

4.8 Hazards and Hazardous Materials

This Section addresses potential impacts to human health and the environment that may be exacerbated by the proposed Project or result from exposure to hazardous materials or hazardous conditions during the construction or operation of the proposed Project. The analysis is based in part on the proposed Project’s *Fire Safety Plan* prepared by FireSafe Planning Solutions on October 2021 (Appendix G-1), *Fuel Modification Plan* prepared by FireSafe Planning Solutions on December 2021 (Appendix G-2), and *Phase 1 Environmental Assessment Report* prepared by Transaction Management Corporation, Inc. on March 4, 2022 (Appendix H).

4.8.1 Existing Site Conditions

The 4.2-acre Project site was part of a residential development built in 1975 that was destroyed in 1989 during the Via Estoril landslide. After the landslide, residential structures were removed, and remediation earthwork was performed to stabilize the landslide. The site is currently vacant and lies on an east facing hillside with a remediated/graded slope, installed terrace drains, and dense vegetation for erosion control. The Project site also contains remnant streets and associated infrastructure. It is noted that no Recognized Environmental Conditions (REC) were identified on-site, and no buildings exist; therefore, no hazardous materials are being stored on-site.

Hazardous Materials Database Results

On-Site

The proposed Project site was not listed in any Environmental Risk Information Services (ERIS) record researched.

Off-Site

Nearby Schools

The closest school to the proposed Project site is Laguna Niguel KinderCare, which is located on Pacific Island Drive, approximately 1 mile to the northeast. Other schools in the area include Moulton Elementary School located approximately 1.25 miles to the north, and Laguna Niguel Jr. Academy located 1.5 miles approximately to the northeast.

Nearby Airports

The proposed Project is not within an airport land use plan area or within 2 miles of a public airport or public use airport or in the vicinity of a private airstrip. The closest airport is John Wayne Airport, approximately 20 miles to the northwest.

Emergency Planning

The Orange County Sheriff Department (OCSD) is contracted by the City to provide police protection service. OCSD’s Emergency Management Division also provides emergency management and preparedness services to the unincorporated areas of Orange County and supports the efforts of the Orange County Operational Area. The Operational Area encompasses all County

departments and agencies, public and private organizations, and the general population within the boundaries of Orange County. The Sheriff-Coroner Department is the lead agency in matters of emergency preparedness and disaster response.

Wildfire Risk

According to the figure “Fire Hazards Severity Zones in LRA – Orange County” from the Fire and Resource Assessment Program, California Department of Forestry and Fire Protection (CAL FIRE), the proposed Project is within a High Fire Risk Area (CAL FIRE 2011). The wildfire risk is further discussed in Section 4.14 *Wildfire*.

4.8.2 Related Policies and Regulations

Hazardous materials and hazardous wastes are regulated by various federal, State, and local regulations to protect public health and the environment. The following is a brief description of the federal, State, and local environmental laws and related regulations governing issues related to hazards and hazardous materials.

Federal Regulations

United States Environmental Protection Agency

The U.S. EPA is the agency primarily responsible for enforcement and implementation of Federal laws and regulations pertaining to hazardous materials. Applicable Federal regulations pertaining to hazardous materials are contained in the CFR Titles 29, 40, and 49. Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. The management of hazardous materials is governed by the following laws:

- Resource Conservation and Recovery Act of 1976 (RCRA) (42 USC 6901 et seq.)
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, also called the Superfund Act) (42 USC 9601 et seq.), as amended by the Superfund Amendments and Reauthorization Act (1986)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 USC 136 et seq.)
- Toxic Substances Control Act (15 USC 2601 et seq.)

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. U.S. EPA provides oversight and supervision for Federal Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards.

Occupational Safety and Health Administration, Title 29 Code of Federal Regulations

Occupational Safety and Health Administration (OSHA) is the federal agency responsible for ensuring worker safety. These regulations provide standards for safe workplaces and work practices, including those relating to hazardous materials handling.

United States Department of Transportation Regulations, Title 49 Code of Federal Regulations

United States Department of Transportation (USDOT), in conjunction with the United States Environmental Protection Agency (EPA), is responsible for enforcement and implementation of federal laws and regulations pertaining to safe storage and transportation of hazardous materials. The Code of Federal Regulations (CFR) 49, 171–180, regulates the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials.

Federal Air Regulations, Part 77

The Federal Aviation Administration (FAA) is responsible for the review of construction activities that occur in the vicinity of airports. Its role in reviewing these activities is to ensure that new structures do not result in a hazard to navigation. The regulations in the Federal Air Regulations (14 CFR, Part 77) are designed to ensure that no obstructions in navigable air space are allowed to exist that would endanger the public. Federal Air Regulations Part 77 identifies the maximum height at which a structure would be considered an obstacle at any given point around an airport. The extent of the off-airport coverage that needs to be evaluated for tall structure impacts can extend miles from an airport facility. In addition, Federal Air Regulations Part 77 establishes standards for determining whether objects constructed near airports will be considered obstructions in navigable airspace, sets forth notice requirements of certain types of proposed construction or alterations, and provides for aeronautical studies to determine the potential impacts of a structure on the flight of aircraft through navigable airspace.

State Regulations

State Assembly Bill 2948

In response to the growing statewide concern of hazardous waste management, State Assembly Bill 2948 (Tanner 1986) enacted legislation authorizing local governments to develop comprehensive hazardous waste management plans. The intent of each plan is to ensure that adequate treatment and disposal capacity is available to manage the hazardous wastes generated within its jurisdiction.

California Occupational Safety and Health Administration Regulations

California Occupational Safety and Health Administration (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and ensuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA requires many entities to prepare injury and illness prevention plans and chemical hygiene plans and provides specific regulations to limit exposure of construction workers to lead.

Cortese List Statute (California Government Code, §65962.5)

This regulation requires the California Department of Toxic Substances Control to compile and maintain lists of potentially contaminated sites throughout the State and includes the Hazardous Waste and Substances Sites List. The overall list is called the “Cortese” List.

Safe Drinking Water and Toxic Enforcement Act (Proposition 65, California Health and Safety Code, §25249.5 et seq.)

The Safe Drinking Water and Toxic Enforcement Act is similar to the federal Safe Drinking Water Act and Clean Water Act in that it regulates the discharge of contaminants to groundwater.

California Department of Forestry and Fire Protection Fire Prevention Program

The program encompasses multiple facets of fire prevention techniques, including fire engineering, vegetation management, fire planning, education, and law enforcement. These techniques can include fire break construction and other fire fuel reduction activities that lessen the risk of wildfire to communities and evacuation routes, and brush clearance around communities, along roadways, and evacuation routes. The fire prevention program also includes defensible space compliance inspections by the local agency, emergency evacuation planning, fire prevention education, fire hazard severity mapping, implementation of the State Fire Plan, and fire-related law enforcement activities such as arson investigation. A comprehensive discussion of the applicable laws can be found in Section 4.14 *Wildfire*.

State Water Resources Control Board Construction Storm Water Program

Dischargers whose projects disturb 1 or more acres of soil or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres are required to obtain coverage under the Construction General Permit under Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation. The Construction General Permit requires the completion and implementation of a site-specific Storm Water Pollution Prevention Plan (SWPPP).

Local Regulations

Orange County Certified Unified Program Agency

The Environmental Health Division was designated by the State Secretary for Environmental Protection on January 1, 1997, as the — Orange County Certified Unified Program Agency (CUPA) for the County of Orange. CUPA is the local administrative agency that coordinates six programs (Hazardous Waste, Underground Storage Tanks (UST), Aboveground Storage Tanks (AST), Hazardous Materials Disclosure (HMD), Business Plan, and California Accidental Release Program (CalARP)) regulating hazardous materials and hazardous wastes in Orange County. County and City Fire Agencies within Orange County have joined the CUPA as Participating Agencies, administering one or more of the six CUPA programs in their jurisdictions. In most cities, Environmental Health administers the Hazardous Waste, Underground Storage Tank, and Aboveground Storage Tank programs while the Fire Agencies administer the other three elements listed above. Fire services for the City are provided by the Orange County Fire Authority (OCFA), in which the CUPA program is also provided by the OCFA.

Laguna Niguel General Plan

The Laguna Niguel General Plan (LNGP) was adopted in 1992 to set forth objectives, policies, standards, and programs within the Seismic/Public Safety Element to protect the community from natural and manmade hazards.

Seismic/Public Safety Element

Goal 2. Protection of the public and sensitive environmental resources from exposure to hazardous materials and waste

- **Policy 2.1.** Reduce risks of exposure to hazardous materials and waste through careful land use and hazardous materials management planning.
- **Policy 2.2.** Reduce risk of exposure by improving the safety of hazardous materials/waste transportation.
- **Policy 2.3.** Encourage sound management practices for the handling and disposal of household hazardous waste.

Goal 3. A safe and secure community free from the threat of personal injury and loss of property.

- **Policy 3.1.** Provide fire protection to ensure the public's health and safety.
- **Policy 3.2.** Reduce the risk of wildland fire through fuel modification programs.

4.8.3 Thresholds of Significance

Criteria for determining the significance of impacts related to hazards and hazardous materials are based on criteria contained in Appendix G of the State CEQA Guidelines and the City's CEQA Manual. The proposed Project could have a significant impact on the environment if it would result in any of the following.

Threshold HAZ-1 *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Threshold HAZ-2 *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Threshold HAZ-3 *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Threshold HAZ-4 *Be located on a site that is included on a list of hazardous materials sites that is compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

Threshold HAZ-5 *For a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

Threshold HAZ-6 *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Threshold HAZ-7 *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Methodology

Within each significance criteria area, specific thresholds of significance are identified under the appropriate federal, state, and/or local jurisdictional authority where applicable to the Project. The thresholds of significance are used to determine whether or not the proposed Project would have a significant effect on the environment. The following indicate that a Project may be deemed to have a significant effect on the environment if the project is likely to impact the environment as outlined below.

4.8.4 Project Design Features and Standard Conditions of Approval

PDF HAZ-1 The Project is to be subdivided into two lots, Lot 1 and Lot A. Lot 1 includes a 2-acre residential area and Lot A includes a 2.2-acre area of open space. The open space lot and the adjacent area next to Lot 1 will be modified as part of a Fuel Modification Plan (see Appendix G-2 Fuel Modification Plan). The plan prescribes Fuel Modification Zones including non-combustible material areas, a wet zone, and a 20-foot setback from MSE wall to the structures in Lot 1.

PDF HAZ-2 The Project is to construct 6-foot-high radiant heat walls tied on top of retaining walls ranging in heights from 2.5 feet to 6 feet high. Such walls will protect two structures on the southern portion of the Project site. This OCFA requirement protects these structures that cannot obtain a 20-foot fuel modification setback. The purpose of the setback zone is to provide a defensible space for fire suppression forces and to protect structures from radiant and convective heat. The setback distance will be a 20-foot minimum width. The setback zone will be located on a level, graded area at the top or base of the slope or retaining wall.

4.8.5 Environmental Impact Evaluation

Threshold HAZ-1 *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less Than Significant Impact. Construction activities would involve the use of typical materials, such as vehicle fuels, paints, oils, transmission fluids, and solvents. The types and amounts of hazardous materials that would be used in connection with occupancy of the 22 proposed condominium dwellings would be typical of residential uses, such as cleaning solutions, solvents, pesticides for landscaping, painting supplies, and petroleum products used in normal vehicles operations. These substances can be hazardous in high concentrations; however, the routine and proper use of these standard construction and household products would not result in significant hazards due to small quantities of use. Impacts would be less than significant, and no mitigation is required.

Threshold HAZ-2 *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Less Than Significant Impact. Construction personnel maintain supplies on-site for containing and cleaning small spills of hazardous materials such as diesel and gasoline fuels, paints, solvents cement, and asphalt. Furthermore, construction activities would be conducted in accordance with the Storm Water Pollution Prevention Plan (SWPPP) as part of the National Pollution Discharge Elimination System (NPDES) permit. The primary objective of the SWPPP is to identify, construct, implement, and maintain best management practices (BMPs) to reduce or eliminate pollutants in stormwater discharges and authorized non stormwater discharges from the construction site. BMPs for hazardous materials may include, but are not limited to, off- site refueling, placement of generators on impervious surfaces, establishing cleanout areas for cement, etc. While the risk of exposure to hazardous materials cannot be eliminated, adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials and with the safety procedures mandated by applicable federal, state, and local laws and regulations. Compliance with these regulations would ensure that risks resulting from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes associated with the proposed Project and the potential for accident or upset are less than significant, and no mitigation is required.

Threshold HAZ-3 *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

No Impact. As noted previously, the closest schools to the proposed Project site are Laguna Niguel KinderCare approximately 1 mile to the northeast, Moulton Elementary School approximately

1.25 miles to the north, and Laguna Niguel Jr. Academy approximately 1.5 miles to the northeast. Therefore, implementation of the proposed Project would not create any significant impacts associated with hazardous emissions or handling of acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. No hazard impacts to existing or proposed schools within 0.25 miles of the Project would occur, and no mitigation measures are required.

Threshold HAZ-4 *Be located on a site that is included on a list of hazardous materials sites that is compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

No Impact. Implementation of the Proposed project would not create any significant impacts associated with being included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The proposed Project site was not identified in any of the ERIS databases researched (Appendix H: Phase 1 Report). Therefore, implementation of the proposed Project would not create significant impacts associated with being included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impact would occur during either construction or operation, and no mitigation is required.

Threshold HAZ-5 *For a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

No Impact. The proposed Project site is not within an airport land use plan area or within 2 miles of a public airport or public use airport. The closest airport is John Wayne Airport, approximately 20 miles to the northwest. Project implementation would neither adversely affect nor be affected by aviation activities. As a result, no impacts would occur during construction or operation, and no mitigation measures are required.

Threshold HAZ-6 *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Less Than Significant Impact. As discussed in Section 4.12, *Transportation*, emergency access to the Project site would be from the entry at Playa Blanca off Crown Valley Parkway. Playa Blanca will be widened to 28 feet curb-to-curb. Proposed Private Drive “A” (24 ½ feet from curb to curb) will run north-south connecting Playa Blanca to the north with Private Drive “B” (24 ½ feet from curb to curb) on the south. These drives will provide access to the residences. Easement roads for maintenance access and shared active recreation roads will be 15 feet wide. The Project plans, including a fuel modification and fire master plan, have been reviewed and conditionally approved by the OCFA in regards to sufficient street width for emergency services and emergency

access. Moreover, the Project would not include any characteristics (e.g., permanent road closures, long-term blocking of road access) that would physically impair or otherwise interfere with emergency response or evacuation in the Project vicinity. During construction, the proposed Project would not result in any substantial traffic queuing at the Play Blanca entrance from Crown Valley Parkway and would not allow any construction vehicles or equipment to park or remain stationary within the roadway. Furthermore, all large construction vehicles entering and exiting the site would be guided by personnel using signs and flags to direct traffic.

During both construction and operational activities, the proposed Project would be required to comply with applicable requirements set forth by the OCSD’s Emergency Management Division, the County’s Emergency Operations Center (Orange County Sheriff’s Department 2014), the Orange County Fire Authority, the Orange County Environmental Health Division, and the LNGP. Evacuation instructions and routes are provided by the County’s Emergency Operations Center and are facilitated by the responding agencies such as OCFA and OCSD. Furthermore, the proposed Project has been reviewed by the OCFA through the tentative tract map plan review process. Such review resulted in the OCFA’s approval of the Project’s fire management plan and emergency access. Therefore, implementation of the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts during both construction and operation would be less than significant, and no mitigation measures are required.

Regarding the potential for a landslide impairing emergency response activities, Section 4.6 Geology and Soils, notes the remediated hillside within Lot A achieves a factor of safety consistent with the standards for residential development. In addition, the Project includes project design features that would maintain the remediated slope as open space (**PDF GEO-1**), install MSE walls at the toe of the remediated slope (**PDF GEO-2**), and implement geotechnical recommendations into the rough grading plans (**PDF GEO-3**). The combination of a remediated landslide that exceeds the required factor of safety for residential development and an approved fire master plan results in a less than significant impact.

Threshold HAZ-7 Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact. The proposed Project site is located within a Very High Fire Hazard Severity Zone (VHFHSZ) per the Fire Hazard Severity maps from CALFIRE and Local Response Area (LRA) per OCFA and generally surrounded by residential uses. Given the existing wildfire environment and mapping for existing or designated residential uses in the area, expected wildfire behavior, availability of nearby firefighting resources (discussed further in Section 4.14 Wildfire), and the approved Fuel Modification Plan (**PDF HAZ-1 and PDF HAZ-2**), impacts would be less than significant. Implementation of the measures detailed in the proposed Project’s

Fire Safety Plan (Appendix G-1) and Fuel Modification Plan (Appendix G-2), combined with proposed ingress and egress routes, emergency response times, would reduce the risk of impacts from wildfire to less than significant levels, and no mitigation measures are required.

4.8.6 Cumulative Impacts

Less than Significant Impact. The proposed Project does not result in significant impacts related to hazards or hazardous materials. Hazards and hazardous materials tend not to be cumulatively considerable unless the projects are adjacent or cause potential releases of hazardous materials. Instead, all projects are responsible on an individual basis to mitigate potential hazards on a given property. Since the proposed Project results in less-than-significant impacts, and the cumulative projects in the surrounding area are primarily residential in nature and not uses that would result in the routine use or transport of hazardous materials, the proposed Project would not contribute to a cumulative impact associated with hazards or hazardous materials.

4.8.7 Summary of Mitigation Measures

As no impacts related to hazards and hazardous materials have been found to be significant, no mitigation measures are required.

4.8.8 Significant Environmental Impacts

The analysis above indicates that the Project will not exceed significance criteria for hazards and hazardous materials impacts. Therefore, all hazards and hazardous materials impacts are **less than significant**, and no mitigation measures are required.

4.8.9 References

14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

California Department of Conservation, Division of Land Resources Protection. A Guide to the Farmland Mapping and Monitoring Program. 2004 Edition.

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City of Laguna Niguel. 1992. General Plan for the City of Laguna Niguel. Available: <http://cityoflagunaniguel.org/DocumentCenter/Home/View/1886>. (Accessed June 20, 2021).

City of Laguna Niguel, Laguna Niguel Municipal Code Title 9, Planning and Zoning. https://library.municode.com/ca/laguna_niguel/codes/code_of_ordinances?nodeId=TIT9PLZO (Accessed June 20, 2021).

County of Orange. Orange County Fire Authority. OCFA Service Request SR #275370, Tentative Map 17721. October 21, 2021.

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