

IV. Environmental Impact Analysis

K.1. Public Services – Fire Protection

1. Introduction

This section analyzes the Project’s potential effects on fire protection and emergency medical services (EMS) provided by the City of Los Angeles Fire Department (LAFD). The analysis addresses whether impacts to fire protection facilities and services, response times, emergency access, water infrastructure, and fire flow (i.e., water available for firefighting) would require the need for new or physically altered fire facilities, the construction of which could cause significant environmental impacts. The analysis is based, in part, on information available on the LAFD website; Inter-departmental correspondence from LAFD to the Department of City Planning (December 3, 2018), which is included in Appendix L-1 of this Draft EIR¹; and the Water Utility Infrastructure Technical Report (Water Technical Report) prepared by KPFF Consulting Engineers, which is included in Appendix O-1 of this Draft EIR.²

2. Environmental Setting

a) Regulatory Framework

(1) Federal

(a) *Occupational Safety and Health Administration*

The Federal Occupational Safety and Health Administrations (OSHA) and California OSHA (Cal/OSHA) enforce the provisions of the Federal and State Occupational Safety and Health Acts, respectively, which collectively require safety and health regulations for construction under Part 1926 of Title 29 Code of Federal Regulations (CFR). The fire-related requirements of the federal Occupational Safety and Health Act are specifically contained in Subpart F, Fire Protection and Prevention, of Part 1926. Examples of general requirements related to fire protection and prevention include maintaining fire suppression equipment specific to construction on-site; providing a temporary or permanent water supply of sufficient volume, duration, and pressure; properly operating the on-site fire-

¹ Ralph M. Terrazas, Fire Chief, and Kristin Crowley, Fire Marshal, Bureau of Fire Prevention and Public Safety, Los Angeles Fire Department (LAFD), correspondence dated December 3, 2018. Provided in Appendix L-1 of this Draft EIR.

² KPFF Consulting Engineers, *Utility Infrastructure Technical Report: Water (Water Technical Report)*, December 4, 2018. Provided in Appendix O-1 of this Draft EIR.

fighting equipment; and keeping storage sites free from accumulation of unnecessary combustible materials.

(b) *Federal Emergency Management Act (FEMA)*

FEMA was established in 1979 via executive order and is an independent agency of the federal government. In March 2003, FEMA became part of the U.S. Department of Homeland Security with the mission to lead the effort in preparing the nation for all hazards and effectively manage federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages the National Flood Insurance Program and the U.S. Fire Administration.

(c) *Disaster Mitigation Act of 2000*

Disaster Mitigation Act (42 United States Code [U.S.C.] Section 5121) provides the legal basis for FEMA mitigation planning requirements for state, local, and Indian Tribal governments as a condition of mitigation grant assistance. It amends the Robert T. Stafford Disaster Relief Act of 1988 (42 U.S.C. Section 5121-5207) by repealing the previous mitigation planning provisions and replacing them with a new set of requirements that emphasize the need and creates incentives for state, tribal, and local agencies to closely coordinate mitigation planning and implementation efforts. This Act reinforces the importance of pre-disaster infrastructure mitigation planning to reduce disaster losses nationwide and the streamlining of the administration of federal disaster relief and programs to promote mitigation activities. Some of the major provisions of this Act include:

- Funding pre-disaster mitigation activities
- Developing experimental multi-hazard maps to better understand risk
- Establishing state and local government infrastructure mitigation planning requirements
- Defining how states can assume more responsibility in managing the Hazard Mitigation Grant Program (HMGP)
- Adjusting ways in which management costs for projects are funded

The mitigation planning provisions outlined in Section 322 of this Act establish performance-based standards for mitigation plans and require states to have a public assistance program (Advance Infrastructure Mitigation [AIM]) to develop county government plans. The consequence for counties that fail to develop an infrastructure mitigation plan is the chance of a reduced federal share of damage assistance from 75 percent to 25 percent if the damaged facility has been damaged on more than one occasion in the preceding 10-year period by the same type of event.

(2) State

(a) *California Building Code and California Fire Code*

The California Building Code (CBC) (California Code of Regulations [CCR], Title 24, Part 2) is a compilation of building standards, including fire safety standards for new buildings, which are presented with more detail in the California Fire Code (CCR Title 24, Part 9). CBC standards are based on building standards that have been adopted by state agencies without change from a national model code; building standards based on a national model code that have been changed to address particular California conditions; and building standards authorized by the California Legislature, not covered by the national model code. The 2019 edition of the California Building Code became effective on January 1, 2020. The building standards in the California Building Code apply to all locations in California, except where more stringent standards have been adopted by state agencies and local governing bodies. Typical fire safety requirements of the California Fire Code include: the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. Specific California Fire Code fire safety regulations have been incorporated by reference in the Los Angeles Municipal Code (LAMC) with local amendments, as discussed below.³

(b) *California Fire Service and Rescue Emergency Aid System*

The LAFD participates in the California Fire Service and Rescue Emergency Mutual Aid System through which the California Governor’s Office of Emergency Service (OES), Fire and Rescue Division is responsible for the development, implementation and coordination of the California Fire Service and Rescue Emergency Mutual Aid Plan (Mutual Aid Plan).⁴ The Mutual Aid Plan outlines procedures for establishing mutual aid agreements at the local, operational, regional, and state levels, and divides the State into six mutual aid regions to facilitate the coordination of mutual aid. The LAFD is located in Region I. Through the Mutual Aid Plan, the OES is informed of conditions in each geographic and organizational area of the State, and the occurrence or imminent threat of disaster. All OES Mutual Aid Plan participants monitor a dedicated radio frequency for fire events that are beyond the capabilities of the responding fire department and provide aid in accordance with the management direction of the OES.

³ Los Angeles Fire Department, *Mutual Aid Agreements/Disaster Declarations/Potential Fiscal Impacts*, July 3, 2014.

⁴ Governor’s Office of Emergency Services, Fire and Rescue Division, *California Fire Service and Rescue Emergency Mutual Aid System, Mutual Aid Plan*, revised December 2014.

(c) *California Vehicle Code*

Section 21806 of the California Vehicle Code pertains to emergency vehicles responding to Code 3 incidents/calls.⁵ This section of the California Vehicle Code states the following:

Upon the immediate approach of an authorized emergency vehicle which is sounding a siren and which has at least one lighted lamp exhibiting red light that is visible, under normal atmospheric conditions, from a distance of 1,000 feet to the front of the vehicle, the surrounding traffic shall, except as otherwise directed by a traffic officer, do the following: (a)(1) Except as required under paragraph (2), the driver of every other vehicle shall yield the right-of-way and shall immediately drive to the right-hand edge or curb of the highway, clear of any intersection, and thereupon shall stop and remain stopped until the authorized emergency vehicle has passed. (2) A person driving a vehicle in an exclusive or preferential use lane shall exit that lane immediately upon determining that the exit can be accomplished with reasonable safety.... (c) All pedestrians upon the highway shall proceed to the nearest curb or place of safety and remain there until the authorized emergency vehicle has passed.

(d) *California Constitution Article XIII, Section 35*

Section 35 of Article XIII of the California Constitution at subdivision (a)(2) provides: “The protection of public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services.” Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50-percent sales tax to be expended exclusively on local public safety services. California Government Code Sections 30051-30056 provide rules to implement Proposition 172. Public safety services include fire protection. Section 30056 mandates that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, an agency is required to use Proposition 172 to supplement its local funds used on fire protection services, as well as other public safety services. In *City of Hayward v. Board of Trustees of California State University* (2015) 242 Cal.App.4th 833, the court found that Section 35 of Article XIII of the California Constitution requires local agencies to provide public safety services, including fire protection, and that it is reasonable to conclude that the city will comply with that provision to ensure that public safety services are provided.⁶ The *Hayward* ruling also concluded that “assuming the city continues to perform its obligations, there is no basis to conclude that the project will cause a substantial adverse effect on human beings” and the “need

⁵ A Code 3 response to any emergency may be initiated when one or more of the following elements are present: a serious public hazard, an immediate pursuit, preservation of life, a serious crime in progress, and prevention of a serious crime. A Code 3 response involves the use of sirens and flashing red lights.

⁶ *City of Hayward v. Board of Trustees of California State University* (2015) 242 Cal.App.4th 833, 847.

for additional fire protection services is not an environmental impact that CEQA requires a project proponent to mitigate.”⁷

(e) *California Governor’s Office of Emergency Services (Cal OES)*

In 2009, the State of California passed legislation creating the Cal OES and authorized it to prepare a Standard Emergency Management System (SEMS) program (Gov. Code Section 8607; Title 19 CCR Section 2401 et seq.), which sets forth measures by which a jurisdiction should handle emergency disasters. In California, SEMS provides the mechanism by which local government requests assistance. Non-compliance with SEMS could result in the state withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster. Cal OES coordinates the state’s preparation for, prevention of, and response to major disasters, such as fires, floods, earthquakes and terrorist attacks. During an emergency, Cal OES serves as the lead state agency for emergency management in the state. It also serves as the lead agency for mobilizing the state’s resources and obtaining federal resources. Cal OES coordinates the state response to major emergencies in support of local government. The primary responsibility for emergency management resides with local government. Local jurisdictions first use their own resources and, as they are exhausted, obtain more from neighboring cities and special districts, the county in which they are located, and other counties throughout the state through the statewide mutual aid system (see discussion of Mutual Aid Agreements, below). California Emergency Management Agency (Cal-EMA) maintains oversight of the state’s mutual aid system.

(3) Local

(a) *City of Los Angeles Charter*

Section 520 of the Los Angeles City Charter states that the LAFD’s duty is to control and extinguish injurious or dangerous fires and to remove that which is liable to cause those fires. It also requires the LAFD to enforce all ordinances and laws relating to the prevention or spread of fires, fire control, and fire hazards within the City, as well as to conduct fire investigations and protect lives and property in case of disaster or public calamity.

(b) *City of Los Angeles General Plan Framework*

The General Plan Framework, originally adopted in December 1996 and re-adopted in August 2001, sets forth general guidance regarding land use issues for the entire City and defines citywide policies regarding land use, including public services. The fire protection service goals and objectives within the General Plan, Chapter 9, Infrastructure and Public Services, pertain to City responsibility and are not applicable to specific developments like the Project.

⁷ *City of Hayward v. Board of Trustees of California State University* (2015) 242 Cal.App.4th 833, 843, 847.

Goal 9J of the Infrastructure and Public Services Chapter of the Framework Element specifies that every neighborhood should have the necessary level of fire protection service, emergency medical service, and infrastructure.⁸ Objective 9.16 requires that the demand for existing and projected fire facilities and service be monitored and forecasted. Objective 9.17 requires that all areas of the City have the highest level of fire protection and emergency medical service, at the lowest possible cost, to meet existing and future demand. Objective 9.18 requires that the development of new fire facilities be phased with growth. Further, Objective 9.19 requires the maintenance of the LAFD's ability to assure public safety in emergency situations. Under the Framework Element, the City goal for response distance for emergency medical response and the distance of fire stations for engine companies from neighborhood land uses is 1.5 miles.⁹ This is consistent with the specifications for response distances within the LAMC, discussed below.

Goal 9J: Every neighborhood has the necessary level of fire protection service, emergency medical service (EMS) and infrastructure.

Objective 9.16: Monitor and forecast demand for existing and projected fire facilities and service.

Policy 9.16.1: Collect appropriate fire and population development statistics for the purpose of evaluating fire service needs based on existing and future conditions.

Objective 9.17: Assure that all areas of the City have the highest level of fire protection and EMS, at the lowest possible cost, to meet existing and future demand.

Policy 9.17.2: Identify areas of the City with deficient fire facilities and/or service and prioritize the order in which these areas should be upgraded based on established fire protection standards.

Policy 9.17.4: Consider the Fire Department's concerns and, where feasible adhere to them, regarding the quality of the area's fire protection and emergency medical services when developing General Plan amendments and zone changes, or considering discretionary land use permits.

Objective 9.19: Maintain the Los Angeles Fire Department's ability to assure public safety in emergency situations.

Policy 9.19.1: Maintain mutual aid or mutual assistance agreements with local fire departments to ensure an adequate response in the event of a major earthquake, wildfire, urban fire, fire in areas with substandard fire protection, or other fire emergencies

⁸ City of Los Angeles Department of City Planning, *City of Los Angeles General Plan Framework Element*, Chapter 9: Infrastructure and Public Services.

⁹ City of Los Angeles Department of City Planning, *City of Los Angeles General Plan Framework Element*, Chapter 9: Infrastructure and Public Services, Status of Infrastructure System/Facilities, Fire.

Policy 9.19.3: Maintain the continued involvement of the Fire Department in the preparation of contingency plans for emergencies and disasters.

(c) *General Plan Safety Element*

The General Plan Safety Element, adopted on November 26, 1996, contains policies related to the City's response to hazards and natural disasters, including fires. In particular, the Safety Element sets forth requirements, procedures, and standards to facilitate effective fire suppression and emergency response capabilities. In addition, the City's Safety Element designates disaster routes.

Goal 2: A city that responds with the maximum feasible speed and efficiency to disaster events so as to minimize injury, loss of life, property damage and disruption of the social and economic life of the City and its immediate environs.

Objective 2.1: Develop and implement comprehensive emergency response plans and programs that are integrated with each other and with the City's comprehensive hazard mitigation and recovery plans and programs.

Policy 2.1.5: Response: Develop, implement, and continue to improve the City's ability to respond to emergency events. [All EOO emergency response programs and all hazard mitigation and disaster recovery programs related to protecting and reestablishing communications and other infrastructure, service and governmental operations systems implement this policy.]

Policy 2.1.6: Standards/fire. Continue to maintain, enforce and upgrade requirements, procedures and standards to facilitate more effective fire suppression. (All peak load water and other standards, code requirements [including minimum road widths, access, and clearances around structures] and other requirements or procedures related to fire suppression implement this policy.)

The Fire Department and/or appropriate City agencies shall revise regulations or procedures to include the establishment of minimum standards for location and expansion of fire facilities, based upon fire flow requirements, intensity and type of land use, life hazard, occupancy and degree of hazard so as to provide adequate fire and emergency medical event response. At a minimum, site selection criteria should include the following standards which were contained in the 1979 General Plan Fire Protection and Prevention Plan:

Fire stations should be located along improved major or secondary highways. If, in a given service area, the only available site is on a local street, the site must be on a street which leads directly to an improved major or secondary highway.

Fire station properties should be situated so as to provide drive-thru capability for heavy fire apparatus.

If a fire station site is on the side of a street or highway where the flow of traffic is toward a signalized intersection, the site should be at least 200 feet from that intersection in order to avoid blockage during ingress and egress.

The total number of companies which would be available for dispatch to first alarms would vary with the required fire flow and distance as follows: (a) less than 2,000 gpm would require not less than 2 engine companies and 1 truck company; (b) 2,000 but less than 4,500 gpm, not less than 2 or 3 engine companies and 1 or 2 truck companies; and (c) 4,500 or more gpm, not less than 3 engine companies and 2 truck companies.

These provisions of the 1979 Plan were modified by the Fire Department for purposes of clarification.

Goal 3: A city where private and public systems, services, activities, physical condition and environment are reestablished as quickly as feasible to a level equal to or better than that which existed prior to the disaster.

Objective 3.1: Develop and implement comprehensive disaster recovery plans which are integrated with each other and with the City's comprehensive hazard mitigation and emergency response plans and programs.

Policy 3.1.1: Coordination: Coordinate with each other, with other jurisdictions and with appropriate private and public entities prior to a disaster and to the greatest extent feasible within the resources available, to plan and establish disaster recovery programs and procedures which will enable cooperative ventures, reduce potential conflicts, minimize duplication and maximize the available funds and resources to the greatest mutual benefit following a disaster. [All EOO recovery programs involving cooperative efforts between entities implement this policy.]

(d) Los Angeles Municipal Code and Charter

The Los Angeles Fire Code (LAMC Chapter V, Article 7) incorporates by reference portions of the California Fire Code and the International Fire Code. The City's Fire Code sets forth regulatory requirements pertaining to the prevention of fires; the investigation of fires and life safety hazards; the elimination of fire and life safety hazards in any building or structure (including buildings under construction); the maintenance of fire protection equipment and systems; and the storage, use, and handling of hazardous materials. Specific regulations regarding fire prevention and protection are discussed below.

Section 57.106.5.2 provides that the Fire Chief shall have the authority to require drawings, plans, or sketches as may be necessary to identify: (1) occupancy access points; (2) devices and systems; (3) utility controls; (4) stairwells; and (5) hazardous materials/waste.

Section 57.107.6 requires that the installation, alteration, and major repair of the following be performed pursuant to a permit issued by the Department of Building and Safety: Fire Department communication systems, building communication systems, automatic elevators, heliports, emergency power systems, fire escapes, private fire hydrants, fire assemblies, fire protective signaling systems, pilot lights and warning lights for heat-producing equipment, refrigerant discharge systems, smoke detectors, emergency smoke control systems, automatic sprinkler systems, standpipe systems, and gas detection systems.

Section 57.118 establishes LAFD's fire/life safety plan review and LAFD's fire/life safety inspection for new construction projects.

Section 57.118.1.1 requires that all new high-rise buildings greater than 75 feet in height (measured from the lowest point with fire access) must include fire/life safety reviews by the Department of Building and Safety and LAFD.

Section 57.408 requires the preparation of an Emergency Plan that establishes dedicated personnel and emergency procedures to assist the LAFD during an emergency incident, and establishes a drill procedure to prepare for emergency incidents. The Emergency Plan would also establish an on-site emergency assistance center and establish procedures to be followed during an emergency incident. The Emergency Plan must be submitted to the LAFD for approval prior to implementation, and must be submitted annually (and revised if required by the LAFD).

Section 57.4704.4.3.1 of the LAMC requires that the Smoke detectors required by Chapter 9 of the LAMC (Building Code) be maintained in dependable operating condition and tested every six months or as required by the Fire Chief. An accurate record of such tests must be kept by the owner, manager, or person in charge of the property, and such records must be open to examination by the Fire Chief.

Section 57.4705.1.6 requires there must be at least one elevator which shall be available for fire EMS and shall have its controls designed so that key switches located in the building control station/fire command center will recall said elevator or elevators to the designated main floors.

Section 57.4705.4 requires each building to have a rooftop emergency helicopter landing facility in a location approved by the Chief.

Section 57.4705.1.6 requires at least one elevator in each bank of elevators to be available for fire emergency service and to have its controls designed so that key switches located in the building control station/fire command center will recall said elevator or elevators to the designated main floor. The elevator or elevators must be interconnected with the standby power. Section 57.503.1.4 requires an approved, posted fire lane whenever any portion of an exterior wall is more than 150 feet from the edge of a roadway.

Section 57.507.3.1 establishes fire water flow standards, which vary from 2,000 gallons per minute (gpm) in low-density residential areas to 12,000 gpm in high-density commercial or industrial areas, with a minimum residual water pressure of 20 pounds per square inch (psi) remaining in the water system. Site-specific fire flow requirements are determined by the LAFD based on land use, life hazard, occupancy, and fire hazard level.

Section 57.507.3.2 addresses land use-based requirements for fire hydrant spacing and type. Regardless of land use, every first story of a residential, commercial, or industrial building must be within 300 feet of an approved hydrant. The site-specific number and

location of hydrants would be determined as part of LAFD's fire/life safety plan review for each development.

Section 57.507.3.3 limits the maximum response distances to an LAFD station based on the type of land use. Applicable distances are based on LAFD's comment letter for each individual project.

Section 57.512.1 provides that response distances, which are based on land use and fire flow requirements and range from 0.75 mile for an engine company to 2 miles for a truck company, shall comply with Section 57.507.3.3. Where a site's response distance is greater than permitted, all structures must have automatic fire sprinkler systems.

(e) *Propositions F and Q*

Proposition F, the City of Los Angeles Fire Facilities Bond, was approved by voters in November 2000. This bond authorized the issuance of \$532.6 million of general obligation bonds to finance the construction and rehabilitation of fire stations and animal shelters. Proposition F allocated \$378.6 million to build 18 new or replacement/expanded fire/paramedic stations, one regional fire station and training facility, and one emergency air operations and helicopter maintenance facility, for a total of 20 Proposition F projects. As of January 2017, all of the proposed projects have been completed.¹⁰

Proposition Q, the Citywide Public Safety General Obligation Bond Program, was approved by voters in March 2002. Proposition Q allocated \$600 million to renovate, improve, expand and construct police, fire, 911, and paramedic facilities. In March 2011, the program was expanded to include renovations to existing LAFD facilities throughout the City. A total of 80 renovation projects at LAFD facilities were scheduled. These renovation projects include the installation of diesel exhaust capture systems, upgrades to air filtration and electrical systems, re-roofing, remodeling, parking lot repair, painting, and other improvements. The fire renovation projects identified under this measure have been completed.¹¹

(f) *Measure J*

Measure J, which was approved by voters at the November 7, 2006 General Election, is a charter amendment and ordinance that involves technical changes to Proposition F. Measure J allows new regional fire stations funded by Proposition F to be located in densely developed areas to be designed and built on one or more properties equaling less than 2 acres. Components of a regional fire station can be built on two or more sites within close proximity, or the facility can be designed to fit on a single site of less than 2 acres.

¹⁰ LAFD, *Los Angeles 2000 Prop F Fire Facilities Bond, Progress Report – Feb–March 2016*, 2016.

¹¹ City of Los Angeles, *A 2002 Proposition Q Citywide Safety Bond Program Progress Report – February/March 2016*, 2016. Accessed December 13, 2018.

(g) *Los Angeles Fire Department Strategic Plan 2018-2020*

The Los Angeles Fire Department Strategic Plan 2018-2020 (LAFD's Strategic Plan) is a collaborative effort between LAFD staff, City leaders, and community members to accomplish the LAFD's organizational vision.¹² LAFD's Strategic Plan identifies five goals and corresponding strategic actions that will guide the LAFD for the next three years. The key goals include providing public safety and emergency service; embracing a healthy, safe, and productive work environment; capitalizing on advanced technology; enhancing LAFD sustainability and community resiliency; and increasing opportunities for personal growth and professional development.

(h) *Central City North Community Plan*

The Land Use Element of the City's General Plan includes 35 community plans. Community plans are intended to provide an official guide for future development and propose approximate locations and dimensions for land use. The community plans establish standards and criteria for the development of housing, commercial uses, and industrial uses, as well as circulation and service systems. The community plans implement the City's General Plan Framework at the local level and consist of both text and an accompanying generalized land use map. The community plans' texts express goals, objectives, policies, and programs to address growth in the community, including those that relate to fire protection required to support such growth. The community plans' maps depict the desired arrangement of land uses as well as street classifications and the locations and characteristics of public service facilities.

The City's 2000 Central City North Community Plan (Community Plan) contains one objective and policy regarding fire protection.¹³

Objective 9-1: Ensure that fire facilities and fire protection services are sufficient for the existing and future population and land uses of Central City North.

Policy 9-1.1: Coordinate with the Fire Department as part of the review of significant development projects and General Plan Amendments affecting land use to determine the impact on service demands.

b) Existing Conditions

(1) Fire Protection Facilities

Fire prevention, fire suppression, life safety and EMS within the City are provided by the LAFD. The LAFD is a full-spectrum life safety agency that serves a population of approximately four million people. The LAFD's estimated 3,435 uniformed personnel and 381 civilian support staff provide fire prevention, firefighting, emergency medical care, technical rescue, hazardous materials mitigation, disaster response, public education, and community service. Currently, there is an estimated total of 1,018 uniformed

¹² LAFD, *Strategic Plan 2018–2020*. Accessed December 2018.

¹³ City of Los Angeles Department of City Planning, *Central City North Community Plan*.

firefighters, including 270 serving as firefighters/paramedics, on-duty at 106 fire stations across the LAFD's 469-square-mile jurisdiction.¹⁴

As shown in **Figure IV.K.1-1, LAFD Fire Stations in the Project Vicinity**, there are five LAFD fire stations that would provide primary fire protection service to the Project Site. The location, distance/direction from the Project Site, average response times, and equipment of each of these fire stations are summarized in **Table IV.K.1-1, LAFD Fire Stations in the Project Vicinity**. The Project Site is within the service area of Fire Station 17, located at 1601 S. Santa Fe Avenue, approximately 1.032 miles to the south of the Project Site.¹⁵

The other four fire stations in the vicinity of the Project include: (1) Fire Station 4, located at 800 N. Main Street, approximately 1.4 miles northwest of the Project Site; (2) Fire Station 14, located at 3401 S. Central Avenue, approximately 1.4 miles southwest; (3) Fire Station 9, located at 430 E. 7th Street, approximately 1.632 miles northwest of the Project Site; and (4) Fire Station 2, located at 1962 Cesar Chavez Avenue, approximately 2.1 miles northeast of the Project Site.

(2) Response Distance

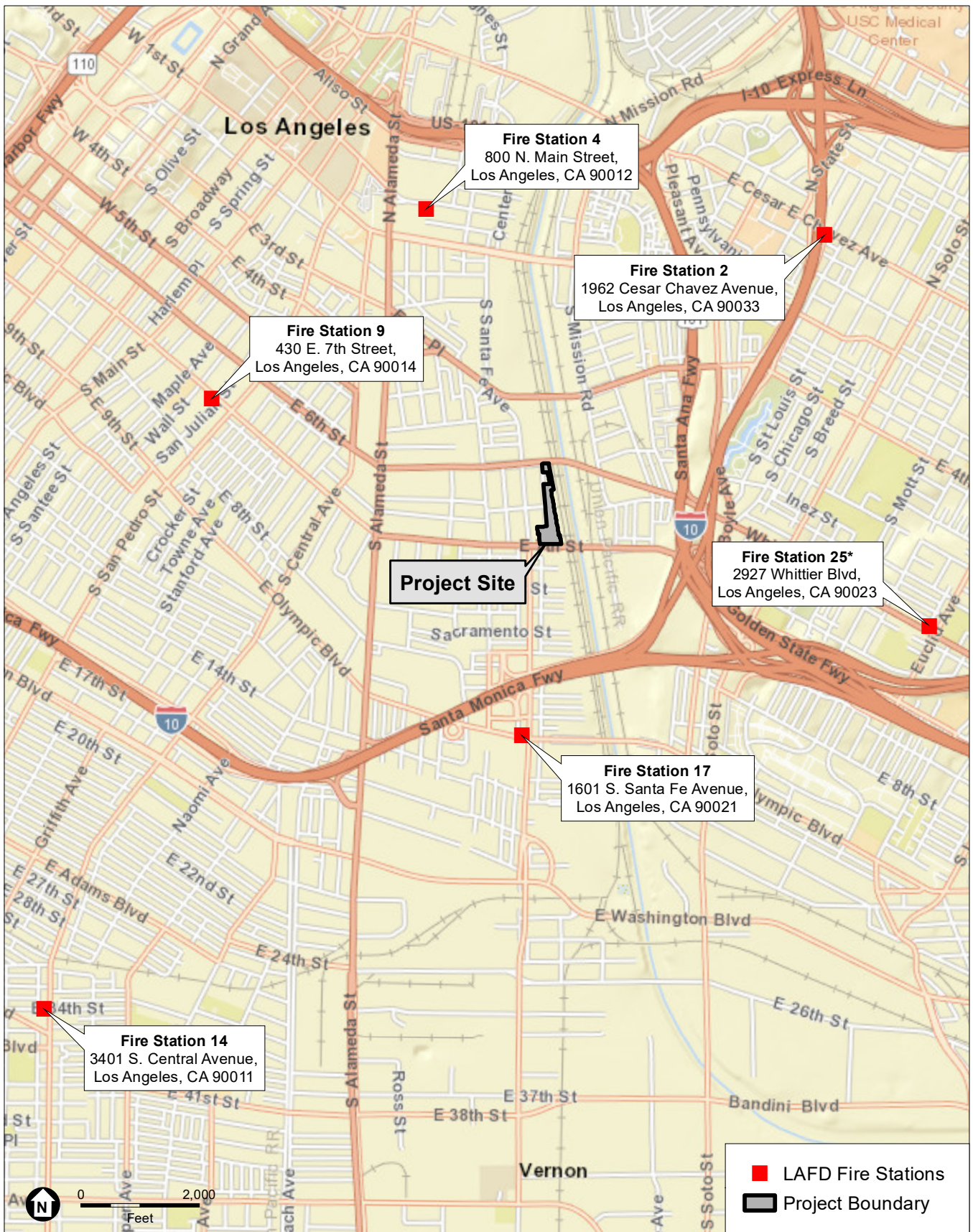
According to the City's Fire Code (Section 57.507.3.3), the first-due Engine Company should be within 1 mile of the Project Site and the first-due Truck Company should be within 1.5 miles. As indicated in Table IV.K.1-1, Fire Station 17, which consists of an Engine Company, is located just over 1 mile (1.032 miles) from the Project Site. Fire Station 9, which consists of a Truck Company, is located more than 1.5 miles (1.632 miles) from the Project Site.

(3) Response Time

Specific response times for the stations for January through December 2019 are included in Table IV.K.1-1. Fire Station 17, the closest station to the Project Site, had an average response time of 6:47 and 6:34 for EMS and non-EMS incidents, respectively. Fire Station 4 had an average response time of 6:27 and 6:10 for EMS and non-EMS incidents, respectively. Fire Station 14 had an average response time of 6:29 and 6:13 for EMS and non-EMS incidents, respectively. Fire Station 9 had an average response time of 5:54 and 5:25 for EMS and non-EMS incidents, respectively. Fire Station 2 had an average response time of 6:27 and 6:21 for EMS and non-EMS incidents, respectively. The Citywide average response times between January and December 2019 were 6:39 and 6:23 for EMS and non-EMS incidents, respectively.

¹⁴ LAFD, Department Overview – Our Mission, <http://www.lafd.org/about/about-lafd/our-mission>. Accessed March 17, 2021.

¹⁵ LAFD, Find Your Station, Generated for 670 Mesquit, Los Angeles, CA 90021, <https://www.lafd.org/fire-stations/station-results>. Accessed December 2018.



SOURCE: ESRI; say Los Angeles Fire Department, 2018
 *Fire Station 25 is not listed by LAFD as a Fire Station that would serve the Project Site.

Figure IV.K.1-1
 LAFD Fire Stations in the Project Vicinity

**TABLE IV.K.1-1
LAFD FIRE STATIONS IN THE PROJECT VICINITY**

Fire Station No./Location	Distance/ Direction from Project Site	Average Response Times ^{a,b,c}		Equipment
		EMS	Non-EMS	
Fire Station 17 1601 South Santa Fe Avenue	1.032 miles south	6:47	6:34	Assessment Engine Paramedic Rescue Ambulance Foam Tender Haz-Mat Tender Arson Investigation Unit
Fire Station 4 800 N. Main Street	1.4 miles northwest	6:27	6:10	Assessment Engine Paramedic Rescue Ambulance EMS Battalion Captain BLS Rescue Ambulance
Fire Station 14 3401 S. Central Avenue	1.4 miles southwest ^d	6:29	6:13	Assessment Engine Paramedic Rescue Ambulance BLS Rescue Ambulance
Fire Station 9 430 East 7th Street	1.632 miles northwest	5:54	5:25	BLS Truck Assessment Engines Paramedic Rescue Ambulances BLS Rescue Ambulance Fast Response Unit
Fire Station 2 1962 Cesar Chavez Avenue	2.1 miles northeast	6:27	6:21	Light Force Truck Assessment Engine Paramedic Rescue Ambulance

NOTE(S):

^a LAFD, FireStatLA, <http://www.lafd.org/fsla/stations-map>. Accessed April 30, 2020.

^b Average Response times from January through December of 2019. Average Response Times include call processing, turn out, and travel time. The Citywide average response time from January through December 2019 is 6:39 for EMS and 6:23 for non-EMS.

^c Non-EMS = Fire and others services. EMS = Emergency Medical Services.

^d As noted in the LAFD Correspondence, the distance measured between the Project Site and Fire Station 14 is 1.4 miles. However, it should be noted that based on driving distance, the Project Site is approximately 2.3 miles away from Fire Station 14.

SOURCE: Ralph M. Terrazas, LAFD, correspondence dated December 3, 2018; LAFD website, FireStatLA, <http://www.lafd.org/fsla/stations-map>. Accessed April 30, 2020.

The LAFD has not established response time standards for emergency response, nor adopted the National Fire Protection Association (NFPA) standard of 5 minutes for EMS response and 5 minutes, 20 seconds for fire suppression response.¹⁶ Roadway congestion, intersection level of service (LOS), weather conditions, and construction traffic along a response route can affect response time. Generally, multi-lane arterial roadways allow emergency vehicles to travel at higher rates of speed and permit other traffic to maneuver out of a path of an emergency vehicle. Additionally, the LAFD, in collaboration with Los Angeles Department of Transportation (LADOT), has developed a Fire Preemption System (FPS), a system that automatically turns traffic lights to green for emergency vehicles traveling along designated City streets to aid in emergency response.¹⁷ The City has over 205 miles of major arterial routes that are equipped with FPS.¹⁸

According to the LAFD, although response time is considered to assess the adequacy of fire protection services, it is one factor among several that LAFD utilizes in considering its ability to respond to fires and life and health safety emergencies, including required fire flow, response distance from existing fire stations, and the LAFD's judgement for needs in an area. If the number of incidents in a given area increases, it is the LAFD's responsibility to assign new staff and equipment, and potentially build new or expanded facilities, as necessary, to maintain adequate levels of service. In conformance with the California Constitution Article XIII, Section 35(a)(2) and the *City of Hayward v. Board of Trustees of California State University* (2015) 242 Cal.App.4th 833 ruling, the City has and will continue to meet its legal obligations to provide adequate public safety services, including fire protection.

The LAFD has recently taken a number of steps to improve their related systems, processes and practices, which in turn serve to reduce response times. Upgrades recently completed or pending include installation of automated vehicle locating systems on all LAFD apparatus; replacement of fire station alerting systems that control fire station dispatch audio, signal lights, and other fire station alerting hardware and software; and development of a new computer-aided dispatch system to manage fire and EMS incidents from initial report to conclusion of an incident.¹⁹

(4) Emergency Access

The Project Site flanks Mesquit Street on the east and west between the former 6th Street Viaduct right-of-way (ROW) on the north and the 7th Street Bridge on the south. The ROW is currently the site of construction of the City's Sixth Street Viaduct Replacement

¹⁶ National Fire Protection Association, NFPA 1710 – Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments, 2016 Edition. Response time is turnout time plus travel time for EMS and fire suppression incidents.

¹⁷ Los Angeles Department of Transportation, *Los Angeles Signal Synchronization Fact Sheet*. Accessed December 2018.

¹⁸ LAFD, *Training Bulletin: Traffic Signal Preemption System for Emergency Vehicles*, Bulletin No. 133, October 2008.

¹⁹ LAFD, *A Safer City Strategic Plan, 2018–2020*.

Project. Therefore, emergency access from the 6th Street Bridge is currently unavailable but the Viaduct Replacement Project is anticipated to be complete and open in late 2020, prior to buildout of the Project.²⁰ Direct emergency access to the Project Site is available from Mesquit Street, fronting the Project Site. Mesquit Street can be accessed from Jesse Street via a variety of nearby streets that include Mateo Street, Imperial Street, or S. Santa Fe Avenue.

(5) Water Infrastructure/Fire Flow for Firefighting Services

In general, fire flow requirements are closely related to land use as the quantity of water necessary for fire protection varies with the type of development, life hazard, type of occupancy, and degree of fire hazard. Fire flow requirements vary from 2,000 gpm in low-density residential areas to 12,000 gpm in high-density commercial or industrial areas with a minimum residual water pressure of 20 psi.²¹ The LAFD has determined that the required fire flow for the Project, which falls within the industrial and commercial category, is a fire flow of 9,000 gpm from four to six hydrants flowing simultaneously.²²

There are four existing public fire hydrants in the immediate vicinity of the Project Site. The existing public fire hydrants are located on the west side of Mesquit Street, approximately 225 feet south of Jesse Street; at the intersection of Mesquit Street and Jesse Street; and 260 and 670 feet north of Jesse Street. In addition to these four hydrants, additional hydrants are located in the vicinity of the Project Site. The Information of Fire Flow Availability Request (IFFAR) shows that flow from the four existing hydrants currently does not have adequate fire flow available to meet the flow required for the Project and provides directions on the system upgrades to be implemented for the system to be able to serve the Project.

Water is supplied to the Project Site by the Los Angeles Department of water and Power (LADWP). Based on the Water Technical Report prepared for the Project, the Service Advisory Report (SAR) showed zero flow at a static pressure of 80 psi, 900 gpm at 20 psi for water service, and 955 gpm at 20 psi for firefighting service.

²⁰ City of Los Angeles Bureau of Engineering, Sixth Street Viaduct Replacement Project, About the Project, <http://www.sixthstreetviaduct.org/>. Accessed January 2019.

²¹ City of Los Angeles, Los Angeles Municipal Code, Ordinance No. 182822, Section 57.507.3.1, Fire-Flow Requirements.

²² Ralph M. Terrazas, LAFD, correspondence dated December 3, 2018.

3. Project Impacts

a) Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, a project would have a significant impact related to fire protection services if it would:

Threshold (a): Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

For this analysis, the Appendix G Thresholds are relied upon. The analysis utilizes factors and considerations identified in the City's 2006 L.A. CEQA Thresholds Guide, as appropriate, to assist in answering the Appendix G Threshold questions. The factors to evaluate fire protection services impacts include:

- A project would normally have a significant impact on fire protection if it requires the addition of a new fire station or the expansion, consolidation or relocation of an existing facility to maintain service.

b) Methodology

Fire protection needs relate to the size of the population and geographic area served, the number and types of calls for service, and the characteristics of the community and the Project. Changes in these factors resulting from the Project may increase the demand for services. The LAFD evaluates the demand for fire prevention and protection services on a project-by-project basis, including review of the Project's emergency features, to determine if the Project would require additional equipment, personnel, new facilities, or alterations to existing facilities. Beyond the standards included in the Fire Code, consideration is given to the size of the Project, uses proposed, fire flow necessary to accommodate the Project, distance of engine and truck companies (the distance standard is 1 mile for an Engine Company and 1.5 miles for a Truck Company) from the Project Site, fire hydrant sizing and placement standards, access, and the Project's potential to use or store hazardous materials. Based on these factors, a determination is made as to whether the LAFD would require the addition of a new or physically altered facility to maintain acceptable service levels, the construction of which could result in a potentially significant environmental impact. As part of the analysis, the LAFD was consulted and its responses were incorporated regarding the Project.

The need for or deficiency in adequate fire protection and EMS in and of itself is not a CEQA impact, but rather a social and/or economic impact.²³ Where a project causes a

²³ *City of Hayward v. Board Trustee of California State University* (2015) 242 Cal, App. 4th 833, 847.

need for additional fire protection and EMS resulting in the need to construct new facilities or additions to existing facilities, and the construction results in a potential impact to the environment, then the impact would need to be assessed in this EIR. The ultimate determination of whether there is a significant impact to the environment related to fire protection and EMS from a project is determined by whether construction of new or expanded fire protection and emergency medical facilities is reasonably foreseeable direct or indirect effect of the project.

There are no current capital improvement plans for the construction or expansion of fire facilities in the impact area. Therefore, the City makes the following assumptions based on existing zoning standards and based on historical development of fire and emergency facilities, that in the event the City determines that expanded or new emergency facilities are warranted, such facilities (1) would occur where allowed under the designated land use, (2) would be located on parcels that are infill opportunities on lots that are between 0.5 and 1 acre in size, and (3) could qualify for a categorical exemption or Mitigated Negative Declaration under CEQA Guidelines Section 15301 or 15332.

c) Project Design Features

Refer to Project Design Feature TRAF-PDF-1 (Construction Traffic Management Plan) and TRAF-PDF-2 (Construction Worker Parking Plan) in Section IV.L, *Transportation*, of this Draft EIR. No additional fire protection-related Project Design Features are applicable to the Project.

d) Analysis of Project Impacts

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

(1) Impact Analysis

(a) Construction Impacts

Fires associated with construction activities could be caused by exposure of combustible materials, such as wood, plastics, sawdust, coverings and coatings, to heat sources, including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. However, in compliance with OSHA, Fire Code, and Building Code requirements, construction managers and personnel would be trained in fire prevention and emergency response. Fire suppression equipment specific to construction would be maintained on-site. Additionally, Project construction would comply with applicable existing codes and ordinances related to the

maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials.

Project construction activities could also potentially affect emergency response times and emergency access to the Project Site and the vicinity due to Project construction traffic and temporary street closures. A Construction Traffic Management Plan (TRAF-PDF-1) would be implemented to minimize disruptions to through traffic flow and maintain emergency vehicle access to the Project Site and neighboring land uses. As described in TRAF-PDF-1, a detailed Construction Management Plan will include, but not be limited to, a traffic control plan to route vehicular traffic, bicyclists, and pedestrians around potential closures; ensure that access will be maintained for land uses in proximity to the Project Site; and coordinate with the City and emergency service providers to ensure adequate access is maintained to the Project Site and neighboring businesses and residences. Additionally, as part of a Construction Worker Parking Plan (TRAF-PDF-2), construction worker parking would either be accommodated on the Project Site or in an alternate location that would not affect the adjacent streets.

As indicated in Table IV.K.1-1, the average response times for the fire stations in the Project area for January through December of 2019 range from 5:54 to 6:47 minutes for EMS (emergency) calls and 5:25 to 6:34 minutes for non-EMS (fire and other services) calls. In addition, the drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic pursuant to California Vehicle Code Section 21806. Furthermore, Project construction activities would be temporary and intermittent, and construction haul routes would require approval by the Los Angeles Department of Transportation (LADOT) prior to construction. Therefore, Project construction would not result in substantial adverse impacts to emergency response times and emergency access. The Project Site is largely available to access from the adjacent roadways, such as via 6th Street, Jessie Street and Mesquit Street, all of which could be used by emergency vehicles during Project construction. Emergency response vehicles can use a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Although minor traffic delays due to temporary lane closures needed to facilitate specific construction activities could occur, particularly during the construction of utilities and street improvements, impacts to fire protection services would be considered less than significant for the following reasons:

1. Emergency access would be maintained to the Project Site during construction through marked emergency access points approved by the LAPD and LAFD (refer to Project Design Feature TRAF-PDF-1 in Section IV.L, *Transportation*, of this Draft EIR);
2. Construction impacts are temporary in nature and do not cause lasting effects; and
3. Partial lane closures, if determined to be necessary, would not significantly affect emergency vehicles, as the drivers of which normally have a variety of options for avoiding traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic, in accordance with Section 21806 of the CVC.

Therefore, Project construction would not result in substantial adverse impacts to emergency response times and emergency access.

Based on the above, Project construction would not result in substantial adverse physical impacts associated with the provision of or need for new or altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives. Impacts would be less than significant.

(b) Operational Impacts

The analysis of the Project's potential operational impacts on LAFD services addresses potential impacts associated with LAFD facilities and equipment, response distance and emergency access, and the ability of the fire water infrastructure system to provide the necessary fire flows.

(i) Fire Protection Facilities and Services

Fire Station 17 is located closest to the Project Site (1.032 miles) and would be the first station to respond to an emergency. Additional back-up response to the Project Site would be provided by Fire Stations 4 (1.4 miles), 14 (2.3 miles²⁴), 9 (1.632 miles), and 2 (2.1 miles), in order of increasing distance from the Project Site. As shown in Table IV.K.1-1, as Fire Station 17 (includes Engine Company) is located 1.032 miles from the Project Site and Fire Station 9 (includes Truck Company) is located 1.632 miles from the Project Site, none of the stations that would serve the Project Site meet the LAFD distance standard to the Project Site of 1 mile for an Engine Company and 1.5 miles for a Truck Company. Fire Station 17 would be 0.032 miles beyond the 1-mile distance for a first-due Engine Company and Fire Station 9 would be 0.132 miles beyond the 1.5-mile distance for a first-due Truck Company. However, the Project would include an automatic sprinkler system that would support compliance with the relevant requirements in Section 57.107.6 of the Fire Code.

In addition, the Project would comply with the applicable OSHA, Building Code, Fire Code, other LAMC, and LAFD requirements including: the provision of fire resistant doors, materials, walkways, stairwells, and elevator systems (including emergency and fire control elevators); installation of a fire sprinkler suppression system, smoke detectors, signage, fire alarms, building emergency communication systems, smoke control systems; implementation of an Emergency Safety Plan; compliance with LAFD fire apparatus and personnel access requirements; water systems and roadway improvements improved to the satisfaction of the LAFD; and LAFD review and approval of definitive plans and specifications.

²⁴ As noted in the LAFD Correspondence, the distance measured between the Project Site and Fire Station 14 is 1.4 miles. However, it should be noted that based on driving distance, the Project Site is approximately 2.3 miles away from Fire Station 14.

The LAFD recommended a variety of fire prevention and protection features regarding building identification, emergency access lanes, building setbacks, and private roadway widths. Additionally, plans and specifications would be submitted to LAFD prior to the provision of necessary permits for the Project. The inclusion of these recommendations would reduce impacts to an acceptable level.²⁵ Compliance with applicable Los Angeles Building Code and Fire Code requirements would be demonstrated as part of LAFD's fire/life safety plan review and LAFD's fire/life safety inspection for new construction projects, as set forth in LAMC Section 57.118, and which are required prior to the issuance of a building permit. As stated by LAFD, there are no immediate plans from the LAFD to increase staffing or resources in these stations which would serve the Project, thereby necessitating the construction of new fire protection facilities.²⁶

Compliance with applicable regulatory requirements, including LAFD's fire/life safety inspection for new construction projects and LAFD's recommendations for fire prevention and protection described above, would ensure that adequate fire prevention features would be provided that would reduce the demand on LAFD facilities and equipment without creating the need for new or expanded fire facilities.

(ii) Emergency Access

The Project-related increase in traffic on surrounding roadways could potentially affect emergency response times in the area. However, the area surrounding the Project Site includes an established street system, consisting of freeways, primary and secondary arterials, and collector and local streets, which provide regional, sub-regional, and local access and circulation within the local Project vicinity. Based on the Project Site's location within an urbanized area of the City, the streets surrounding the Project Site were designed as standard streets in terms of pavement width and thickness, curb and gutter, and horizontal and vertical curvature. Therefore, the street system surrounding the Project Site is not considered substandard. In addition, emergency response is routinely facilitated, particularly for high priority calls, through the use of sirens to clear a path of travel (including bypassing of signalized intersections), driving in the lanes of opposing traffic pursuant to California Vehicle Code Section 21806 and multiple station response. Furthermore, the Project's driveways and internal circulation would be designed to incorporate all applicable City Building Code and Fire Code requirements regarding Project Site access, including providing adequate emergency vehicle access. Compliance with applicable Los Angeles Building Code and Fire Code requirements would be demonstrated as part of LAFD's fire/life safety plan review and LAFD's fire/life safety inspection for new construction projects, as set forth in LAMC Section 57.118, and which are required prior to the issuance of a building permit.

Emergency access to the Project Site would be provided from major roadways near the Project Site, including 6th Street and 7th Street. Specifically, the currently contemplated Project design would allow for LAFD emergency access using fire apparatus access

²⁵ Ralph M. Terrazas, LAFD, correspondence dated December 3, 2018, pages 4 to 6.

²⁶ Ralph M. Terrazas, LAFD, correspondence dated December 3, 2018, page 3.

roads in accordance with applicable requirements found in LAMC Section 57.503, which would be confirmed as part of the final design review per LAFD's fire/life safety plan review and LAFD's fire/life safety inspection for new construction projects. Access would be provided along 6th Street and Mesquit Street, including the Mesquit Paseo, such that all portions of the first story of the buildings are located within 150 feet of an apparatus access road in accordance with LAMC Section 57.503.1. The intersection of Jesse Street and Mesquit Street would have removable bollards, at the northern end of the Mesquit Paseo, for emergency services access and for turnaround access. Automatic or removable bollards would comply with requirements of LAMC Section 503.5.3 and the exact mechanism and methodology would be coordinated with LAFD to ensure compliance with best-practices and applicable requirements for such traffic separations. Thus, the Project would not include the installation of barriers that could impede emergency vehicle access. By utilizing a fire apparatus turn around that complies with LAFD requirements and Los Angeles Department of Public Works minimum turnaround requirements, access roads would not be required along the Los Angeles River/Amtrak right of way. Access roadways would be provided with a minimum clear width of 28 feet in order to accommodate aerial apparatus access in accordance with LAMC Section 502.1.6 Item 2.

Additionally, sleeping/dwelling unit entry doors for the Project would be coordinated in order to comply with Section 503.1.4 Exception 1 such that all entry doors would not be more than 150 feet in horizontal travel from the edge of the roadways, or proposed fire department access lanes.

In order to facilitate coordinated site-wide response, both Central and Distributed Fire Control Rooms would be provided within the Project buildings as part of the Project. A pair of Central "master" fire control rooms would be provided on the fire access street level at a response point located adjacent to public access lobbies/response points on 6th Street as well as Mesquit Street. These response points would allow for LAFD First Responders to verify and assess fire department response based on addressable fire alarm information available on the fire control panel. In addition to these centralized "master" fire control rooms, Fire Command Centers (FCC's) would be provided at each building located along Mesquit Street in accordance with LAMC Section 57.508. These command centers would be coordinated closely with LAFD's Hydrants and Access Unit and the Fire Chief. The proposed FCC's would be located on the address side of the building adjacent to Fire Service Access Elevators (FSAE) with access to FSAE Lobbies and Exit Stair Enclosures in accordance with the requirements of the LAMC. As noted above, compliance with applicable Los Angeles Building Code and Fire Code requirements would be demonstrated as part of LAFD's fire/life safety plan review and LAFD's fire/life safety inspection for new construction projects, as set forth in LAMC Section 57.118, and which are required as part of existing regulatory procedure prior to the issuance of a building permit.

Furthermore, there are a number of additional factors that influence and improve emergency response times in addition to proximity, emergency response routes and

traffic, including alarm transfer time, alarm answering and processing time, mobilization time, risk appraisal, signals, and roadway characteristics. The LAFD has been taking a number of steps to improve their related systems, processes and practices. Upgrades recently completed or pending include: installation of automated vehicle locating systems on all LAFD apparatus; replacement of fire station alerting systems that control fire station dispatch audio, signal lights, and other fire station alerting hardware and software; development of a new computer aided dispatch system to manage fire and emergency medical service incidents from initial report to conclusion of an incident; and, use of traffic pre-emption systems.²⁷ A traffic pre-emption system allows the normal operation of traffic lights to be preempted by an emergency vehicle to improve response times by stopping conflicting traffic in advance, providing the emergency vehicle the right-of-way. Therefore, the increase in traffic generated by the Project would not significantly impact emergency vehicle response times to the Project Site and surrounding area.

Therefore, based on the considerations above, despite the Project increase in traffic, the Project would not significantly impair the LAFD from responding in a timely manner to emergencies at the Project Site or the surrounding area.

(iii) *Fire-Flow and Demand*

As described in Section IV.N.2, *Water Supply*, of this Draft EIR, domestic and fire water service to the Project Site would be supplied by the LADWP. The LAFD has determined that the required fire-flow for the Project would be 9,000 gpm (total) from four to six fire hydrants flowing simultaneously with a residual water pressure of 20 psi.²⁸ While the IFFAR shows that the existing infrastructure currently does not have adequate flow available to meet the flow required for the Project, the IFFAR provides directions on the system upgrades that would need to be implemented for the system to be able to serve the Project. As described in Section IV.N.2, *Water Supply*, of the Draft EIR and in the Water Technical Report, the Project would be required to upgrade the infrastructure and install 1,380 feet of 16-inch and 12-inch pipe on S. Santa Fe Avenue, Jesse Street, and Mesquit Street to have available flow to serve the Project Site. With the inclusion of these system upgrades, the hydrants would have adequate fire flow available to meet the flow required for the Project.²⁹ The Project would comply with applicable regulatory requirements of the Fire Code, and development plans would be subject to review and approval by the LAFD.

(iv) *Conclusion*

Based on the above, Project operation would not result in substantial adverse physical impacts associated with the provision of or need for new or altered fire protection facilities, the construction of which could cause significant

²⁷ LAFD, A Safer City Strategic Plan, 2018–2020, pages 6–7 and 11.

²⁸ Ralph M. Terrazas, LAFD, correspondence dated December 3, 2018, page 2.

²⁹ Note that the completed IFFAR only analyzed four existing hydrants. However, a 5th existing hydrant, located at the southeast intersection of Santa Fe Avenue and 7th Street, while not included in the completed IFFAR, would also be required to obtain the 9,000 gpm flow requirement.

environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives. Impacts would be less than significant.

(c) *Project with the Deck Concept*

Demand for fire protection services and the fire protection features associated with fire protection services would be essentially the same under the Project or the Project with the Deck Concept. The Project and the Project with the Deck Concept would include the same access, circulation, and supporting fire protection features, as described above. Thus, the conclusions regarding impact significance presented above are the same and apply to the Project and the Project with the Deck Concept. **As such, impacts on fire protection services under the Project with the Deck Concept would be less than significant.**

(2) Mitigation Measures

Impacts regarding fire protection services were determined to be less than significant without mitigation. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts regarding fire protection services were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

e) Cumulative Impacts

(1) Impact Analysis

Chapter III, *Environmental Setting*, of this Draft EIR, identifies 141 related projects that are planned or are under construction in the Project study area. Impacts to LAFD services and facilities for each of the related projects would be addressed as part of each related project's development review process conducted by the City. Each related project would be subject to the City's routine permitting process, which would include a review by the LAFD to ensure that sufficient measures are implemented to reduce potential impacts to fire protection services.

The geographic context for cumulative analysis for fire protection and EMS is the service areas of the LAFD stations that would serve the Project Site, including Fire Stations Nos. 2, 4, 9, 14, and 17. Of the 141 related projects identified in Chapter III, 97 are located within the service areas of the fire stations listed above and are listed below in **Table IV.K.1-2, Cumulative Projects for Fire Protection**. The increase in development and service population from these related projects would generate, in conjunction with the Project, the need for additional fire protection and EMS from these fire stations. As discussed below, however, the incremental increase in demand on LAFD services would not result in a cumulative impact.

**TABLE IV.K.1-2
CUMULATIVE PROJECTS FOR FIRE PROTECTION**

No.^a	Address	Primary Fire Station
1	540 S Santa Fe Ave	17
2	601 S Main St	9
3	225 S Los Angeles St	4
4	150 N Los Angeles St	4
5	534 S Main St	9
6	1057 S San Pedro St	9
7	1525 E Industrial St	9
8	950 E 3rd St	4
9	2051 E 7th St	17
10	963 E 4th St	4
11	826 S Mateo St	17
12	2030 E 7th St	17
13	360 S Alameda St	4
14	649 S Wall St	9
15	410 Center St	4
16	500 S Mateo St	4
17	300 S Main St	9
18	400 S Alameda St	4
19	719 E 5th St	9
20	2130 E Violet St	17
21	929 E 2nd St	4
22	1800 E 7th St	17
23	1722 E 16th St	17
24	454 E Commercial St	4
25	118 S Astronaut E S Onizuka St	4
26	555 S Mateo St	4
27	1000 S Santa Fe Ave	17
28	2110 Bay St	17
29	330 S Alameda St	4
30	668 S Alameda St	9
31	520 Mateo St	17
32	717 Maple Ave	9
34	433 S Main St	9
35	676 Mateo St	17
36	732 Wall St	9

**TABLE IV.K.1-2
CUMULATIVE PROJECTS FOR FIRE PROTECTION**

No.^a	Address	Primary Fire Station
37	333 S Alameda St	4
38	1129 E 5th St	4
39	2650 E Olympic Bl	17
40	2143 E Violet St	17
41	633 S Spring St	9
42	732 S Spring St	9
43	237 S Los Angeles St	4
44	640 S Santa Fe Avenue	17
45	1745 E 7th Street	9
46	940 E 4th Street	4
47	609 E 5th St	9
48	713 E 5th St	9
49	1000 S Mateo St	17
50	926 E 4th St	4
51	2159 E Bay St	17
53	1 Gateway Plaza	4
54	354 S Spring St	9
55	552 S San Pedro	9
56	1005 S Mateo Street	17
57	1800 E 1st St	2
58	1001 E 1st St	4
59	755 S Los Angeles St	9
60	601 S Central Ave	9
61	527 Colyton St	4
62	1100 E 5th St	4
63	600 S San Pedro Street	9
64	655 S San Pedro Street	9
65	656 S Stanford Ave	9
67	641 Imperial Street	17
69	1828 E Cesar Chavez Av	2
70	2407 E 1st St	2
71	2420 E Cesar Chavez Av	2
72	119 S Soto St	2
73	810 E 3rd St	4
81	400 S Broadway	9

**TABLE IV.K.1-2
CUMULATIVE PROJECTS FOR FIRE PROTECTION**

No.^a	Address	Primary Fire Station
91	527 N Spring Street	4
92	737 S Spring St	9
95	744 S Figueroa St	9
96	850 S Hill St	9
98	649 S Olive St	9
100	924 N Spring St	4
104	333 W 5th Street	9
106	754 S Hope St	9
109	708 N Hill St	4
110	211 W Alpine St	4
115	643 N Spring St	4
117	1843 E 41st St	14
119	1700 E Martin Luther King Blvd	14
121	3401 E 1st Street	2
122	1147 E Palmetto	4
123	1030 N Soto Street	2
124	2710 S Compton Ave	14
125	441 Bauchet St	4
126	129 W College St	4
128	1206 E 6th Street	9
130	930 E 6th St	9
132	1024 S Mateo St	17
133	554 S San Pedro St	9
134	443 S Soto St	2
135	220 N Center Street	4
136	755 S Wall St	9
139	400 W 7th St	9

NOTE(S):

^a This table corresponds with map numbers on Figure III-1 of this Draft EIR.

SOURCE: ESA, 2019.

(a) Construction Impacts

As with the Project, each related project would have the potential to result in accidental on-site fires by exposing combustible materials (e.g., wood, plastics, sawdust, coverings, and coatings) to fire risks from machinery and equipment sparks, and from exposed

electrical lines, chemical reactions, in combustible materials and coatings, and lighted cigarettes. However, similar to the Project, construction managers and personnel would be trained in emergency response and fire safety operations, which include the monitoring and management of life safety systems and facilities, such as those set forth in the safety and health regulations for construction established by OSHA. Additionally, in accordance with the provisions established by OSHA for emergency response and fire safety operations, fire suppression equipment (e.g., fire extinguishers) specific to construction would be maintained on-site. Construction of the related projects would also occur in compliance with applicable federal, state, and local requirements concerning the handling, disposal, use, storage, and management of hazardous materials.

In the event that Project construction occurs concurrently with related projects in proximity to the Project Site, specific coordination among these multiple construction sites would be required and implemented through the Project's Construction Traffic Management Plan, which would ensure that emergency access and traffic flow are maintained on adjacent rights-of-way. The Project would not have significant impacts on access and safety. Similar to the Project, each related project would implement similar design features during construction and would be subject to the City's routine construction permitting process, which includes a review by LAFD to ensure that sufficient fire safety measures are implemented to reduce potential impacts to fire protection services. Furthermore, construction-related traffic generated by the Project and related projects would not significantly impact LAFD response times within the Project Site vicinity as drivers of fire and emergency vehicles have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes opposing traffic, pursuant to CVC Section 21806. In summary the less than significant cumulative construction related impacts of the related projects combined with the less than significant impacts of the Project would have a less than significant cumulative impact on fire protection services.

Based on the above, cumulative impacts on fire protection services would be less than significant.

(b) Operational Impacts

Similar and in addition to the Project, the increase in development and service population from the related projects would generate the need for additional fire protection and EMS from the fire stations identified above. With regard to facilities and equipment, similar to the Project, the related projects would be required to implement all applicable Building Code and Fire Code requirements regarding structural design, building materials, site access, fire-flow, storage and management of hazardous materials, and alarm and communications systems. Compliance with applicable Building Code and Fire Code requirements would be demonstrated as part of LAFD's fire/life safety plan review and LAFD's fire/life safety inspection for new construction projects, as set forth in LAMC Section 57.118, prior to the issuance of a building permit. Compliance with applicable regulatory requirements would ensure that adequate fire prevention features would be provided and reduce demand on LAFD facilities and equipment. As with the Project, other

related projects may also include the installation of automatic fire sprinklers to enhance fire safety that would further reduce the demand placed on the LAFD facilities and equipment.

The Project, as well as the related projects, would also generate revenues to the City's Municipal Fund (in the form of property taxes, sales revenue, etc.) that could be applied toward the provision of new fire station facilities and related staffing, as deemed appropriate by the City. Furthermore, over time, LAFD would continue to monitor population growth and land development throughout the City and identify additional resource needs, including staffing, equipment, trucks and engines, ambulances, other special apparatuses, and possibly station expansions or new station construction, which may become necessary to achieve the required level of service.

With regard to response distance, given that the related projects are generally located within an urban area, each of the related projects within the geographic scope would likewise be developed within urbanized locations serviced by one or more existing fire stations. Additionally, in accordance with Fire Code requirements, if a related project would not be within the acceptable distance from a fire station, that related project would be required to install an automatic fire sprinkler system to comply with response distance requirements. Similarly, as with the Project, the related projects would be required to comply with all applicable Building Code and Fire Code requirements regarding site access, including providing adequate emergency vehicle access. Compliance with applicable City Building Code and Fire Code requirements would be demonstrated as part of LAFD's fire/life safety plan review prior to the issuance of a building permit.

With regard to response times, the Project and related projects would introduce new uses that would generate additional traffic within the boundaries of the fire stations, as defined in Figure IV.K.1-1, that would serve the Project Site. Traffic from the Project and related projects has the potential to increase emergency vehicle response times due to travel time delays caused by the additional traffic. Furthermore, as previously stated, emergency response vehicles can use a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Therefore, despite the cumulative increase in traffic, the Project and related projects would not significantly impair the LAFD from responding to emergencies at the Project Site or the surrounding area.

With regard to cumulative impacts on fire protection, consistent with *City of Hayward v. Board of Trustees of California State University* (2015) 242 Cal.App.4th 833 ruling and the requirements stated in the California Constitution Article XIII, Section 35(a)(2), the obligation to provide adequate fire protection service is the responsibility of the City. Through the City's regular budgeting efforts, LAFD's resource needs, including staffing, equipment, trucks and engines, ambulances, other special apparatuses and possibly station expansions or new station construction, would be identified and allocated

according to the priorities at the time, as appropriate.³⁰ LAFD has no known or proposed plans to expand fire facilities or construct new facilities in the Project's service area either because of this Project or other projects in the service area. However, if LAFD determines that new facilities are necessary at some point in the future, such facilities (1) would occur where allowed under the designated land use, (2) would be expected to be located on parcels that are infill opportunities on lots that are typically between approximately 0.5 to 2 acres in size (such as the five stations identified as serving the Project Site), and (3) would likely qualify for a Categorical Exemption under CEQA Guidelines Section 15301 or 15332 or Mitigated Negative Declaration and would not be expected to result in significant impacts. Further analysis, including a specific location for a new fire station or expansion or alteration of the existing fire stations which would service the Project Site and the related projects' sites, would be speculative and, therefore, beyond the scope of this Draft EIR. In summary the less than significant cumulative impacts of the related projects combined with the less than significant impacts of the Project would have a less than significant cumulative impact on fire protection services

Based on the above, cumulative impacts on fire protection services would be less than significant.

(c) *Project with the Deck Concept*

As cumulative impacts associated with fire protection services for related projects would be the same under the Project and the Project with the Deck Concept, and as access, circulation, and supporting fire protection features, would be essentially the same for the Project and the Project with the Deck Concept, the analysis and conclusions regarding cumulative impact significance presented above are the same under the Project with the Deck Concept. **As such, cumulative impacts on fire protection services under the Project with the Deck Concept would be less than significant.**

(2) Mitigation Measures

Cumulative impacts regarding fire protection services were determined to be less than significant without mitigation. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts with regard to fire protection services were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

³⁰ City of Los Angeles, Budget for the Fiscal Year 2017–18, modified and adopted by City Council on May 24, 2017.