



4.8 HAZARDS AND HAZARDOUS MATERIALS

This section describes known and potential hazards and hazardous materials conditions at the Cypress City Center project (proposed project) site and in the surrounding area, related potentially significant adverse public health impacts anticipated as a result of the proposed project, and addresses the proposed impacts with consideration of local, State, and federal regulations and policies and provides recommended measures pursuant to California Environmental Quality Act (CEQA).

The hazards and hazardous materials analysis in this section is based on the following project-specific technical reports: the *Phase I Environmental Site Assessment* (2019b) and the *Phase II Limited Soil Investigation, Northwest Corner of Katella Avenue and Winners Circle, Cypress, California* (2019a), prepared by Roux Associates, Inc. (Roux Associates) in June 2019. The findings of these reports are summarized, and the complete reports are contained in Appendix F.

4.8.1 Methodology

To assess the impacts of the proposed project with respect to hazardous materials and wastes, Roux Associates performed a Phase I Environmental Site Assessment (ESA) and Phase II Limited Soil Investigation (LSI) of the property located at the northwest corner of Katella Avenue and Winners Circle in Cypress, California, with the Assessor's Parcel Numbers (APNs) 241-091-22, 23, 24, 25, and 26 (project site). Roux Associates performed the Phase I ESA in general accordance with the American Society for Testing Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527-13) in an effort to identify, to the extent feasible, the presence of recognized environmental conditions (RECs) with respect to the project site as defined in ASTM E1527-13.

The Phase I ESA used the following methodology:

4.8.1.1 Background Research and Data Review

Roux Associates performed a records review for the project site and surrounding properties in an effort to identify potential RECs in connection with the project site and assess potential concerns associated with the migration of hazardous substances to the project site from off-site sources. The records review included reasonably ascertainable historical data, which can be helpful in identifying the past uses of the project site and surrounding areas, as they may relate to the environmental condition of the project site.

4.8.1.2 Site Reconnaissance

On May 13, 2019, Roux Associates visually assessed the project site for potential RECs, including, but not limited to, potential underground storage tanks, aboveground storage tanks, polychlorinated biphenyl-containing equipment, hazardous materials storage or handling areas, containerized or bulk wastes, and visual indications of impacted soil. Roux Associates was unaccompanied during the site reconnaissance.



The findings of the Phase I ESA identified a REC in connection to disturbed/imported soils along the southern boundary and in the northeastern corner of the project site. The subsequent Phase II Limited Soil Investigation used the following methodology:

4.8.1.3 Soil Sampling

Eight soil sampling locations were selected along the southern and eastern portions of the project site to address fill materials suspected at the project site. Discrete samples were collected from all borings at depths of 0.5 and 1.5 feet (ft) below ground surface (bgs).

4.8.1.4 Laboratory Analysis

A total of 16 soil samples were collected during this investigation, including eight “shallow” samples from 0.5 ft bgs, and eight “deeper” samples from 2 ft bgs. All shallow soil samples were analyzed for Title 22 Metals using United States Environmental Protection Agency (USEPA) Methods 6010B and 7471A. Additionally, one randomly selected shallow sample (SS-2-0.5) also was analyzed for total petroleum hydrocarbons (TPH) using USEPA method 8015M and volatile organic compounds (VOCs) using USEPA Method 8260B.

Hazardous materials and wastes, as identified in the ESA and LSI, were assessed with respect to significance within the context of Appendix G to the *State CEQA Guidelines*. The shallow soil samples collected from eight locations across the project site were analyzed for California Title 22 metals, TPH (one sample only), and VOCs (one sample only). Laboratory reports showed that Title 22 metals concentrations for all samples analyzed were within acceptable background ranges. Additional analyses showed TPH concentrations below actionable levels and VOC concentrations below laboratory method reported limits for all constituents in the one sample analyzed. Based on the results of the Phase II LSI, the identified REC has been addressed, and no additional investigation of the project site is recommended.

4.8.2 Existing Environmental Setting

The project site is a relatively flat paved parking lot with existing light poles and various electrical utility boxes and lines, approximately 13 acres in size, with no physical street address. The project site has historically been used for surface parking and staging of empty truck trailers and is bordered by an entrance to the Los Alamitos Race Course to the west, beyond which is a retail development; parking for the Los Alamitos Race Course to the north; Winners Circle the east, beyond which is Costco warehouse outlet and other retail development; and, Katella Avenue to the south, beyond which are commercial properties.

According to aerial photographs, topographic maps, and a City of Cypress (City) directory obtained from Environmental Data Resources, Inc. (EDR), the project site was undeveloped from at least 1896 through 1925. The project site appears to have been used for agricultural purposes in 1928 and the site was vacant from at least 1938 through 1947. The project site was improved with a parking lot before 1963, and it has been generally used for that purpose since that time.



4.8.3 Regulatory Setting

Hazards and hazardous materials are subject to numerous federal, State, and local laws and regulations intended to protect health, safety, and the environment. The U.S. Environmental Protection Agency (USEPA), California EPA (Cal/EPA), the California Department of Toxic Substance Control (DTSC), the Santa Ana Regional Water Quality Control Board (RWQCB), and the County of Orange are the primary agencies responsible for enforcing these regulations. Local regulatory agencies enforce many federal and State regulations through the Certified Unified Program Agency (CUPA) program.

4.8.3.1 Federal Regulations

Major federal laws and issue areas include the following statutes and regulations:

Occupational Safety and Health Administration (OSHA), Title 29 CFR. 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.

EPA, Title 40 CFR 700–799 (Toxic Substances Control Act). The Toxic Substances Control Act regulates manufacturing, inventory, and disposition of industrial chemicals, including hazardous materials. It addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCB), asbestos-containing materials (ACM), and lead-based paint.

United States Department of Transportation (USDOT) Regulations, Title 49 CFR. U.S. DOT, in conjunction with the U.S. 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.

4.8.3.2 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 assure that adequate treatment and disposal capacity is available to manage the hazardous wastes generated within its jurisdiction.

California Occupational Safety and Health Administration (Cal/OSHA) Regulations. Cal/OSHA is responsible for developing and enforcing workplace safety standards and assuring 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.

4.8.3.3 Local Regulations

Certified Unified Program Agency. Senate Bill 1082 provides for the designation of a CUPA that would be responsible for the permitting process and collection of fees. The CUPA would be responsible for implementing at the local level the Unified Program, which serves to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for the following environmental and emergency management programs:

- Hazardous Waste
- Hazardous Materials Business Plan
- California Accidental Release Prevention Program
- Underground Hazardous Materials Storage Tanks
- Aboveground Petroleum Storage Tanks / Spill Prevention Control & Countermeasure Plans
- Hazardous Waste Generator and On-Site Hazardous Waste Treatment (tiered permitting) Programs

In Orange County, the Environmental Health Division of the Orange County Health Care Agency is designated as the CUPA responsible for implementing the above-listed program elements. The laws and regulations that established these programs require that businesses that use or store certain quantities of hazardous materials submit a Hazardous Materials Business Emergency Plan (HMBEP) that describes the hazardous materials usage, storage, and disposal required by the CUPA.



As the CUPA, the Environmental Health Division of the Orange County Health Care Agency coordinates five programs regulating hazardous materials and hazardous wastes in Orange County, which include the following:

- **Orange County Health Agency – Environmental Health Division Hazardous Waste**
 - Underground Storage Tanks (UST)
 - Aboveground Storage Tanks (AST)
- **Orange County Fire Authority**
 - Hazardous Materials Disclosure (HMD)
 - Business Plan
 - California Accidental Release Program (CalARP)

4.8.4 Thresholds of Significance

The thresholds for hazards and hazardous materials impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines* and the City's *Initial Study/Environmental Checklist*. The proposed project may be deemed to have a significant impact with respect to hazards and hazardous materials if it would:

Threshold 4.8.1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Threshold 4.8.2: 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 4.8.3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Threshold 4.8.4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Threshold 4.8.5: For a project located 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 4.8.6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Threshold 4.8.7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?



4.8.5 Project Impacts

Threshold 4.8.1: Would the project 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. Construction of the proposed project would temporarily increase the regional transport, use, and disposal of construction-related hazardous materials and petroleum products (e.g., diesel fuel, lubricants, paints and solvents, and cement products containing strong basic or acidic chemicals). These materials are commonly used at construction sites, and the construction activities would be required to comply with applicable State and federal regulations for proper transport, use, storage, and disposal of excess hazardous materials and hazardous construction waste. In addition, Regulatory Compliance Measures HYD-1 and HYD-2 (refer to Section 4.9, Hydrology and Water Quality, of this EIR) require compliance with the waste discharge permit requirements to avoid potential impacts to water quality due to spills or runoff from hazardous materials used during construction. Therefore, with adherence to the regulatory standards included in Regulatory Compliance Measures HYD-1 and HYD-2, impacts related to the routine transport, use, or disposal of hazardous materials during construction would be less than significant.

Operation. Retail and restaurant uses included in the proposed project may include the use and disposal of typical cleaning products along with limited use of pesticide and herbicides for landscape maintenance. Trucks accessing the businesses on site would contain oil and gasoline, to power their engines, which could have the potential to result in minor releases of such substances through drips or leaks from truck loading areas. The proposed project's uses are not anticipated to be associated with major hazardous materials and would not create unusually high quantities of hazardous waste.

The Orange County Fire Authority (OCFA) Hazardous Material Division and the Orange County Environmental Health Department both identify types and amounts of waste generated in Orange County and establish programs for managing waste. The OCFA maintains a Hazardous Material Management Plan, which assures that adequate treatment and disposal capacity is available to manage the hazardous waste generated within the County and address issues related to the disposal, handling, processing, storage, and treatment of local hazardous materials and waste products.

The proposed project would be reviewed by the OCFA for hazardous material use, safe handling, and storage of materials. Prior to the issuance of grading permits, conditions of approval would be applied to the proposed project by the OCFA to reduce hazardous material impacts and insure that any hazardous waste that is generated on site would be transported to an appropriate disposal facility by a licensed hauler in accordance with State and federal law. Therefore, due to the type and nature of the proposed project, its implementation would result in less than significant impacts related to the routine transport, use, or disposal of hazardous materials; no mitigation is required.

Threshold 4.8.2: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?



Less Than Significant Impact. Because no significant hazards would be created by uses associated with the proposed project, the potential for the proposed project to 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 would be less than significant; no mitigation is required.

Threshold 4.8.3: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. Grace Christian School is located approximately 0.75 mile northwest of the project site, and the Cottonwood Christian Center preschool facility is located approximately 0.5 mile west of the project site. The proposed project's uses would not pose a significant threat of hazardous emissions or significant handling of hazardous materials or substances. Therefore, impacts on schools would be less than significant; no mitigation is required.

Threshold 4.8.4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less Than Significant Impact. Database searches of the project site, including a GeoTracker search and a search of Superfund sites, determined that the project site is not included on a list of hazardous materials sites that could create a significant hazard to the public or the environment and is not a recorded Superfund site. On May 8, 2019, as part of the Phase I ESA, a government records database search was conducted to identify any properties of potential environmental concern within a 1-mile radius of the project site. The project site was not listed in any of the queried databases. The Phase I ESA identified several listings for off-site adjacent or nearby properties on databases potentially indicative of a contamination concern. However, the Phase I ESA concluded that these sites do not pose a potential hazard to the project site. In addition, soil sampling undertaken as part of the Phase II LSI did not identify elevated concentrations of metals, TPH, or VOCs in the soil at the project site. Therefore, impacts related to hazardous materials sites would remain less than significant; no mitigation is required.

Threshold 4.8.5: For a project located 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?

Less Than Significant Impact. The project site is located approximately 0.5 mile north of the Joint Forces Training Base (JFTB) Los Alamitos. The facilities at JFTB Los Alamitos include two runways and associated taxiways, ramp space, and hangars. According to the Orange County Airport Land Use Commission's 2016 *Airport Environs Land Use Plan (AELUP) for Joint Forces Training Base Los Alamitos*, the project site is located in the Federal Aviation Administration's (FAA) Part 77 Notification Area (Exhibit D1) and the AELUP height restriction zone for JFTB Los Alamitos (Exhibit



D2).¹ Height limitations are imposed on projects within a height restriction zone so that structures or trees (1) do not obstruct the airspace required for take off, flight, or landing of aircraft at an airport, or (2) are not otherwise hazardous to the landing or taking off of aircraft.

Implementation of the proposed project would not result in a safety hazard for people working in the project area because the project would comply with all appropriate FAA standards and requirements, including Regulatory Compliance Measure HAZ-1, which requires that the FAA be notified of any proposed structure(s) that would penetrate the 100 to 1 imaginary surface that surrounds the runway at JFTB Los Alamitos. The FAA would then be responsible for reviewing the height of the proposed structures and determining whether they pose a potential aviation hazard. With adherence to the regulatory standards provided in Regulatory Compliance Measure HAZ-1, implementation of the proposed project would result in less than significant impacts related to safety hazards for people working in the project area; no mitigation is required.

Threshold 4.8.6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The project site is not located along an emergency evacuation route.² Therefore, implementation of the proposed project would not interfere with the adopted emergency response plan and/or the emergency evacuation plan. No impact would occur; no mitigation is required.

Threshold 4.8.7: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. The project site is located within a fully urbanized area. There are no wildlands adjacent or in the vicinity of the project site, and the project site is not designated as a Fire Hazard Severity Zone on the Statewide CAL FIRE Map.³ Therefore, there would be no risk of loss, injury, or death involving wildland fires. No impact would occur, and no mitigation is required.

4.8.6 Level of Significance Prior to Mitigation

Impacts resulting from implementation of the proposed project would be less than significant prior to mitigation; no mitigation is required related to hazardous materials and wastes.

¹ Orange County Airport Land Use Commission. 2016. *Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos*. Website: <http://www.ocair.com/commissions/aluc/docs/JFTB-AELUP2016ProposedFINAL.pdf> (accessed December 29, 2019).

² City of Cypress General Plan, Safety Element, Emergency Evacuation Routes map (Exhibit SAF-5), October 2, 2001.

³ California Department of Forestry and Fire Protection (CAL FIRE). 2007. Draft Fire Hazard Severity Zones in LRA. Website: https://osfm.fire.ca.gov/media/6737/fhszs_map30.pdf (accessed December 29, 2019).



4.8.7 Regulatory Compliance Measures and Mitigation Measures

4.8.7.1 Regulatory Compliance Measures

Regulatory Compliance Measure HAZ-1 Federal Aviation Regulation Title 14 Part 77. The Applicant/Developer shall notify the Federal Aviation Administration (FAA) of any proposed structure(s) that would penetrate the 100 to 1 imaginary surface that surrounds the runway at Joint Forces Training Base Los Alamitos at least 45 days prior to beginning construction.

4.8.7.2 Mitigation Measures

No mitigation measures are required.

4.8.8 Cumulative Impacts

The project vicinity is largely urbanized with residential, commercial, and industrial uses. As the area continues to develop, the addition of more development could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; therefore, cumulative development could result in potentially significant impacts regarding hazardous materials.

Projects considered part of the cumulative condition include Related Project Nos. 1, 2, 3, and 4. Related Project No. 1 is the approved retail/commercial project on a 33-acre site located west of the project site and includes 244 units of senior housing, 35,600 square feet (sf) of major retail use, and 11,376 sf of restaurant uses. Related Project No. 2 is also located west of the project site, and includes a 129-unit assisted living facility and 13,700 sf of retail use. Related Project No. 3, to the north of the project site, includes 67 apartments. Related Project No. 4, to the west of the project site, is a 9-acre, 6-field soccer facility.

For the proposed project, impacts due to hazardous materials would be less than significant. Although some of the cumulative projects listed also have potential impacts associated with hazardous materials, the environmental concerns associated with hazardous materials are site specific. Each project is required to address any issues related to hazardous material or wastes. Federal, state, and local regulations require mitigation to protect against site contamination by hazardous materials. Therefore, there would be no cumulative hazardous materials impacts.



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