4.5 Public Services – Fire Protection Services

4.5.1 Introduction

The analysis presented in this section addresses the impacts to fire protection services specific to the proposed MSC North Project as well as the impacts to fire protection services related to the implementation of the future phase(s) of the MSC Program. The fire protection services analysis incorporates relevant analysis and assumptions from the Los Angeles International Airport (LAX or the Airport) Master Plan EIR[1] and the Bradley West Project EIR.[2] The fire protection services in this area of LAX have been addressed in the Bradley West Project EIR and the analysis procedures and data already known from this other project were applied and updated as appropriate for the proposed MSC North Project and future phase(s) of the MSC Program.

Prior to the preparation of this EIR, an Initial Study (see Appendix A) was prepared using the CEQA Environmental Checklist Form to assess potential environmental impacts associated with public services. For several issues related to public services the Initial Study found that the proposed MSC North Project and future phase(s) of the MSC Program would result in either "less than significant impact" or "no impact" and no further analysis of these topics in an EIR was required. The thresholds not addressed further include:

- Potential impacts to police protection services were evaluated and determined to have a "less than significant impact" in the Initial Study as the increase in square footage associated with the MSC North Project and the future phase(s) of the MSC Program would not result in the need for new or physically altered police facilities in order to maintain acceptable service ratios, response times, or other performance objectives. The need to potentially add personnel to patrol the new building is considered to be a less than significant impact, which was evaluated in the LAX Master Plan EIR;
- Potential impacts to schools were evaluated and determined to have a "less than significant impact" in the Initial Study as any indirect growth associated with the potential increase in long-term employment would not result in significant enrollment increases that would adversely affect schools. Employment growth at LAX was assessed as part of the LAX Master Plan EIR;
- Potential impacts to parks were evaluated and determined to have a "less than significant impact" in the Initial Study as any indirect growth associated with the potential increase in long-term employment would not result in significant demand for parks. Employment growth at LAX was assessed as part of the LAX Master Plan EIR; and

[1] City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, April 2004.

[2] City of Los Angeles, Los Angeles World Airports, Final Environmental Impact Report for Bradley West Project, Los Angeles International Airport (LAX), September 2009.

- Potential impacts to other public facilities were evaluated and determined to have "no impact" in the Initial Study.

4.5.2 Methodology

As noted above, this analysis focuses on impacts of the proposed MSC North Project and future phase(s) of the MSC Program on fire protection services. The analysis methodology for this EIR is based largely on the approach and data used for the Bradley West Project EIR. The analysis procedures and data from this previous project are applicable to the proposed MSC North Project and future phase(s) of the MSC Program because both projects would result in the construction and operation of passenger terminal facilities at LAX. In addition, the MSC North Project and future phase(s) of the MSC Program include provisions for conveyance systems from the proposed MSC to the Central Terminal Area (CTA) and eventually the proposed Central Terminal Processor (CTP).

4.5.3 Existing Conditions

4.5.3.1 Regulatory Context

Federal Regulations

Federal regulations that apply to fire protection and emergency services include Federal Aviation Regulations (FARs). Federal agencies that have jurisdiction over activities at LAX that relate to fire protection and emergency services, such as the FAA and the U.S. Coast Guard, have regulations which are consistent with the National Fire Protection Association (NFPA) Code, which establishes fire safety provisions. **Table 4.5-1** includes a partial list of applicable federal regulations, a summary of their provisions, and a list of responsible federal agencies.

Table 4.5-1

Federal Regulations

Regulation	Summary of Provisions	Regulation Agency
Federal Aviation Regulations (FAR) 139.315 through 139.319	Aircraft Rescue and Fire Fighting (ARFF)	FAA
FAR 139.321	Hazardous substances that require safety training	FAA
FAR 139.325(f)	Requires Airport Emergency Plans to provide for Air/Sea Disaster Response	FAA/U.S. Coast Guard
FAR 139.325(4)	Airport response to natural disasters	FAA
U.S. Department of Labor 29 CFR 1910.38	Emergency action plans	FAA

Source: RS&H, October 2013.

Federal Aviation Regulations

Federal Aviation Regulations (FARs) serve as the basis for the LAWA Rules and Regulations Manual and the LAX Air/Sea Disaster Preparedness Plan discussed below. The fire and fire-related safety provisions found in these documents are also in accordance with applicable sections of the Uniform Fire Code (UFC) and/or the NFPA Codes and Standards. FAR mandates many aspects of emergency response services at LAX, including equipment types, personnel training, vehicle response times, and readiness.

Aircraft Rescue and Fire Fighting

Aircraft Rescue and Fire Fighting (ARFF) is regulated under FAR Sections 139.315 through 139.319. Handling and storage of hazardous substances and materials which require fire safety training in fuel farm and storage areas, and required compliance with locally-adopted fire codes, are provided for under FAR 139.321. Under FAR 139.325, airport safety plans require coordination with fire fighting services and provision of rescue vehicles large enough to handle the maximum persons carried aboard the largest aircraft that operate at an airport. ARFF protocol requires apparatus to respond in three minutes or less from the position of the equipment to all areas within aircraft operating areas. Should equipment become inoperable for a period exceeding 48 hours, the FAA requires that airport operations be limited to the response capability of equipment in operative condition unless waived by the FAA. LAFD Station 80, located at LAX, is an ARFF-compliant facility.

The FAA-operated Airport Traffic Control Tower (ATCT) at LAX activates the emergency telephone system which notifies airlines when they are involved in safety-related operations. In addition, the ATCT coordinates runway assignments with LAX Airfield Operations personnel and is authorized when warranted to stop aircraft traffic on runways and taxiways adjacent to the scene of an emergency response.

Air/Sea Disaster Response

Due to its unique nature, an accident involving an aircraft over water requires a two-part command and control system. FAR 139.325(f) requires that airport emergency plans also provide a plan "for the rescue of aircraft accident victims from significant bodies of water or marsh lands adjacent to the airport …" The U.S. Coast Guard is responsible for coordinating the search and rescue operations, including shoreside coordination and support with the assistance of representatives from the Los Angeles County Sheriff's Department (LACSD), Los Angeles County Lifeguards, Los Angeles County Fire Department (LACFD), LAWA, the Los Angeles Police Department (LAPD), Los Angeles Airport Police Department (LAXPD), and airline representatives.

Natural Disaster

Natural disasters are emergency situations declared by the President of the United States in response to, and in agreement with, a request from the Governor of the affected state. Emergency action plans are addressed in general by 29 CFR 1910.38, Employee Emergency Plans, and Fire Prevention Plans.

The requirement for preparation for airport response to a natural disaster is regulated by FAR 139.325(4). In the event of a natural disaster, it is the responsibility of the ATCT to issue a

Notice to Airmen (NOTAM) if it is determined that this is necessary. In the event that the condition of the airport or any part of the airport is determined to be unsafe for landings or takeoffs, a NOTAM is issued closing the airport or any of its parts. In addition, the ATCT verifies that the navigational aid systems are operating.

The National Fire Protection Association Code

The NFPA advocates consensus of codes and standards for fire and related safety issues and has developed the NFPA Code, which establishes safety provisions for fire prevention and fire fighting regulatory structures. As these codes are adopted on a voluntary basis by individual communities into their own fire protection and emergency services operations, there are no legislative enforcement mechanisms. **Table 4.5-2** presents relevant sections of the NFPA Code that would apply to the MSC North Project and/or future phase(s) of the MSC Program.

Table 4.5-2

Sections of National Fire Protection Association Code Relevant to MSC

NFPA Section	Relevant Items
Fire Protection Systems	
NFPA 130: Standard for fixed guideway transit and passenger rail systems:	
	5.7.2.3 Emergency alarm reporting devices shall be located on passenger platforms and throughout the stations such that the travel distance from any point in the public area shall not exceed 100 m (325 ft) unless otherwise approved.
	5.7.4.3 Where underground stations include more than one platform level (such as crossover subway lines), there shall be a cross-connection pipe of a minimum size of 100mm (4 in) in diameter between each standpipe system, so that supplying water through any fire department connection will furnish water throughout the entire system.
	5.10 Rubbish Containers. Rubbish containers shall be manufactured of non-combustible materials.
	6.5.3.1 Standpipe Installations in Tunnels under Construction. A standpipe system shall be installed before the enclosed tramway has exceeded a length of 61 m (200 ft) beyond any access shaft or portal and shall be extended as work progresses to within 61 m (200 ft) of the most remote portion of the enclosed tramway.
Emergency Ventilation Systems	
NFPA 130: Standard For Fixed Guideway Transit And Passenger Rail Systems	
	7.1.2.2 A mechanical emergency ventilation system shall be provided in the following locations: 1. In an enclosed system station 2. In a system underground or enclosed tramway that is greater in length than 305m (l000ft)
Emergency Exit Details	
NFPA 130: Standard For Fixed Guideway Transit And Passenger Rail Systems	
	6.2.2.2.2 For exit stairs serving underground or enclosed trainways, the width of exit stairs shall not be required to exceed 1120mm (44 in.).
	6.2.12.1 Access to the trainway shall be from stations or by mobile ladder equipment from roadways adjacent to the trackway. If no adjacent or crossing roadways exist, access roads at a maximum of 762 m (2500 ft) intervals shall be required.
	6.2.8.2 Signs indicating station or portal directions shall be installed at maximum 25 m (82 ft) intervals on either side of the underground or enclosed tramways.

Table 4.5-2

Sections of National Fire Protection Association Code Relevant to MSC

NFPA Section	Relevant Items
Egress for Passengers	
NFPA 130: Standard for fixed guideway transit and passenger rail systems:	
	6.2.1.9 The means of egress within the tramway shall be provided with an unobstructed clear width graduating from the following: 1. 610 mm (24 in.) at the walking surface to 2. 760 mm (30 in.) at 1420 mm (56 in.) above the walking surface and to 3. 610 mm (24 in.) at 2025 mm (80 in.) above the walking surface
	6.2.1.10.1 Raised walkways that are more than 760 mm (30 in.) above the floor or grade below shall be provided with a continuous guard to prevent falls over the open side.
	6.2.2.2 Number and Location of means of egress routes. Within underground or enclosed tramways, the maximum distance between exits shall not exceed 762 m (2500 ft).
	5.5.6.1.1 The maximum travel distance on the platform to a point at which a means of egress route leaves the platform shall not exceed 100 m (325 ft).
	5.5.6.3.1.1 A minimum clear width of 1120mm (44 in.) shall be provided along all platforms, corridors, and ramps serving as means of egress.
	5.5.1.3 At least two means of egress remote from each other shall be provided from each station platform.
	5.5.1.4 A common path of travel from the platform ends shall not exceed 25 m (82 ft) or one car length, whichever is greater.
	5.5.6.1 Platform Evacuation Time. There shall be sufficient egress capacity to evacuate the platform occupant load from the station platform in 4 minutes or less.
	5.5.6.1.1 The maximum travel distance on the platform to a point at which a means of egress route leaves the platform shall not exceed 100 m (325 ft).
	5.5.6.3.2.1 Stairs in the means of egress shall be a minimum of 1120 mm (44 in.) wide.
	5.5.6.3.4.1 Doors and gates in the means of egress shall have a minimum clear width of 910 mm (36 in.).
	5.5.6.3.4.4 Gate-type exits shall be provided for at least 50 percent of the required emergency exit capacity unless fare collection equipment provides unobstructed exiting under all conditions.
	5.6.2.1 Emergency lighting for stairs and escalators shall be designed to emphasize illumination on the top and bottom steps and landings.
Traction Power	
NFPA 130: Standard for fixed guideway transit and passenger rail systems:	
	6.4.2.4 Coverboards where used, shall be capable of supporting a vertical load of 1125 N (250 lb) at any point with no visible permanent deflection.
	6.4.3 Traction Power Overhead Contact System Protection. **6.4.3.2** Power conductor(s) (DC or AC which supply power to the vehicle for propulsion and other loads) shall be secured to insulating supports, bonded at joints, and protected to prevent contact with personnel.
	6.5 Protection (Automatic Fire Detection) **6.5.1.1** Heat and smoke detectors shall be installed at traction power substations and signal bungalows and shall be connected to the operations control center.
	6.5.1.2 Signals received from such devices shall be identifiable as to origin of signals.

Table 4.5-2

Sections of National Fire Protection Association Code Relevant to MSC

NFPA Section	Relevant Items
	6.2.7.1 Blue light stations shall be provided at the following locations: • at the ends of station platforms; • at cross-passage ways; • at emergency access points; • at traction power substations; and • in underground tramways as approved. **6.2.7.2** Adjacent to each blue light station, information shall be provided that identifies the location of that station and the distance to an exit in each direction.

Source: National Fire Protection Association Code., 2013.

State Regulations

State of California Uniform Fire Code

The State of California Uniform Fire Code (UFC) sets the framework for fire protection and safety within California. The UFC contains several sections which provide authority and standards that pertain to operations at airport facilities.

Fire Fighting Authority

Article 2 provides standards for the organization, authority, duties, and procedures for fire fighting. Division I (Organization and Authority), Section 2.105 provides for the exercise of police powers by fire fighters. Division II (Duties and Procedures), Section 2.201 provides for fire inspection and characterizes what can be declared an unsafe building.

Fire Access

Article 10 (Fire Protection Systems and Equipment), Division II (General Provisions), Section 10.207 specifies access roadway requirements for fire apparatus. Article 12 (Maintenance of Means and Egress and Emergency Escapes), Section 12.109, provides standards for stair, ramp, and escalator enclosures.

Air Service Operations

Article 24 provides standards for airports, heliports, and helistops in Division I (General), Sections 12.013 (Dispensing Flammables or Combustible Liquids), 12.104 (Transferring Fuel), 24.105 (Application of Flammable or Combustible Liquid), and 24.111-24.116, which provide aircraft service and repair standards. Provisions for safety standards of fuel system maintenance and use is provided in Article 24, Division II (Refueler Units), Sections 24.202 (Operation Maintenance and Use of Aircraft Refueler), 24.203 (Fueling and Defueling); and Article 79 (Flammable and Combustible Liquids), Division I (General), Section 79.114 (Fire Protection); Division II (Container and Portable Tank Storage Inside Buildings), Section 79.205 (Fire Protection); and Division VI (Tank Storage Underground, Outside or Under Buildings), Section 79.511 (Fire Protection).

Materials Handling

Article 80 (Hazardous Materials), Section 80.103 (General Requirements) and Section 80.110 (Designation of Cargo) provide for the identification and handling of hazardous materials sent as air cargo.

Fuel Farm and Fuel Dispensing Systems

Portions of the fuel hydrant system are within the jurisdiction of the State Fire Marshal. In addition, fuel farm siting, design, construction, and equipment are regulated under the UFC, Article 79 (Flammable and Combustible Liquids), Division V (Stationary Tank Storage, Above Ground, Outside of Buildings), with fire protection specifically addressed by Section 79.511.

Office of Emergency Services Mutual Aid Plan

The California Fire Service and Rescue Emergency Mutual Aid System is managed by the Governor's Office of Emergency Services (OES). The OES 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. LAFD is located in Region I. Through the Emergency Mutual Aid system, 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 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.

California Building Code

The California Building Code contains provisions for fire protection systems for commercial buildings. Relevant sections of the California Building Code are provided in **Table 4.5-3**.

Table 4.5-3

Sections of California Building Code Relevant to MSC

Fire Protection Systems	**Section 903.2.17.1: Automatic sprinkler system**. An automatic sprinkler system shall be installed in all stations of fixed guideway transit systems. **Section 905.3.10: Standpipe systems.** Underground stations shall be provided with a class III standpipe system designed to comply with the following: • Automatically supply 65 pounds per square inch (psi) for each outlet. • Supply a 250 gpm (946 L/m) flow to each of the two most remote 21/2 inch (64 mm) outlets when pressurized through the fire department connection(s). **Section 907.2.26: Fixed guideway transits systems fire alarm and communication systems**. Every fixed guideway transit station shall be provided with an approved emergency voice/alarm communication system in accordance with NFPA 72. The emergency voice/alarm communication system shall be designed and installed so that damage to any one speaker will not render any paging zone of the system inoperative.

Table 4.5-3

Sections of California Building Code Relevant to MSC

Section 907.2.26.2: System components. Each station fire alarm system shall consist of:

- Fire alarm control unit at a location as permitted by the enforcing agency.
- An alarm annunciator(s). The annunciator(s) shall be located at a point acceptable to the enforcing agency. The annunciator(s) shall indicate the type of device and general location of alarm. All alarm, supervisory and trouble signals shall be transmitted to the local annunciator(s) and the operations control center.
- Manual fire alarm boxes shall be provided throughout passenger platforms and stations.
- Automatic smoke detectors in all ancillary spaces.

Section 907.2.26.3: Emergency voice/alarm communication system. Each station shall be provided with an emergency voice/alarm communication system capable of transmitting voice, recorded or electronically generated textual messages to all areas of the station. The system(s) shall be configured such that the messages can be initiated from either the Emergency Management Panel (EMP) or the Operations Control Center (OCC).

Section 907.2.26.4: Emergency telephones. A dedicated two-way emergency communication phone system designed and installed in accordance with NFPA 72 shall be provided in all underground stations to facilitate direct communications for emergency response between remote locations and the EMP.

- **907.2.26.4.1** Remote emergency phones shall be located at ends of station platforms, each hose outlet connection and station valve rooms.
- **907.2.26.4.2** Provisions shall be made in the design of this two-way emergency communication phone system for extensions of the system to the next passenger station or guideway portal.

Section 910.3.4: Heat Vent locations. Smoke and heat vents shall be located 20 feet (6.1 m) or more from adjacent lot lines and fire walls and 10 feet (3.0 m) or more from fire barriers. Vents shall be uniformly located within the roof in the areas of the building where the vents are required to be installed by Section 910.2 with consideration given to roof pitch, draft curtain location, sprinkler location and structural members.

Section 910.4.1: Mechanical smoke exhausts location. Exhaust fans shall be uniformly spaced and the maximum distance between fans shall not be greater than 100 feet (30.5 m).

Section 906.9 Extinguisher installation: The installation of portable fire extinguishers shall be in accordance with Sections 906.9.1 through 906.9.3.

- **906.9.1** Extinguishers weighing 40 pounds or less. Portable fire extinguishers having a gross weight not exceeding 40 pounds (18 kg) shall be installed so that their tops are not more than 5 feet (1.5 m) above the floor.
- **906.9.2** Extinguishers weighing more than 40 pounds. Hand-held portable fire extinguishers having a gross weight exceeding 40 pounds (18 kg) shall be installed so that their tops are not more than 3.5 feet (1.1 m) above the floor.
- **906.9.3** Floor clearance. The clearance between the floor and the bottom of installed hand-held portable fire extinguishers shall not be less than 4 inches (102 mm).

Section 912.2: Fire Department Connections Location. With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. The location of fire department connections shall be approved by the fire chief.

Section 912.3.2: Clear space around connections. A working space of not less than 36 inches (762 mm) in width, 36 inches (914 mm) in depth and 78 inches (1981 mm) in height shall be provided and maintained in front of and to the sides of wall-mounted fire department connections and around the circumference of free-standing fire department connections, except as otherwise required or approved by the fire chief.

Emergency Ventilation Systems

Table 4.5-3

Sections of California Building Code Relevant to MSC

Section 433.4.5.1: Emergency ventilation shall be provided for enclosed and underground stations for the protection of passengers, employees and emergency personnel.

Section 433.4.5.3: Ventilation shaft terminals at-grade shall be located to prevent recirculation as follows:

- Openings for blast relief shafts, and under platform and smoke exhaust shafts at-grade shall be separated by a minimum horizontal distance of 40 feet (12.2 m) from any station entrance, elevator hoistway enclosure, surface emergency stair doorway, unprotected outside air intake or other opening, or from each other. Exhaust outlets that are not used for intakes may be adjacent to each other.
- Where this distance is not practical, the horizontal distance may be reduced to 15 feet (4.6 m) if the closest blast relief or under platform and smoke exhaust shaft terminal is raised a minimum of 10 feet (3.00 m) above the station entrance, emergency stair doorway and unprotected outside air intake or other opening, or the under platform and smoke exhaust shaft terminal is raised a minimum of 10 feet (3.0 m) above the blast relief shaft terminal.
- Ventilation of stations shall not terminate at grade on any vehicle roadway.

Section 433.4.5.5: Emergency ventilation control. Local controls shall override remote control. Local control shall be capable of operating the fans in all modes in the event the remote controls become inoperative.

Section 433.4.5.6: Ventilation systems and ancillary areas. Ancillary area ventilation systems shall be arranged so that air is not exhausted into station public occupancy areas.

Emergency Exit Details

Section 433.3.2: Exits required. Stations shall have at least two exits placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the station.

- Enclosed station platforms shall have a minimum of one exit within 20 feet (6.1 m) from each end.
- Underground station platforms shall have a minimum of one enclosed exit within 20 feet (6.1 m) from each end.

Minimum number of exits for Occupant Load

Occupant Load (persons per story)	Minimum Number of Exits (per story)
1-500	2
501-1,000	3
More than 1,000	4

Section 433.3.2.2.2: There shall be sufficient means of exit to evacuate the station occupant load from the station platforms in four minutes or less.

Section 433.3.2.2.3: The station shall also be designed to permit evacuation from the most remote point on the platform to a point of safety in six minutes or less.

Section 433.3.5: Distance to exits. No point of the station platform(s) or mezzanine(s) shall be more than 300 feet (91.4 m) from a point of safety.

Section 433.3.6: Other exits required/guideway access. Access/egress between guideway and platforms shall be provided as follows:

- Stairs or ramps, 2 feet 10 inches (0.9 m) in width minimum, or other arrangement having equivalent capacity, shall be provided at each end of the platform, arranged to provide access/egress to guideway level.
- Except in underground stations, the access points between the guideway and the platform, and the exit from the platform may be integrated.

Table 4.5-3

Sections of California Building Code Relevant to MSC

Section 1011.1: Exit Signs. Exit sign placement shall be such that no point in an exit access corridor or exit passageway is more than 100 feet (30.5 m) or the listed viewing distance for the sign, whichever is less, from the nearest visible exit sign.

Section 1011.3 Tactile exit signs. Tactile exit signs shall be required at the following locations:

- Each grade-level exterior exit door shall be identified by a tactile exit sign with the word, "EXIT."
- Each exit door that leads directly to a grade-level exterior exit by means of a stairway or ramp shall be identified by a tactile exit sign.
- Each exit door that leads directly to a grade-level exterior exit by means of an exit enclosure that does not utilize a stair or ramp, or an exit passageway shall be identified by a tactile exit sign.
- Each exit access door from an interior room or area shall be identified by a tactile exit sign.
- Each exit door through a horizontal exit shall be identified by a tactile exit sign.

Section 1013.1: Guards shall be located along open-sided walking surfaces, including mezzanines, equipment platforms, stairs, ramps and landings that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side.

Section 1015.1.1: The exit doors or exit access doorways shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between exit doors or exit access doorways. Interlocking or scissor stairs shall be counted as one exit stairway.

Section 1027.3: Exit discharge location. Exterior balconies, stairways and ramps shall be located at least 10 feet (3.0 m) from adjacent lot lines and from other buildings on the same lot unless the adjacent building exterior walls and openings are protected in accordance with Section 705 based on fire separation distance.

Egress for Passengers

Section 1003.2: Ceiling height. The means of egress shall have a ceiling height of not less than 7 feet 6 inches (2.3 m).

Section 1003.4: Floor surface. Walking surfaces of the means of egress shall have a slip-resistant surface and be securely attached.

Section 1006.2: Illumination level. The means of egress illumination level shall not be less than 1 foot-candle (11 lux) at the walking surface.

Section 1007.10: Directional signage. Directional signage indicating the location of the other means of egress and which accessible means of egress are available shall be provided at the following:

- At exits serving a required accessible space but not providing an approved accessible means of egress.
- At elevator landings.
- Within areas of refuge.

Source: 2010 California Building Code, Title 24, Part 2 (First Printing) , Includes Errata/Supplement through July 1, 2012.

County Regulations

The Mutual Aid Operations Plan

The Disaster Preparedness Section of the LACSD, Emergency Operations Bureau, conducts active disaster/emergency planning with other public and private organizations, including all incorporated cities within the County, the American Red Cross, and various public and private civil defense/disaster planning entities. The County of Los Angeles is also required to organize a formal mutual aid agreement between all fire departments within its jurisdiction. Additional informal agreements may be made directly between the fire departments involved. The Mutual Aid Operations Plan is a reciprocal agreement between signatory agencies to provide personnel and resources to assist other member agencies during emergency and/or conditions of extreme peril. The Mutual Aid Operations Plan provides a structure of response should an emergency at LAX arise which requires immediate response by more fire protection personnel than would be available to LAFD using all other available resources.

City Regulations

The City of Los Angeles establishes fire protection and emergency services regulations for both on- and off-airport property. On-airport areas are subject to provisions included in the LAWA Rules and Regulations Manual, LAX Airport Emergency Plan (AEP), the LAX Air/Sea Disaster Preparedness Plan, the General Plan Safety Element, and the LAFC.

LAWA Rules and Regulations

The Rules and Regulations Manual for LAWA is published under authority contained in Sections 632(b) and 633(a) and (b) of the Los Angeles City Charter, which empowers LAWA to make rules and regulations governing the use and control of City airports, subject to the powers of the United States respecting commerce. The Rules and Regulations Manual complies with FAA and the Transportation Security Administration (TSA) FAR Part 139 and Transportation Security Regulation (TSR) Parts 1540 and 1542, which requires airport management to establish operational and safety procedures and measures to meet FAA and TSA requirements for airport certification.[3]

The Fire and Safety Section, Section 6 of the LAWA Rules and Regulations Manual, specifically applies to fire safety at LAX. As discussed under Section 6, the Airport Fire Inspector is required to inspect all buildings, structures, and premises periodically, as well as enforce all applicable laws, rules, and regulations regarding fire protection, including the UFC, NFPA Codes and Standards, and the LAFC.[4]

LAX Airport Emergency Plan

In accordance with FAA guidance provided in Advisory Circular 150/5200-31C, the Airport Emergency Plan (AEP) addresses essential emergency-related and deliberate actions to ensure

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[3] City of Los Angeles, Los Angeles World Airports, Airport Police Division, Rules and Regulations Manual, Available: http://www.lawa.org, accessed June 27, 2013.

[4] City of Los Angeles, Los Angeles World Airports, Airport Police Division, Rules and Regulations Manual, Available: http://www.lawa.org, accessed June 27, 2013.

safety and the provision of adequate emergency services for LAX and surrounding communities.[5] The AEP details the roles and responsibilities that first responders, airport managers, commercial carriers, and airport tenants are to undertake in an emergency.[6]

LAX Air/Sea Disaster Preparedness Plan

The LAX Air/Sea Disaster Preparedness Plan was approved by the FAA on November 26, 1991, with sections approved on August 19, 1991. The LAX Air/Sea Disaster Preparedness Plan was "established to provide a course of action to be followed in the event an accident involving an air carrier occurs in the immediate vicinity of Los Angeles International Airport (LAX) over water." LAFD provides personnel, aircraft, and nautical equipment as needed to assist with any aircraft incidents over water (accidents at sea) or elsewhere.

City of Los Angeles 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. Policy 2.1.6 requires LAFD to maintain, enforce, and upgrade requirements, procedures, and standards to facilitate effective fire suppression including peak load water flow and building and fire code regulations. In addition, LAFD is required to revise regulations or procedures to include the establishment of minimum standards for the location and expansion of fire facilities, based on flow, intensity, and type of land use, life hazards, occupancy, and degree of hazards, in order to ensure adequate fire and emergency medical service response.

Los Angeles Fire Code and Charter

The provisions of the LAFC are detailed in Section 57.09.01-11, Article 7 (Fire Protection and Prevention) of Chapter V (Public Safety and Protection) of the Los Angeles Municipal Code (LAMC). As stated therein, the LAFD Bureau of Fire Prevention and Public Safety is required to administer and enforce basic building regulations set by the State Fire Marshal. The LAFC also provides regulations for the safeguarding of life and property from fire, explosion, panic, or other hazardous conditions which may arise in the use or occupancy of buildings, structures, or premises. Division 101 of the LAFC regulates fire and life safety for all airports, heliports, aircraft factories, aircraft hangars, and aircraft repair hangars. Further, this Division regulates the ground fuel servicing of all types of aircraft with petroleum fuels.

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

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5 U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular 150/5200-31C, Airport Emergency Plan, June 19, 2009.

6 City of Los Angeles Mayor's Blue Ribbon Panel, Report of the Mayor's Blue Ribbon Panel on Airport Security. A Report to Los Angeles Mayor Antonio R. Villaraigosa Concerning Public Safety at Los Angeles International Airport, June 2011.

4.5.3.2 Existing Conditions

The City of Los Angeles Fire Department provides fire protection services throughout LAX, including the proposed MSC site. Four fire stations (Fire Station Nos. 80, 51, 5, and 95) are located on LAX property and have a direct responsibility for fire protection and emergency services within the airport boundaries. In addition to serving LAX, Fire Stations 5 and 95 also serve areas of the adjacent communities; Fire Station 51 also serves Dockweiler State Beach. Data pertaining to each station is shown in **Table 4.5-4**; the location of each station is shown in **Figure 4.5-1**.

Table 4.5-4

City of Los Angeles Fire Department Stations Located at LAX

Station #	Address	Floor Area (sf)	Service Area (square miles)	Personnel[1]	Equipment
51	10435 Sepulveda Blvd	8,600	4.6	6/18	1 Fire Engine 1 Paramedic Rescue Ambulance 1 Rescue Apparatus
80	7250 World Way West	27,500	LAX	14/42	4 Specialized Fire Trucks 1 Reserve Truck 1 Stair Truck 1 Pick-Up
95	10010 International Road	9,500	2.34	12/36	1 Truck with 100' ladder 1 Fire Engine Pumper 1 Paramedic Rescue Ambulance 1 Rescue Air Cushion HazMat Unit
5	8900 Emerson Avenue	24,700	4.3	14/42	1 USAR Vehicle 2 Fire Engines 1 Fire Truck 1 Paramedic Rescue Ambulance 1 Battalion Chief Vehicle
Totals		70,300		46/138	

Note:

1 Per shift/total

Souces: Los Angeles Fire Department,www.lafd.org, January 2014 and Los Angeles World Airports, Los Angeles International Airport Specific Plan Amendment Study, Final Environmental Impact Report, January 2013.

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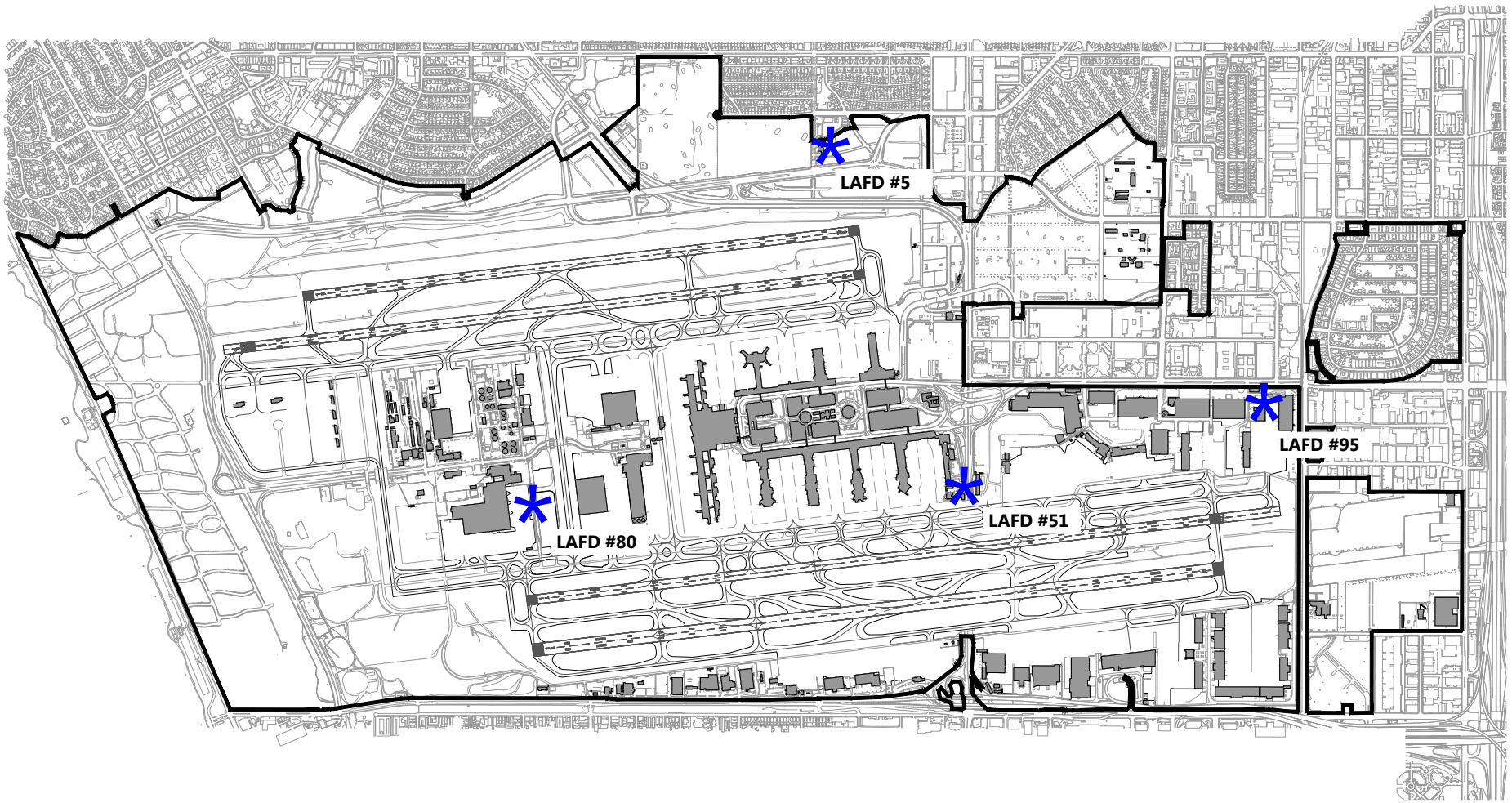

0 2,500 ft.
Scale north

Source: Ricondo & Associates, Inc., May 2013.
Prepared By: Ricondo & Associates, Inc., November 2013.

Legend
Airport Property Line
Fire Station *

LAX Midfield Satellite Concourse Draft EIR	**Los Angeles International Airport Fire Stations**	Figure **4.5-1**

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4.5.4 Thresholds of Significance

A significant impact on fire and emergency services would occur if the direct and indirect changes in the environment that may be caused by the North MSC Project or future phase(s) of the MSC Program would:

- Restrict emergency access, increase response times, or extend station response distances beyond the standards maintained by the agencies serving LAX and the surrounding communities.
- Require the need for a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain adequate service levels.

These thresholds of significance were utilized because they address the potential concerns for fire protection services associated with the LAX Master Plan; namely, emergency access, response times, station response distances, and fire flow. The first threshold was derived from the LAFC (LAMC, Section 57.09.01-11).[7] This threshold also complies with the FAR requirements for ARFF stations. The second threshold is derived from the L.A. CEQA Thresholds Guide.

4.5.5 Applicable LAX Master Plan Commitments

As part of the LAX Master Plan, LAWA adopted 12 commitments pertaining to fire protection and emergency services in the Alternative D Mitigation Monitoring and Reporting Program (MMRP). The following commitments are applicable to the North MSC Project and future phase(s) of the MSC Program and were considered in the fire protection analysis herein.

FP-1. LAFD Design Recommendations.

During the design phase prior to initiating construction of a Master Plan component, LAWA will work with LAFD to prepare plans that contain the appropriate design features applicable to that component, such as those recommended by LAFD, and listed below:

1. Emergency Access. During Plot Plan development and the construction phase, LAWA will coordinate with LAFD to ensure that access points for off-airport LAFD personnel and apparatus are maintained and strategically located to support timely access. In addition, at least two different ingress/egress roads for each area, which will accommodate major fire apparatus and will provide for major evacuation during emergency situations, will be provided.
2. Fire Flow Requirements. Proposed Master Plan development will include improvements, as needed, to ensure that adequate fire flow is provided to all new facilities. The fire flow requirements for individual Master Plan improvements will be determined in conjunction with LAFD and will meet, or exceed, fire flow requirements in effect at the time.

[7] According to LAFD and LAMC, Section 57.09.1-11, an engine company should be located within 1.0 mile and a truck company should be located within 1.5 miles of an emergency location while meeting fire flow requirements.

3. Fire Hydrants. Adequate off-site public and on-site private fire hydrants may be required, based on a determination by the LAFD upon review of proposed plot plans.
4. Street Dimensions. New development will conform to the standard street dimensions shown on the applicable City of Los Angeles Department of Public Works Standard Plan.
5. Road Turns. Standard cut-corners will be used on all proposed road turns.
6. Private Roadway Access. Private roadways that will be used for general access and fire lanes shall have at least 20 feet of vertical access. Private roadways will be built to City of Los Angeles standards to the satisfaction of the City Engineer and the LAFD.
7. Dead-End Streets. Where fire lanes or access roads are provided, dead-end streets will terminate in a cul-de-sac or other approved turning area. No fire lane shall be greater than 700 feet in length unless secondary access is provided.
8. Fire Lanes. All new fire lanes will be at least 20 feet wide. Where a fire lane must accommodate a LAFD aerial ladder apparatus or where a fire hydrant is installed, the fire lane will be at least 28 feet wide.
9. Building Setbacks. New buildings will be constructed no greater than 150 feet from the edge of the roadways of improved streets, access roads, or designated fire lanes.
10. Building Heights. New buildings exceeding 28 feet in height may be required to provide additional LAFD access.
11. Construction/Demolition Access. During demolition and construction activities, emergency access will remain unobstructed.
12. Aircraft Fire Protection Systems. Effective fire protection systems will be provided to protect the areas beneath the wings and fuselage portions of large aircraft. This may be accomplished by incorporating foam-water deluge sprinkler systems with foam-producing and oscillating nozzle (per NFPA 409, aircraft hangars for design criteria).

PS-1. Fire and Police Facility Relocation Plan.

Prior to any demolition, construction, or circulation changes that would affect LAFD Fire Stations 5, 51, 80, and 95, or on-airport police facilities, a Relocation Plan will be developed by LAWA through a cooperative process involving LAFD, LAWA Police Division (LAWAPD), the LAPD LAX Detail, and other airport staff. The performance standards for the plan will ensure maintenance of required response times, response distances, fire flows, and a transition to new facilities such that fire and law enforcement services at LAX will not be significantly degraded. The plan will also address future facility needs, including details regarding space requirement, siting, and design.[8]

PS-2. Fire and Police Facility Space and Siting Requirements.

During the early design phase for implementation of the Master Plan elements affecting on-airport fire and police facilities, LAWA and/or its contractors will consult with LAFD,

[8] Subsequent to approval of the LAX Master Plan, the new, relocated LAFD ARFF Fire Station 80 at LAX was constructed and opened in November 2010.

LAWAPD, LAPD, and other agencies as appropriate, to evaluate and refine as necessary, program requirements for fire and police facilities. This coordination will ensure that final plans adequately support future facility needs, including space requirements, siting, and design.

C-1. Establishment of a Ground Transportation/Construction Coordination Office.

Establish this office for the life of the construction projects to coordinate deliveries, monitor traffic conditions, advise motorists and those making deliveries about detours and congested areas, and monitor and enforce delivery times and routes. LAWA will periodically analyze traffic conditions on designated routes during construction to see whether there is a need to improve conditions through signage and other means.

This office may undertake a variety of duties, including but not limited to:

1. Inform motorists about detours and congestion by use of static signs, changeable message signs, media announcements, airport website, etc.;
2. Work with airport police and the Los Angeles Police Department to enforce delivery times and routes;
3. Establish staging areas;
4. Coordinate with police and fire personnel regarding maintenance of emergency access and response times;
5. Coordinate roadway projects of Caltrans, City of Los Angeles, and other jurisdictions with those of the airport construction projects;
6. Monitor and coordinate deliveries;
7. Establish detour routes;
8. Work with residential and commercial neighbors to address their concerns regarding construction activity; and
9. Analyze traffic conditions to determine the need for additional traffic controls, lane restriping, signal modifications, etc.[9]

ST-9. Construction Deliveries.

Construction deliveries requiring lane closures shall receive prior approval from the Construction Coordination Office. Notification of deliveries shall be made with sufficient time to allow for any modifications to approved traffic detour plans.

ST-12. Designated Truck Delivery Hours.

Truck deliveries shall be encouraged to use night-time hours and shall avoid the peak periods of 7:00 a.m. to 9:00 a.m. and 4:30 p.m. to 6:30 p.m.

ST-14. Construction Employee Shift Hours.

Shift hours that do not coincide with the heaviest commuter traffic periods (7:00 a.m. to 9:00 a.m., 4:30 p.m. to 6:30 p.m.) will be established. Work periods will be extended to include weekends and multiple work shifts, to the extent possible and necessary.

[9] Subsequent to approval of the LAX Master Plan, LAWA established a Ground Transportation/Construction Coordination Office in accordance with the provisions of LAX Master Plan Commitment C-1 above.

ST-17. Maintenance of Haul Routes.

Haul routes on off-airport roadways will be maintained periodically and will comply with City of Los Angeles or other appropriate jurisdictional requirements for maintenance. Minor striping, lane configurations, and signal phasing modifications will be provided as needed.

ST-18. Construction Traffic Management Plan.

A complete construction traffic plan will be developed to designate detour and/or haul routes, variable message, and other sign locations, communication methods with airport passengers, construction deliveries, construction employee shift hours, construction employee parking locations and other relevant factors.

ST-19. Closure Restrictions of Existing Roadways.

Other than short time periods during nighttime construction, existing roadways will remain open until they are no longer needed for regular traffic or construction traffic, unless a temporary detour route is available to serve the same function. This will recognize that there are three functions taking place concurrently: (1) airport traffic, (2) construction haul routes, and (3) construction of new facilities.

ST-21. Construction Employee Parking Locations.

During construction of the eastern airport facilities, employee parking locations will be selected that are as close to I-405 and I-105 as possible and can be accessed by employee vehicles with minimal disruption to adjacent streets. Shuttle buses will transport employees to construction sites. In addition, remote parking locations (of not less than 1 mile away from project construction activities) will be established for construction employees with shuttle service to the airport. An emergency return system will be established for employees that must leave unexpectedly.

ST-22. Designated Truck Routes.

For dirt and aggregate and all other materials and equipment, truck deliveries will be on designated routes only (freeways and non-residential streets). Every effort will be made for routes to avoid residential frontages. The designated routes on City of Los Angeles streets are subject to approval by LADOT's Bureau of Traffic Management and may include, but will not necessarily be limited to: Pershing Drive (Westchester Parkway to Imperial Highway); Florence Avenue (Aviation Boulevard to I-405); Manchester Boulevard (Aviation Boulevard to I-405); Aviation Boulevard (Manchester Avenue to Imperial Highway); Westchester Parkway/Arbor Vitae Street (Pershing Drive to I-405); Century Boulevard (Sepulveda Boulevard to I-405); Imperial Highway (Pershing Drive to I-405); La Cienega Boulevard (north of Imperial Highway); Airport Boulevard (Arbor Vitae Street to Century Boulevard); Sepulveda Boulevard (Westchester Parkway to Imperial Highway); I-405; and I-105.

4.5.6 Impact Analysis

4.5.6.1 MSC North Project

Construction

Traffic congestion associated with the construction of the MSC North Project would have the potential to hamper or delay emergency response. However, these impacts would be reduced or avoided through LAX Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office. The Ground Transportation/Construction Coordination Office, which is now in place, would ensure, among other things, proper coordination and planning with fire protection agencies to reduce effects from construction on traffic, emergency access, and response times. In addition, LAX Master Plan Commitments ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would serve to further reduce potential traffic impacts during construction. In the event construction activities were to result in deterioration of traffic conditions, use of emergency sirens, alternate response routes, and multiple station responses when necessary would help facilitate emergency access and response as occurs under current congested conditions. No new or expanded fire stations would be required during construction of the MSC North Project. Therefore, impacts to emergency response times related to construction of the proposed improvements would be less than significant.

Airfield Improvements

Airfield improvements associated with the MSC North Project include new Taxilane C12, which would be constructed to provide access to the gates on the west side of the MSC North building and provide connections to existing Taxilane D and Taxiway E. Taxilane T, on the east side of the proposed MSC North building is currently under construction would provide access between the gates on the east side of the MSC North building and the airfield. Taxiway C14, a new crossfield taxiway located west of existing Taxiway R would be constructed to provide connections to existing Taxiway B, Taxilane C, and Taxiway E. Also included under airfield improvements is the construction of the associated aircraft apron for the MSC North building. Airfield improvements under the MSC North Project would provide taxiway facilities that would meet FAA Airport Design Standards for ADG VI aircraft, particularly as related to separation requirements, thereby reducing the need for special operations restrictions, modifications of standards, and waivers from FAA. These improvements to the airfield would enhance safety and efficiency compared to baseline conditions, thereby decreasing demand on fire protection services and personnel associated with airfield accidents. In addition, LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access in association with airfield improvements. The implementation of these improvements would not affect the ability of Fire Station 80 to respond to emergencies at LAX and would not affect response times to other locations at LAX. Additionally, the MSC North Project would not require any new or expanded fire stations. Therefore, impacts to fire protection services related to airfield improvements under the MSC North Project would be less than significant.

Building Improvements

Building improvements under the MSC North Project would include the construction of the MSC North building and a tunnel for passenger conveyance, baggage, and/or utilities from the MSC North building to the CTA. The MSC North building would include facilities for passenger holdrooms, concessions, restrooms, airline space, utility rooms, circulation, airline operations, baggage handling, concourse circulation, airline lounges, office space, building support spaces, bus station(s), and space for a future automated people mover system. Terminal improvements would also include the construction of a ramp or supplemental airport traffic control tower. LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access. Implementation of relevant sections of the NAFP Code and California Building Code related to the construction and operation of the tunnel would address fire, emergency access, and passenger safety issues. The implementation of these improvements would not affect the ability of Fire Station 80 to respond to emergencies at LAX and would not affect response times to other locations at LAX. Additionally, the MSC North Project would not require any new or expanded fire stations. Therefore, impacts to fire protection services associated with building improvements would result in a less than significant impact.

Ground Access Improvements and Parking

The MSC North Project would result in minor changes to ground access or parking for American Airlines personnel working at the American Airlines High Bay Hangar. Employees currently utilizing those spaces would park at the existing American Airlines parking lot located west of the Project site along World Way West. The MSC North Project would also require the reconfiguration of World Way West and some airfield vehicle service roads to the west of the MSC North building. However, the reconfiguration of World Way West and these service roads would not affect emergency response times or emergency vehicle access. Additionally, the MSC North Project would not require any new or expanded fire stations. Therefore, impacts to ground access and parking would be less than significant.

Removal / Relocation of Existing Facilities

Under the MSC North Project the following buildings and facilities would be either relocated or demolished:

- American Airlines maintenance (non-power) shop;
- American Airlines leasehold parking;
- US Airways maintenance facility;
- Electric vault #2;
- U.S. Coast Guard facility;
- Water deluge tank and pump station;
- Five RON aircraft parking spaces;

- FAA navigational aids (beacon and antenna array) and electrical substation;
- Two electrical industrial stations (#66 and #1548);
- Natural gas regulator;
- American Airlines Private Post; and
- Existing utility lines.

All of these facilities are in close proximity to Fire Station 80. The removal and/or relocation of these facilities listed would not affect the ability of Fire Station 80 to respond to emergencies at LAX and would not affect response times to other locations at LAX. Therefore, the removal and/or relocation of these facilities would be a less than significant impact.

4.5.6.2 Future Phase(s) of the MSC Program

Construction

Traffic congestion associated with construction of the future phase(s) of the MSC Program would have the potential to hamper or delay emergency response. However, these impacts would be reduced or avoided through LAX Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office. The Ground Transportation/ Construction Coordination Office, which is now in place, would ensure, among other things, proper coordination and planning with fire protection agencies to reduce effects from construction on traffic, emergency access, and response times. In addition, LAX Master Plan Commitments ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would serve to further reduce potential traffic impacts during construction. In the event construction activities were to result in deterioration of traffic conditions, use of emergency sirens, alternate response routes, and multiple station responses when necessary would help facilitate emergency access and response as occurs under current congested conditions. No new or expanded fire stations would be required during construction of the future phase(s) of the MSC Program. Therefore, impacts to emergency response times related to construction of the proposed improvements would be less than significant.

Airfield Improvements

Airfield improvements associated with the future phase(s) of the MSC Program would include the extension of Taxilane C12 south to connect with Taxilane C and the extension of the aircraft apron associated with the southerly extension of the MSC building. Airfield improvements under the MSC Program would provide taxilane facilities that would meet FAA Airport Design Standards for ADG V aircraft, particularly as related to separation requirements, thereby reducing the need for special operations restrictions, modifications of standards, and waivers from FAA. These improvements to the airfield would enhance safety and efficiency compared to baseline conditions, thereby decreasing demand on fire protection services and personnel associated with airfield accidents. In addition, LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access in association with airfield improvements. The implementation of these improvements would not affect the ability of Fire Station 80 to respond to emergencies at LAX and would not affect response times

to other locations at LAX. Additionally, the future phase(s) of the MSC Program would not require any new or expanded fire stations. Therefore, impacts to fire protection services related to airfield improvements under the MSC Program would be less than significant.

Building Improvements

Building improvements associated with the future phase(s) of the MSC Program include expanding the MSC North building in one or more phases by extending the building to the south, and construction of a new dual-level central terminal processor (CTP) in the area east of parking structures P3 and P4. The future phase(s) of the MSC Program include providing utilities to accommodate the additional gates, CTP, and APM. LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of FAR and fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access. The implementation of these improvements would not affect the ability of Fire Station 80 to respond to emergencies at LAX and would not affect response times to other locations at LAX. Additionally, the future phase(s) of the MSC Program would not require any new or expanded fire stations. Therefore, impacts to fire protection services associated with the future phase(s) of the MSC Program would be less than significant.

Ground Access Improvements and Parking

Ground access improvements under the future phase(s) of the MSC Program include construction of a new dual-level central terminal processor (CTP) in the area east of parking structures P3 and P4. This would require roadway modifications along World Way and the associated terminal roadway network. Construction of the ground access improvements under the future phase(s) of the MSC Program would reduce traffic congestion and curb-front demands, which would reduce the potential for automobile collisions, automobile/pedestrian conflicts, and emergency response incidents at the airport compared to existing conditions. Improved traffic flow associated with new ground access facilities also is expected to improve response times for fire protection services. LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access. Additionally, the future phase(s) of the MSC Program would not require any new or expanded fire stations. Thus, impacts to fire protection services associated with ground access improvements of the future phase(s) of the MSC Program would be less than significant.

Removal / Relocation of Existing Facilities

Under the future phase(s) of the MSC Program the following buildings and facilities may be either removed and/or relocated: American Airlines High Bay Hangar, American Airlines maintenance shed, and parking garages P2B and P5. The removal and/or relocation of these facilities would not affect the ability of Fire Stations 5, 51, 80, and 95 to respond to emergencies at LAX and would not affect response times to other locations at LAX. Additionally, the future phase(s) of the MSC Program would not require any new or expanded fire stations. Therefore, the removal and/or relocation of these facilities would be a less than significant impact.

4.5.7 Cumulative Impacts

The following projects would cumulatively contribute to fire protection service demands at the Airport:

- Within the central terminal area, the Bradley West Project, North Terminal Improvements, CUP Replacement Project, and South Terminal Improvements; and
- Within the airfield area, the West Aircraft Maintenance Area Project, Runway 7L-25R Runway Safety Area Project, and the North Airfield Runway Safety Area Project.

When cumulatively examined with future proposed projects at the Airport, the MSC North Project and future phase(s) of the MSC Program would contribute to cumulative increases in fire-related public service demands. However, the LAX Master Plan Commitments would be sufficient to offset the associated increases in fire protection service demands. The implementation of these improvements would not cause emergency vehicles to change their existing emergency access routes, impact existing fire stations, or require new fire stations at LAX. Thus, these improvements would not affect the ability of the LAX Fire Stations to respond to emergencies at LAX and would not affect response times to other locations at LAX. Therefore, cumulative public service demands associated with the MSC North Project and future phase(s) of the MSC Program would result in a less than significant impact with mitigation.

4.5.8 Mitigation Measures

Implementation of LAX Master Plan Commitments FP-1, PS-1, PS-2, C-1, ST-9, ST-12, ST-14, ST-17, ST-18, ST-19, ST-21, and ST-22 would ensure that fire protection and emergency response services impacts related to the MSC North Project and future phase(s) of the MSC Program would be less than significant. Therefore, no mitigation measures unique to the MSC North Project or future phase(s) of the MSC Program would be necessary.

4.5.9 Level of Significance After Mitigation

With implementation of LAX Master Plan Commitments and compliance with FAR and fire code requirements, the MSC North Project and future phase(s) of the MSC Program would result in a less than significant impact to fire protection services.

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