

1. SUMMARY

Fire protection and emergency medical response services for the project site and the surrounding area are provided by the Los Angeles County Fire Department. Specifically, 14 fire stations with 12 engine companies, one assessment engine company, five paramedic squads, one hazardous materials squad, and two ladder trucks serve the Santa Clarita Valley. Fire Station 107, located at 18239 West Soledad Canyon Road, is the jurisdictional engine company that would respond to emergencies on the project site.¹ Fire Station 107 is currently 1.8 miles (6 minutes) from the project site.² Fire Station 132, located at 29310 Sand Canyon Road, is also approximately 1.8 miles (6 minutes) from the project site.

The project site is located within an area described by the Forester and Fire Warden for Los Angeles County as a Fire Zone 4, Very High Fire Hazard Severity Zone, which denotes the County Forester's highest fire hazard potential.³ All applicable fire code and ordinance requirements for construction, access, water mains, fire hydrants, water fire flows, brush clearance and fuel modification plans would need to be met by the proposed project.

The project applicant also would pay fire facility fees, which would be used to help fund the construction of new facilities and purchase of additional equipment. In addition, tax revenues generated by the project would assist in securing additional equipment and hiring of firefighter personnel for the Los Angeles County Fire Department. And as noted above, the proposed project would be required to comply with City codes and requirements relative to the provision of adequate fire protection services to the site during both the construction and operational stages of the project. As a result, the proposed project would not diminish the staffing or the response times of existing fire stations in the City of Santa Clarita, nor would it create a special fire protection requirement on the site that would result in a decline in existing service levels in the City. In summary, with mitigation, the proposed project would not have a significant project-specific or cumulative impact on fire protection services in the City of Santa Clarita.

¹ Frank Vidales, Acting Chief, Forestry Division Prevention Services Bureau, Los Angeles County Fire Department, written correspondence with Chris Graham, Staff Planner of Impact Sciences, Inc., December 29, 2008.

² Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

³ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

2. INTRODUCTION

The following analysis of fire services is based on information provided by the Los Angeles County Fire Department. The Fire Department maintains ultimate review and approval authority over aspects of the proposed project that relate to fire protection, and may identify further recommendations and/or requirements in the future.

3. EXISTING CONDITIONS

a. Fire Protection Services

Fire protection service is provided to the City of Santa Clarita by the Los Angeles County Fire Department. The Santa Clarita Valley is serviced by 14 fire stations with 12 engine companies, one assessment engine company, five paramedic squads, one hazardous materials squad, and two ladder trucks. The nine-person Hazardous Materials Task Force (comprised of a four-person engine and a five-person hazardous materials squad) operates out of Fire Station 76. The 14 fire stations that serve the Santa Clarita Valley area have approximately 67 firefighters on duty every day, 24 hours per day (not including chief officers and fire prevention staff).

The jurisdictional station for the proposed project site is Fire Station 107, located at 19239 West Soledad Canyon Road, in the City of Santa Clarita. Additional fire protection services would be provided by Station 132, located at 29310 Sand Canyon Road, which also is located in Santa Clarita. Should a significant incident occur, the project site would be served by the full resources of the Fire Department, not just the stations closest to the site or the 14 that have primary jurisdiction within the Santa Clarita Valley.

The location of these stations is illustrated on **Figure 4.13-1, Fire Station Locations**. **Table 4.13-1, Los Angeles County Fire Stations Serving the Santa Clarita Valley Area**, describes the fire stations within the City of Santa Clarita and their location. A description of the operational characteristics of the stations closest to the site and, therefore, most likely to respond is provided below:

- **Los Angeles County Fire Station 107** has a three-person engine company and a two-person paramedic squad. This fire station is approximately 1.8 miles (6 minutes) from the project site.
- **Los Angeles County Fire Station 132** is approximately 1.8 miles (6 minutes) from the project site. It has a four-person engine company.

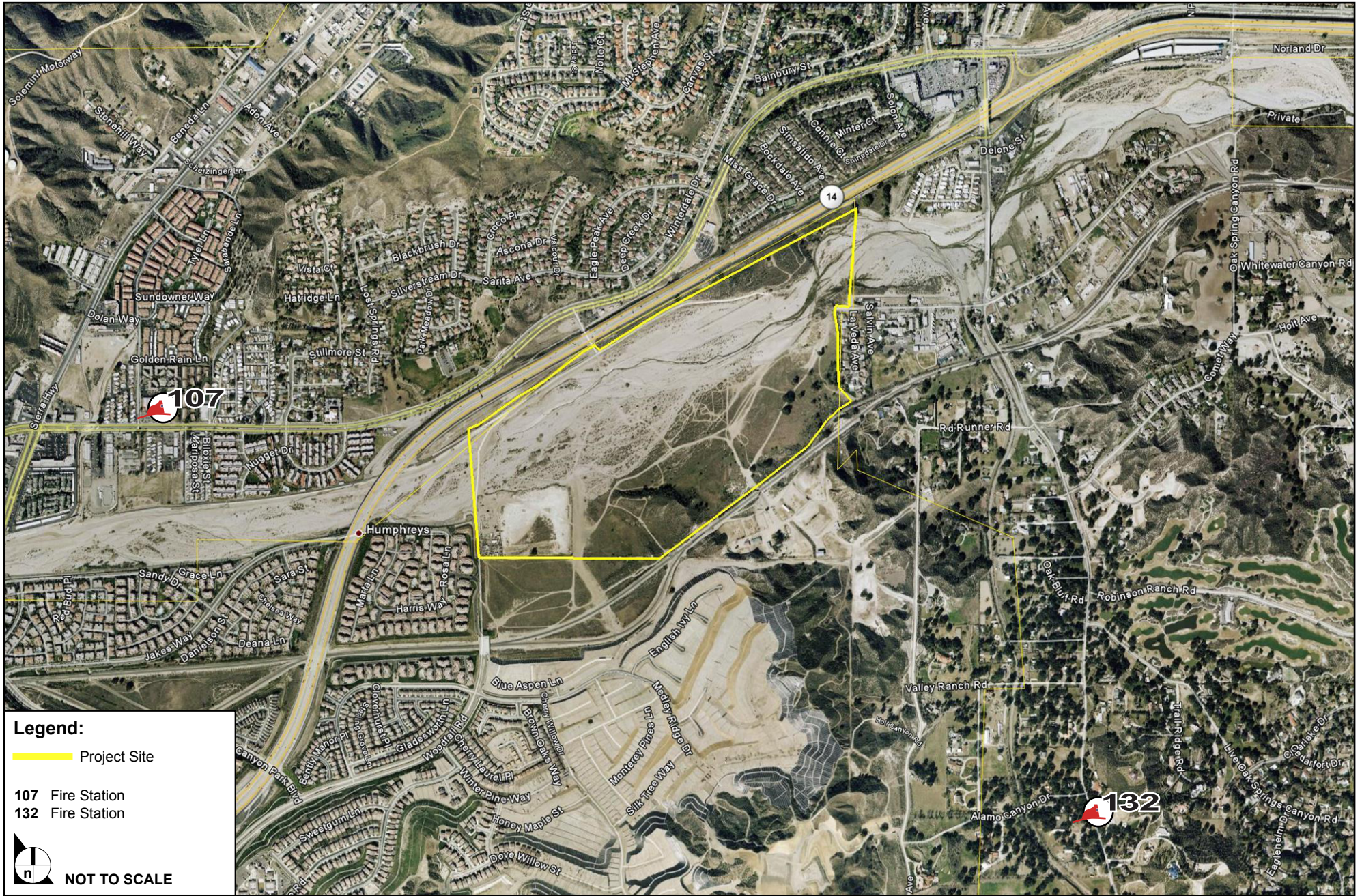


FIGURE 4.13-1

Fire Station Locations

**Table 4.13-1
Los Angeles County Fire Stations Serving the Santa Clarita Valley Area**

Fire Station	Location
Fire Station 73*	24875 N. San Fernando Road, Newhall, CA 91321
Fire Station 76*	27223 Henry Mayo Drive, Valencia, CA 91355
Fire Station 81	8710 W. Sierra Highway, Aqua Dulce, CA 91350
Fire Station 104 (Temporary)	26201 Golden Valley Road, Santa Clarita, CA 91359
Fire Station 107*	18239 W. Soledad Canyon Road, Canyon Country, CA 91351
Fire Station 111*	26829 Seco Canyon Road, Saugus, CA 91350
Fire Station 123	26321 N. Sand Canyon Road, Canyon Country, CA 91387
Fire Station 124*	25870 Hemingway Avenue, Stevenson Ranch, CA 91381
Fire Station 126	26320 Citrus Avenue, Santa Clarita, CA 91355
Fire Station 132 (Temporary)	29310 Sand Canyon Road, Santa Clarita, CA 91387
Fire Station 149*	31770 Ridge Route, Castaic, CA 91384
Fire station 156 (Temporary)	24525 W. Copper Hill Drive, Santa Clarita, CA 91350

Source: Los Angeles County Fire Department, 2008.

Note:

* *With Paramedic Units.*

The Fire Department also maintains three fire camps with three fire crews, which include County jail inmate teams of 12 to 15 fire laborers. These camps are located in San Francisquito Canyon and Soledad Canyon, and at the Peter Pitchess Honor Rancho. An additional County non-inmate crew of 8 to 10 members provides wildland fire fighting protection for the Santa Clarita Valley area.

While the above mentioned stations are the closest to the project site, the Los Angeles County Fire Department operates under a regional concept in its provision of fire protection and emergency medical services, wherein emergency response units are dispatched as needed to an incident anywhere in the Fire Department's service territory based on distance and availability, without regard to jurisdictional or municipal boundaries.⁴

The level of service provided to areas within the district is determined by the Fire Department, and the Fire Department does not calculate service-to-population ratios.⁵ Such ratios do not properly reflect the need for fire protection and emergency medical services because they do not account for demand caused

⁴ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

⁵ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

by non-residential structures, vehicular incidents, transient population, and vacant land with combustible vegetation.⁶ Indicators of need for additional units or fire stations is based on a combination of response times, incident loads, resident and transient populations, and square footage of improvements.⁷ Nationally recognized response times targets for urban areas are 5 minutes for a basic life support unit (engine company) and 8 minutes for an advanced life support unit (paramedic squad). The Los Angeles County Fire Department uses the following response guidelines⁸:

- In urban areas, a 5-minute or less response time for the first arriving unit for fire and emergency medical service responses, and an 8-minute or less response for the advanced life support (paramedic) unit, or
- In suburban areas, an 8-minute response time for the first arriving unit, and 12 minutes for a paramedic unit.

The Fire Department averages 6-minute response times from the two fire stations that would serve the project site; therefore, the Fire Department is currently meeting the above response time standards. Additionally, the Fire Department anticipates that once the road network (including the bridge) for the proposed project, as described in **Section 1.0, Project Description**, is completed, the current distance and response times for these two fire stations will decrease.⁹

The Fire Department annually updates their Five-Year Capital Plan. This plan identifies anticipated facilities that would be constructed during a five-year planning horizon. Funding used for land acquisitions, facility improvements, and partial funding of new equipment is generated through the Fire Department's Developer Fee Program, and funding used for increases in staffing is generated from local property taxes. The Fire Department has a developer fee in effect in the Antelope Valley, Santa Clarita Valley and Santa Monica/Malibu Area.¹⁰ The Los Angeles County Board of Supervisors and City Council for Santa Clarita recently approved an update to the developer fee amount to \$0.99 per square foot of construction, effective March 1, 2010.¹¹ The applicant is required to pay fees for land and construction of

⁶ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

⁷ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

⁸ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

⁹ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

¹⁰ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

¹¹ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

fire stations, and the full cost fire fighting equipment. Application of the developer fees and property tax revenues generated by new development help ensure adequate fire service levels for future developments.¹²

b. Wildland Fire Hazard Potential

The Fire Department designates lands in the County with regards to their potential for wildland fire hazards. These designations are made by the County Forester and are based on an area's accessibility, amount and type of vegetative cover, water availability, and topography. The two designations used by the Fire Department are Moderate Fire Hazard Zone and Very High Fire Hazard Severity Zone. Areas within the County not designated as either a Moderate Fire Hazard Zone or Very High Fire Hazard Severity Zone are not considered to be subject to wildland fire hazards. The differences between Moderate Fire Hazard Zone and Very High Fire Hazard Severity Zone designations are relatively minor, in that one or more of the four criteria (access, topography, vegetation, and water) may pose less of a constraint in Moderate Fire Hazard Zone than in the Very High Fire Hazard Severity Zone. Additionally, the Very High Fire Hazard Severity Zone has more restrictive building requirements than the Moderate Fire Hazard Zone, and is considered to be the most severe fire zone.

The Fire Department has designated the project site, consistent with the rest of the Santa Clarita Valley, as a Fire Zone 4, Very High Fire Hazard Severity Zone. Fire Zone 4 typically has the following vegetation types: chaparral, coastal sage, riparian, and oak woodlands vegetation communities. Wildland fires are relatively common occurrences in these vegetation communities, which are similar to the types found in Santa Clarita Valley and surrounding areas. The plant species characteristics of Fire Zone 4 have adapted to periodic wildland fire conditions, and maintain a healthy ecosystem in the regional vicinity. These plant communities pose the greatest threat to expanding urban development due to their high combustibility and their dense biomass. However, in the areas where these plant communities border urban development, the frequency of fire events may be diminished as a result of fire prevention and fire suppression activities. Fire prevention activities include prescribed burns, vegetation thinning/removal, and creation of buffer zones; whereas fire suppression involves measures that control fires once they have started (i.e., fuel breaks, use of fire fighting equipment, etc.).

Typically, during the spring months, vegetation begins to lose its moisture content and, by the summer and fall when Santa Ana wind conditions begin to occur, wildland fire conditions become extremely high. Historically, large fires tend to burn these areas every 20 to 25 years. The County Forester has indicated that wildland fire events have occurred in the region. When chaparral and coastal sage growth is

¹² Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

younger, it is more succulent with little or no dead or dying branches, provides less horizontal fuel continuity, has a higher average fuel moisture content, and is usually more fire retardant. However, as these plant species reach 20 or more years, the dead-to-live fuel ratio increases, creating more available fuel to carry fire with very high intensities and energy releases. Generally, fire prevention for urban development in wildland fire hazard areas focuses on restricting the types of building materials used, building design, and incorporating setbacks. Development within the Very High Fire Hazard Severity Zone is required to meet the building construction requirements specified in the City's Building and Safety Code for construction, access, water mains, fire hydrants, fire flows, brush clearance, and fuel modifications.

c. Fire Codes and Guidelines

The availability of sufficient on-site water pressure is a basic requirement of the Los Angeles County Fire Department. According to the Fire Department, the proposed project would require fire flows up to 5,000 gallons per minute at 20 pounds per square inch residual pressure for up to a 5-hour duration.¹³ Final fire flows would be based on the size of the buildings, their relationship to other structures, property lines, and types of construction used throughout the project site.¹⁴ It is the responsibility of the developer to conduct fire flow verification and provide documentation to the Fire Department's Land Development Unit when requested.¹⁵

The proposed project also may be subject to requirements for the placement of fire hydrants in order to provide adequate fire protection within the project area. The following requirements for the placement of fire hydrants would apply to the project site:¹⁶

- Fire hydrant spacing shall be 300 feet apart.
- No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.
- No portion of a building within the proposed development shall exceed 400 feet via vehicular access from a properly spaced fire hydrant.
- When cul-de-sac depth exceeds 200 feet, hydrants will be required at the corner and at mid-block of the street.

¹³ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

¹⁴ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

¹⁵ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

¹⁶ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

- Additional hydrants will be required if the hydrant spacing exceeds specific distances.
- All new fire hydrants will be required to be approved 6-inch x 4-inch x 2.5-inch fire hydrants.

Due to the relatively high fire hazard potential in the Very High Fire Hazard Severity Zone, development within these areas is subject to various governmental codes, guidelines, and programs aimed at reducing the hazard potential to acceptable levels. The County of Los Angeles has prepared *Fuel Modification Plan Guidelines*, which set forth guidelines and landscape criteria for all new construction relating to fuel modification planning.¹⁷ Per Section 1117.2.1 of the County Fire Code: “A fuel modification plan, a landscape plan and an irrigation plan ... shall be submitted with any subdivision of land or prior to any new construction ... where the structure or subdivision is located within areas designated as a Very High Fire Hazard Severity Zone in the Los Angeles County Building Code.” A fuel modification plan identifies specific zones within a property which are subject to fuel modification, and a fuel modification zone is a strip of land where combustible native or ornamental vegetation has been modified and/or partially or totally replaced with drought tolerant, fire resistant plants. The City of Santa Clarita has adopted the County Fire Code. A preliminary fuel modification plan (Dudek, 2010) has been prepared for the project and is included in **Appendix 4.13** of this EIR.

d. Current Site Conditions

The project site consists of floodplain areas associated with the Santa Clara River, which runs through the northern portion of the project site from east to west, and adjacent elevated terraces. South of the Santa Clara River Corridor on the project site are flat terraces. The majority of the on-site vegetation consists of moderate to heavy scrub grasses, with small outcroppings of oak trees along the southern and eastern portion of the project site. Additionally, moderate to heavy scrub grassland and areas of chaparral are located on the northeastern portion of the project site. The Santa Clara River Corridor area of the project site is mainly void of vegetation and consists of sandy soil, typical of riverbeds.

4. PROJECT IMPACTS

a. Significance Threshold Criteria

The *City of Santa Clarita Environmental Guidelines* and Appendix G of the *State CEQA Guidelines* provide that a project would adversely impact fire protection services when it would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the

¹⁷ Los Angeles County Fire Department, *Fuel Modification Plan Guidelines for Projects Located in Fire Zone 4 of Very High Fire Hazard Severity Zones* (January 1998).

construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives; or

- expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Additionally, based upon the Los Angeles County Fire Code, the proposed project would create a significant threat to the safety of future residents and occupants if the project site:

- is located in a high fire hazard area (such as Very High Fire Hazard Severity Zone);
- is in a high fire hazard area, and is served by inadequate access due to length, width, surface material, turnarounds, or grade of access roads;
- is in a high fire hazard area and has more than 75 dwelling units on a single means of access;
- is located in an area having inadequate water and pressure to meet fire flow standards; or
- is located in close proximity to potential dangerous fire hazard conditions or uses such as refineries, storage of flammable materials, or explosives manufacturing.

b. Proposed Improvements

The project proposes 1,117 residential units with an estimated population of 3,450 residents, along with the development of 950,000 square feet of commercial and medical offices, retail, theater, and hotel uses. The residential overlay component of the proposed project would allow 1,350 residential units with an estimated population of 4,170 residents, along with the development of 700,000 square feet of commercial and medical offices, retail, theater, and hotel uses (refer to **Section 4.17, Population, Housing, and Employment**).

c. Construction-Related Impacts

Currently, the project site is undeveloped and is not served by fire hydrants or water mains. Unimproved dirt roads extend onto and within the project site. Due to the lack of fire equipment access and water lines, construction activities would have a significant impact on fire protection without mitigation.

Proposed mitigation would require that (1) brush clearance be conducted prior to initiation of construction activities, (2) adequate water be available to service construction activities, and (3) all construction-related requirements of the fuel modification plan, landscape plan and irrigation plan, as approved by the Fire Department, be fulfilled. Construction activities also would be required to comply with all applicable Building and Fire Code requirements for such items as types of roofing materials, building construction, brush clearance, water mains, fire hydrant flows, hydrant spacing, access and

design, and other hazard reduction programs for Very High Fire Hazard Severity Zone, as set forth by the County Forester and Fire Warden. With mitigation, there would be no significant construction-related impacts to fire services.

d. Operational Impacts

Over the four-year buildout of the project site, development would involve the construction of up to 1,350 residential dwelling units and 950,000 square feet of commercial and medical offices, retail, theater, restaurant, and hotel uses. The operational phase of the proposed project would not present special fire protection problems; however, the intensification of land uses combined with the increase in human activity on the project site would result in an increase in fire hazards and other associated needs for fire protection services, including paramedic services. The Fire Department has stated that the fire protection services appear to be adequate for existing development/land use; however, each additional development creates greater demands on existing Fire Department resources.¹⁸ Without additional Fire Department staffing, equipment and facilities, the proposed project may decrease the existing level of service of the Fire Department and result in a significant impact to fire services.

In response to the increased demand for new facilities, equipment and staffing created by new development, the City of Santa Clarita and County of Los Angeles have implemented a Developer Fee Program to fund the purchase of station sites, construction of new stations, and purchase of new equipment. The developer fees, which are currently \$0.99 per square foot (effective March 1, 2010) of new development (all land uses), are adjusted annually by the County in order to maintain adequate levels of service and are collected at the time building permits are issued. This fee constitutes mitigation in full of growth impacts associated with development of the proposed project. In addition, tax revenues from development of the project site would assist in the continued operation, purchasing of equipment, and hiring of new firefighters within the City of Santa Clarita, as needed. Finally, the project would be required to meet City/County codes and requirements relative to providing adequate fire protection services to the site during both the construction and operational stages of the project. As a result, with mitigation, project operation would not diminish the staffing or the response times of existing fire stations in the Santa Clarita Valley, and would not create a special fire protection problem on the site that would result in a decline in existing services levels in the Valley.

¹⁸ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

e. Wildland Fire Hazards

Development of the proposed project would result in the construction of residential uses in areas that have been designated as Zone 4, Very High Fire Hazard Severity Zone, by the County Forester and Fire Warden.¹⁹ Characteristics of the project site that contributed to this designation include (a) access, (b) water supply, (c) topography, and (d) vegetative cover.²⁰ An analysis of the site's fire hazard potential relative to these four factors is presented below.

Access: Vehicular access to and from the project site is proposed from four existing roadways. Primary access to the site would be from: (a) Soledad Canyon Road, via the proposed Vista Canyon Road Bridge, to the north; (b) the westerly Lost Canyon Road within Fair Oaks Ranch, which would be extended to the project site, terminating at a roundabout with Jakes Way; and (c) after the roundabout, Lost Canyon Road would traverse easterly through the site and terminate at a roundabout with the new Vista Canyon Road. Secondary access to and from the project site would be from the easterly terminus of Lost Canyon Road near existing La Veda Avenue; this access is designed with a roundabout, an internal traffic loop, and other traffic calming features to minimize "cut-through" traffic. The internal circulation system for the project would be consistent with City standards regarding access (i.e., roadway widths, length of single access streets, street parking restrictions, etc.; see **Section 4.3, Traffic and Access**, for more information). The project also would comply with all circulation and access requirements imposed by the City and Fire Department. Consequently, no significant vehicular access-related impacts are expected to occur as a result of project implementation.

Water Supply: The proposed water system for the project would provide water service for potable and non-potable uses (see **Section 4.8, Water Services**, for further information). This system would also provide water supplies sufficient to support fire suppression activity in the event of wildland or structural fires. The proposed water supply system would include water mains and fire hydrants, and would provide fire flows that meet County standards. Given that a long-term source of water must exist for the project prior to the issuance of building permits, and that a water supply system is proposed that would meet County fire flow requirements, no significant water-related fire hazards would occur.

Topography: Topography across the project site varies and includes the Santa Clara River Corridor, adjacent elevated terraces, gently sloping knolls on the southern side of the property, Mitchell Hill on the northeast portion of the property and other relatively flat areas. Elevation at the project site ranges from approximately 1,400 feet above mean sea level within the active channel of the Santa Clara River to 1,580 feet above mean sea level along the southern portion of the project site. Without mitigation, impacts

¹⁹ Frank Vidales, Los Angeles County Fire Department, written correspondence with Chris Graham, Impact Sciences, Inc., December 29, 2008.

²⁰ California Department of Forestry and Fire Protection, *Los Angeles County Fire Hazard Severity Zone Maps, City of Santa Clarita*.

due to topography could be significant. However, the project would be required to meet City codes and requirements relative to providing adequate fire protection services to the site during both the construction and operational stages. Consequently, no significant impacts with regard to site topography would occur.

Vegetative Cover: The project site is generally surrounded by urban development. However, there are some adjacent areas with moderate to heavy vegetative cover. The plant communities located on site include moderate amounts of scrub grasses on the southern portion of the project site, and moderate scrub grasses and chaparral on the northeast corner of the proposed project site. The plant communities that make up this cover are highly combustible and, without mitigation, would present a high fire hazard to development in these areas. As development of the project site occurs, fire hazards associated with the natural vegetative cover would be eliminated due to the replacement of this cover with urban landscape vegetation, which would be irrigated and less combustible than the existing vegetation. The potential for wildland fire hazards would still exist at the wildland/urban interface due to (1) increased human activity, and (2) the potential for fires due to accidental and arson-related causes. Without mitigation, such impacts could be significant. The project would be required to meet City codes and requirements relative to providing adequate fire protection services to the site during both the construction and operational stages of the project. Further, a preliminary fuel modification plan (Dudek, 2010) has been prepared for the project and is included in **Appendix 4.13**. Mitigation measures for the project include the preparation of a final fuel modification plan. A conceptual landscape and irrigation plan (Yamasaki, 2010) has been prepared and is included in the **Appendix 4.13**. A final landscape and irrigation plan, consistent with the conceptual plan, would be prepared in accordance with City requirements. Consequently, no significant impacts with regard to vegetative cover would occur.

In conclusion, the jurisdictional stations for the project site are Fire Station 107, located at 18239 West Soledad Canyon Road in Santa Clarita, and Fire Station 132, located at 29310 San Canyon Road in Santa Clarita. Additional fire protection services would be provided by the closest available district response units. Fire service for the project site would be funded through payment of developer fees. These fees result in mitigation in full of growth impacts. In addition, tax revenues from development of the proposed project would assist in providing for the purchase of new equipment and hire of new firefighter personnel by in the Los Angeles County Fire Department. The project would be required to meet City codes and requirements relative to providing adequate fire protection services to the site during both the construction and operational stages of the project. Given compliance with all proposed mitigation measures and other jurisdictional requirements, the proposed project would not diminish the staffing or response times of existing fire stations in the Santa Clarita Valley, nor would it create a special fire protection requirement on the site that would result in a decline in existing service levels in the Valley. Therefore, the proposed project with mitigation would not have a significant impact on fire protection services in the Santa Clarita Valley.

5. MITIGATION MEASURES ALREADY INCORPORATED INTO THE PROJECT

The proposed project has not incorporated any mitigation measures into its design.

6. MITIGATION MEASURES PROPOSED BY THIS EIR

To mitigate its potential significant impacts, the project must comply with the following measures:

- 4.13-1** Concurrent with the issuance of building permits, the project applicant shall pay fire facilities fees to the satisfaction of the City of Santa Clarita.
- 4.13-2** The project applicant shall prepare a Final Fuel Modification Plan, and Landscape and Irrigation Plan, as required for projects located within a Very High Fire Hazard Severity Zone. These two plans shall be submitted to and approved by the Los Angeles County Fire Department prior to building construction. The Final Fuel Modification Plan shall depict a fuel modification zone in conformance with the Fuel Modification Ordinance in effect at the time of subdivision.
- 4.13-3** The project shall provide water mains, fire hydrants and fire flows, as required by the Los Angeles County Fire Department, for all land shown on the map that shall be recorded.
- 4.13-4** Brush clearance shall be conducted prior to the initiation of construction activities in accordance with City of Santa Clarita and Los Angeles County Fire Department requirements.
- 4.13-5** Adequate water availability shall be available to service any fire suppression activities that arise during the construction phase of the project.
- 4.13-6** Vehicular access must be provided and maintained throughout construction to all required fire hydrants. All required fire hydrants shall be installed, tested and accepted or bonded prior to construction. All hydrants shall measure 6 inches by 4 inches by 2.5 inches brass or bronze, conforming to current AWWA standard C503 or approved equal. Additionally, the following fire hydrant standards shall be met:
- Fire hydrant spacing shall be 300 feet.
 - No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.
 - No portion of a building shall exceed 400 feet via vehicular access from a properly spaced fire hydrant.

- Any cul-de-sac proposed for the project site that's street length exceeds a depth of 200 feet, shall be required to place fire hydrants at the corner and mid-block of the cul-de-sac.
- Additional hydrants will be required if the hydrant spacing exceeds specified distances.
- These hydrants shall be located as per the vesting tentative tract map on file with the Fire Department.

4.13-7 Fire Department access shall be extended to within 150 feet distance of any exterior portion of all structures.

4.13-8 All fire lanes must not be less than 26 feet paved width (clear to sky and unobstructed) and posted and red curbed "NO PARKING – FIRE LANE."

4.13-9 Private driveways shall be indicated on the final vesting tract map as "Private Driveway and Fire Lane," with the widths clearly depicted, and shall be maintained in accordance with the Fire Code.

4.13-10 The applicant shall provide the Los Angeles County Fire Department or City of Santa Clarita with approved street signs and building access numbers prior to occupancy of the project site.

7. CUMULATIVE IMPACTS

The cumulative impact analysis considers the cumulative contribution of the proposed project to the expected future growth in the Santa Clarita Valley at its buildout under two conditions: (1) the existing City of Santa Clarita General Plan and Los Angeles County Santa Clarita Valley Area Plan (known also as the Santa Clarita Valley Cumulative Build-Out Scenario), and (2) the proposed OVOV General Plan.

a. Santa Clarita Valley Cumulative Build-Out Scenario

The Santa Clarita Valley Cumulative Build-Out Scenario entails build-out of all lands under the existing land use designations indicated in the existing City of Santa Clarita General Plan, the existing Los Angeles County Santa Clarita Valley Area Plan, plus the project, plus all known active pending General Plan Amendment requests for additional urban development in the unincorporated area of the Santa Clarita Valley and in the City of Santa Clarita.

A list of the future development activity (with and without the project) expected in the Valley under the Santa Clarita Valley Cumulative Build-Out Scenario is presented below in **Table 4.13-2, Cumulative Development Activity – Santa Clarita Valley Cumulative Build-Out Scenario**.

**Table 4.13-2,
Cumulative Development Activity – Santa Clarita Valley Cumulative Build-Out Scenario with
Proposed Project**

Land Use Types	Cumulative Build-out w/o Project	Proposed Project	Cumulative Build-out w/ Proposed Project
Single-Family	93,281 du	105 du	93,386 du
Multi-Family	48,013 du	1,012 du	49,258 du
Mobile Home	2,699 du		2,699 du
Commercial Retail	19,859,030 sq. ft.	164,000 sq. ft.	20,023,030 sq. ft.
Hotel	2,071 room	200 rooms	2,271 room
Sit-Down Restaurant	283,790 sq. ft.		283,790 sq. ft.
Fast Food Restaurant	23,600 sq. ft.		23,600 sq. ft.
Movie Theater	3,300 seats		3,300 seats
Health Club	54,000 sq. ft.		54,000 sq. ft.
Car Dealership	411,000 sq. ft.		411,000 sq. ft.
Elem./Middle School	278,953 students	199 students	279,152 students
High School	12,843 students	61 students	12,904 students
College	29,948 students		29,948 students
Hospital	247,460 sq. ft.		247,460 sq. ft.
Library	171,790 sq. ft.		171,790 sq. ft.
Church	501,190 sq. ft.		501,190 sq. ft.
Day Care	785,000 sq. ft.		785,000 sq. ft.
Industrial Park	41,743,950 sq. ft.		41,743,950 sq. ft.
Business Park	8,424,330 sq. ft.		8,424,330 sq. ft.
Manufact./Warehouse	3,932,470 sq. ft.		3,932,470 sq. ft.
Utilities	1,150,240 sq. ft.		1,150,240 sq. ft.
Commercial Office	6,380,520 sq. ft.	646,000 sq. ft.	6,776,520 sq. ft.
Medical Office	133,730 sq. ft.		133,730 sq. ft.
Golf Course	1,209.0 ac		1,209.0 ac
Developed Parkland	465.3 ac		ac
Undeveloped Parkland	1,000.0 ac		1,000.0 ac
Special Generator ²	413.0 sg		413.0 sg

Notes:

du = dwelling unit; sq. ft. = square feet; sta = staff; ac = acres; sg = special generator

¹ *Santa Clarita Valley Consolidated Traffic Model (November 2002). Includes existing development and active pending General Plan Amendment requests.*

² *Includes Wayside Honor Ranch, Six Flags Magic Mountain, Travel Village, CHP Office, and Aqua Dulce Airport.*

Additionally, **Table 4.13-3, Cumulative Development Activity – Santa Clarita Valley Cumulative Build-Out Scenario with Proposed Project with the Residential Overlay Component**, shows the estimated buildout under the Santa Clarita Valley Cumulative Build-Out Scenario including the proposed project with the residential overlay component.

The Santa Clarita Valley Cumulative Build-Out Scenario is expected to generate a population of approximately 435,291 residents. Therefore, with the development of the proposed project and the proposed project with the residential overlay component, expected population at buildout would be approximately 438,741 residents and 439,461 residents, respectively.

**Table 4.13-3
Cumulative Development Activity – Santa Clarita Valley Cumulative Build-Out Scenario with
Proposed Project with Residential Overlay Component**

Land Use Types	Cumulative Build-out w/o Project	Proposed Project with the Residential Overlay Component	Cumulative Build-out w/ Proposed Project with Residential Overlay Component
Single-Family	93,281 du	105 du	93,386 du
Multi-Family	48,013 du	1,245 du	49,258 du
Mobile Home	2,699 du		2,699 du
Commercial Retail	19,859,030 sq. ft.	164,000 sq. ft.	20,023,030 sq. ft.
Hotel	2,071 room	200 rooms	2,271 room
Sit-Down Restaurant	283,790 sq. ft.		283,790 sq. ft.
Fast Food Restaurant	23,600 sq. ft.		23,600 sq. ft.
Movie Theater	3,300 seats		3,300 seats
Health Club	54,000 sq. ft.		54,000 sq. ft.
Car Dealership	411,000 sq. ft.		411,000 sq. ft.
Elem./Middle School	278,953 students	234 students	279,187 students
High School	12,843 students	69 students	12,912 students
College	29,948 students		29,948 students
Hospital	247,460 sq. ft.		247,460 sq. ft.
Library	171,790 sq. ft.		171,790 sq. ft.
Church	501,190 sq. ft.		501,190 sq. ft.
Day Care	785,000 sq. ft.		785,000 sq. ft.
Industrial Park	41,743,950 sq. ft.		41,743,950 sq. ft.
Business Park	8,424,330 sq. ft.		8,424,330 sq. ft.
Manufact./Warehouse	3,932,470 sq. ft.		3,932,470 sq. ft.
Utilities	1,150,240 sq. ft.		1,150,240 sq. ft.
Commercial Office	6,380,520 sq. ft.	396,000 sq. ft.	6,776,520 sq. ft.
Medical Office	133,730 sq. ft.		133,730 sq. ft.
Golf Course	1,209.0 ac		1,209.0 ac

Land Use Types	Cumulative Build-out w/o Project	Proposed Project with the Residential Overlay Component	Cumulative Build-out w/ Proposed Project with Residential Overlay Component
Developed Parkland	465.3 ac		465.3 ac
Undeveloped Parkland	1,000.0 ac		1,000.0 ac
Special Generator ²	413.0 sg		413.0 sg

Notes:

du = dwelling unit; sq. ft. = square feet; sta = staff; ac = acres; sg = special generator

¹ *Santa Clarita Valley Consolidated Traffic Model (November 2002). Includes existing development and active pending General Plan Amendment requests.*

² *Includes Wayside Honor Ranch, Six Flags Magic Mountain, Travel Village, CHP Office, and Aqua Dulce Airport.*

Increases in development could result in an increase in the average response time for fire protection services, particularly for non-emergency calls. There would be a cumulative impact on fire services if the projects failed to implement mitigation measures reducing impacts to the Los Angeles County Fire Department. However, such mitigation is required, and impacts resulting from new development would be reduced by compliance with state, City and County fire codes, standards and guidelines, and incorporation of project-specific mitigation measures to reduce fire protection impacts to a less-than-significant level, similar to the proposed project but dependent upon each site specific requirements. Moreover, increased cumulative development demands would be met by increases in staffing and equipment, which would be funded by developer fees and increased taxes paid by new development. Therefore, cumulative impacts on fire protection are considered to be less than significant under the Santa Clarita Valley Cumulative Build-Out Scenario.

b. Proposed OVOV General Plan Cumulative Build-Out Scenario

The Proposed OVOV General Plan Cumulative Build-Out Scenario entails buildout of land within the City of Santa Clarita along with the build-out of land within the proposed City of Santa Clarita Sphere of Influence. **Table 4.13-4, OVOV General Plan Build-Out Land Uses**, shows the buildout of the expected land uses under the proposed OVOV General Plan, which includes the proposed project. The expected population upon buildout of the proposed OVOV General Plan is approximately 275,000 residents, which is less than the Santa Clarita Valley Cumulative Build-Out Scenario.

Development of the proposed project and proposed project with the residential overlay component would cumulatively contribute to the overall demand for Los Angeles County Fire Department services under the Proposed OVOV General Plan Cumulative Build-Out Scenario. Development of the proposed project would account for approximately 1.3 percent of the expected population buildout of the proposed OVOV General Plan and the proposed project with the residential overlay component would account for approximately 1.5 percent of the expected population at buildout.

**Table 4.13-4
OVOV General Plan Build-Out Land Uses**

Land Use Types	Cumulative Build-out of the City of Santa Clarita and City SOI
Single-Family Residential Units	77,975 du
Multi-Family Residential Units	65,327 du
Mobile Home Units	3,420 du
Senior Active Units	2,352 du
Commercial Center	21,126,810 sq. ft.
Commercial Shops	2,104,110 sq. ft.
Hotel	2,527 rooms
Sit-Down Restaurant	289,720 sq. ft.
Fast-Food Restaurant	64,420 sq. ft.
Movie Theater	3,600 seats
Health Club	138,000 sq. ft.
Car Dealership	530,000 sq. ft.
Elementary School/Middle School	51,667 students
High School	18,500 students
College	36,062 students
Hospital	365,160 sq. ft.
Library	91,400 sq. ft.
Church	997,460 sq. ft.
Day Care	540 students
Industrial Park	36,687,270 sq. ft.
Business Park	7,797,080 sq. ft.
Manufacturing/Warehouse	3,268,690 sq. ft.
Utilities	1,032,440 sq. ft.
Regional Post Office	780,000 sq. ft.
Commercial Office	8,483,890 sq. ft.
High-Rise Office	300,000 sq. ft.
Medical Office	730,560 sq. ft.
Post Office	50,000 sq. ft.
Golf Course	1,338 ac
Developed Parkland	1,040.2 ac
Undeveloped Parkland	890 acres
Special Generator	380.13 sg

Source: Written Communication with Mike Ascione, City of Santa Clarita and Impact Sciences (April 2, 2009).

du = dwelling unit; sq. ft. = square feet; sg = special generator; ac = acres

² Special Generators include Wayside Honor Ranch, Six Flags Magic Mountain, Travel Village, CHP Office, and Aqua Dulce Airport.

As with the Santa Clarita Valley Cumulative Build-Out Scenario, increases in development under the Proposed OVOV General Plan Cumulative Build-Out Scenario, including buildout of the proposed project and proposed project with the residential overlay component, could result in an increase in the average response time for fire protection services, particularly for non-emergency calls. There would be a cumulative impact on fire services if projects failed to implement mitigation measures reducing impacts to the Los Angeles County Fire Department. However, such mitigation is required, and impacts resulting from new development would be reduced by compliance with state, City and County fire codes, standards and guidelines, and incorporation of project-specific mitigation measures to reduce fire protection impacts to a less than significant level, similar to the proposed project but dependent upon each site specific requirements. Moreover, increased cumulative development demands would be met by increases in staffing and equipment, which would be funded by developer fees and increased taxes paid by new development. Therefore, cumulative impacts on fire protection are considered to be less-than-significant under the Proposed OVOV General Plan Cumulative Build-Out Scenario.

8. CUMULATIVE MITIGATION MEASURES

As no cumulative impacts have been identified, no cumulative mitigation measures are required.

9. SIGNIFICANT UNAVOIDABLE IMPACTS

With implementation of the above-identified mitigation measures, project-specific impacts associated with fire services would be reduced to a level below significant. There would be a cumulative impact on fire services if the proposed project and other projects failed to implement mitigation measures to reduce impacts under both the Santa Clarita Valley Cumulative Build-Out Scenario and the Proposed OVOV General Plan Cumulative Build-Out Scenario. However, increased cumulative development demands would be met by increases in staffing and equipment, which would be funded by developer fees and increased taxes paid by new development; therefore, no unavoidable significant cumulative impacts related to fire services would occur as a result of the proposed project and cumulative development.