industrial facilities and construction activities under the NPDES permit program. The regulations require that Municipal Separate Storm Sewer System (MS4) discharges to surface waters be regulated by an NPDES permit. The MS4s are designated or used only for collecting or conveying storm water (not wastewater or combined sewage).

Regional Water Quality

The federal CWA places the primary responsibility for the control of water pollution and for planning the development and use of water resources with the States. California's primary statute governing water quality and water pollution is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and the Regional Water Quality Control Boards (RWQCBs) broad powers to protect water quality and is the

primary vehicle for implementation of California's responsibility under the federal CWA. The Porter-Cologne Act grants the SWRCB and RWQCBs the authority and responsibility to adopt plans and policies; to regulate discharges to surface and groundwater; to regulate waste disposal sites; and to require clean up of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, oil, or petroleum product.

Each RWQCB must formulate and adopt a water quality plan for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State Water Policy. The Porter-Cologne Act also provides that an RWQCB may include in its region a regional plan with water discharge prohibitions applicable to particular conditions, areas, or types of waste. The RWQCBs are also authorized to enforce discharge limitations, take actions to prevent violations of these limitations from occurring, and conduct investigations to determine the status of quality of any of the waters of the state within their region.

NPDES General Construction Activities Permit

Pursuant to §402(p) of the CWA (which requires regulations for permitting of certain storm water discharges), the SWRCB has issued a statewide general NPDES Permit for storm water discharges from construction sites (NPDES No. CAS000002 – Construction General Permit). Under this Construction General Permit, storm water discharges from construction sites with a disturbed area of one or more acres (effective March 2003) are required to either obtain individual NPDES permits for storm water discharges or be covered by the Construction General Permit. Coverage under the Construction General Permit is accomplished by completing and filing a Notice of Intent with the SWRCB. Each applicant under the Construction General Permit must ensure that a Storm Water Pollution Prevention Plan (SWPPP) is prepared prior to grading and is implemented during construction. The primary objective of the SWPPP is to identify, construct, implement, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site during construction. BMPs include programs, technologies, processes, practices, and devices that control, prevent, remove, or reduce pollution.

Local Water Quality Regulations

The City of Fullerton is within the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB). In January 2002, the SARWQCB issued an NPDES permit (Order No. R8-2002-0010) that is applicable to northern Orange County cities (co-permittees). This permit regulates storm water and urban runoff discharges from proposed development to constructed storm drain systems in the project area. To implement the requirements of the NPDES permit, the co-permittees have developed a 2003 Drainage Area Management Plan (DAMP) that includes a New Development and Significant Redevelopment Program. This Program provides a framework and a process for following the NPDES permit requirements and incorporates watershed protection/storm water quality management principles into the co-permittees' General Plan process, environmental review process, and development permit approval process.

In compliance with the NPDES program and the DAMP, Fullerton has adopted a Water Quality Ordinance (FMC Chapter 12.18) that requires all construction projects, development, and significant redevelopment projects to incorporate BMPs into a project's design and/or implementation. This is done in an attempt to reduce the amount of pollutants introduced into the storm water drainage system, which connects to local streams, rivers and eventually the ocean. In January 2004, the City adopted Water Pollution Control Guidelines for the preparation of required Water Quality Management Plans (WQMPs), Water Pollution Prevention Plans (WPPPs), and SWPPPs.

Related Planning Programs

City of Fullerton General Plan, Community Health & Safety Element

The Community Health & Safety Element of the *City of Fullerton General Plan* includes goals and policies related to hydrology and water quality that are applicable to the proposed project. These goals and policies are provided in Table 3.11-1 with a project consistency analysis.

3.11.2 THRESHOLDS OF SIGNIFICANCE

The following significance criteria are based on the City's Initial Study checklist for water resources. The proposed project would have a significant environmental impact if it would:

Threshold 3.11.1 Violate any water quality standards or waste discharge requirements.

Threshold 3.11.2 Otherwise substantially degrade water quality.

Threshold 3.11.3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.

Threshold 3.11.4: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

Threshold 3.11.5 Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of pollutant runoff.

Threshold 3.11.6 Conflict with any applicable plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

3.11.3 ENVIRONMENTAL IMPACTS

Methodology

Water quality impacts were evaluated by analyzing the proposed construction and operation associated with the project and by determining whether these activities would significantly impact water quality. Guidelines set forth by the RWQCB and the County DAMP for this area were used to establish both significant impacts and conditions that would be applied to the project in order to comply with these plans and regulations.

Impact Analysis

Threshold 3.11.1: Would the proposed project violate any water quality standards or waste discharge requirements?

Threshold 3.11.2: Would the proposed project otherwise substantially degrade water quality.

Short-term Construction-related Water Quality Impacts

The proposed project could result in short-term construction impacts to surface water quality from grading and other construction-related activities. The potential impacts of construction activities on water quality focus on sediments and turbidity and pollutants that might be associated with sediments (e.g., phosphorus and legacy pesticides). Construction-related activities that are primarily responsible for sediment releases are related to exposing soils to potential mobilization by rainfall, runoff, and wind. These activities include grading and excavation of the site and trenching for infrastructure improvements. Non-sediment-related pollutants that are also of concern during construction include waste construction materials; chemicals, liquid products, and petroleum products used in building construction or the maintenance of heavy equipment; and concrete-related waste streams. Spills or leaks from heavy equipment and machinery, construction staging areas, or building sites can also enter runoff, which typically includes petroleum products such as fuel, oil and grease, and heavy metals.

Based on SC 3.11-1 (Construction General Permit Notice of Intent [NOI]) and SC 3.11-2 (construction phase SWPPP), construction impacts from development of the project site would be minimized through compliance with the Construction General Permit. This permit requires the development and implementation of an SWPPP, which must include erosion- and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit, as well as BMPs that control the other potential construction-related pollutants. An SWPPP would be developed as required by, and in compliance with, the NPDES Construction General Permit. Erosion-control BMPs are designed to prevent erosion, whereas sediment controls are designed to trap sediment once it has been mobilized. The General Permit requires the SWPPP to include BMPs to be selected and implemented based on the construction phase and weather conditions.

The SWPPP would be designed and implemented to address site-specific conditions related to project construction. The SWPPP would identify the sources of sediment and other pollutants that may affect the quality of storm water discharges and describe and ensure the implementation and maintenance of BMPs to reduce or eliminate sediment, pollutants adhering to sediment, and other non-sediment pollutants in storm water as well as non-storm water discharges.

Compliance with the NPDES Construction General Permit and the preparation of an SWPPP would ensure that any impacts to downstream waters resulting from construction activities associated with the project site would be less than significant. Erosion-control and treatment BMPs would be implemented per NPDES requirements.

In addition to the requirements of the NPDES General Construction Permit, the building code, and grading permit requirements include elements that also require reduction of erosion and sedimentation impacts during construction. Full compliance with applicable local, State, and federal regulations, including SC 3.11-1 and SC 3.11-2, would reduce water quality impacts associated with construction to a less than significant level.

Long-term Operational Water Quality Impacts

The project site, developed with three office buildings, two apartment complexes, and surface parking lots, is a predominantly impervious surface. Currently, all surface runoff from the site drains toward existing storm water drain inlets located within the parking lots, driveways, and landscaped areas; it then enters the municipal storm water system in Chapman Avenue without being treated. While the type of urban pollutants generated from the site would be similar under existing and proposed conditions, it is likely that the project's concentration of urban pollutants,

such as such as petroleum hydrocarbons (oil and grease) and trash/debris, would be higher due to the intensification of development.

As noted previously, in compliance with the NPDES program and the DAMP, the proposed project would be required to incorporate post-construction BMPs to reduce the amount of pollutants introduced into the storm water drainage system on a long-term basis. Although the final design would be reviewed and approved by the City with the final design of the proposed project, the project proposes to implement structural BMPs to capture and treat the "first flush" runoff from the site (first 0.75″ of rainfall). As part of the proposed project, the on-site surface runoff collection system would include two continuous deflective separation (CDS) storm water interceptors (TMSU 20_20) clarifying units on either side of the main driveway entering the parking structure. The site would be graded and constructed so that the westerly portion of the project site would drain to and be treated by one of the units; the easterly half of project site would drain to and treated by the other. The units are sized to capture and clean the "first flush" runoff from the site. After passing through the CDS units, the runoff would discharge to the City's storm drain on the southern side of Chapman Avenue.

The proposed project's operational impacts would be reduced with implementation of SC 3.11-3, which requires the preparation of and compliance with a WQMP for the project. Compliance with the required project WQMP and implementation of BMPs as well as compliance with local, State, and federal water quality regulations would reduce potential long-term water quality impacts to a level considered less than significant.

Impacts 3.11.1 and 3.11.2: Construction and operational activities related to the proposed project have the potential to increase pollutant levels in storm water runoff. However, implementation of SC 3.11-1 through SC 3.11-3 as well as compliance with local, State, and federal water quality regulations would ensure that these impacts would not be considered significant.

Threshold 3.11.3: ***Would the proposed project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?***

Threshold 3.11.4: ***Would the proposed project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?***

As previously discussed, the project site is approximately 6.8 acres and is almost entirely covered with hardscape or impervious surfaces. The project site slopes gently to the southwest toward Fullerton Creek, located approximately one mile west of the project site. There are no streams or rivers within or proximate to the project site. Surface water runoff from the project site drains toward existing storm water drain inlets located within the parking lots, driveways, and landscaped areas; it then enters the municipal storm drain located in the southern side of Chapman Avenue.

The proposed project would also be designed to drain into the existing City storm drain in Chapman Avenue. As with existing conditions, following completion of project construction, the project site would contain primarily impervious surfaces. The proposed project would include five separate on-site courtyards with the residential/commercial uses wrapped around these open areas. These landscaped areas would increase the amount of pervious area; however, given the size of the site, it would not substantially alter or reduce the amount or rate of runoff.

The proposed project would not result in flooding on or off the site. There would not be exposed soil after construction and the proposed project would not result in a substantial increase in the amount of erosion or sedimentation after construction is complete (potential erosion during construction is discussed above). No significant impacts would result and no mitigation is required.

Impacts 3.11.3 and 3.11.4: Runoff from the project site would discharge to the same storm facilities as existing conditions and the total amount of runoff would be essentially the same as under existing conditions; therefore, the project would not alter the drainage pattern of the site or area or of a stream or river.

Threshold 3.11.5: ***Would the proposed project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of pollutant runoff?***

As noted above, surface water runoff from the project site drains toward existing storm water drain inlets located within the parking lots, driveways, and landscaped areas; it then enters the municipal storm drain located in the southern side of Chapman Avenue. The proposed project would include a system of underground storm drains, which would convey project runoff to the existing storm drain system. Because there would not be an increase in the amount of runoff from the site, the existing storm drain system is expected to have sufficient capacity to accommodate the flows.

In compliance with the NPDES program and the DAMP, the proposed project would be required to incorporate post-construction BMPs to reduce the amount of pollutants introduced into the storm water drainage system on a long-term basis (see SC 3.11-1 through SC 3.11-3). Because the proposed project incorporates site design, source control, and water quality treatment BMPs selected and designed to act in concert to effectively address all potential pollutants of concern identified for the proposed development, pollutant levels entering the storm drain system would an improvement over existing conditions.

Impact 3.11.5: The existing storm drain facilities are sufficient to accommodate runoff from the proposed project. The quality of project site runoff entering the storm drain system would be an improvement over existing conditions (SC 3.11-1 through 3.11-3).

Threshold 3.11.6: ***Would the project conflict with any applicable plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?***

An EIR must discuss the consistency between the proposed project and applicable general plans and regional plans. Table 3.11-1, Consistency of the Proposed Project with Hydrology and Water Resources Related Goals and Policies, addresses the consistency of the project with the relevant General Plan Health & Safety Element goals and policies.

TABLE 3.11-1
CONSISTENCY OF THE PROPOSED PROJECT WITH HYDROLOGY AND WATER QUALITY-RELATED GOALS AND POLICIES

Goals and Policies	Consistency Analysis
Community Health & Safety Element	
Goal CHS-6: Properly designed and maintained water, utility, flood control, and sanitary sewer systems to meet the needs of present residents, accommodate future growth, protect the environment, and afford proper health and safety protection.	The proposed project would not significantly increase the amount or rate of runoff from the project site and would not result in any impacts related to flooding. Additionally, the proposed project would involve the installation of on-site storm drain facilities which would capture and treat "first flush" runoff before it is discharged to the existing City storm drain in Chapman Avenue which has sufficient capacity to accept runoff from the proposed project. The facilities would be designed and installed in accordance with applicable City requirements.
Policy CHS-6.3: Reduce water pollution and ensure a quality water supply.	The proposed project would not significantly alter the amount or rate of runoff from the project site. Runoff exiting the project site would be subject to conditions set for in the NPDES and the DAMP and would include the provision of pre- and post-construction BMPs to reduce pollutant levels in storm water runoff (SC 3.11-1 through SC 3.11-3).

Impact 3.11.6: As identified in Table 3.11-1, the proposed project would be considered consistent with applicable goals.

3.11.4 CUMULATIVE IMPACTS

The cumulative study area with regard to hydrology and water quality includes the entire Orange County Groundwater Basin and any tributary waterways. A portion of water within the cumulative study area goes within the Groundwater Basin and a portion flows to the Ocean. The proposed project, in conjunction with the existing development and planned development in the City of Fullerton could result in a cumulatively considerable impact to surface water runoff due to construction activities in the area and post-development runoff. All construction projects larger than one acre are subject to the NPDES General Construction Permit requirements for the implementation of BMPs.

The pollutants generated by the proposed project would be mitigated on the site through the use of filters, as well as BMPs during construction activities, as outlined in the WQMP and SWPPP. Therefore, on a cumulative basis, the project's contribution to water quality impacts would not be cumulatively considerable. Based on the requirements of local, State, and federal regulations, all cumulative projects would also be required to mitigate potential water quality impacts through the preparation of an SWPPP and implementation of WQMP requirements.

The proposed project would not substantially change the amount of storm water runoff from the project site since the site is currently covered with impervious surface. The project would not contribute to cumulative increases in the amount runoff entering the City's storm drain system. Existing storm drain facilities are sufficient to accommodate runoff from the proposed project and would not result in environmental impacts. The proposed project would not have a cumulative impact related to storm drain facilities.

3.11.5 MITIGATION PROGRAM

Project Design Features

No project design features have been identified.

Standard Conditions

SC 3.11-1 Prior to the approval of grading plans, the Applicant shall file a Notice of Intent with the State Water Resources Control Board (SWRCB) in order to obtain coverage under the Construction General Permit (CGP) (NPDES No. CAS000002, Resolution No. 2001-046, or the latest approved CGP). The Applicant shall provide the City of Fullerton's Chief Building Official with evidence that the Notice of Intent has been filed with the SWRCB. Such evidence shall consist of a copy of the Notice of Intent stamped by the SWRCB or Regional Water Quality Control Board, or a letter from either agency.

SC 3.11-2 Prior to the issuance of grading permits, the Applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP) that will:

- Require implementation of Best Management Practices (BMPs) designed with a goal of preventing a net sediment load increase in storm water discharges relative to preconstruction levels;
- Prohibit (during the construction period) discharges of storm water or non-storm water at levels which would cause or contribute to an exceedance of applicable water quality standards contained in the Basin Plan;
- Discuss in detail the BMPs planned for the project related to control of sediment and erosion, non-sediment pollutants, and potential pollutants in non-storm water discharges;
- Describe post-construction BMPs for the project;
- Explain the maintenance program for the project's BMPs;
- During construction, require reporting of violations to the Regional Board; and
- List the parties responsible for SWPPP implementation and BMP maintenance during and after grading. The project proponent shall implement the SWPPP and will modify the SWPPP as directed by the Construction General Permit.

SC 3.11-3 Prior to approval of grading plans, the Applicant shall prepare a project Water Quality Management Plan (WQMP). The WQMP shall demonstrate compliance with the implementation plans under the Municipal Storm Sewer Systems (MS4) Permit, namely the Drainage Area Management Plan (DAMP). More specifically, the WQMP shall, in accordance with DAMP and Local Implementation Plan (LIP), do the following:

- Describe the routine and special post-construction BMPs to be used at the proposed development site (including both structural and non-structural measures).

- Describe responsibility for the initial implementation and long-term maintenance of the BMPs.

- Provide a narrative with graphic materials, as necessary, to specify the locations of the structural BMPs.

Mitigation Measures

The proposed project would not result in significant impacts related to hydrology or water quality (including the existing storm drain facilities); therefore, no mitigation measures are required.

3.11.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Potentially significant hydrology and water quality impacts would be reduced to levels considered less than significant with implementation of SC 3.11-1 through SC 3.11-3.

3.12 PUBLIC SERVICES

This section describes existing public services for the proposed project area and addresses potential project impacts related to the following public services:.

- Fire protection and emergency services (City of Fullerton)
- Police protection (City of Fullerton)
- Schools (Fullerton Joint Union High School District and Fullerton School District)
- Parks and recreation (City of Fullerton)
- Libraries (City of Fullerton)

3.12.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

Fire Protection and Emergency Services

Fire protection, prevention, and emergency medical services are provided to the project area by the City of Fullerton Fire Department. The Operations and Training Division is responsible for providing fire control and suppression, rescue, medical aid, and paramedic services in the City. The Operations and Training Division also provides emergency response to hazardous materials incidents (Fullerton Fire Department 2007).

Fire Station 5 serves the project site and provides first-in company response. Station 5 is located at 2555 E. Yorba Linda Boulevard, and is approximately 1.4 miles to the north of the project site. Station 5 houses one Class A – Triple Combination Pumper and a four-person Paramedic Engine Company that is capable of providing immediate fire response and Advanced Life Support. Response times vary depending on the type of call and the level of service required in order to respond to the call. The Fullerton Fire Department currently meets its fire response and medical aid response times to the project area.

The Fire Department has Automatic Aid Agreements with all surrounding jurisdictions which include the Cities of Anaheim and Brea and the Orange County Fire Authority. Together, these cities provide highly trained professionals to any emergency. The closest emergency response unit is dispatched to the emergency, regardless of city boundary.

Police Protection

Police protection service is provided by the City of Fullerton Police Department. All patrol investigation and support services operate from one police station located at 237 W. Commonwealth Avenue. Response times vary depending on the nature of the call. Priority one calls are expected to have response times of less than six minutes. Response times for priority one calls are currently being met in all parts of the City including the project area. The project area averages 110 calls for service per month; the City averages 8,394 calls for service per month.

The Fullerton Police Department is staffed by 160 sworn police officers and 118 civilian personnel. These numbers represent staffing for the entire City. The existing level of law enforcement staffing in the City is approximately 1.2 (1.17) sworn officers for every 1,000 residents. However, the optimum ratios are closer to 1.5 officers per 1,000 residents; a ratio of 1.2 officers per 1,000 residents is considered the minimum staffing ratio (Mayes 2007).

The City adheres to a mutual aid contract agreed upon by the Orange County Chiefs of Police and Sheriff's Association. This mutual aid program provides back-up support to member

departments as needed. Most frequently, the Fullerton Police Department provides assistance to, or is assisted by, the Cities of Anaheim, Buena Park, Brea, La Habra, and Placentia Police Departments.

Schools

The project site is within both the Fullerton School District and Fullerton Joint Union High School District. The Fullerton School District is responsible for serving kindergarten through 8th grade levels and the Fullerton Joint Union High School District is responsible for serving 9th through 12th grade levels. The Fullerton School District has 18 elementary schools and 5 junior high schools, including 2 K–8 schools (Fullerton School District 2007). Commonwealth Elementary School and Ladera Vista Junior High School would serve the proposed project. The Fullerton Joint Union High School District serves a 50-square-mile area with 6 high schools, 1 continuation high school, and 1 alternative high school. Fullerton High School would serve the proposed project. It should be noted that both school districts offer an open enrollment policy to city residents where the resident can elect to transfer to any school within the district. Acceptance in the schools would depend on the capacity of that particular school.

Schools that would serve the project site, their current enrollment, and current capacity are identified in Table 3.12-1.

TABLE 3.12-1
SCHOOL FACILITIES AND CAPACITY

School	Enrollment	Capacity
Fullerton School District[a]	13,628	13,890
Commonwealth Elementary School (K–6 grade)	443[b]	678
Ladera Vista Junior High School (7–8 grade)	890[b]	840
Fullerton Joint Union High School District[c]	16,702[d]	14,256[e]
Fullerton High School[c]	2,016	2,079

[a] Reed 2007.
[b] Wolkott 2007.
[c] Patterson 2007.
[d] Includes Fullerton Joint Union High School District's six high schools and the continuation and alternative schools as of 2002–2003.
[e] Includes Fullerton Joint Union High School District's six high schools.

As shown in Table 3.12-1, student enrollment in the Fullerton School District does not exceed existing capacity on a district-wide basis or at Commonwealth Elementary School. Ladera Vista Junior High School exceeds available capacity. The school district is currently meeting school facility needs through the use of portable classrooms.

The current enrollment in the Fullerton Joint Union High School District exceeds existing capacity. However, Fullerton High School does not exceed available capacity. It should be noted that the Fullerton Joint Union High School District enrollment number reflects all six high schools and the alternative and continuation schools while the capacity number reflects capacity for the six high schools only. Capacity information including the continuation and alternative schools was not available from the school district. The Fullerton Joint Union High School District is planning the construction of two new school facilities (continuation and alternative schools). Construction of these new school facilities is anticipated to begin in two to four years.

Legal Framework for School Impact Fees

Senate Bill 50 (SB 50 or the "Leroy Green School Facilities Act"), enacted in 1998 as emergency legislation, represents the most significant school facility finance and developer fee reform legislation for school facilities construction and modernization since the adoption of the 1986 School Facilities Act. SB 50 establishes a new comprehensive program for funding school facilities based on 50 percent funding from the State and 50 percent funding from local districts, while limiting the obligation of developers to mitigate the impact of projects on school facilities.

Government Code §65995 establishes the statutory criteria for assessing construction fees, also known as "developer's fees." The legislation has recognized the need for the fees to be adjusted periodically to keep pace with inflation; therefore, the State Allocation Board increases the maximum fees according to the adjustment for inflation in the statewide cost index for Class B construction.[1] The current maximum rates are $0.36 per square foot of new commercial/industrial construction and $2.24 per square foot of new residential construction. The Fullerton School District and Fullerton Joint Union High School District have adopted impact fees for residential and commercial/industrial uses. Fullerton School District impact fees are $0.28 per square foot for commercial/industrial uses and $1.75 per square foot for residences. Fullerton Joint Union High School District impact fees are $0.14 per square foot for commercial/industrial uses and $0.88 per square foot for residences.

In accordance with California Government Code §65995(h)(I):

> The payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995 and, if applicable, any amounts specified in Section 65995.5 or 65995.7 are hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in Section 56021 or 56073, on the provision of adequate school facilities.
>
> A State or local agency may not deny or refuse to approve a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in Section 56021 or 56073 on the basis of a person's refusal to provide school facilities mitigation that exceeds the amounts authorized pursuant to this section or pursuant to Section 65995.5 or 65995.7, as applicable.

As such, the payment of school mitigation impact fees authorized by SB 50 is deemed to provide "full and complete mitigation of impacts" from the development of real property on school facilities.

[1] The Office of Public School Construction defines Class B construction as buildings constructed primarily of reinforced concrete, steel frames, concrete floors, and roofs.

Parks and Recreational Facilities

The City of Fullerton has 55 public parks, including 33 community parks, 9 specialized parks, 5 greenbelts, 2 nature preserves, 1 golf course, and 28 miles of recreational trails. The three parks listed below are all within one mile of the project site. Park acreage totals 683 acres. Based on a citywide population of approximately 138,000 persons, Fullerton currently provides approximately 5 acres of parkland for every 1,000 persons. The City's acre per population requirement is 4 acres per 1,000 persons. The project site is within walking distance (within one mile) of the following active recreation parks:

- Acacia Park
  1910 Fullerton Creek Road

- Fullerton Creek Greenbelt
  Fullerton Creek Road (adjacent to Acacia Park)

- Chapman Park
  2515 San Carlos Drive

Libraries

The project site is located approximately three miles east of the Main Library Branch located at 353 West Commonwealth Avenue. The 56,000 square foot (sf) library includes a recently expanded Children's Library and Checkout Desk. The library houses a collection of approximately 240,000 volumes which includes books, magazines, videos, audiocassettes, CDs, and DVDs. The library is open seven days a week.

Related Planning Programs

City of Fullerton General Plan

Community Health and Safety Element

Community Health and Safety Element contains goals related to police and fire protection; water, sewer, and flood control facilities; noise; airport operations; and seismic safety. Relevant goals and policies related to police and fire protection are identified in Table 3.12-2 with a project consistency analysis.

Community Services Element

The City's Community Services Element is not required by State law but is included as part of the City's General Plan to reflect the important relationship between recreation, human services, education, the arts, and land use planning. Relevant goals and policies related to library services are identified in Table 3.12-2 with a project consistency analysis.

Resource Management Element

The City's Resource Management Element establishes goals, policies, and actions for preserving open space and natural and cultural resources. This Element also addresses scenic corridors, parks, recreational trails, historic sites, and energy conservation. Goals and policies related to parks which are applicable to the proposed project are provided in Table 3.12-2 with a project consistency analysis.

3.12.2 THRESHOLDS OF SIGNIFICANCE

The criteria used to determine the significance of potential impacts related to fire protection, police, school, and library services is taken from the City of Fullerton Initial Study Checklist. The project would result in a significant impact if it would:

Threshold 3.12.1 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 would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for services.

Threshold 3.12.2 Result in the increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Threshold 3.12.3 Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Threshold 3.12.4 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 or other performance objectives for services.

3.12.3 ENVIRONMENTAL IMPACTS

Methodology

The Fullerton Fire Department, Fullerton Police Department, Fullerton Joint Union High School District, Fullerton School District, City of Fullerton Parks and Recreation Department, and the City of Fullerton Public Library were contacted to determine if the proposed project would significantly impact the respective agencies' and districts' abilities to provide services.

Impact Analysis

Threshold 3.12.1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for services?

Fire Protection Services and Emergency Services

The proposed project would allow for the construction of 375 student-oriented residential units and 30,000 sf of commercial uses. All on-site buildings would have sprinkler systems (see PDF 3.12-1). The project would increase the demand for the City's fire protection services. However, this increased demand would not affect the Fire Department's ability to maintain an acceptable response time. The proposed project would not require the construction of new facilities, require the expansion of existing facilities, or require additional personnel or equipment

to maintain acceptable response times (Kunze 2007). Therefore, the project's impact on fire protection services and emergency services would be less than significant.

To ensure the safety of each approved project by the City, the Fullerton Fire Department requires the review and approval of site plans before building permits are issued (refer to SC 3.12-1). The proposed project would incorporate all required fire and life safety features in compliance with the Fire Department's requirements. An additional requirement of an 800 megahertz communications amplification system may be required by the Fire Department in or on the proposed buildings (refer to SC 3.12-2).

Police Services

As with fire protection services, the proposed project would increase the demand for police protection services. The Fullerton Police Department has indicated that the project would not result in a significant impact on police services. Implementation of the proposed project is not anticipated to cause a change in existing response times.

Using the number of bedrooms that are proposed in the 375-unit student-oriented housing project, the proposed project would generate approximately 1,300 residents (net 1,113 residents), as well as employees associated with the 30,000 sf of retail/commercial uses. In 2007, Fullerton had a population of approximately 137,367 (DOF 2007). As stated in Section 3.7, Population, Housing, and Employment, the project site currently includes 2 apartment complexes with a total of 79 residential units that are occupied by a mix of student and non-student residents. Using an estimate of 2.37 persons per dwelling unit for residential development in Area 4, Northeast Fullerton (based on Table H-10 of the Fullerton General Plan's Housing Element), the project site has 187 existing residents. Additionally, the project site includes 103,515 sf of office space used by various office tenants, the largest being Hope International University. The remaining office space is occupied by various tenants in small individual offices; all office space would be displaced as a part of the project. Implementation of the proposed project would result in a net increase in the resident population of 1,113 persons. Additionally, the project would add 30,000 sf of retail/commercial uses to the project site.

In order for the minimum ratio of 1.2 officers per 1,000 residents to be reached in the City, 4 officers are currently needed without the project. The increase in population is consistent with the population projections identified in regional and local plans. It should be noted that current city residents could relocate to the project site; therefore, the net increase of persons occupying the project site would not necessarily be a net increase of 1,113 residents to the City. The existing deficiency in officer-to-population ratio and the net increase of 1,113 residents and 30,000 sf of retail uses (and the net decrease of 73,515 sf of commercial space) would not result in the need for an increase in staffing levels above those already identified by the Police Department. The City would ultimately determine the timing and number of new officers hired as part of its standard staffing practices. The funding for new officer positions needed to maintain acceptable citywide police service levels would come from the City's General Fund.

Although the project would increase demand on the City's police protection services, this demand would not require the construction of new facilities or require the expansion of existing facilities that would result in physical environmental impacts. Therefore, the project's impact on police protection services would be less than significant.

Schools

Based on student generation rates for the Fullerton School District and Fullerton Joint Union High School District for multi-family residential units, the existing apartments would generate approximately 44 students in kindergarten through 8th grade; 11 students in 7th and 8th grades;

and 14 students in the Fullerton Joint Union High School District. With the development of 375 multi-family residences and based on the school districts' generation rates, the proposed project is estimated to generate approximately 207 students in kindergarten through 6th grade and 51 students in 7th and 8th grades in the Fullerton School District and 68 students in the Fullerton Joint Union High School District.[2] Implementation of the proposed project would result in a net increase of approximately 163 students in kindergarten through 6th grade, 40 students in 7th and 8th grades in the Fullerton School District, and 54 students in the Fullerton Joint Union High School District. It should be noted that these generation factors are for typical multi-family residential uses. The proposed project would be designed, marketed, and managed for the higher education student population. It is anticipated that the resident student population (e.g., college students) would have considerably fewer children and the actual amount of kindergarten through 12th grade students that would reside in the proposed student-oriented residential project would be less than anticipated by the districts' generation factors. However, for purposes of analysis, the districts' standard rates have been used as a worst-case scenario.

As shown in Table 3.12-1, the Fullerton School District is currently operating below capacity while the Fullerton Joint Union High School District is currently operating above capacity. Payment of development fees as required by State law would provide the funding to mitigate impacts to both the Fullerton Joint Union High School District and the Fullerton School District that would be generated by the proposed project (refer to SC 3.12-3). The proposed project would not require construction of new school facilities.

Libraries

Implementation of the proposed project would generate an increase in population thereby increasing demand on the City's public library system. The City's Main Library, nearest the project site, would be the most affected by the project. Because the proposed project would be designed, managed, and marketed to the higher education student population, it is anticipated that project residents would most likely use the surrounding university libraries. However, this fact would not preclude the use of the City's libraries. The City has indicated that the project would not create a need for new or expanded library facilities; therefore, no impact related to construction of library facilities would occur.

Impact 3.12.1: The proposed project would increase the population and could increase the demand for public services, but it would not require the construction of new fire protection, police, school, or library facilities to maintain acceptable levels of service. No significant impacts would result and no mitigation would be required.

Threshold 3.12.2 ***Would the project result in the increase of the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

Threshold 3.12.3 ***Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?***

[2] Based on student generation rate of 0.552 students per multi-family residential unit (K–6) and a student generation rate of 0.135 student per multi-family residential unit (7–8) for Fullerton School District and 0.182 students per multi-family residential unit for Fullerton Joint Union High School District.

Parks and Recreational Facilities

As discussed previously, the project site is proximate to several existing recreational uses. The proposed project could have approximately 1,300 residents (net increase of 1,113) creating an increased demand for park and recreational facilities. The City identifies a target ratio of 4 acres of parkland acres for every 1,000 residents. Based on this ratio, approximately 5.1 acres of parkland would be required to serve the proposed project. The proposed project includes the provision of shared private open space in separate courtyards (passive recreational areas with turf, walkways, and seating areas) and recreational areas (refer to the project description in Section 2.4.3 and PDF 3.12-2) In addition, the proposed project includes 2 recreation centers (totaling approximately 12,000 sf). These courtyard areas and the recreation centers are intended to serve the residents of the project.

Because the project does not include public on-site park and recreational facilities and because residents of the proposed project could increase the demand for existing park and recreational facilities in the city, the Applicant shall pay park fees in compliance with Chapter 21.12 of the City *Municipal Code* as permitted by Government Code §66000 et. seq. ("Mitigation Fee Act"). City park fees are paid at the time building permits are issued for residential uses, as set for in SC 3.12-4. Although the project's impacts to City park facilities would be less than significant, payment of required park fees would be used by the City for the acquisition, development, and improvement of City parks and recreational facilities as set forth in the City's Five-Year Capital Improvement Program. No additional mitigation is required.

Impacts 3.12.2 and 3.12-3: The proposed project would create new demand for recreational facilities throughout the City. Compliance with SC 3.12-4 would reduce this potential impact to less than significant. No additional impacts would occur related to the construction or expansion of recreational facilities.

Threshold 3.12-4: ***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 or other performance objectives for services?***

An EIR must discuss the consistency between the proposed project and applicable general plan and regional plans. As previously noted, the *City of Fullerton General Plan*, Community Health and Safety Element, the Community Services Element, and the Resources Management Element apply to the proposed project. Table 3.12-2 addresses the consistency of the proposed project with the relevant goals and policies.

TABLE 3.12-2
CONSISTENCY OF THE PROPOSED PROJECT WITH PUBLIC SERVICES-RELATED GOALS AND POLICIES

Goals and Policies	Consistency Analysis
Community Health and Safety Element	
Goal CHS-1: Efficient, well-equipped, and responsive fire and police departments which offer maximum feasible personal safety and protection from loss of life and property.	
Policy CHS-1.2: Expand the police and fire services, as necessary, to serve increased needs.	The proposed project can be served by existing police and fire services. The project would not result in the need to expand any existing facilities or result in the need for additional equipment or personnel for police and fire, respectively.
Community Services Element	
Goal CS-3: Library services of the highest quality which emphasize a strong central library and conveniently located extension services, facilities and materials to meet the educational, informational, and recreational needs of a culturally diverse community.	
Policy CS-3.1: Strive to provide highest quality library services for people of diverse age groups, socioeconomic levels, and cultural background.	The proposed project can be served by existing library facilities. The project would not result in the need to expand existing facilities or result in the need for additional personnel.
Resources Management Element	
Goal RM-2: A combination of public and private open space and park land conveniently located and designed to be responsive to residents' needs	
Policy RM-2.2: Provide a comprehensive and unified system of public parks and recreational facilities accessible to all residents.	While the proposed project would not require the expansion or construction of new facilities, the increase in population could result in additional demands on existing park facilities. Payment of City park fees, in compliance with the *City of Fullerton Municipal Code* (FMC 21.12.040), would reduce this potential impact to less than significant.

Impact 3.12.4: As identified in Table 3.12-2, the proposed project would be considered consistent with relevant goals and policies.

3.12.4 CUMULATIVE IMPACTS

The cumulative study area for public services is the service area for the City of Fullerton Fire Department, City of Fullerton Police Department, the City's Park and Recreation services, the City's public library system, and the respective school districts. Implementation of the proposed project would incrementally increase existing demands for public services. The proposed project is consistent with the *City of Fullerton General Plan* and, in combination with anticipated citywide growth, has been taken into account in long-range planning efforts by the public services providers.

As previously described, implementation of the proposed project would increase development but would not require the construction of new fire protection facilities, police facilities, schools, park and recreation facilities, or library facilities. Therefore, no physical impacts would occur.

Police staffing levels are in constant need of evaluation as the City population grows. As noted by the Fullerton Police Department, individual projects may not result in the need to increase staffing levels; however, combined development may result in a cumulative increase in police protection service requirements. New development, including the proposed project, would contribute to the City's tax revenues that would assist in financing additional facilities and personnel as required to meet additional police protection requirements in the City. Therefore, the project's incremental effect on police protection services is not considered cumulatively significant.

As with the proposed project, State law would require any new developments to pay school development fees pursuant to Government Code §65995. This funding would mitigate impacts of students generated by the proposed project and other development projects in the City. Cumulative impacts would be less than significant.

Standard measures such as the payment of fees and incorporation of needed facilities have been or would be addressed for each project as determined appropriate in the environmental analysis. The project's increased demand for public services would not result in significant impacts; therefore, the impact would not be cumulative considerable.

3.12.5 MITIGATION PROGRAM

Project Design Features

PDF 3.12-1 All on-site buildings will have sprinkler systems.

PDF 3.12-2 The project site plan includes shared open space in five separate courtyards and recreational areas. In addition, two recreation centers (totaling approximately 12,000 sf) are included in the project. These courtyard areas and the recreation centers are intended to serve the residents of the project.

Standard Conditions

Fire Protection Services

SC 3.12-1 The Applicant shall comply with all applicable codes, ordinances and standard conditions, including the current edition of the *California Fire Code* and the *Fullerton Municipal Code*, including, but not limited to, fire prevention and suppression measures, fire hydrants, automatic fire extinguishing systems (including sprinklers), fire access, water availability, and requirements for high rise structures. Prior to issuance of building permits, compliance with applicable codes shall be verified by the City of Fullerton Fire Department, the Community Development Department, and the Water Engineering Division of the City's Engineering Department.

SC 3.12-2 Prior to the issuance of building permits, if deemed necessary by the City of Fullerton Fire Department, the Applicant shall install/provide for an 800 megahertz communications amplification system in or on the on-site buildings; the location shall be determined by the Fire Department.

Schools

SC 3.12-3 Prior to issuance of the first building permit, the Applicant shall pay new development fees to the Fullerton School District and the Fullerton Joint Union High School District pursuant to the requirements established in Government Code §65995. The amount of fees to be paid will be determined based on the established State formula for determining construction costs.

Parks and Recreation

SC 3.12-4 Prior to issuance of a building permit for a residential building, the Applicant shall pay required park fees in compliance with Chapter 21.12 of the City's *Municipal Code.* Payment of fees shall be confirmed by the City of Fullerton Community Development Department.

Mitigation Measures

No significant impacts have been identified and no mitigation is required.

3.12.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

There are no significant impacts to public services resulting from project implementation.

3.13 UTILITIES AND SERVICE SYSTEMS

This section describes the existing utilities and service systems for the proposed project and addresses potential project impacts on the availability and capacity of the local providers for the following:

- Electricity (Southern California Edison)
- Natural Gas (Southern California Gas Company)
- Communication systems (SBC/AT&T and Time Warner)
- Storm drain facilities (City of Fullerton)
- Water facilities (City of Fullerton)
- Wastewater facilities (City of Fullerton)

3.13.1 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

Electricity

Southern California Edison (SCE) provides electrical service to the project area, including the project site. There are existing electrical power lines within and adjacent to the project site. SCE is a public utility that provides electricity to a business and residential population of more than 13 million people within a 50,000-square-mile service area that is comprised of central, coastal, and southern California. Regulated by the California Public Utilities Commission (CPUC), they protect customers from overcharge and promote energy efficiency, system reliability, and financial integrity of utilities.

Natural Gas

The Southern California Gas Company (SCGC) provides natural gas service to the project area including the project site. According to their website, the SCGC is the nation's largest natural gas distribution utility and serves nearly 20 million customers throughout central and southern California (SCGC 2007). The SCGC operates the largest natural gas pipeline system in the United States, with transmission and distribution pipelines that span approximately 49,000 miles and service pipelines that span approximately 46,000 miles (SCGC 2007). As a public utility, the SCGC is under the jurisdiction of the California Public Utilities Commission (CPUC). The availability of natural gas service is based upon conditions of gas supply and the regulations set forth by regulatory agencies such as the CPUC. The SCGC's ability to provide service can also be affected by federal regulatory agencies.

As noted in its NOP comment letter dated March 14, 2007 (included in Appendix A), the SCGC has facilities in the project area that can be used to serve the proposed project. There is a three-inch gas line in Chapman Avenue in the project vicinity and a two-inch gas line in Commonwealth Avenue where it joins with Chapman Avenue.

Communication Systems

SBC/AT&T Communications provides telephone service to the City of Fullerton including the project site. Existing telephone facilities are located within and adjacent to the project site. As of August 1, 2006, Time Warner provides cable television, digital cable service, and computer DSL facilities to the City of Fullerton, including the project area. There are existing cable television facilities within and adjacent to the project site.

Storm Drain Facilities

The City of Fullerton Street Maintenance Division owns and maintains the storm drain facilities in the vicinity of the project site. Surface water runoff from the project site drains toward existing storm water drain inlets located within the on-site parking lots, driveways, and landscaped areas, subsequently entering the municipal storm drain located in the southern side of Chapman Avenue.

The project site slopes gently to the southwest toward Fullerton Creek, which is located approximately one mile west of the project site. Surface water runoff from the project site drains toward existing storm water drain inlets located within the parking lots, driveways, and landscaped areas; it then enters the municipal storm drain located in the southern side of Chapman Avenue.

Water Supply

The following information is provided by the City of Fullerton Water Engineering Department, the *Water System Report: Jefferson Commons – Fullerton* prepared by KHR Associates (KHR Associates 2007), and the *Engineering Feasibility Report for Hope International University Mixed Use Community* (KHR Associates 2006). These reports are included in Appendix H. The City of Fullerton currently provides water service to the project site. The City purchases water from the Metropolitan Water District. However, approximately 75 percent of Fullerton's domestic water is pumped from groundwater sources. The City's system consists of 11 wells, 10 reservoirs, and 8 imported water connections. The City of Fullerton Water Division is responsible for the production, storage, transmission, and distribution of water in the City.

The existing water system consists of a six-inch water distribution main south of the project site in Chapman Avenue; a six-inch water distribution main north of the project site in College Place; and an eight-inch water distribution main east of the project site in North Commonwealth Avenue (KHR Associates 2007). The project site connects to a six-inch water main located in East Chapman Avenue and an eight-inch water main line located in North Commonwealth Avenue.

Wastewater Facilities

The City of Fullerton Water Division also maintains all sewer and water system infrastructure. The existing sewer system consists of an eight-inch sewer transmission pipe located in East Chapman Avenue. The existing sewer pipeline is approximately eight to ten feet in depth.

Regional Planning Programs

Fullerton General Plan, Community Health and Safety Element

The Community Health and Safety Element of the City of Fullerton General Plan addresses the infrastructure serving the City including water, utility, flood control, and sanitary systems to meet the needs of present uses, to accommodate future growth, to protect the environment, and to afford proper health and safety protection. Applicable goals and policies from the Community Health and Safety Element that are related to utilities are provided in Table 3.13-1 with a project consistency analysis.

3.13.2 THRESHOLDS OF SIGNIFICANCE

The following criteria are based on the Initial Study checklist for utilities and service systems. The proposed project would have a significant environmental impact if it would:

Threshold 3.13.1 Require or result in the construction of new electric, natural gas or communication facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects.

Threshold 3.13.2 Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Threshold 3.13.3 Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Threshold 3.13.4 Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Threshold 3.13.5 Have insufficient water supplies available to serve the project from existing entitlements and resources, or if new or expanded entitlements needed.

Threshold 3.13.6 Conflict with any applicable plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

3.13.3 ENVIRONMENTAL IMPACTS

Methodology

KHR Associates contacted utility providers to determine if there are existing facilities in the project area to serve the proposed project and to determine if the proposed project would affect their ability to provide services to the project site and surrounding area. In addition, the Project Applicant coordinated with the City to determine the storm drain, water, and sewer line design requirements within and adjacent to the project site.

Impact Analysis

Threshold 3.13.1: Would the project require or result in the construction of new electric, natural gas, or communication facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Electricity

The proposed project would increase the demand for electrical service in the project area. Based on electric demand factors provided in Appendix 9 of the SCAQMD *CEQA Air Quality Handbook* (2003) for residential and commercial uses, the proposed project would generate an electric demand of approximately 2.67 million kilowatts an hour (kWh) of electricity per year. This amount of electricity would be consistent with the amounts typically consumed by commercial, retail, and residential uses in urban areas and would represent an incremental increase in the amount of electricity consumed in the region.

As stated above, SCE currently has electrical facilities within and adjacent to the project site that would serve the proposed project; new electrical distribution facilities would not be required to

be installed and no physical impacts would result. SCE has indicated its ability to serve the proposed project in accordance with all applicable tariff schedules which are the effective rates and rules of SCE on file with and approved by the Public Utilities Commission, State of California, and subject to the receipt of such permits or other authorizations from public agencies as may be required for such installation. Therefore, projected electrical demand for the proposed project would not significantly impact SCE's current level of service. Further, implementation of SC 3.13-1 ensures that energy conservation efforts are incorporated into the project to reduce the overall demand for electricity.

There are existing SCE on-site facilities that may need to be removed, relocated, or placed underground. However, these actions would occur within the proposed project's impact area and potential impacts (e.g., construction-related dust, noise) and have been addressed in other sections of this EIR. Installation of on-site electrical facilities would occur during project construction and would not result in any environmental impacts beyond those identified for construction of the project as addressed in this EIR. Therefore, the project would not result in a significant impact to electrical services or facilities.

Natural Gas

The proposed project would increase the demand for natural gas service in the project area. Based on natural gas demand factors provided in Appendix 9 of the SCAQMD *CEQA Air Quality Handbook* (2003) for residential and commercial uses, the proposed project would generate a demand of approximately 0.031 million therms of natural gas per year. This amount of natural gas is consistent with the amounts typically consumed by commercial, retail, and residential uses in urban areas and represents an incremental increase in the amount of natural gas consumed in the region.

SCGC has indicated its ability to serve the proposed project from existing gas mains adjacent to the project site in accordance with SCG's policies and extension rules on file with the California Public Utilities Commission. Therefore, the projected demand for natural gas resulting from the proposed project would not significantly impact SCGC's current level of service. Because the project does not require the installation of off-site natural gas facilities, there would be no off-site physical impacts associated with the provision of these facilities. Physical impacts would be limited to the area within the project limits, and impacts have been addressed in this EIR. Further, implementation of SC 3.13-1 ensures that energy conservation efforts are incorporated into the project to reduce the overall demand for natural gas.

The availability of natural gas service is based upon present conditions of gas supply and regulatory policies. SCGC is under the jurisdiction of the California Public Utilities Commission and can also be affected by actions of federal regulatory agencies. Should these agencies take any action which affect gas supply or the condition under which service is available, gas service would be provided in accordance with the revised conditions. The proposed project's impact to natural gas service is less than significant.

Communication Systems

SBC/AT&T would provide communication service to the proposed project in accordance with rates and charges specified in its scheduled tariffs on file with the California Public Utilities Commission. Service to the proposed project can be provided without any adverse impact on its ability to provide communication service in the area. Facility design would be provided by the service providers once specific development plans become available.

Because the project does not require the installation of off-site communication and cable facilities, there would be no off-site physical impacts associated with the provision of these

facilities. Physical impacts would be limited to the area within the project limits, and potential impacts (e.g., construction-related dust, noise) have been addressed in other sections of this EIR. The proposed project's impact related to communication and cable systems is less than significant.

Impact 3.13.1: There are existing electric, natural gas, and communication facilities adjacent to the project site to serve the proposed project and no significant physical environmental impacts would result from connection to these facilities beyond on-site impacts addressed in this EIR.

Threshold 3.13.2: ***Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

Threshold 3.13.3: ***Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

Conceptual sewer facilities improvements for the proposed project include the provision of a six-inch sewer lateral connecting with the existing eight-inch transmission line in East Chapman Avenue. The connection point would be located in the southern portion of the project site. In accordance with SC 3.13-2, the Applicant will prepare a Sewer Study to determine if the existing public sewer system has sufficient capacity to receive flows from the project. Any deficiencies identified in the study that are caused by the development would be upgraded by the project as approved by the City. Compliance with SC 3.13-2 would reduce impacts to a less than significant level. All sewer lines would be designed per the requirements and standards of the City of Fullerton. A grease interceptor and proper venting would be installed within the retail portion of the project, if applicable, as required by the Fullerton Building Department.

Construction associated with the installation of new sewer lines would result in short-term, construction-related impacts, which would be considered less than significant (e.g., traffic disruption). However, traffic management plans would be prepared to minimize potential conflicts during construction (refer to MM 3.3-1 in Section 3.3, Transportation and Circulation).

The Orange County Sanitation District (OCSD) provides wastewater treatment service for the City of Fullerton, including the project site. The proposed development of 375 residential units and approximately 30,000 square feet (sf) of commercial uses would not substantially increase the amount of wastewater treated by the OCSD. The project would not require the construction of new or expanded wastewater treatment facilities that could result in significant environmental impacts.

Impacts 3.13.2 and 3.13.3: There are existing water and sewer treatment facilities in the vicinity of the project site and the proposed project would involve the construction of new facilities and upgrading existing facilities to serve the project. Construction of new or upgraded water and sewer facilities would occur within existing street rights-of-way and no significant physical environmental impacts would result. In addition, no new or expanded wastewater facilities would be required as a result of project implementation.

Threshold 3.13.4: Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

An on-site storm water runoff collection system is proposed as part of the project. As presently designed, the proposed storm water runoff collection system would capture all surface runoff, including water from roof drains. As addressed in Section 3.11, Hydrology and Water Quality, two continuous deflective separation (CDS) storm water interceptor clarifying units are proposed to be installed along both sides of the main driveway entering the parking structure on the project site. One unit would capture runoff from the western portion of the project site, and the other would capture runoff from the eastern portion of the project site. Both units would be sized to capture and treat the "first flush" (or first 0.75 inch of rainfall) runoff from the project site as required by State municipal storm water permits and water quality regulations. After passing through the CDS units, the runoff would discharge to the City's storm drain on the south side of East Chapman Avenue.

Storm drain facility connections and extensions would occur within existing City-owned and maintained street rights-of-way. There would be no construction in areas that are currently undisturbed or that have any natural features. Construction of these connections would result in short-term, construction-related impacts, which would be considered less than significant. However, traffic management plans would be prepared to minimize potential conflicts and inconveniences during construction (refer to MM 3.3-1 in Section 3.3, Transportation and Circulation).

Impact 3.13.4: There are existing storm drain facilities in the vicinity of the project site and the proposed project would involve the construction of new facilities to transmit flows to the existing facilities. Construction would occur within existing street right-of-way and no significant physical environmental impacts would result.

Threshold 3.13-5: Would the project have insufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

<u>Water Supply</u>

Water supply and consumption within the City is planned for by both the *Urban Water Management Plan* (last updated December 2005) and the *Water System Master Plan Update* (last updated November 1997). As indicated previously, the project site is located within the service area of the City of Fullerton. Based on generation factors provided in *Water System Master Plan Update,* the proposed project would have an average daily demand of 313,385 gallons per day (gpd) for residential and commercial uses and irrigation. As shown in Table 3.13-1, the proposed project would increase the average daily demand for domestic water by 85 percent over existing land uses. The net increase in water demand generated by the proposed project can be accommodated without impacting current water supplies. The City of Fullerton Water System Management Division has identified that there is sufficient water supplies to serve the proposed project (Schickling 2007).

According to the General Plan, City water supply and the distribution network overall are considered adequate for existing and future development (Fullerton 1997, pages CHS 15 and 16). All proposed water facilities improvements would be designed per the requirements and standards of the City of Fullerton.

TABLE 3.13-1
DOMESTIC WATER DEMAND

Land Use	Size	Average Daily Rate	Average Daily Demand (ADD)	Maximum Daily Rate	Maximum Daily Demand (MDD)
Existing Uses					
Office	103,515 sf (2.38 ac)	1,200 gpd/ac	2,856 gpd	1.5 x ADD	4,284 gpd
Apartment	79 du or 187 beds	250 gpd/ppl[a]	46,750 gpd	1.5 x ADD	70,125 gpd
		Total (Existing Uses)	**49,606 gpd**		**74,409 gpd**
Proposed Uses					
Retail	0.69 ac	1,200 gpd/ac	828 gpd	1.5 x ADD	1,242 gpd
Apartment	363 du or 1249 beds	250 gpd/ppl[a]	312,250 gpd	1.5 x ADD	468,375 gpd
Leasing Office and Residents' Amenity Center	0.21 ac	1,200 gpd/ac	252 gpd	1.5 x ADD	378 gpd
Recreation Center	0.046 ac	1,200 gpd/ac	55 gpd	1.5 x ADD	82.5 gpd
		Total (Proposed Uses)	**313,385 gpd**		**470,078 gpd**
		Net Change	**263,779 gpd**		**395,669 gpd**

ac: acre
gpd: gallons per day
gpd/ac: gallons per day per acre
gpd/ppl: gallons per day per person
[a] The project site has 187 residents; the proposed project would have 1,300 residents.

Source: KHR Associates 2006.

Construction associated with the installation of new water lines would result in short-term, construction-related impacts, which would be considered less than significant (e.g., traffic disruption). However, traffic management plans would be prepared to minimize potential conflicts during construction (refer to MM 3.3-1 in Section 3.3, Transportation and Circulation).

Fire Flow

Fire flow tests were conducted on July 20, 2006, on four fire hydrants in the project area to determine whether adequate residual pressure would be available based on the required fire flow and maximum daily demand. Fire flow requirements are identified in Table 3.12-2. Four fire hydrants are proposed for the project, including two public hydrants and two on-site private hydrants. On-site fire hydrants would be located in the north and southeast portions of the site. Public fire hydrants would be accessible from Chapman Avenue. All proposed water facilities improvements would be designed per the requirements and standards of the City of Fullerton. The existing six-inch water main in Chapman Avenue would need to be upgraded to accommodate the proposed change in land uses and associated water supply requirements. Approximately 1,650 linear feet to the Chapman Avenue water main would need to be upgraded from a 6-inch to 8-inch water line. Because the water line upgrades would occur on-site and within the existing roadway right of way, no significant impacts are anticipated beyond those already addressed in this EIR.

Impact 3.13.5: There is sufficient water supply available to serve the proposed project. No new or expanded water entitlements would be required and no mitigation would be required. A portion of the six-inch water line would be upgraded to an eight-inch water line.

TABLE 3.13-2
FIRE FLOW WATER DEMAND

Land Use	Size	Required Fire Flow
Existing Office	103,515 sf	2,375 gpm @ 20 psi
Existing Apartment	79 du	3,000 gpm @ 20 psi
Proposed Retail	29,920 sf	1,625 gpm @ 20 psi
Proposed Apartment	438,097 sf	4,000 gpm @ 20 psi
Proposed Leasing Office and Residents' Amenity Center	9,072 sf	1,625 gpm @ 20 psi
Proposed Recreation Center	1,988 sf	1,625 gpm @ 20 psi
Parking Structure	349,740 sf	3,000 gpm @ 20 psi

sf: square feet
du: dwelling unit
gpm: gallons per minute

Source: KHR Associates 2007.

Threshold 3.13.6 ***Would the project conflict with any applicable plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?***

An EIR must discuss the consistency between the proposed project and applicable general and regional plans. As previously noted, the *City of Fullerton General Plan*, Community Health and Safety Element applies to the proposed project. Table 3.13-3 addresses the consistency of the project with the relevant goals and policies.

TABLE 3.13-3
CONSISTENCY OF THE PROPOSED PROJECT WITH UTILITIES- AND SERVICE SYSTEMS-RELATED GOALS AND POLICIES

Goals and Policies	Consistency Analysis
Community Health and Safety Element	
Goal CHS-6: Properly designed and maintained water, utility, flood control, and sanitary sewer systems to meet the needs of present residents, accommodate future growth, protect the environment, and afford proper health and safety protection.	As discussed in the Initial Study included in Appendix A, the proposed project would not alter the amount or rate of runoff from the project site and would not result in any impacts related to flooding. The proposed project would involve the installation of utilities necessary to serve the proposed project as described in Section 2, Project Description, including upgrading utilities in the vicinity of the project site. The utilities would be designed and installed in accordance with applicable City requirements.

Impact 3.13.6: As identified in Table 3.13-3 the proposed project is consistent with applicable goals and policies.

3.13.4 CUMULATIVE IMPACTS

Electricity, Natural Gas, Communication Systems

SCE, SCGC, and SBC/AT&T have indicated that they would be able to serve the proposed project and other projects within their respective service areas. Connections to existing facilities would occur within the project site and no physical environmental impacts beyond those addressed in this EIR would occur. Additionally, all projects are required to comply with State and local regulations related to energy conservation. The proposed project would not have a cumulative impact related to electric, natural gas, or communications systems service.

Storm Drain Facilities

As discussed above, the proposed project would not substantially change the amount of storm water runoff from the project site since the site is currently covered with impervious surface. The project would not contribute to cumulative increases in the amount runoff entering the City's storm drain system. Connections to existing storm drain facilities would occur within existing street rights-of-way and would not result in environmental impacts. The proposed project would not have a cumulative impact related to storm drain facilities.

Water and Wastewater Facilities

The City of Fullerton Water Division indicated that they would be able to serve the proposed project and other projects within their respective service areas. The City obtains most of its water supply from wells that tap the Orange County groundwater basin; however the City also imports surface water from the Metropolitan Water District (MWD) of Southern California. The project site is located in the in the City's Zone 2 (water zone), which receives a mixture of groundwater and imported water. The City has 11 active well and 8 imported water connections, which provides flexibility in how water is obtained and distributed (Fullerton 2007).

Connections to existing facilities would occur within the project site or existing street rights-of-way and no physical environmental impacts would occur that have not been addressed elsewhere in this EIR. The proposed project would not have a cumulative impact related to the provision of water and sewer facilities.

3.13.5 MITIGATION PROGRAM

Project Design Features

No project design features have been identified.

Standard Conditions

Electricity and Natural Gas

SC 3.13-1 The proposed project shall comply with all State Energy Insulation Standards and City of Fullerton codes in effect at the time of application for building permits. (Commonly referred to as Title 24, these standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Title 24 covers the use of energy-efficient building standards, including ventilation, insulation, and construction and the use of

energy saving appliances, conditioning systems, water heating, and lighting.) Plans submitted for building permits shall include written notes demonstrating compliance with energy standards and shall be reviewed and approved by the City of Fullerton Community Development Department prior to building permit issuance.

SC 3.13-2 The Applicant shall prepare a sewer study to determine if the existing public sewer system has sufficient capacity to receive the flows from the development. Any deficiencies identified in the study caused by the project as approved by the Director of Engineering.

Mitigation Measures

Water Supply

MM 3.13-1 As a condition placed on the tentative map, the Applicant shall deposit funds to the City of Fullerton for payment of City staff time and construction of the physical improvements associated with the upgrading of the water line in East Chapman Avenue from a six-inch to an eight-inch water line.

Please also refer to MM 3.3-2 in Section 3.3, Transportation and Circulation, which would reduce potential impacts resulting from traffic disruptions during construction in the roadway rights-of-way.

3.13.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts related to electric, natural gas, and communication systems would be less than significant. Impacts related to storm drain facilities are considered less than significant. Impacts related to construction of water and wastewater facilities are considered less than significant.