
2.4 Hazards – Fire Safety and Hazardous Chemicals

The assessment of the Project's potential to have an adverse effect related to hazards and fire safety is based on technical studies prepared for the Project. The results of the analysis are presented below and are included in appendices of this DSEIR.

- Appendix H: *Fire Protection Plan Chinese Bible Church of San Diego* (Robin Church and Firewise 2000, 2015, 2018) and MUP 10-037 Changes to Project Description (Firewise 2000, 2016)
- Appendix I: *Phase I Environmental Site Assessment* (Coast 2 Coast Environmental, Inc., 2016)

The Santa Fe Valley Specific Plan (SFVSP) EIR (SP95-00) was also reviewed. The SFVSP EIR did not specifically analyze hazards or hazardous materials; however, consideration was given to fire safety under the category Public Services and Utilities (Section 4.13). The SFVSP EIR identified significant impacts related to the provision of fire protection facilities.

One comment was received related to hazards during the Notice of Preparation (NOP). This comment addressed the potential for fires from the commercial kitchen. This concern is addressed in this section. Copies of the NOP and comment letters received in response to the NOP are included in Appendix A.

2.4.1 Background

The previously certified Santa Fe Valley Specific Plan EIR (1995) did not specifically analyze hazards or hazardous materials; however, consideration was given to fire safety under the category Public Services and Utilities (Section 4.13). Significant and mitigable impacts to Public Services and Utilities were identified in the previous EIR. The previous EIR included the following mitigation measure:

- Mitigation Measure 10A required the subdividers to obtain a “will serve” letter from the appropriate fire agency and develop a fire management plan.

Mitigation Measure 10A is still applicable to the Project and a Project Facility Availability Form for fire service from the Rancho Santa Fe Fire Protection District (RSFFPD) has been secured for the Project (Appendix P of the DSEIR). Additionally a Fire Protection Plan (FPP), which serves as the fire management plan identified in Mitigation Measure 10A, has been prepared for the Project and included as Appendix H of the DSEIR.

Changes Requiring New Analysis

Since certification of the Santa Fe Valley Specific Plan EIR in 1995, the RSFFPD has mapped all areas within its boundary, including the Project site, as a Very High Fire Hazard Severity Zone. Therefore this following analysis is provided to analyze the Project in light of the recent mapping by RSFFPD. The analysis also discusses the results of an updated Phase I Environmental Site Assessment.

2.4.2 Existing Conditions

This section provides an overview of site condition and federal, state and local regulations related to fire hazards and hazardous materials.

2.4.2.1 Site Conditions

Land Use, Topography and Climate

The site is composed of residentially developed and agricultural lands with the exception of a small area of open space in the northwestern corner. The site has residential development to the north, south and east, and a fire station to the west.

The County is divided into five climate zones from the coast to the desert (Climates of San Diego County, Agricultural Relationships, University of California, Agricultural Extension Service, and U.S. Weather Bureau). These climate zones are determined by several factors: proximity to the ocean, terrain, elevation, and latitude. Using the Köppen system, the metropolitan areas of Southern California have a Mediterranean climate, characterized by mild, sometimes wet winters and warm, very dry summers. The Mediterranean climate includes all coastal areas, valleys and foothills. Annual precipitation amounts increase gradually from the coast to the mountain crests, then drop dramatically into the deserts. Most precipitation comes from winter storms between November and March. The Project site is located within the coastal climate zone. Average rainfall is 13 inches per year (Western Regional Climate Center).

The topography of the Project site is gently sloping with the local topographic gradient tending to the north toward Jason Creek, a seasonal creek paralleling the north border of the site. Regionally the topographic gradient tends to the west-southwest. Site elevation ranges from approximately 485 AMSL on the north end of the Project site to 516 feet AMSL on the south end of the site.

Vegetation, Fuel Loads and Fire History

The entire Project site, with the exception of the open space limit in the northwest corner, will be developed as part of the Project. The open space contains emergent wetlands and non-native grassland. The non-native grassland may develop into a shrub community through time. The site is surrounded by development to the south, east and southwest. Offsite fuel threat from the north and northwest are primarily additional emergent wetlands and non-native grassland.

According to CalFire maps, the Project site is located within a State Responsibility Area and a high fire hazard severity zone with the adjacent areas being mapped as very high, moderate and urban/developed. The RSFFPD has declared all area within its service boundary as Very High Fire Hazard Severity Zone by adopting a more stringent ordinance (District Ordinance 2011-001). RSFFPD's Very High Fire Hazard Severity Zone designation applies to all areas, regardless if they are adjacent to developed areas. The fire history of the site and surrounding area (approximately two-mile radius) as documented by CalFire and San Diego Geographic Information Source (SanGIS) Data Warehouse was reviewed. The assessment includes most fires greater than 10 acres in size, however not all historic fires may be documented. A total of 12

documented fires have burned in the Project vicinity between the years 1919 and 2010. The Project site has burned two times during that period, in 1943 and 1981. The Witch Fire of 2007 came within 200 feet of the western property line of the Project site.

Fire Protection Services

The Project is located within the RSFFPD. The closest fire station to the Project site is Fire Station No. 2, which is located directly across Four Gee Road from the Project site. The fire companies assigned at Station No. 2 respond to emergencies in the communities of 4S Ranch, Santa Fe Valley and Bernardo Lakes Estates, Bernardo Point and Summit of Rancho Bernardo. Travel time from Fire Station No. 2 to the Project site is approximately two minutes.

Fire Station No. 2 is also a regional training facility. The facility houses a 4-story training tower with three burn rooms, three underground vaults simulating confined-space rescue incidents, an extrication area where firefighters practice cutting cars apart to free victims of traffic collisions, three roof props to simulate ventilation techniques, a 33,000 gallon drafting pit, and a splash wall. The facility also holds an on-site classroom.

Historical Land Use

The Project site consists of two parcels, one of which is undeveloped and the other of which contains an occupied single-family residence with an attached two-car garage, a caretaker's cottage, and a carport/work space. Historically, the site has been utilized for agricultural operations from at least 1947 to 1949. The property was utilized as a residence and cattle ranch in the 1950s through 1997. An organic farming operation cultivated row crops on the east side of the Property from 2006 to 2011.

2.4.2.2 Federal Regulations and Standards

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984, establishes a framework for national programs to achieve environmentally sound management of both hazardous and non-hazardous wastes. RCRA was designed to protect human health and the environment, reduce/eliminate the generation of hazardous waste, and conserve energy and natural resources. RCRA also promotes resource recovery techniques. The Hazardous Waste Management subchapter of the RCRA deals with a variety of issues regarding the management of hazardous materials including the export of hazardous waste, State programs, inspections of hazardous waste disposal facilities, enforcement, and the identification and listing of hazardous waste.

Uniform Fire Code

The Uniform Fire Code (UFC) is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The UFC regulates the use, handling and storage requirements for hazardous materials at fixed facilities. The UFC and the Uniform Building Code use a hazard classification system to determine what protective

measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the UFC employs a permit system based on hazard classification.

Chemical Accident Prevention Provisions

The Chemical Accident Prevention Provisions are listed under Part 68 of the Code of Federal Regulations and set forth the list of regulated substances and thresholds, the petition process for adding or deleting substances to the list of regulated substances, the requirements for owners or operators of stationary sources concerning the prevention of accidental releases, and the State accidental release prevention programs approved under Section 112(r).

2.4.2.3 State Regulations and Standards

California Code of Regulations

Title 24 of the California Code of Regulations contains several International Codes that address fire safety including the International Fire Code, International Building Code. Additional safety regulations adopted by the California Building Standards Commission include the Uniform Mechanical Code, and Uniform Plumbing Code, which are also part of the California Code of Regulations.

California Code of Regulations Title 14 (SRA Fire Safe Regulations) contains regulations that establish minimum wildfire protection standards in conjunction with building construction and development in the State Responsibility Area (SRA). Over 90 percent of the unincorporated area of the County is located within the SRA. The County has authority to approve subdivisions and issue building permits and, therefore, is the “inspection authority” authorized in Title 14 “SRA Fire Safe Regulations”. However, since the state Board of Forestry and Fire Protection certified the County Fire Code and Consolidated Fire Code under 14 CCR Section 1270.03, the County Fire Code and Consolidated Fire Code apply in lieu of the SRA Fire Safe Regulations.

California Code of Regulations Title 19 (State Fire Marshal) contains regulations that have been developed by the State Fire Marshal for the purpose of establishing additional fire protection for group occupancies, such as places of assembly, schools, high rise buildings, hospitals and organized camps.

California Health and Safety Code

The County of San Diego Department of Environmental Health (DEH) Hazardous Materials Division is responsible for the implementation of the Hazardous Materials Business Plan (HMBP) program and the California Accidental Release Program (CalARP) in San Diego County, both of which are found in the California Health and Safety Code, Chapter 6.95. The HMBP and CalARP Program provide threshold quantities for regulated hazardous substances. When the indicated quantities are exceeded, a HMBP or Risk Management Plan (RMP) is required pursuant to the regulation.

The Hazardous Waste Control Act regulates the generation, treatment, storage and disposal of hazardous waste. Hazardous Waste is any material or substance that is discarded, relinquished, disposed or burned, or for which there is no intended use or reuse, and the material or substance causes or significantly contributes to an increase in mortality or illness; or the material or substance poses a substantial present or potential hazard to human health or the environment. These materials or substances include: spent solvents and paints (oil and latex), used oil, used oil filters, used acids and corrosives, and unwanted or expired products (pesticides, aerosol cans, cleaners, etc.). If the original material or substance is labeled danger, warning, toxic, caution, poison, flammable, corrosive or reactive, the waste is very likely to be hazardous.

2.4.2.4 Local Regulations and Standards

County of San Diego Building and Fire Codes

Following the October 2003 and fall 2007 wildfires in San Diego, assessments were made of damaged and destroyed homes in an effort to identify areas where codes could be strengthened in order to enhance the chances of a structure surviving a wildfire. As a result, in February 2008, the County amended the Fire Code and Building Code to include strengthened ignition-resistive construction requirements, modifying the previous two-tiered system and requiring “enhanced” standards for all new construction.

County Consolidated Fire Code

The County Consolidated Code is based on the County Fire Code and incorporates local fire district fire codes as ratified by the Board of Supervisors into a single document. The County Consolidated Fire Code includes notations where the local fire district(s) requirements differ from the County Fire Code. The County Consolidated Fire Code is the current fire regulations approved by the Board of Supervisors that apply in the various fire districts. The County Consolidated Fire Code has been certified by the California Board of Forestry and Fire Protection for use in lieu of “SRA Fire Safe Regulations” in CCR title 14.

General Plan Safety Element

The Safety Element provides information to facilitate the inclusion of “safety considerations in the planning and decision-making process by establishing policies related to future development that will minimize the risk of personal injury, loss of life, property damage, and environmental damage associated with natural and man-made hazards.” The Safety Element contains information about topic areas including, but not limited to, wildfires and hazardous materials.

The following policies identified in the County of San Diego General Plan (August 2011) Safety Element are applicable to the Project:

1. **Goal S-3: Minimized Fire Hazards.** Minimize injury, loss of life, and damage to property resulting from structural or wildland fire hazards.

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- a. **Policy S-3.1: Defensible Development.** Require development to be located, designed, and constructed to provide adequate defensibility and minimize the risk of structural loss and life safety resulting from wildland fires.
 - b. **Policy S-3.3: Minimize Flammable Vegetation.** Site and design development to minimize the likelihood of a wildfire spreading to structures by minimizing pockets or peninsulas, or islands of flammable vegetation within a development.
 - c. **Policy S-3.4: Service Availability.** Plan for development where fire and emergency services are available or planned.
 - d. **Policy S-3.5: Access Roads.** Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.
 - e. **Policy S-3.6: Fire Protection Measures.** Ensure that development located within fire threat areas implement measures that reduce the risk of structural and human loss due to wildfire. Mitigation measures include, but are not limited to, the use of ignition resistant materials, multiple ingress and egress routes, and fire protection systems.
 - f. **Policy S-3.7: Fire Resistant Construction.** Require all new, remodeled, or rebuilt structures to meet current ignition resistance construction codes and establish and enforce reasonable and prudent standards that support retrofitting of existing structures in high fire threat areas.
2. **Goal S-4: Managed Fuel Loads.** Managed fuel loads, including ornamental and combustible vegetation.
 - a. **Policy S-4.1: Fuel Management Programs.** Support programs consistent with state law that require fuel management/modification within established defensible space boundaries and when strategic fuel modification is necessary outside of defensible space, balance fuel management needs to protect structures with the preservation of native vegetation and sensitive habitats.
3. **Goal S-11: Controlled Hazardous Material Exposure.** Limited human and environmental exposure to hazardous materials that pose a threat to human lives or environmental resources.
 - a. **Policy S-11.3: Hazards-Sensitive Uses.** Require that land uses using hazardous materials be located and designed to ensure sensitive uses, such as schools, hospitals, day care centers, and residential neighborhoods, are protected. Similarly, avoid locating sensitive uses near established hazardous materials users or High Impact Industrial areas where incompatibilities would result.

2.4.3 Analysis of Project Effects and Determination as to Significance

2.4.3.1 Compliance with Applicable Fire Codes

Guideline for the Determination of Significance

A significant fire hazards impacts would occur if:

- The project cannot demonstrate compliance with all applicable fire codes.

Guideline Source

This guideline is from *The County of San Diego's Guidelines for Determining Significance and Report Format and Content Requirements Wildland Fire and Fire Protection* (August 2010).

Analysis

All projects located within the RSFFPD are required by law to comply with all applicable fire protection and construction-related local regulations and standards, including District Ordinance 2011-01, County of San Diego Ordinances 10146-10148, and the Consolidated Fire Code, County Ordinance 10172.

Fuel Management

The San Diego County Consolidated Fire Code and the RSFFPD Fire Code require management of flammable vegetation within 100 feet of structures. The main entrance roadway, Grace Way, requires 30 feet of fuel management from the improved surface. The purpose of this zone is to provide the necessary defensible space for fire suppression and to reduce the radiant heat and convective heat that would result from a fire.

The minimum fuel management zone adjacent to open space is 100 feet. All of the proposed buildings are a minimum of 100 feet from the on-site or off-site open space. A 150-foot buffer (50-foot no build buffer and 100-foot fire safety buffer) from the EW habitat offsite was also examined and fire safety measures within that area were reviewed and confirmed by the fire safety specialist (Appendix H). Also, the Landscape Concept Plan (Figure 1-7) shows that the fuel management zone will be composed of hardscape primarily in the form of parking with landscaping. The fuel management zone is almost four times the largest anticipated flame length of 28 feet. The balance of the Project is adjacent to development. Therefore, the Project is in compliance with the Consolidated Fire Code and RSFFPD Fire Code for fuel management.

Water Availability/Flow

The Project site is located within the OMWD. Due to the Project being located within a hazardous fire area, the main capacity for the Project shall be 2,500 gallons per minute at 20 psi residual pressure in conformance with the Consolidated Fire Code, the District Fire Code, and the letter from the District dated December 30, 2015 (Appendix A of the FPP). Fire hydrants would be installed at locations acceptable to the District and within 300 feet to all parts of buildings. The location of the hydrants would be identified during the Construction Drawing Phase of the Project. The design of the water supply system

shall be reviewed and approved by the District prior to installation. The water supply system shall be installed prior to bring flammable building materials onsite. As detailed further in Section 3.1.7, Utilities/Service Systems, the OMWD indicated that they have or will have adequate facilities with sufficient capacity to serve the Project. Therefore, the Project would have sufficient water supplies available and impacts would be **less than significant**.

Access

As described above, the Project provides access via Grace Way which will be improved to a width of 44 feet. This is 20 feet wider than the minimum required. The internal loop road allows for fire truck access to within 150 feet of all portions of the building when a truck is parked perpendicular to parked cars, as required by Section 503 of the Consolidated Fire Code. In addition, all of the buildings will have approved automatic sprinkler systems. Per the FPP, the access road, Grace Way and internal loop will be constructed and maintained in conformance with Section 503 of the Consolidated Fire Code, County Ordinance 10148, and RSFFPD Ordinance 2014-01A. Additionally, a lighted directory map, meeting current Fire District Standards will be installed in a pre-approved location to assist the Fire Department with locating buildings in the event of an emergency. The Project provides an approved primary access and all roads and driveways proposed as part of the Project meet San Diego County, RSFFPD, and Consolidated Fire Code requirements.

Fire Hazards from the Commercial Kitchen

Chapter 6, Building Services and Systems, of the California Fire Code addresses installation, operation, and maintenance of commercial kitchen equipment, among other systems. Section 609 addresses commercial kitchen hoods installed for grease vapors. Inspection and cleaning frequency of the commercial cooking system is outlined in Table 609.3.3.1. Cleaning records are required to be completed and automatic fire-extinguishing systems shall be installed and in operation as required by Section 904.11.6, along with the provision of a fire extinguisher. Section 609 also stipulates that commercial kitchen exhaust hoods shall comply with the California Mechanical Code as well. Section 610 addresses the storage of commercial kitchen cooking oil. Adherence to these requirements would ensure risks related to kitchen fires are minimized and, should such fires occur, proper fire-extinguishing systems are operational. Impacts resulting from kitchen fires would be **less than significant**.

2.4.3.2 Fire Protection Plan Consistency

Guideline for the Determination of Significance

A significant fire hazards impacts would occur if:

- A comprehensive Fire Protection Plan has been accepted, and the Project is inconsistent with its recommendations.

Guideline Source

This guideline is from *The County of San Diego's Guidelines for Determining Significance and Report Format and Content Requirements Wildland Fire and Fire Protection* (August 2010).

Analysis

A FPP was prepared by the applicant and approved by the RSFFPD Fire Marshal and the San Diego County Planning and Development Services pursuant to Article 86, Section 8601 of the 2001 California Fire Code. The complete FPP is included as Appendix H of the DSEIR. Key points of the FPP are summarized below.

Fuel Management Zones and Fire Behavior Modeling

Several factors were taken into consideration when determining the fuel management zones including topography, degree of exposure, parcel size, and proximity to biological open space. Fire modeling was performed using Behave Plus 4.0 for three types of weather conditions, a Santa Ana weather condition, a peak weather condition and a summer weather condition. Weather data for the Santa Ana, peak and summer conditions were determined by the Standard Weather Parameters for the Coastal Zone from the County of San Diego Guidelines For Determining Significance and Report Format and Content Requirements for Wildland Fire and Fire Protection (County 2010). Modeling was performed for non-native grassland and, as a conservative estimate if the grassland converts to a shrub community, coastal sage scrub. Model results estimate flame length and rate of spread. The rate of spread is measured in chains per hour (ch/h) and is defined as the speed with which the fire is moving away from the site of origin. Wind, moisture, and slope drive the fire. The flaming zone, or fire head, moves away from the origin quickly with great intensity.

Fire Behavior for a Santa Ana Condition

A Santa Ana weather condition is potentially the worst weather for fire. Santa Ana's typically occur from September to May. The fall Santa Ana can create extremely dangerous fire conditions because they are associated with high temperatures, high winds coming from the north/northeast and low humidity. They also occur after long periods of no rain when the vegetation is in a drought stress condition. The soft shrubs that compose habitats such as coastal sage scrub are semi-drought deciduous and have typically lost the majority of their foliage by the end of summer.

Santa Ana winds result in a wind driven fire. These winds typically come from the northeast that are warm dry winds that result from air spilling over high elevations and moving downhill. These are gravity winds that typically follow the ground. When gravity winds hit an obstacle they can either split around the obstacle and continue or follow the object to the top and then launch over the top resulting in an area behind the obstacle with normal wind conditions. The primary topographic feature near the site is the San Dieguito River with a generally northeast to southwest trending path upstream and adjacent to the Project site. The fork of the river that the Project is located on ends upstream to the east approximately 400 feet and is a narrow swath surrounded by

development. The adjacent development would inhibit a Santa Ana wind driven fire from getting a large run on the Project site from wildland fuels.

The model results for the Santa Ana condition produced flame-lengths of up to approximately 17 feet in height for grassland and 26 feet for coastal sage scrub. The rate of spread is 275 chains per hour (ch/h) for grassland and 88 ch/h for coastal sage scrub.

Fire Behavior for Peak Conditions

Peak conditions are the extreme conditions during a Santa Ana event. The peak winds represent the gusts that occur during a Santa Ana. The fire behavior would be essentially the same as during a Santa Ana, however the gusts could significantly increase the rate of spread and the distance that fire brands travel during the time that they are occurring. The model results produced flame-lengths of up to approximately 19 feet in height for grassland and 28 feet for coastal sage scrub. The rate of spread is 374 ch/h for grassland and 107 ch/h for coastal sage scrub.

Fire Behavior for Normal Weather Condition

Normal weather conditions consist of an onshore flow from the southwest. This condition has a lower temperature and higher humidity than a Santa Ana condition. A fire under normal conditions is typically a fuel driven fire, however wind will also contribute to the rate of spread. The Project site has a limited exposure to wildland fuels. Modeling was performed using the summer weather conditions. The model results produced flame-lengths of up to approximately 16 feet in height for grassland and 25 feet for coastal sage scrub. The rate of spread is 237 ch/h for grassland and 80 ch/h for coastal sage scrub.

Fire Behavior Modeling Summary

As shown by the modeling, the greatest anticipated flame length is from the vegetation burning during a Peak Santa Ana fire. The resulting flame length is 28 feet. The flame lengths for other modeled conditions are less than 28 feet. Whereas a shrub fire will have greater flame lengths a grassland fire will have a much faster rate of spread due to the fast ignition of the fine fuels. The model is an estimate of the flame lengths that can be anticipated. Actual fire behavior can be more or less intensive.

Fuel Management, Landscaping, and Maintenance Design Considerations

As per the FPP for the Project, the following fuel management, landscaping and maintenance Project design features will be implemented:

1. All fuel management and landscaping shall be in conformance with Section 4704.4 of the Consolidated Fire Code and RSFFPD Ordinance 2014-01A. Additionally Section 4707.4 as adopted by the Rancho Santa Fe Fire Protection District requires that the Project submit Landscape Plans to be reviewed and approved by the District. The Rancho Santa Fe Fire District is the only fire district to have a professional urban forester on staff to monitor fuel management and landscaping. All landscaping must be installed prior to final inspection and certificate of occupancy.

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2. All of the plants used for landscaping must be listed on the Wildland/Urban Interface Development plant palette included as Appendix D of the Fire Protection Plan (Appendix H of the DSEIR). No plants on the Undesirable Plant List or Invasive Species Plant List shall be planted as per Appendix E of the Fire Protection Plan (Appendix H of the DSEIR).
 3. Vegetation maintenance shall be the responsibility of the Chinese Bible Church of San Diego, its successors or assignees, or owner as designated with the County Tax Assessor. The following maintenance activities shall be performed:
 - Conduct annual or more frequent if necessary maintenance to reduce fuel volumes, remove dead and detached material, and maintain in healthy succulent condition;
 - Maintain irrigation in a working condition;
 - Mature trees greater than 18 feet shall be limbed up to a minimum of six feet above the ground;
 - No tree limbs within 10 feet of chimneys or dead limbs overhanging structures or roadways;
 - Trees adjacent to or overhanging roadways, driveways, or other emergency access paths shall be maintained with a minimum height clearance of 13 feet and six inches.
 - Palm trees to be maintained in conformance with the Rancho Santa Fe Fire District Policy included as Appendix F of the Fire Protection Plan (Appendix H of the DSEIR).
 - Perform additional measures that may be required by the Fire District.

Access

The Project's main access point is from Four Gee Road at the proposed Grace Way. The proposed improved width is 44 feet, which is wider than the minimum required of 24 feet. The intersection of Four Gee Road and Grace Way is the first location from which a car may turn left or right to leave the area. The Project does not provide nor is it required to provide secondary access because the Project meets design requirements for single access as provide in the County of San Diego Consolidated Fire Code.

The internal loop road allows for fire truck access to within 150 feet of all portions of the building when a truck is parked perpendicular to parked cars as required by Section 503 of the Consolidated Fire Code. In addition, all of the buildings will have approved automatic sprinkler systems.

Access Road Design Considerations

As per the FPP for the Project, the following Project design features will be implemented related to fire access road design:

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- The access road, Grace Way and internal loop shall be constructed in conformance with Section 503 of the Consolidated Fire Code, County Ordinance 10148, and District Ordinance 2014-01A.
 - Per Section 503 of the Consolidated Fire Code, fire apparatus access roads shall be provided for every facility, building, or portion of building and shall extend within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. A fire code official may increase the 150 foot minimum when the building is equipped throughout with an approved automatic sprinkler system installed in accordance with sections 903.3.1.1, 903.3.1.2 or 903.3.1.3.
 - All other portions of Section 503 of the Consolidated Fire Code apply including but not limited to: dimensions, vertical clearance, grade, surface and imposed loads. The first layer of asphalt must be in place and serviceable prior to delivery of combustible materials to the site.
 - To assist emergency personnel to find a building, a lighted directory map, meeting current Fire District Standards shall be installed in a pre-approved location.
 - Fire lanes shall be marked and fire alarms installed.

Ignition Resistant Construction and Fire Protection Systems

Due to the location of the Project in a very high fire hazard severity zone, a range of “fire safe” construction measures are proposed below that control the materials, design, and safety systems used in the building.

As per the FPP for the Project, the following Project design features will be implemented related to construction:

- The Project shall be required to use construction methods for exterior wildfire exposure per Section 4910.1 of the County Ordinance 10148, County Fire Code.
- The construction methods for exterior wildfire exposure in a wildland-urban interface fire area shall be as provided in Chapter 7A of the County Building Code.
- The Project shall also comply with District Ordinance 2014-01A.
- The Project shall install an automatic fire protection system sprinklers as appropriate to the use of each building in conformance with the requirements of for Group ‘E’ occupancies as identified by NFPA 13, the State, District and the County Codes.

Emergency Response

The Project is located within the service area of Rancho Santa Fe Fire Protection District. The nearest fire station to the Project site is located directly across from Grace Way, the Project entrance. Under most circumstances, there would be exceptional response time from Fire Station No. 2 to the Project site. However, regularly scheduled

services and facility uses may result in large volumes of vehicles entering and exiting the Project during a consolidated period of time. Due to the fact that the driveway for Fire Station No. 2 is located directly across from Grace Way, the Project entrance, and there is no feasible way to relocate the entrance location, there is a potential for the traffic to result in delays to emergency vehicle response from the fire station, resulting in a **significant impact (Impact HZ-1)**. Mitigation is required.

Fire Fuel Assessment

With the exception of non-native grassland in the northwest corner, the entire Project site will be developed, including the 100-foot fuel management zone around buildings. Only District-approved plants will be included in the Project, as identified above. Adjacent to the Project site is development to the south, east and southwest. The only adjacent fuel threats are the emergent wetlands and non-native grasslands to the north and northwest, respectively.

As stated above, the greatest anticipated flame length is 28 feet resulting from the vegetation burning during a Peak Santa Ana fire. Because the terrain leading to the Project site is a gentle slope and developed on all sides, except a narrow swath 400 feet to the east, a Santa Ana wind driven fire would not be able to get a large run on the Project site due to lack of sufficient wildland fuels. As provided above, the fuel management zone is almost four times the largest anticipated flame length.

The wildlands and non-native fuels on and adjacent to the Project site would not expose people or structures to a significant risk of loss, injury, or death as a result of wildland fires.

Summary of Wildland Fire Impact Discussion

The Project is designed in conformance and meets or exceeds all applicable codes and standards. With incorporation of the aforementioned design measures for fuel management, landscaping, and maintenance, access road design, and construction, the Project would not expose people or structures to a significant risk of loss, injury, or death as a result of wildland fires. However, due to the Project's location across from Fire Station No. 2, large volumes of vehicles entering and exiting the Project site could result in traffic delays to emergency vehicles exiting Fire Station No. 2. Due to this potential, impacts related to emergency response time would be considered significant and require mitigation.

2.4.3.3 Consistency with Emergency Response Objectives in County General Plan

Guidelines for the Determination of Significance

A significant fire hazards impacts would occur if:

- The project does not meet the emergency response objectives identified in the Safety Element of the County General Plan or offer feasible alternative that offer comparable emergency response objectives.

Guideline Source

This guideline is from The County of San Diego's Guidelines for Determining Significance and Report Format and Content Requirements Wildland Fire and Fire Protection (August 2010).

Analysis

The Safety Element of the County General Plan identifies travel time standards for the closest fire station based upon regional categories and/or land use designation. The General Plan regional category for the site is Semi Rural and has a land use designation of SPA (Santa Fe Valley Specific Plan).

Based upon a Semi-Rural Residential Category, the Project should be within a 10 minute travel time from the closest fire station. The closest fire station to the Project is RSFFPD Station No. 2, which is located at 16930 Four Gee Road, immediately across the street from the Project site. Estimated response times from Station No. 2 to the Project site is less than two minutes, which is in compliance with the Safety Element of the County General Plan. Therefore impacts are **less than significant**.

Further, a Project Facility Availability Form for fire service from RSFFPD was prepared for the Project in December 2015. RSFFPD indicated that the expected travel time to the Project site would be less than 2 minutes.

2.4.3.4 Hazardous Substance Handling

Guideline for the Determination of Significance

A significant hazardous materials impact would occur if:

- The project is a business, operation, or facility that proposes to handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the Health and Safety Code, generate hazardous waste regulated under Chapter 6.5 of the Health and Safety Code, and/or store hazardous substances in underground storage tanks regulated under Chapter 6.7 of the Health and Safety Code and the project will not be able to comply with applicable hazardous substance regulations; or
- The project is a business, operation, or facility that would handle regulated substances subject to CalARP RMP requirements that in the event of a release could adversely affect children's health due to the presence of a school or day care within one-quarter mile of the facility.

Guideline Source

This guideline is from The County of San Diego's Guidelines for Determining Significance and Report Format and Content Requirements Hazardous Materials and Existing Contamination (July 2007).

Analysis

There is a potential for accidental upset of fuels, lubricants or various other liquids needed to operate construction equipment on the site. These materials include diesel

fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. Direct impacts from accidental spills of small amounts of hazardous materials from construction equipment during construction could occur in the case of accidental spill or upset. However, existing federal and state standards are in place for the handling, storage and transport of these materials. These include, but are not limited to, the federal Chemical Accident Prevention Provisions (Part 68 of the Code of Federal Regulations), California Highway Patrol and California Department of Transportation container and licensing requirements for transportation of hazardous waste on public roads, the International Fire Code, the Resource Conservation and Recovery Act of 1976 as amended by the Hazardous and Solid Waste Amendments of 1984, California's Hazardous Waste Control Law, the California Fire Code, California Health and Safety Code Hazardous Materials Release Response Plans and Inventory, the California Integrated Waste Management Act, regulations developed by California OSHA, and the state Hazardous Waste Control Act.

Operationally, future uses proposed within the Project area are limited to a church and café. These types of land uses are not typically characteristic of generating, releasing, or using large amounts of hazardous materials. Industrial uses are not proposed as part of the Project. The only hazardous materials anticipated for use and disposal associated with the completed Project are routinely used commercial products such as cleaners, paint, solvents, batteries, and garden maintenance products. As stated above, household hazardous waste programs that are part of the Integrated Waste Management Plan of the County of San Diego address the use, handling, and disposal of these products.

Therefore, the Project would not handle or store hazardous substances in excess of those permitted by hazardous substance regulations. Impacts would be **less than significant**.

The closest school or day care facility is located just under one-quarter mile south of the Project site. While Del Norte High School is located within one-quarter mile of the Project site, the Project would not handle regulated substances subject to CalARP RMP requirements. Impacts would be **less than significant**.

2.4.3.5 Existing Onsite Contamination

Guideline for the Determination of Significance

A significant hazardous materials impact would occur if:

- The project is located on or within one-quarter mile from a site identified in one of the regulatory databases compiled pursuant to Government Code Section 65962.519 or is otherwise known to have been the subject of a release of hazardous substances, and as a result the project may result in a significant hazard to the public or the environment;
- The project proposes structure(s) for human occupancy and/or significant linear excavation within 1,000 feet of an open, abandoned, or closed landfill

(excluding burnsites) and as a result, the project would create a significant hazard to the public or the environment;

- The project is proposed on or within 250 feet of the boundary of a parcel identified as containing burn ash (from the historic burning of trash); and as a result, the project would create a significant hazard to the public or the environment;
- The project is proposed on or within 1,000 feet of a FUDS and it has been determined that it is probable that munitions or other hazards are located onsite that could represent a significant hazard to the public or the environment;
- The project could result in human or environmental exposure to soils or groundwater that exceed U.S. Environmental Protection Agency (USEPA) Region 9 Primary Remediation Goals, Cal/EPA California Human Health Screening Levels (CHHSLs), or Primary State or Federal Maximum Contaminant Levels (MCLs) for applicable contaminants and the exposure would represent a hazard to the public or the environment; or
- The project will involve the demolition of commercial, industrial or residential structures that may contain asbestos-containing materials (ACM), lead-based paint (LBP) and/or other hazardous materials and as a result, the project would represent a significant hazard to the public or the environment.

Guideline Source

This guideline is from The County of San Diego's Guidelines for Determining Significance and Report Format and Content Requirements Hazardous Materials and Existing Contamination (July 2007).

Analysis

Hazardous Materials Sites

A search of environmental records conducted by Environmental Data Resources, Inc. (EDR) did not find listings for the Property on the federal National Priority List Liens database, Comprehensive Environmental Response, Compensation and Liability Information System liens database, State Deed Restriction Listing or State Environmental Liens Listing. The Property does appear on the Hazardous Materials Management Division database for the presence of two permitted above ground storage fuel tanks for its on-site organic farming operation between 2006 and 2011. The County Department of Agriculture conducted a close out inspection in January 2012 and noted that hazardous materials were not observed on site.

One neighboring site (Proposed Salviati Community/Bernardo Lakes Dev. Prop. 1) appeared on the EnviroStore & County Site Assessment & Mitigation databases. These listings date to 2000 and address a concern in the Santa Fe Valley area concerning methane. The County of San Diego Board of Supervisors issued an ordinance concerning methane after it was found beneath completed homes in the area and appears to have been a partial cause of an explosion while digging a trench for a

stormwater drain. The environmental site assessment concluded that this site does not represent an imminent threat to the Project site.

Three additional sites within 1/8 to 1/2 mile of the Project site appear on the California Department of Toxic Substance Control (DTSC)'s EnviroStor and School Evaluation databases. The two school sites nearest the Project site were evaluated for past use of agricultural chemicals and issues of concern were not found. Agricultural chemicals were reportedly found at the third school located 0.45 mile from the Project site but DTSC did not require further action beyond the preliminary assessment. No evidence was found during the environmental site assessment that indicated these neighboring sites adversely impacted the Project site. The environmental site assessment concluded that these sites do not represent an imminent threat to the Project site.

In summary, the Project site is not located on or within one-quarter mile of a site identified in any regulatory database compiled pursuant to Government Code Section 65962.519. Impacts would be **less than significant**.

Landfills

No open, abandoned, or closed landfills exist within 1,000 feet of the Project site. The Project would not create a significant hazard to the public or the environment due to the construction of structures for human occupancy or linear excavation. **No impact would occur.**

Burn Ash

The Project site is not located on or within 250 feet of the boundary of a parcel identified as containing burn ash. No indication of such burn areas was identified during the site reconnaissance during preparation of the environmental site assessment. **No impact would occur.**

Formerly Used Defense Sites

The Project site is not located on or within 1,000 feet of a formerly used defense site. No associated munitions or other hazards are located on the Project site. **No impact would occur.**

Contaminated Soils and Groundwater

As identified above, the Project site was utilized for agricultural operations in the 1940s. Records documenting what crops were planted or whether pesticides and herbicides were used were not located during the environmental site assessment. Visitors to the Project site, including children within any play areas, could be exposed to unidentified pesticides and/or herbicides in areas of exposed soil. This represents a **potentially significant impact (Impact HZ-2a)**. Mitigation is required.

The potential also exists for human or environmental exposure to contaminated soils if such soils are transported off site. This also represents a **potentially significant impact (Impact HZ-2b)**. Mitigation is required.

The site reconnaissance conducted during the environmental site assessment did not identify any additional hazardous materials or areas of concern.

Asbestos and Lead

A limited visual asbestos survey of the buildings located on the Project site was conducted to assess if the buildings contain significant sources of ACM. Friable or damaged, nonfriable building materials likely to contain ACM were not found on the Project site. Potential ACM observed to generally be in good condition included drywall systems, resilient flooring, and roofing materials. Insulation materials were not visible in either residence, but if they exist, they are also a potential ACM. The Project proposes demolition of the existing structures. Demolition activity could disturb ACM. This represents a **potentially significant impact (Impact HZ-3)**. Mitigation is required.

As the buildings on the Project site were constructed in the 1950s and 1960s, it is possible that lead-based paint was used on the buildings. Lead-based paint was effectively banned for residential purposes as of 1978. While painted surfaces appeared to be intact and surfaces with cracked, chipped and peeling paint were not observed, demolition of the existing structures could disturb lead-based paint. This represents a **potentially significant impact (Impact HZ-4)**. Mitigation is required.

2.4.4 Cumulative Impact Analysis

All projects proposed for development in the County are required to conform to the San Diego County Consolidated Fire Code, as revised October 28, 2011. The Code includes substantial fire safety measures designed to minimize fire risk associated with development. When projects conform to the San Diego County Consolidated Fire Code, they minimize their vulnerability and potential to contribute to fire risks.

The Project meets RSFFPD requirements for fire protection. The Project conforms to the County's Consolidated Fire Code and local fire district fire safety requirements, including fuel management, landscaping, and maintenance, access road design, fire safe construction measures, water supply availability and fire hydrant design. Due to proposed signalization and Project design features, the Project would not contribute to any delay in emergency response time, service ratios or other performance objectives for fire protection. The Project, when considered with the other projects in the area with a fire safety impact, does not have a cumulatively considerable impact. Guidelines are not exceeded. Impacts are not significant. No mitigation will be necessary.

For hazardous materials, impacts are generally site specific and addressed on a site-by-site basis. Of the 20 cumulative projects identified in Table 1-2, one project was identified as having a potential for impacts related to fire safety. TPM 21229, which is still under environmental review, identified a potential hazard impact related to fire safety.

Implementation of the Project would have a potentially significant impact to emergency response and contaminated soils, and would have the potential for the presence of asbestos and lead. Mitigation in the form of signalization of the intersection at Four Gee Road and Grace Way (M-HZ-1), soil sampling and remediation (M-HZ-2), and a survey for ACM and lead-based paint which would include management of the contaminants (M-HZ-3, M-HZ-4) would be made conditions of approval which would reduce impacts to less than significant. The Project would not have an impact related to fire safety. With the requirement of the mitigation measures identified in section 2.4.6 below, the Project

would not contribute to any cumulative impacts related to hazards or hazardous materials. Cumulative impacts would be **less than significant**.

2.4.5 Significance of Impacts Prior to Mitigation

The following significant impacts related to hazards would occur with implementation of the Proposed Project:

- **Impact HZ-1** There is a potential for project traffic to result in delays to emergency vehicle response from the fire station.
- **Impact HZ-2** There is the potential for human or environmental exposure to soils contaminated from pesticide and/or herbicides in areas of exposed soil.
- **Impact HZ-3** Demolition activities could result in the disturbance of asbestos-containing materials
- **Impact HZ-4** Demolition activities could result in the disturbance of materials containing lead-based paint.

2.4.6 Mitigation

Implementation of the following mitigation measures will be required as a condition of project approval to reduce hazards/fire safety impacts to below a level of significance:

- **M-HZ-1** In order to reduce the potential for delays to emergency vehicle response from Fire Station No. 2, the intersection of Four Gee Road and Grace Way shall be signalized. This signal shall be capable of being controlled from Fire Station No. 2, which is located directly across from Grace Way. The purpose is to allow fire station personnel to control traffic so that emergency vehicles can safely exit the fire station unimpeded in an emergency. The signal at the intersection of Camino Del Sur and Four Gee Road shall be connected to this control system so that fire personnel can coordinate signal changes between the two intersections, which are in close proximity to one another. The ability to coordinate the intersection signals will prevent delays in response time as a result of church-related activities. Additionally, road striping "Do Not Block" shall be painted in front of the Fire Station entrance. These measures will be completed prior to occupancy of the facilities.
- **M-HZ-2a** If the redevelopment plans include areas of exposed soil where visitors may congregate, soil sampling for pesticides, herbicides, and metals shall be completed. If finished areas where people will congregate are paved or covered with an impermeable surface, sampling would not be necessary.
- **M-HZ-2b** If soil is to be transported from the Project site during redevelopment, sampling shall be conducted to confirm if the soil is a hazardous waste due to historic agricultural chemical use.
- **M-HZ-3** A survey for ACM shall be completed prior to demolition of the existing structures in order to properly manage these contaminants during demolition.

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- **M-HZ-4** A survey for lead-based paint shall be completed prior to demolition of the existing structures in order to properly manage these contaminants during demolition.

2.4.7 Conclusion

Due to the fact that that the driveway for Fire Station No. 2 is located directly across from Grace Way, the Project entrance, there is a potential for the traffic to result in potentially significant delays to emergency vehicle response from the fire station. Signalizing the intersection of Four Gee Road and Grace Way, and allowing Fire Station No. 2 personnel to control signalization of that intersection and the intersection of Camino Del Sur and Four Gee Road, will prevent delays in response time as a result of church related activities. Painting “Do Not Block” in front of the Fire Station entrance will further reduce potential delays to emergency vehicle response. This mitigation measure was identified in cooperation with the Rancho Santa Fe Fire Protection District. Design measures outlined above will provide fire protection in compliance with current fire codes and will provide an added measure of safety for the Project. Further, these improvements were reviewed and included in the Traffic Impact Analysis discussed in Chapter 3.1.6, Traffic, of this DSEIR. Taken together, these measures fully mitigate Project impacts related to fire hazards (emergency response).

Impacts related to hazardous materials were determined to be less than significant with the exception of potentially contaminated soils and the presence of ACM and lead-based paint. Previous agricultural use could have resulted in the use of pesticides and/or herbicides. Areas of exposed soils could expose site visitors to these chemicals, if present. In addition, if such soils are hauled off site during Project construction, such materials could impact humans or the environment. Mitigation confirming the presence of such chemicals via soil sampling would reduce these impacts to below a level of significance. As demolition of the on-site structures is proposed, incorporation of mitigation requiring tests to properly classify and dispose of such materials would ensure that impacts are reduced to less than significant levels.

In summary, all impacts would be reduced to below a level of significance with the incorporation of mitigation.