

# **ATTACHMENT 1**

## **PROJECT DESCRIPTION**

## **Los Angeles International Airport West Aircraft Maintenance Area Project**

### **Project Description**

#### **Proposed Project**

The Los Angeles World Airports (LAWA) proposes to construct and implement the Los Angeles International Airport (LAX) West Aircraft Maintenance Area Project. The proposed Project would provide facilities and areas for aircraft maintenance and maintenance hangars, as well as parking areas for existing aircraft and employees. Refer to the enclosed **Attachment 2** for the conceptual site plan associated with the proposed Project. The proposed facilities would include: (1) an apron area; (2) aircraft maintenance hangars; and, (3) ancillary facilities. The proposed Project would not increase passenger or gate capacity and would not increase flights and/or aircraft operations at LAX. The proposed facilities are anticipated to serve aircraft that would be at LAX in conjunction with regularly scheduled flights or other business matters, whereby aircraft maintenance and/or parking would be ancillary to the primary reason why the aircraft is at the airport. Similarly, the proposed Project would consolidate functions and services that already occur elsewhere at the airport. This consolidation of existing remain overnight/remain all day (RON/RAD) and aircraft maintenance activities is not anticipated to result in an increase in such activities at LAX nor is it projected to result in an increased number of employees associated with such activities.

#### **Project Location and Existing Conditions**

The Project site is located within the southwest portion of LAX immediately south of World Way West between Taxiway AA and Pershing Drive. Existing adjacent uses include the West Remote Pads/Gates and aircraft aprons to the north; an airport employee parking lot and vacant airport property to the south; Taxiway AA, an American Airlines employee parking lot and the United (formerly Continental) Airlines maintenance hangars to the east; and Pershing Drive followed by the Los Angeles/El Segundo Dunes to the west. The Los Angeles/El Segundo Dunes is a former residential area that consists of open space/coastal dunes, with navigational aids, minor ancillary airport and utility improvements, abandoned residential streets, and the El Segundo Blue Butterfly Habitat Restoration Area. To the north of LAX is the community of Westchester (part of the City of Los Angeles), to the south is the City of El Segundo, to the east is the City of Inglewood and the unincorporated Los Angeles County community of Lennox, and to the west is the Pacific Ocean.

The Project site is currently used primarily as a staging area for airport construction projects, and includes: modular construction trailers/offices and an associated surface parking area, several paved roads, and several paved and unpaved outdoor loading and storage areas. In addition, stockpiled material consisting of soil and construction rubble is located within and immediately adjacent to the Project site. The Project site is permitted by the South Coast Air Quality Management District (SCAQMD) to accommodate and has at various times supported a concrete batch (production) plant and a rock/concrete crusher, although such facilities are not currently located on the Project site. In addition to construction-related uses, the Project site supports certain airport operations-related uses such as an airfield access security post (Guard Post 21) and a small LAWA Police Department/Transportation Security Administration (LAWAPD/TSA) canine "walk" area.

The Project site is located entirely within the City of Los Angeles LAX Plan area, as well as the LAX Specific Plan area, and is designated in the LAX Plan as "Airport Airside." Permitted uses include, but are not limited to, runways, taxiways, aircraft gates, maintenance areas, airfield operation areas, air cargo areas, passenger handling facilities, fire protection facilities, and other ancillary airport facilities. The LAX Specific Plan establishes the zoning and development regulations and standards consistent with the LAX Plan for the airport. Existing zoning within the LAX Specific Plan is Airport Airside (LAX-A Zone). Permitted uses in LAX-A Zone include, but are not limited to: surface and structured parking lots; aircraft under power; airline maintenance and support; air cargo facilities; commercial passenger vehicle staging and holding area; helicopter operations; navigational aids; runways, taxiways, aircraft parking aprons, and service roads; passenger handling facilities; run-up enclosures; and other ancillary airport facilities. The proposed Project is consistent with existing land use designations.

### **Project Characteristics**

**Apron Area** - An aircraft parking apron area is a large flat paved surface where aircraft can either be maintained or parked until their next scheduled flight at which time they would be moved to their appropriate aircraft parking departure gate. Such apron areas occur at many locations at LAX including, but not limited to, airline maintenance areas, the West Remote Pads, the RON/RAD spaces along the west side of Taxiway R, and at air cargo areas when needed. Portions of the proposed WAMA aircraft apron not associated with access and circulation at the Project site would serve as aircraft parking areas (i.e., RON/RAD) for aircraft awaiting maintenance and/or placement at a terminal gate for departure. The proposed Project includes the construction of an aircraft RON/RAD parking apron on approximately 29 acres of the Project site south of the proposed hangars. The footprint for the proposed aircraft hangars and employee parking are not included in the 29 acres, and represent additional area to be developed as part of the proposed Project (see description below). Unlike certain existing maintenance areas that do not fully accommodate all aircraft types operating at LAX, the proposed Project would fully accommodate ADG VI aircraft, as well as smaller commercial aircraft.

Access to the apron area would be via the westerly extension of Taxiway B and the extension of Taxiway C (as Taxilane C), which is part of the proposed Project and would add approximately seven (7) acres of paved area within the Project site.<sup>1</sup>

Aircraft traveling to and from the Project site would mostly be towed with high-speed tugs, but some aircraft may be under power (taxi). Once leaving the Project site, aircraft would be towed back or taxi to a passenger gate or cargo ramp area to resume normal operation.

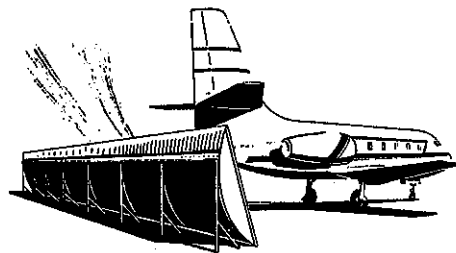
**Aircraft Maintenance Hangars** - The proposed Project includes construction of aircraft maintenance hangars, capable of accommodating a wide range of existing aircraft up to and including ADG VI aircraft. The proposed hangar area, including employee parking and other associated paved areas, in addition to aircraft apron areas described previously that may overlap, is estimated to encompass approximately 19 acres of the Project site. The purpose of the aircraft hangars would be to provide an area for routine aircraft maintenance when aircraft are not at a contact terminal gate, scheduled line maintenance, and other higher levels of scheduled and unscheduled aircraft maintenance. Unlike the existing aircraft maintenance hangars, the new hangars would be fully capable of servicing the largest aircraft that regularly operates at LAX – the Airbus A380 - and would contain state of the art features to enable the effective servicing of other aircraft types as well.

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<sup>1</sup> The aircraft apron area would be located outside of the Runway Protection Zone restricted development area associated with the nearest runway - Runway 7L.

Approximately 290,000 square feet of hangar bay space (floor area) with a maximum estimated height of up to approximately 150 feet could be accommodated on the Project site. Hangars would typically have a sliding hangar door to fully enclose aircraft within the hangar. Typical equipment (subject to user requirements of the eventual tenant) may include an internal crane to hoist aircraft or parts, 400 Hertz (Hz) power and pre-conditioned air, a compressed air system to include drop down reels and/or floor mounted receptacles that are retractable, explosion proof outlets and/or plugs installed in drop down reels and/or floor mounted that are retractable, foundation able to handle point loading for jacks, trench drain to include oil/water separators and grease traps, foam fire protection system, water sprinkler or deluge system, test bed for testing equipment and parts, ground water storage tank, phone, intercom, and internet installed throughout the entire hangar, lighting in both (hangar and office) to include 3-phase power, auxiliary back-up power, office support space for administrative functions, conference rooms, kitchen, break and restrooms, warehouse shipping/receiving, vehicle service bays, tool storage, welding shop, and flammable/hazardous materials storage. Typically, hangars also include a maintenance shop and supporting office space. The proposed aircraft hangars would provide area for routine and unscheduled aircraft maintenance.

Airlines routinely inspect and maintain their aircraft to ensure the safety of the traveling public, and each aircraft is on a stringent maintenance schedule based on its number of hours in operation. As part of this regularly scheduled maintenance, the U.S. Department of Transportation Federal Aviation Administration (FAA) requires that aircraft engines be tested at various power levels to ensure their proper operation. These tests are called engine run ups and occur when aircraft are stationary, causing what can be a substantial amount of noise. Both low power and high power engine run-ups occur at LAX. Two types of low-power engine checks include: (1) checks when an engine is only idling, which can be performed on a parking ramp when an aircraft is at the gate and does not require any installed safety devices; and, (2) low-power engine checks that occur above engine idle and are monitored and performed away from concourse/gate areas. High-power engine checks require engine run-ups at or near maximum thrust settings, as well as safety devices referred to as blast fences, which are open one-sided structures that redirect high energy exhaust (jet blast) from a jet engine to prevent damage and injury in the downstream area. They are designed to withstand heat and high speed air streams, and to control dust and debris carried by the turbulent air from engine run-ups. As part of the proposed Project, a blast fence that would accommodate ADG VI aircraft and other aircraft, is proposed on the apron area, parallel to Taxiway AA (see Figure 2-4). Based on assumptions associated with the proposed maintenance operations, an estimated 60 run-ups annually (five monthly) may occur at the Project site.



Typical Blast Fence

Assumptions associated with aircraft movement to and from the Project site are based on the number of spaces available at the site (i.e., either parked on the apron or within hangars) to accommodate aircraft, which is up to 10 ADG VI aircraft, or a mix of smaller aircraft. In addition,

assumptions related to aircraft movement are also based on typical airline operations at LAX, with consideration given to the airlines within the western area of LAX whose maintenance operations and RON/RAD aircraft parking are being consolidated. Additionally, the assumptions take into consideration other existing RON/RAD aircraft parking activities at LAX, such as those that occur at the West Remote Pads/Gates and at the Central Terminal Area (CTA), which can become crowded during overnight periods, and RON/RAD in other areas such as on the west side of Taxiway R. Following are the operational aircraft assumptions associated with the proposed Project:

*Morning (AM) – 13 total aircraft movements*

- Seven aircraft arrive at the Project site from early arrival flights and remain all day awaiting their return to gates for same day PM departure flights; servicing/light maintenance checks may occur while aircraft are parked. These aircraft are assumed to include the four wide-body aircraft that currently use the aircraft parking area at the former TWA Hangar area, and three wide-body aircraft that might typically park at the RON/RAD positions adjacent to Taxiway R.
- Four aircraft that arrived at the Project site the prior PM leave to go to gates for AM departure flights. These include three narrow-body aircraft that might otherwise park overnight at one of the northern concourses in the CTA and one narrow-body aircraft that might otherwise park overnight at one of the southern concourses in the CTA.
- On average, one aircraft arrives each AM for maintenance that will last more than one day (i.e., would go to a maintenance hangar/bay and stay there for several days - assumes that between the total hangar positions (3) and adjacent bays (2), one position/bay would, on average, be available each day).
- On average, one aircraft leaves each AM after having completed maintenance. This includes the departure of aircraft that have been at the Project site for several days of maintenance, or the departure of aircraft that arrived at the site the previous PM.

*Afternoon/Evening (PM) – 13 total aircraft movements*

- Seven aircraft that arrived at the Project site in the AM return to gates for same day PM departure flights.
- Four aircraft arrive at the Project site and stay overnight (until next AM, awaiting AM departure flights); servicing/light maintenance checks may occur while the aircraft are parked.
- On average, one aircraft leaves each PM after having completed maintenance that occurred at the Project site over an extended period (i.e., more than one day).
- On average, one aircraft arrives each PM for maintenance that will last more than one day.

Based on the above, it is estimated that a maximum of 26 aircraft would travel to or from the Project site on a daily basis.

The proposed Project also includes construction of employee vehicle parking areas to accommodate aircraft maintenance technicians and management staff. Such parking is planned to occur immediately north of the hangar area. The size of the employee parking lot would be based on tenant requirements, but is not expected to exceed 300 spaces. Access to and from the parking lot would be via World Way West. The employee parking area would include lighting, paint/stripes for vehicle stalls, and an Air Operations Area security fence with a personnel gate to separate airside and landside activities.

As detailed below in Section 2.7, Construction Schedule, the initial phase of the proposed Project would involve construction of a portion of the proposed hangar area along with

associated employee parking. The remainder of the hangar area and additional employee parking is anticipated to be constructed by the end of the proposed Project's planned five (5) year development program. It is possible that, based on the construction timing of the LAX Master Plan improvements, a relocatable structure(s) may be constructed prior to a permanent hangar to provide covered maintenance space until such time as the permanent hangar(s) is/are developed.<sup>2</sup>

**Ancillary Facilities** - The proposed Project includes ancillary (supplemental) facilities and equipment to support the primary function of the proposed Project, which is aircraft maintenance. Ancillary facilities and support includes areas for equipment (such as site-specific GSE) and maintenance areas/facilities, including electrical charging stations. A combination of diesel-fueled and alternative fuels, such as electric power and compressed natural gas (CNG) or liquefied natural gas (LNG), would fuel cars, trucks and related equipment in use on the site.

RON/RAD kits (large cabinet type structures that provide hook-ups for 400 Hertz (Hz) ground power, GSE charging stations, preconditioned air, and potable water) are proposed at the aircraft parking positions at the west end of the apron (along Pershing) and will allow full aircraft functionality without running auxiliary power units, as well as a wash rack for aircraft washing operations that would include a recycling system to minimize flows to the sewer system. The hangars described above would require provisions for fire protection, including possibly water storage for a deluge system. Deluge systems are used for fire protection and have the ability to deliver large volumes of water under high pressure. This delivery is accomplished by storing large volumes of water in storage tanks that would be located near the hangars.

The proposed Project would connect to existing water, sanitary sewer, storm drain, electricity, gas and communications lines located within the World Way West and Pershing Drive right-of-ways. Multiple existing utility lines also bisect the Project site, and would either be preserved, adjusted/strengthened, or abandoned/removed. In addition, to safely convey runoff from the Project site, an on-site system of 18-inch, 24-inch, 36-inch, and 42-inch reinforced concrete pipes (RCPs) would be constructed. A detention/infiltration basin with connections to the existing storm drains in World Way West and Pershing Drive is proposed in the southwest corner of the Project site (within an existing LAX employee surface parking lot) to treat stormwater runoff. The proposed Project also includes other on-site water quality improvements (e.g., wash rack recycling system, oil-water separator, use of porous pavement or media filters, etc.) to reduce urban pollutants in Project stormwater runoff.

**Relocation and Demolition of Existing Uses on Site** - Development of the Project site would include removal or relocation of existing on-site uses. Existing construction staging yards and associated equipment would either be phased out or relocated if necessary to other areas at LAX such as the existing staging areas located to the south of Westchester Parkway and west of Lincoln Boulevard, or the staging area located between La Tijera Boulevard, Westchester Parkway, and Sepulveda Westway (noted respectively as Construction Staging Areas A and D in the LAX Specific Plan Amendment Study [SPAS] Draft EIR). These areas are undeveloped and have been in use for several years as construction staging areas for various improvement projects at LAX. If the construction staging activities currently occurring on the Project site are not completely phased out well in advance of site clearing and need to be relocated, the shift in activities would not materially change the general pattern and type of activities that have occurred in these construction staging areas over the last several years. Construction staging for the proposed Project would occur on-site. The existing small fenced area used by LAWAPD

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<sup>2</sup> A relocatable structure is a temporary structure that would typically feature a high strength polyvinyl chloride (i.e., PVC) coated polyester membrane cladding that is tensioned over an engineered structural steel frame system. If used, the relocatable structure would be removed once a permanent hangar is developed.

and TSA as a canine "walk" area would be relocated in an area in the southern area of the airport, west of Runway 7R. Guard Post 21 would be demolished prior to the construction of the second hangar. Existing utility lines serving the site would either be preserved, adjusted/strengthened, or removed. Stockpiled soil and construction rubble stockpiles existing within and immediately adjacent to the site would be re-used on-site as backfill material and/or exported for off-site re-use and/or disposal.