5.0 ALTERNATIVES

5.1 Purpose and Scope

The *California Environmental Quality Act (CEQA) Guidelines* require that an Environmental Impact Report (EIR) include a discussion of a reasonable range of project alternatives that would "feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the proposed Project, and evaluate the comparative merits of the alternatives" (*CEQA Guidelines* Section 15126.6). Within that context, this chapter discusses alternatives to the proposed Project.

Key provisions of the *CEQA Guidelines* on alternatives (Section 15126.6(b) through (f)) are excerpted below to explain the foundation and legal requirements for the alternatives analysis in the EIR.

- "…the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the proposed objectives, or would be more costly (15126.6(b)).
- "The specific alternative of 'no project' shall also be evaluated along with its impact" (15126.6(e)(1)). "The 'no project' analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives" (15126.6(e) (2)).
- "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making" (15126.6(f)).
- "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)" (15126.6(f)(1)).
- For alternative locations, "only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR" (15126.6(f)(2)(A)).
- "If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example,

in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location" (15126.6(f)(2)(B)).

- "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative" (15126.6(f)(3)).

5.2 Significant Impacts of the Project

The alternatives in this Chapter have been selected to evaluate means for avoiding or substantially reducing the significant impacts of the proposed Project identified in Chapter 4 of this EIR. As summarized in **Table 1-1** in Chapter 1, *Introduction and Executive Summary*, in this EIR, impacts related to air quality (operational impacts), human health risk, greenhouse gas emissions, hydrology and water quality, noise, land use and planning, and construction surface transportation were determined to be less than significant with incorporation of Los Angeles International Airport (LAX) Master Plan commitments and mitigation measures.[1] Impacts to hazards and hazardous materials were found to be less than significant with incorporation of LAX Master Plan commitments and mitigation measures and a Project–specific mitigation measure. As described in Section 4.1, *Air Quality*, the proposed Project would result in a net increase in temporary emissions of criteria air pollutants associated with construction-related activities that represents a significant and unavoidable impact after implementation of LAX Master Plan commitments and mitigation measures with respect to regional emissions of nitrogen oxides (NO_X) and no other feasible mitigation measures were identified.

5.3 Project Objectives

The objectives of the proposed Project which have been considered in the formulation and evaluation of alternatives, include the following:

- Consolidate, relocate, and modernize some of the existing aircraft maintenance facilities at Los Angeles International Airport (LAX) consistent with the LAX Master Plan.
- Provide for more efficient and effective maintenance of existing aircraft at the airport, including Airplane Design Group (ADG) VI aircraft (i.e., Airbus A380 and Boeing 747-8).
- Provide aircraft maintenance hangars and aircraft parking areas that are all sized to accommodate ADG VI aircraft and other aircraft in one location.
- Provide an area for remain overnight/remain all day (RON/RAD) aircraft parking that can also support routine servicing and maintenance of aircraft.
- Support consistency with the LAX Master Plan by providing an aircraft maintenance area in the southwest portion of the airport**.**

[1] In the case of air quality, LAX Master Plan commitments and mitigation measures are included within the LAX Air Quality Control Measures applicable to the proposed Project.

5.4. Alternatives Considered and Rejected

5.4.1. West Remote Pads/Gates Site

One alternative considered, focuses on development of the proposed Project on the West Remote Pads/Gates site. This site is located just north of the proposed Project Site and is bounded to the south by World Way West, to the north by Taxiway D, to the west by Pershing Drive, and to the east by Taxiway AA. The approximately 71-acre West Remote Pads/Gates site is currently utilized as an apron/gate area for on-loading and off-loading of international and domestic flights that cannot be handled in the Central Terminal Area (CTA). Passengers are ferried to and from the site by buses. The apron area is also utilized for RON and RAD parking of aircraft when the gates are not in use.

The West Remote Pads/Gates site can accommodate 11 aircraft at apron gates having jet loading bridges and another 7 hardstand (pads) without loading bridges, for a total of 18 positions. Additional aircraft are double- and sometimes triple-parked at some of these positions during overnight and early morning hours. In April, May and June of 2013 the West Remote Pads/Gates were utilized to park 1,592 aircraft, with 634 using contact gates and an additional 958 operations parked on "hardstand" or RON positions. An August 2012 peak month survey of West Remote Pads/Gates usage found that peak use of the area was in the early morning, and included 16 aircraft parked simultaneously. On that same day, a total of 34 aircraft were positioned on the West Remote Pads/Gates site during various parts of the day.

A large maneuvering area is located in the southwest quadrant of this Alternative site. This maneuvering area also serves as an operational readiness area for "super-jumbo" aircraft such as the Antonov AN-124 cargo carrier, which has called on LAX in the past. Additionally, this space is utilized for RON/RAD for highly secure visits by public and government officials that at times require staging of military cargo and other large aircraft. Although the West Remote Pads/Gates site was investigated in whole and in part as an alternative location for the proposed Project, it was not carried forward for further analysis because the site is highly utilized for passenger gate facilities and for aircraft parking (i.e., RON/RAD), including special-purpose use (i.e., super-jumbo aircraft parking and high-security areas) and would not be available for use during the time frame required for development of the proposed Project.

The timing for the proposed Project, with the first hangar constructed in 2015 and the second hangar constructed by 2019 is necessary to help consolidate and replace maintenance facilities and hangars that have been removed, or are planned for removal within the next several years consistent with the LAX Master Plan.

5.4.2. Other LAX Sites

In addition to the West Remote Pads/Gates site that was considered but not carried forward for further analysis, and the Alternate Site Alternative in the eastern portion of LAX that is evaluated below, other areas on the airport property were also considered for analysis. However, other sites at LAX were not carried forward for analysis as they were either not available for development, or were located in areas without feasible access and proximity to runways and taxiways.

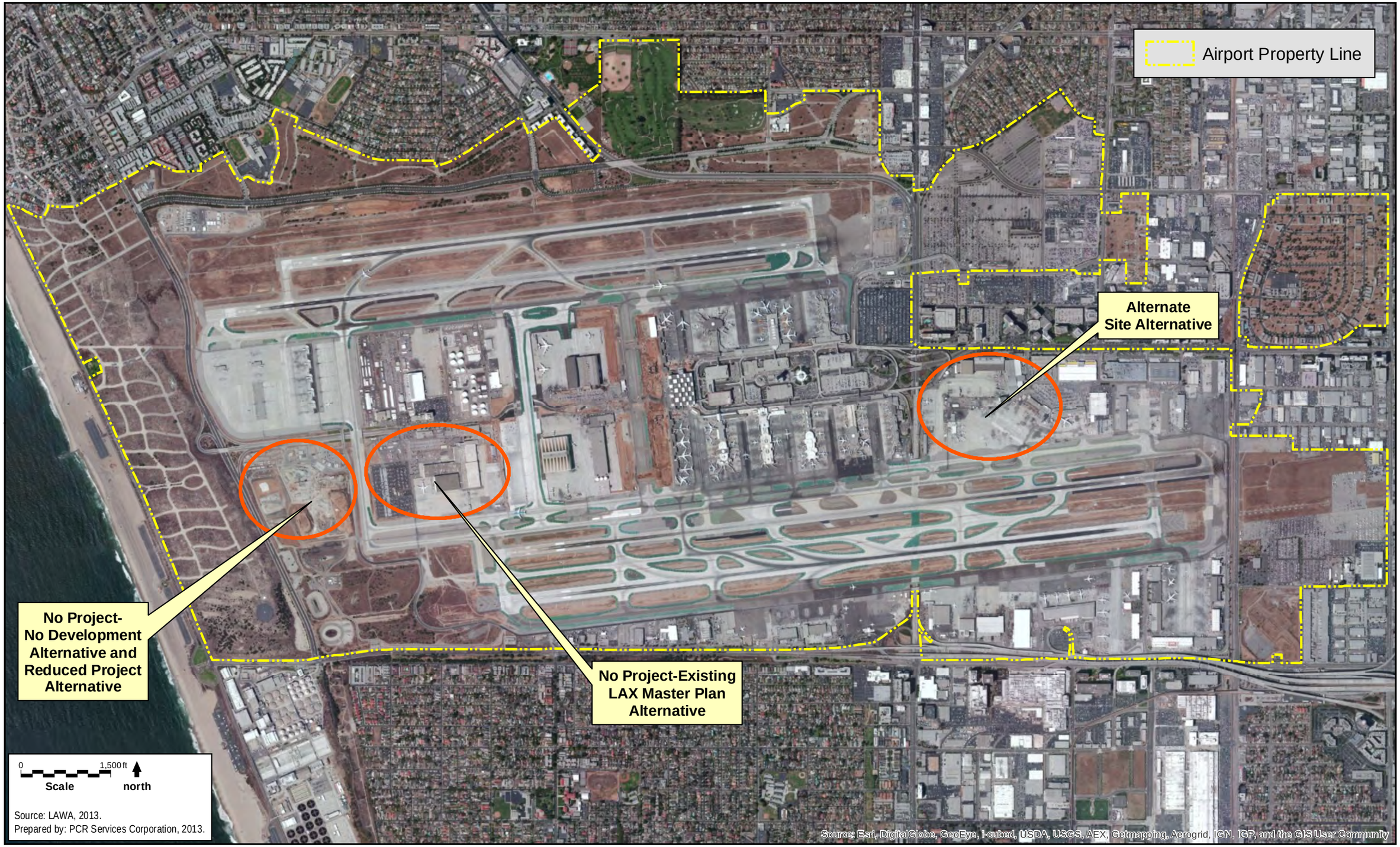
5.5 Alternatives

The alternatives to the proposed Project were formulated to avoid or substantially lessen the significant impacts of the Project, with emphasis on the one significant and unavoidable impact that would occur during construction with respect to regional emissions of NO_X. As required by CEQA, a "no project" alternative is addressed in this section. The no-project alternative was evaluated under two scenarios: 1) a No Project-No Development Alternative, that represents conditions that would occur if existing land uses and facilities were to continue operating on the Project site, and; 2) a No Project-Existing LAX Master Plan Alternative, which evaluates the Project site and potential facilities being developed in a manner that replicates the exact program locations presented in the 2004 LAX Master Plan **(Figure 5-1)** without the currently proposed refinements to the originally proposed Master Plan concept, which now constitute the currently proposed Project.

Additional alternatives presented in this section include: 3) a Reduced Project Alternative and; 4) an Alternate Site Alternative. The Reduced Project Alternative was selected to evaluate means for reducing the magnitude of most if not all of the adverse impacts that would occur under the proposed Project. In regards to the significant unavoidable impact associated with construction air emissions, the Reduced Project Alternative would reduce the amount and duration of construction (reduced by 16 to 24 months), thus reducing the extent of, but not eliminating the significant unavoidable construction-related air quality impact. The Alternate Site Alternative was selected to evaluate the extent to which the impacts of the proposed Project could be avoided or reduced by putting the Project in another location, pursuant to *CEQA Guidelines* Section 15126.6(f). The alternatives evaluated in this chapter are described below and evaluated in subsection 5.6, Evaluation of Project Alternatives.

5.5.1 No Project-No Development Alternative

Under the No Project-No Development Alternative, development of a consolidated aircraft maintenance facility with aircraft parking apron areas, maintenance hangars, employee parking areas, and related storage, equipment and facilities would not occur at all. The proposed Project site would continue to be used as a staging area for airport construction projects, with modular construction trailers/offices, a surface parking area, an airfield access security post (Guard Post 21), a small Los Angeles World Airports (LAWA) Police Department/Transportation Security Administration (LAWAPD/TSA) canine “walk” area, paved roads, and outdoor loading and storage areas. In addition, material would continue to be stockpiled on the site in association with projects under construction at LAX. Thus, the physical conditions associated with the site and its activities would remain essentially the same as under current conditions. Without the proposed Project, there would be less ability to efficiently and effectively maintain ADG VI aircraft and other aircraft at LAX. The need for maintenance facilities removed by past and pending projects as contemplated under the LAX Master Plan (such as Taxiway T) would be accommodated to the extent feasible at various maintenance facilities already in use on the airport, with potential for some maintenance having to be accommodated at other airports (**Figure 5-2**). Other existing aircraft maintenance facilities at LAX are currently used on a regular basis by the tenant airlines/companies, and it is unlikely existing facilities could accommodate the aircraft maintenance needs. It is possible that the remaining facilities would not be able to accommodate the increased demands completely and/or efficiently. This is especially true relative to the ability to accommodate the existing RON/RAD areas associated



West Aircraft Maintenance Area Project Draft EIR	**Locations of Alternatives Evaluated in EIR**	Figure **5-1**

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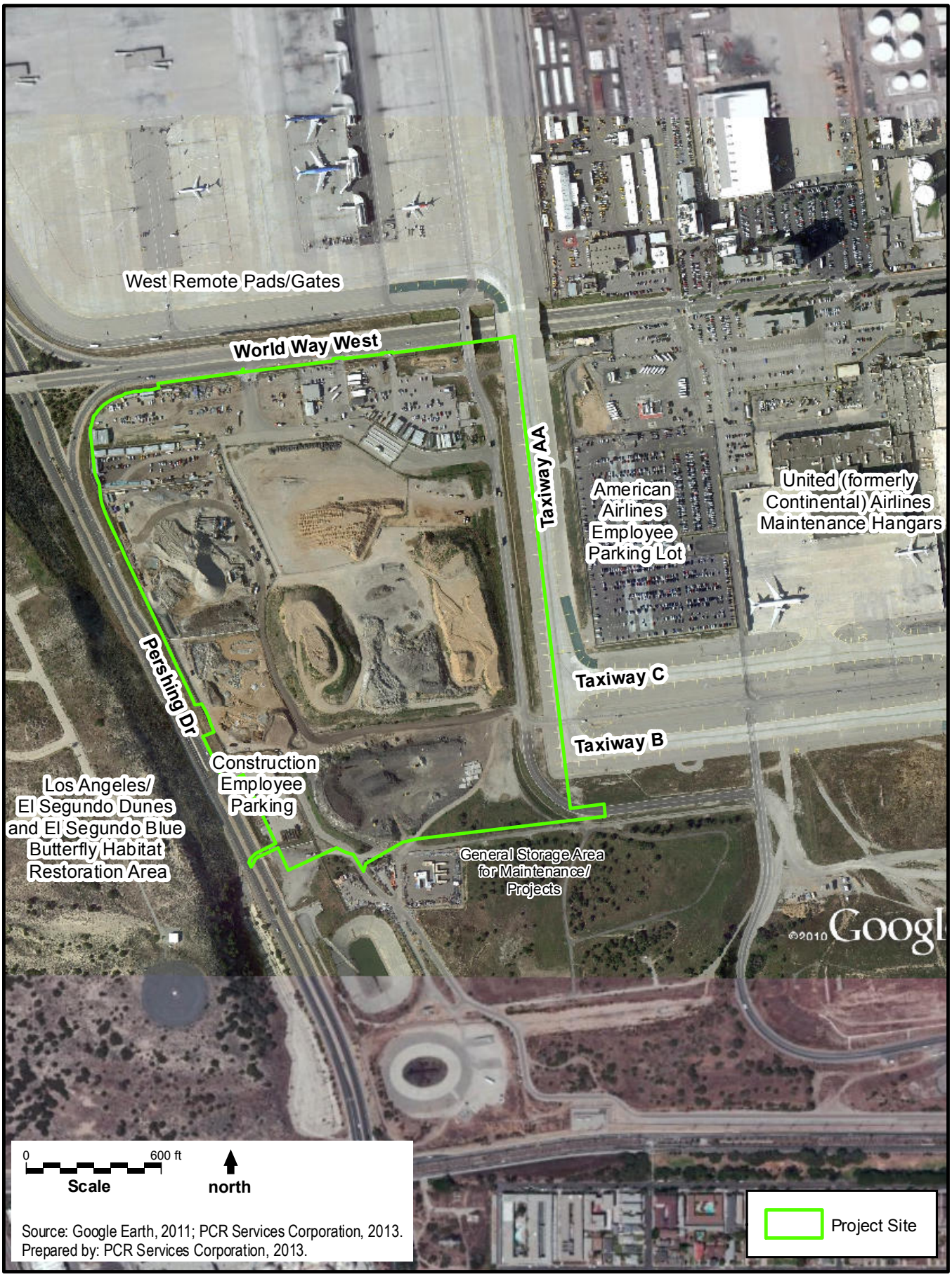

West Aircraft Maintenance Area Project Draft EIR

No Project-No Development Alternative

Figure **5-2**

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with the removal of aircraft maintenance hangars that would be removed. As indicated above in Section 5.4.1, there are already substantial demands on existing RON/RAD areas at LAX and the loss of RON/RAD spaces would exacerbate that problem. Given that the RON/RAD areas at the subject maintenance areas are used for aircraft cabin cleaning and light servicing/maintenance (i.e., "Level A checks"), the loss of those areas would mean that such aircraft servicing and light maintenance would need to be done while aircraft are at the gate, which would extend gate occupancy time and possibly delay other aircraft waiting to use the gate, or require additional stacking of aircraft at the remaining RON/RAD areas, which hinders the efficient management and movement of aircraft in those areas.

5.5.2 No Project-Existing LAX Master Plan Alternative

Under the No Project-Existing LAX Master Plan Alternative, development of aircraft maintenance facilities in the southwestern portion of the airport with aircraft parking apron areas, maintenance hangars, employee parking areas, and related storage, equipment and facilities would occur in a manner that replicates the exact program locations presented in the 2004 LAX Master Plan without the currently proposed Project refinements. Under this Alternative, a new 270,000-square foot aircraft maintenance hangar would be constructed just east of Taxiway AA to the west of the existing United-Continental Hangar, with a new aircraft apron area placed between the new hangar and Taxiway C. The former Continental Airlines training building, which is now vacant, would be demolished and rebuilt as a 23,000 square foot ancillary building (i.e., potential maintenance-related offices, machine shops, etc.). Employee parking and maintenance-related storage/staging would be provided between the new hangar and the new ancillary building. Additionally, this Alternative would include another new maintenance hangar, approximately 25,000 square feet in size, located between the United-Continental Hangar and the American Airlines High-Bay Hangar. Based on existing conditions, the new hangar and associated apron area would likely be developed immediately southwest of the new Aircraft Rescue and Firefighting Facility (ARFF) replacing two to three of the existing aircraft RON parking positions on the west side of Taxiway R (**Figure 5-3)**. For purposes of this alternatives analysis, it is assumed that construction would commence in early to mid-2014 with completion by mid- to late-2018.

5.5.3 Reduced Project Alternative

The Reduced Project Alternative would eliminate one of the two aircraft maintenance hangars proposed for the Project along with 150 associated employee parking spaces, and would reduce the proposed aircraft apron area by approximately half. The developed area of the site would be reduced by approximately 22 acres (10 acres of hangar area/parking and 12 acres of apron area) resulting in a total development area of approximately 45 acres, compared to the proposed Project with approximately 68 acres of development area. The site would be able to accommodate up to eight ADG VI aircraft, or a mix of smaller aircraft, compared to the 10 ADG VI aircraft that could be accommodated under the proposed Project. All of the existing stockpiles would still be removed; however, existing uses within the northeast portion of the proposed Project site would remain, including the existing construction trailers/offices area, which would continue to be used for coordination of terminal improvements, unrelated to activities occurring on the Project Site, Guard Post 21, and the LAWAPD/TSA canine "walk" area (see **Figure 5-4**). The total floor area of the hangar to be constructed under this Alternative would be approximately 125,000 square feet and it would be designed to

accommodate up to an ADG VI aircraft. The hangar would consist of a single hangar building with adjacent hardstands to the west and east where aircraft can be parked and undergo various maintenance activities that do not require being within a hangar (i.e., such as maintenance to the interior/cabin areas). In addition, as only one aircraft hangar would be developed under the Reduced Project Alternative, it would be less able to accommodate the need for maintenance facilities removed by pending or planned LAX Master Plan projects and therefore would result in the need for use of various other maintenance facilities currently in use at LAX with the potential need for some maintenance to be accommodated at other airports. For purposes of this alternatives analysis, it is assumed that construction of the Reduced Project Alternative would commence in the first quarter of 2014 with completion by mid-2015, reducing the duration of construction compared to the proposed Project by 16 to 24 months.

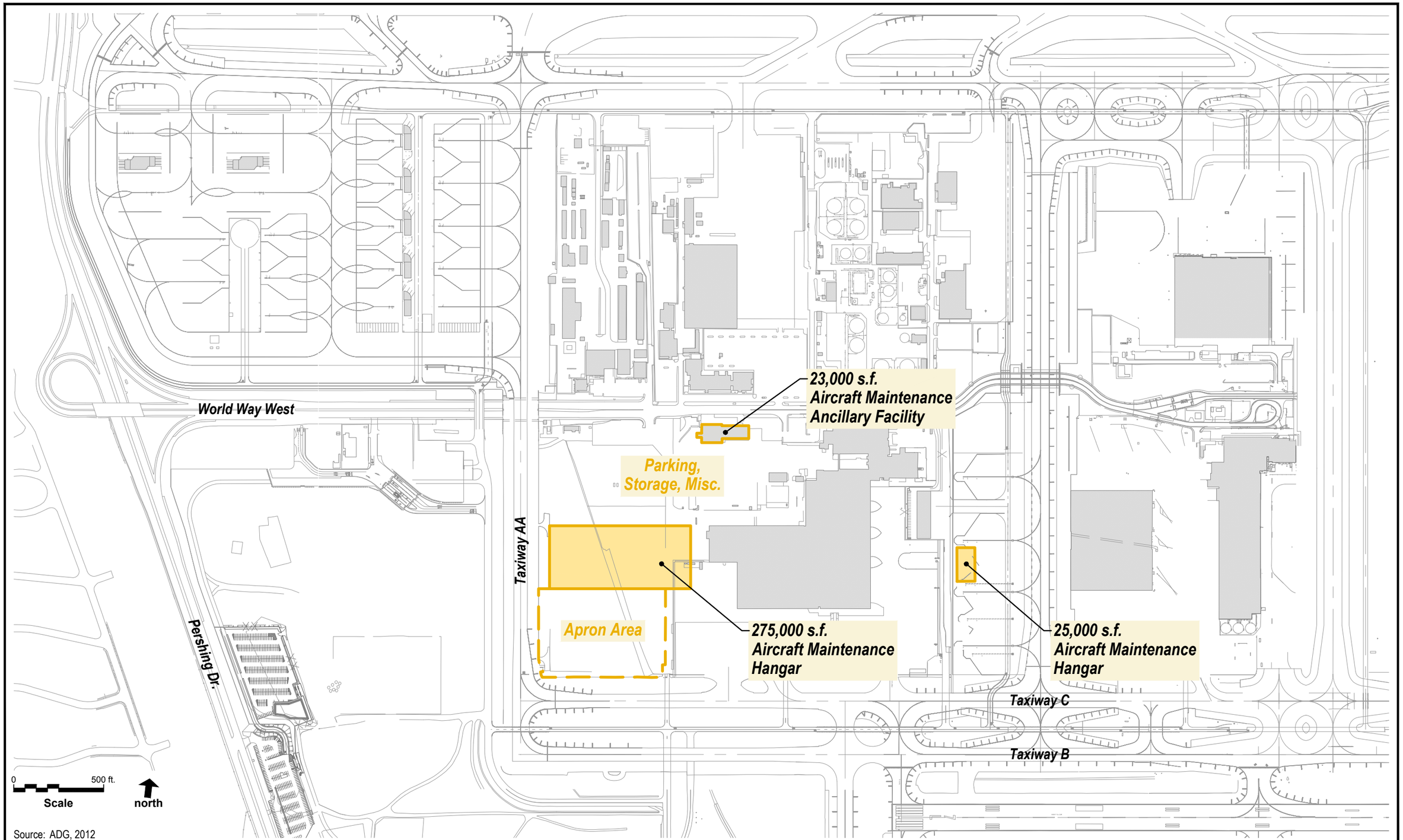
5.5.4 Alternate Site Alternative

Under this Alternative, the Project site would continue to be used as a staging area for airport construction projects as described under the No Project-No Development Alternative. Proposed maintenance facilities would instead be developed at a location in the eastern portion of the airport, south of Century Boulevard and east of Sepulveda Boulevard within the Delta and United Airlines Complex area (see **Figure 5-5**). Existing facilities on the approximately 59-acre alternate site include the Delta Airlines Ground Support Equipment (GSE) facility, the American Eagle Commuter Terminal, the Delta Airlines maintenance area, the Mercury Air Group Cargo building, the LAX Records Retention Building, and the United Maintenance Hangar.

In order to accommodate two modern maintenance hangars with a design similar to that described for the proposed Project, and due to the size and age of the existing hangars and maintenance facilities on the site, the existing facilities would need to be demolished to accommodate new hangars to be built on the north and east of the alternate site under this Alternative. This Alternative would require removal of the Delta Airlines GSE facility, American Eagle Commuter Terminal, Delta Airlines maintenance area, Mercury Air Group Cargo, LAX Records Retention Building, and the United Maintenance Hangar. Some of the existing hangars and office/administration buildings that would be removed to support development of the Alternative, including the former Western Airlines double-arched hangar, are part of the Intermediate Terminal Complex, which is considered a historical resource pursuant to CEQA.

Existing aircraft maintenance operations would be integrated into the new hangars to the extent possible and some maintenance operations might need to be relocated to other existing maintenance areas such as the United-Continental Hangar (western maintenance area). However, similar to the No Project-No Development Alternative, such consolidation and relocation of maintenance and cargo facilities may overburden the existing facilities and some amount of maintenance and cargo operations may need to be completed at other airports. It is anticipated that the LAX Records Retention Building would be relocated to another existing LAWA building.

Up to 300 parking spaces for employees, and related storage, equipment and facilities would also be located on the site, with access from Century Boulevard and Avion Drive. Similar to the proposed Project, the site would be able to accommodate up to 10 ADG VI aircraft, or a mix of smaller aircraft. For purposes of this alternatives analysis, it is assumed that construction of the Alternate Site Alternative would commence in early to mid-2014 with completion prior to 2019.



West Aircraft Maintenance Area Project **Draft EIR**	**No Project-Existing LAX Master Plan Alternative**	Figure **5-3**

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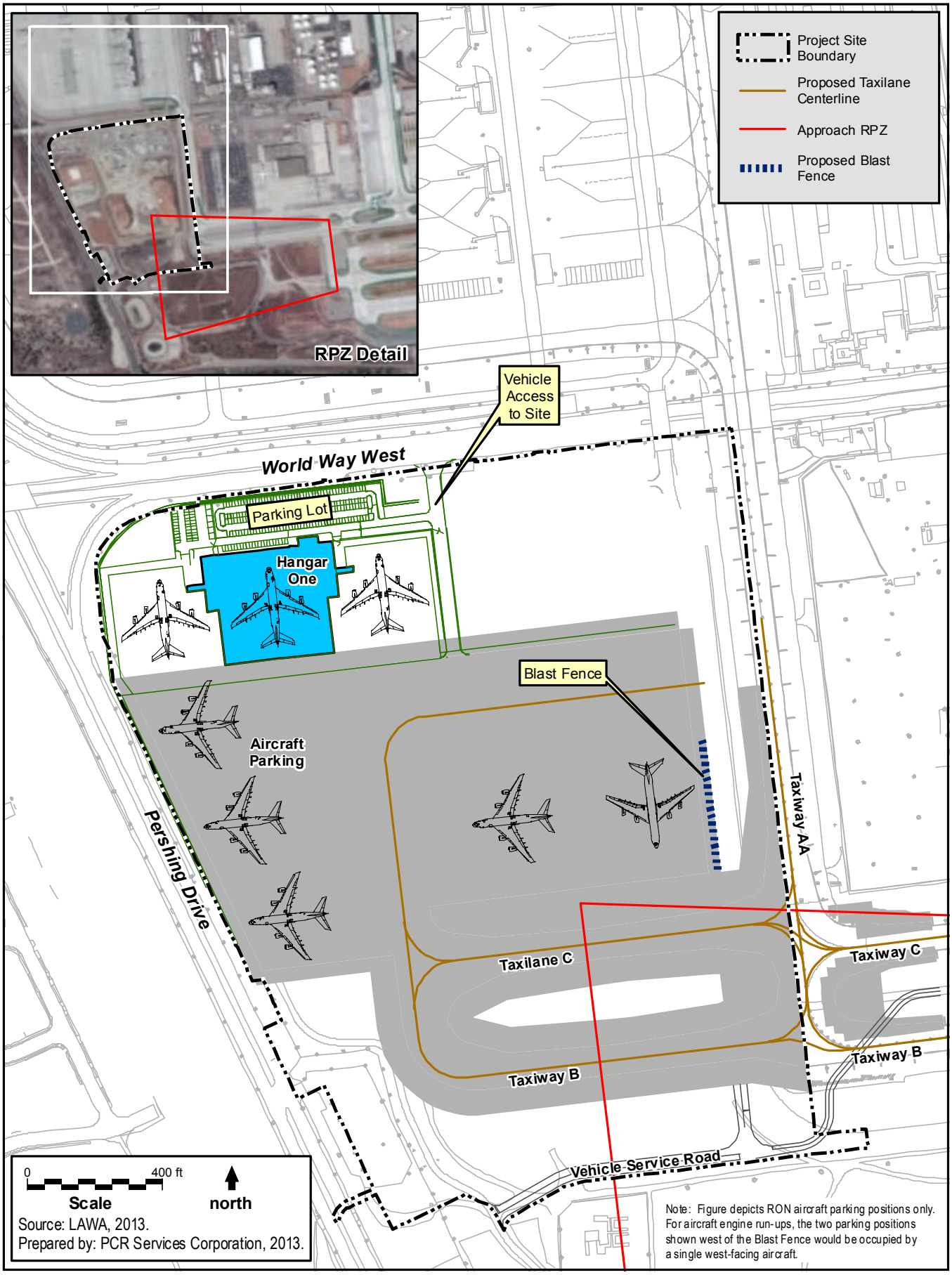

West Aircraft Maintenance Area Project Draft EIR

Reduced Project Alternative

Figure **5-4**

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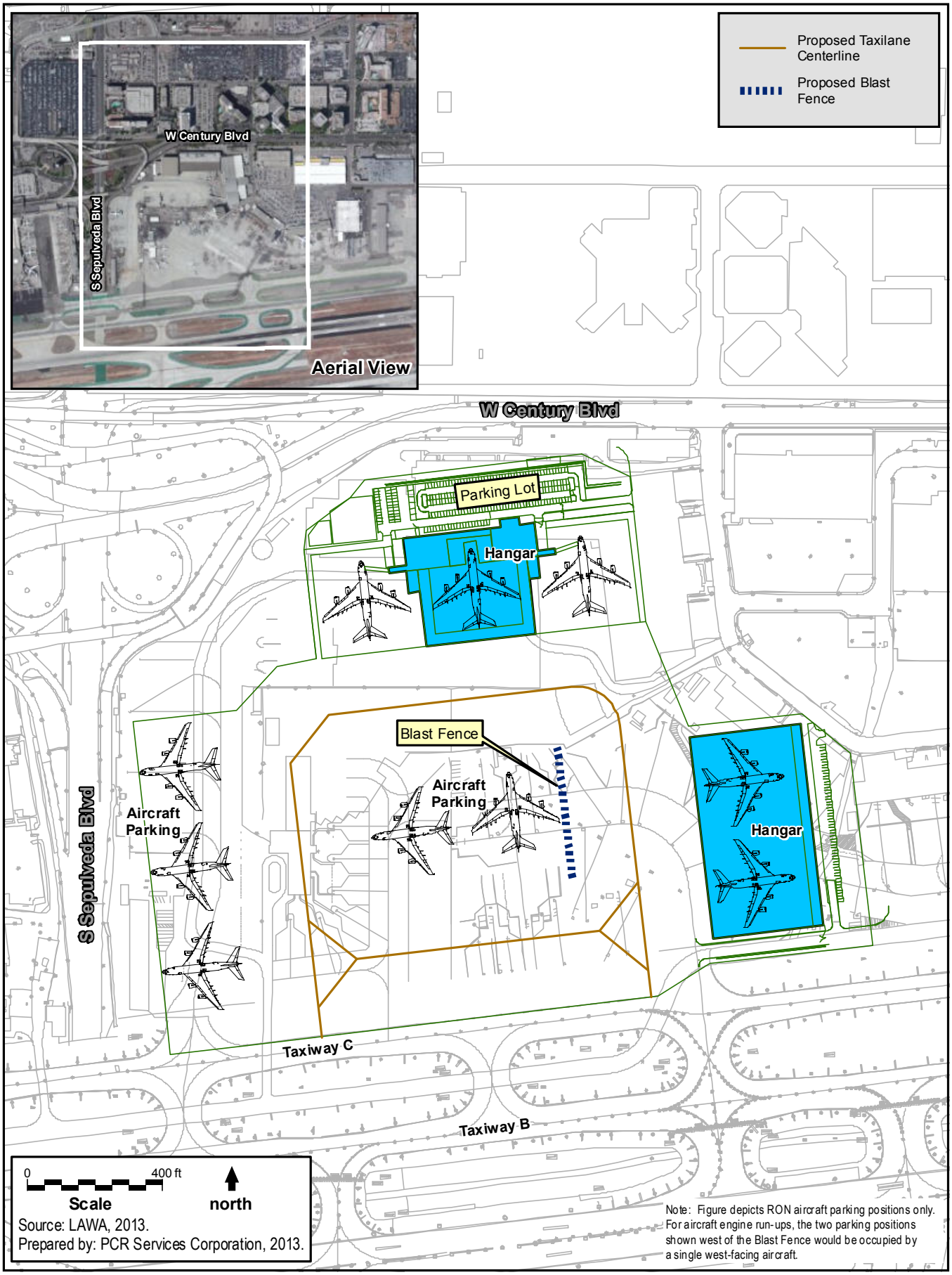

West Aircraft Maintenance Area Project Draft EIR

Alternate Site Alternative

Figure **5-5**

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5.6 Evaluation of Project Alternatives

5.6.1 No Project-No Development Alternative

Air Quality

Under the No Project-No Development Alternative, the Project site would continue to be used as a staging area for airport construction projects and would continue to accommodate stockpiled soil and construction rubble. 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, it may continue to be used for such activities in accordance with its permit. Under the No Project-No Development Alternative, the consolidation, relocation, and modernization of existing aircraft maintenance facilities at LAX that would be supported under the proposed Project would not occur.

The No Project-No Development Alternative would result in emissions consistent with current levels, which would be less than the proposed Project on a short-term and temporary basis. As discussed in Section 4.1, *Air Quality,* the proposed Project would result in a net increase in short-term and temporary emissions of criteria air pollutants associated with construction-related activities with a significant and unavoidable impact with respect to regional emissions of NO_X, which is a precursor to regional ozone. The No Project-No Development Alternative would not involve construction, therefore it would have no net increase in short-term and temporary emissions of criteria air pollutants.

On a long-term basis, the existing aircraft maintenance facilities at LAX would continue to be used and would not be consolidated, relocated, or modernized. The No Project-No Development Alternative would result in emissions consistent with current levels, which would be about the same as the emissions under the proposed Project on a long-term basis. As discussed in Section 4.1, *Air Quality*, operation of the proposed Project is not expected to generate new emissions associated with aircraft maintenance because the proposed Project redirects and consolidates existing aircraft maintenance operations. In addition, the number of run-ups from aircraft engine testing is not expected to increase compared to the current condition, nor is additional on-road vehicle traffic expected. Other maintenance facilities removed by past and pending projects would result in the redirection of maintenance operations that would generate minimal amounts of taxiing/towing emissions similar to the proposed Project. Under the No Project-No Development Alternative, maintenance activities would continue to occur at existing facilities at LAX, which were built prior to LAX's adoption of the Los Angeles Green Building Code (LAGBC) Tier 1 standards and thus were not designed to meet the current energy efficiency standards. In addition, queuing of aircraft at the existing maintenance hangars may increase as maintenance facilities at LAX are removed by past and pending projects. Thus, the operational emissions under the No Project-No Development Alternative would have similar emissions related to taxiing/towing but slightly greater emissions from maintenance buildings and potentially from increased aircraft queuing. Regional operational emissions under the No Project-No Development Alternative would be less than significant; however, they would be slightly greater than the proposed Project.

Nonetheless, as the No Project-No Development Alternative would not involve any construction, it would not have the significant unavoidable impact that would occur under the proposed

Project with respect to construction-related regional NO_X emissions. With respect to regional operational emissions, while the No Project-No Development Alternative would be slightly greater than the proposed Project, impacts would be less than significant.

Regarding the Health Risk Assessment, the No Project-No Development Alternative would have no health risk impact associated with construction since no construction would occur. Maintenance activities associated with this Alternative would either occur in decentralized locations at LAX or would occur at other airports. Regarding operational health impacts of this Alternative, impacts would be less than significant as there would be no change in operation at the Project site compared to existing conditions. Therefore, there would be no change in localized emissions at the Project site and no impact would occur and impacts would be less than the proposed Project.

Greenhouse Gas Emissions

Under the No Project-No Development Alternative, the existing site would continue to be used as a staging area for airport construction projects. The Project site may continue to be used as a concrete batch (production) plant and a rock/concrete crusher in accordance with its SCAQMD permit. Under the No Project-No Development Alternative, the consolidation, relocation, and modernization of aircraft maintenance facilities at LAX under the proposed Project would not occur.

This Alternative would result in greenhouse gas (GHG) emissions consistent with current levels, which would be less than the proposed Project on a short-term and temporary basis. As discussed in Section 4.2, *Greenhouse Gas Emissions*, the proposed Project would result in a net increase in short-term and temporary GHG emissions associated with construction-related activities. This Alternative would result in no net increase in short-term and temporary emissions of GHGs since construction would not occur. On a long-term basis, the existing aircraft maintenance facilities at LAX would continue to be used and would not be consolidated, relocated, or modernized. Other maintenance facilities removed by past and pending projects would result in the redirection of maintenance operations that would generate minimal amounts of taxiing/towing emissions similar to the proposed Project. Under the No Project-No Development Alternative, no action would be taken to modernize maintenance facilities, such as hangars, to comply with the California Green Buildings Standards Code (CALGreen) or the LAGBC Tier 1 standards for nonresidential buildings. The proposed Project would be required to comply with the CALGreen and LAGBC Tier 1 standards for nonresidential buildings, which would reduce energy consumption, waste generation, and GHG emissions compared to similar buildings that do not meet the standards. Maintenance activities would continue to occur at existing facilities at LAX, which were built prior to LAX's adoption of the LAGBC Tier 1 standards and thus were not designed to meet the current energy efficiency standards. In addition, queuing of aircraft at the existing maintenance hangars may increase as maintenance facilities at LAX are removed by past and pending projects. Thus, the operational emissions under the No Project-No Development Alternative would have slightly greater emissions from maintenance buildings and potentially from increased aircraft queuing. Operational GHG emissions under the No Project-No Development Alternative would be less than significant; however, they would be slightly greater than the proposed Project.

Therefore, the No Project-No Development Alternative would avoid the short-term GHG emissions that would occur under the proposed Project with respect to construction-related

GHG emissions; however, this Alternative would have slightly greater operational GHG emissions, although less than significant, as compared to the proposed Project.

Hazards and Hazardous Materials

Release of Hazardous Materials

The No Project-No Development Alternative would not increase the overall transport, use, or disposal of hazardous materials on the Project site or at LAX. Maintenance activities would continue to occur throughout LAX rather than in a consolidated location and all hazardous materials (e.g., fuels, solvents, lubricants, cleaners, paints, compressed gasses, peroxides, caustics, alcohols, foams) would be used in accordance with applicable regulations and manufacturers' recommendations. The Project site would continue to be used as construction staging area and materials would continue to be stockpiled in association with projects under construction at LAX. Similar to the proposed Project, the No Project-No Development Alternative Project Site is located in the Former Hyperion Oilfield and there may be two abandoned/plugged oil wells on the Project site and four more in the general vicinity of the Project site. The Project site is also located within a City-designated methane zone. Construction staging and stockpiling would continue to occur in accordance with all applicable regulations, including LAX Master Plan Commitment HM-2, which provides guidance for LAX projects involving excavation and grading of soils, and LAWA's best management practices (BMPs). Because the No Project-No Development Alternative would not involve grading or soil excavation for the development of aircraft maintenance or parking aprons, the potential to encounter existing subsurface soil contamination and/or abandoned oil wells is low and similar to existing conditions. As a result, the No Project-No Development Alternative would result in a less than significant impact with respect to the potential release of hazardous materials. Compared to the proposed Project, the No Project-No Development Alternative would not require grading and/or the excavation of potentially abandoned oil wells. As a result, no construction impacts related to this issue would occur under the No Project-No Development Alternative and there would be no need for the Project-specific mitigation required for the proposed Project.

Construction staging would continue to occur at the Project site under the No Project-No Development Alternative. Furthermore, although the stockpiled materials currently on the Project site do not contain concentrations of contaminants that qualify them as Class I hazardous materials, they are not homogeneous in composition and may contain undiscovered hazardous materials. Although stockpiled materials on the Project site under the No Project-No Development Alternative would not be removed completely in the near-term, in the long term, the potential for encountering previously unidentified hazardous materials associated with the stockpiled materials under both the proposed Project and No Project-No Development Alternative would be similar with full removal of the materials ultimately occurring. If previously undiscovered hazardous materials are encountered during long-term stockpile removal, they would be conducted in accordance with applicable federal, state, and local regulations, including LAWA's BMPs, the LAX Master Plan Mitigation Monitoring & Reporting Program (MMRP), *Procedure for the Management of Contaminated Materials Encountered During Construction* (the "Procedure") prepared in accordance with LAX Master Plan Commitment HM-2. Therefore, this Alternative would have a similar impact than the proposed Project with regard to the potential release of hazardous materials from stockpiled materials and impacts would be less than significant.

Because aircraft maintenance would continue to occur throughout LAX under the No Project-No Development Alternative, this Alternative would have a similar impact as the proposed Project with regard to the potential release of hazardous materials during aircraft maintenance.

Exposure of Workers to Hazardous Materials

The Project site would continue to be used as a construction staging area under the No Project-No Development Alternative and materials would continue to be stockpiled on-site. Routine maintenance would continue to occur throughout LAX in accordance with applicable regulations and manufacturers' recommendations. Worker exposure to hazardous materials associated with the stockpiling of materials on the Project site would be similar to existing conditions. Adherence to applicable plans and regulations, such as LAX Master Plan Commitment HM-2, LAWA's BMPs, federal Occupational Safety and Health Act (OSHA) and California Occupational Safety and Health Act (CalOSHA) regulations, and SCAQMD Rule 1166 (Volatile Organic Compound Emissions from Decontamination of Soil), would ensure that any potential contamination in stockpiled soils does not result in a significant impact to workers. As a result, the No Project-No Development Alternative would result in a less than significant impact with respect to worker exposure to hazardous materials.

The No Project-No Development Alternative would not have a construction phase, and therefore, would not require grading and/or the excavation of potentially contaminated subsurface soils and/or abandoned oil wells, and no enclosed spaces, such as trenches, would be created on the Project site. Therefore, this Alternative would have no impact with regard to exposing workers to hazardous materials during construction. Therefore, impacts would be less compared to the proposed Project and no Project-specific mitigation would be required. Aircraft maintenance would continue to occur throughout LAX under the No Project-No Development Alternative, and as such, this Alternative would have a similar potential to expose workers to hazardous materials during maintenance. The potential to expose workers to hazardous materials due to construction staging activities would not change from existing conditions and are not expected to be substantially greater than risks identified with operation of the proposed Project. Therefore, this Alternative would have a similar impact as the proposed Project with regard to exposing workers to hazardous materials during operation, and impacts would be less than significant.

Contamination of Soil and Groundwater/Prevention of Cleanup

Because no development would occur, the No Project-No Development Alternative would have no impact on the ongoing vacuum-enhanced free product remediation (VEFPR) system. No other ongoing remediation is occurring on the Project site. In comparison, the proposed Project would protect existing monitoring wells CMW-31, CMW-32, and CMW-33 in place through the use of concrete vaults that maintain access to the monitoring wells at all times.

Therefore, the No Project-No Development Alternative would have less impact than the proposed Project on the existing remediation systems because monitoring would not be restricted in any way under this Alternative.

Impacts Related to Landfill Capacity

Under the No Project-No Development Alternative, material would continue to be stockpiled on the Project site in the near-term in association with projects under construction at LAX. Over the long-term, it is likely that stockpiled materials would be removed from the Project site, either

being used as backfill for construction projects at LAX or disposed of at appropriate landfill facilities. With respect to stockpiled materials that do not contain hazardous materials, as with the proposed Project, these stockpiled materials could be disposed of at Class III Municipal Solid Waste (MSW) landfills within Los Angeles County. As discussed in Section 4.3, *Hazards & Hazardous Materials*, of this EIR, as of December 31, 2011, the most recent information available, the remaining MSW capacity of landfills in Los Angeles County is estimated at 127 million tons. As a result, adequate landfill capacity would be available to accommodate non-hazardous materials stockpiled on the Project site. If stockpiled materials are found to contain hazardous materials, they would be handled and disposed of in accordance with LAWA's Procedure prepared in accordance with LAX Master Plan Commitment HM-2, and properly disposed of at a Class I Hazardous Waste Landfill. At this time, there are no known capacity restraints at facilities accepting Class I hazardous waste.

During operation, the No Project-No Development Alternative would not increase the use of hazardous materials at LAX for aircraft maintenance. Hazardous waste generated at LAX is removed by private contractors and delivered to treatment, recycling, and disposal facilities both within and outside the Los Angeles region. Existing disposal capacity adequately meets the needs of routine maintenance activities currently occurring at LAX. As a result, the No Project-No Development Alternative would result in a less than significant impact with respect to landfill capacity.

Therefore, the No Project-No Development Alternative would have a similar impact as the proposed Project on solid waste facilities because the existing stockpiled materials would likely be removed from the Project site in the long-term.

Hydrology and Water Quality

Drainage

Under the No Project-No Development Alternative, the Project site would continue to consist of 12 acres of impervious surface area and 72 acres of pervious surface area. As discussed in Section 4.4, Hydrology and Water Quality, surface water runoff would continue to flow to the north, south, east and west. The majority of the surface water runoff would continue to be from northeast and drain towards the southwest, consistent with the prevailing topography of the Project site, resulting in the majority of Project site runoff flowing directly to the Pershing reinforced concrete box (RCB). The northern portion of the Project site would continue to flow northward to the World Way West RCB, and a small eastern portion of the Project site would flow eastward to a small drainage channel running along the west side of Taxiway AA, which in turn drains to the World Way West RCB. Under the No Project Alternative, the existing stormwater peak flow deficiencies would continue to occur in the four conveyance structures serving the Project site during a Capital Flood event.

In comparison, the proposed Project would increase the amount of impervious surface area on the Project site, but it would also include a structural BMP (i.e., a proposed detention/infiltration basin) to shave stormwater peak flows to the Pershing Drive RCB. This structural BMP would serve to reduce existing deficiencies in the conveyance infrastructure serving the Project Site. Under the No Project-No Development Alternative, no BMPs would be implemented to shave stormwater peak flows and the existing deficiencies would remain. Therefore, the No Project-No Development Alternative would result in a greater impact than the proposed Project with regard to drainage.

Groundwater

Under the No Project-No Development Alternative, the 84-acre Project site would continue to consist of 12 acres of impervious surface area and 72 acres of pervious surface area. Based on these figures, existing recharge associated with the Project site would continue to be approximately 17.76 acre-feet per year (AFY), or approximately 0.2 percent of total annual inflows to the West Coast Groundwater Basin. The No Project-No Development Alternative would not include the development of groundwater supply wells. Further, no groundwater production wells occur in the vicinity of LAX, and thus, groundwater within the vicinity of LAX is not utilized for the identified beneficial uses of the West Coast Groundwater Basin (i.e., municipal, agricultural, industrial). As a result, the No Project-No Development Alternative would result in no impact to groundwater withdrawal or recharge.

In comparison, the proposed Project would increase the amount of impervious surface area on the Project site by 56 acres, to a total of 68 acres, which would reduce groundwater infiltration occurring to the West Coast Groundwater Basin by approximately 0.21 percent. Although the Project site's current contribution to groundwater inflows constitute a negligible contribution (0.2 percent) to the West Coast Groundwater Basin, the proposed Project would reduce current inflows on the Project site by 78.4 percent when compared to existing conditions. Therefore, the No Project-No Development Alternative would have less impact than the proposed Project with regard to groundwater infiltration.

Water Quality

The No Project-No Development Alternative would not change water quality conditions at the Project Site. Most surface water runoff would continue to flow across unpaved soils and stockpiled materials and into the local storm drain system, thus, surface water quality would remain the same as under existing conditions and the No Project-No Development Alternative would result in no impact.

In comparison, the proposed Project would likely increase the concentration of pollutants of concern (e.g., metals, oils, grease) in surface water flows across the Project site. However, the proposed Project would also include on-site BMPs to ensure that there is no increase in pollutant concentrations to receiving water bodies (i.e., the Santa Monica Bay). The replacement of previous surfaces with paved surfaces would also serve to decrease sediment loads in surface water runoff. Therefore, the No Project-No Development Alternative would have a slightly greater impact than the proposed Project with regard to water quality because no treatment measures would be constructed under this Alternative and suspended solids (i.e., fine soils) would still continue to enter surface water flows.

Noise

As discussed in Section 4.5, *Noise*, under the proposed Project, construction noise and vibration would be generated from heavy-duty construction equipment and haul trucks; however, impacts would be less than significant. In comparison, the No Project-No Development Alternative would not result in construction activities and local noise and vibration levels associated with short-term construction would not occur. As such, no significant impacts from construction-related noise would occur under either scenario.

Under the proposed Project, operational noise sources would include aircraft maintenance activities occurring on the site and taxiing/towing of aircraft to the site, all of which would have

less than significant noise impacts. The No Project/No Build Alternative would not introduce any new sources of noise on the Project site or within the surrounding vicinity; ambient noise levels at the site would remain as they are under existing conditions, consistent with typical noise levels from the existing construction staging and soil stockpiling activities. As such, no significant impacts from operations-related impacts would occur under either scenario.

Land Use and Planning

Under the No Project-No Development Alternative, the Project site would continue to be used primarily as a staging area for airport construction projects, and would include modular construction trailers/offices, surface parking, paved roads, stockpile materials, and several outdoor loading and storage areas. Other airport-supporting uses would continue on the Project site, such as Guard Post 21 and the LAWAPD/TSA canine "walk" area.

As discussed in Section 4.6, *Land Use and Planning*, the Project site is located entirely within the LAX Plan area, as well as the LAX Specific Plan area. The LAX Plan designated that Project site as "Airport Airside" that permits the various uses that currently occur on the Project site including related airfield support services such as runways, taxiways, maintenance areas, fire protection facilities, and other ancillary airport facilities.

The existing uses on the Project site would also be consistent with permitted activities within LAX-A Zone area of the LAX Specific Plan that include surface and structured parking lots; airline maintenance and support; runways, taxiways, and service roads; aggregate/asphalt grinding and recycling facility, and other ancillary airport facilities.

However, the No Project-No Development Alternative would not address LAWA's need to efficiently and effectively maintain ADG VI aircraft and other aircraft at LAX. Therefore, while the No Project-No Development Alternative would be consistent with the land uses permitted under the LAX Specific Plan, it would not be consistent with LAX Plan policies and programs that aim to provide for more efficient and effective use of airport facilities, update airport facilities to accommodate New Large Aircraft, and modernize, upgrade, and improve LAX. The LAX Master Plan identifies the proposed Project site as Proposed Employee Parking and Airfield/Airport Open Space. Portions of the Project site are also identified as Airfield/Airport Open Space. As existing construction staging areas and other construction related uses would continue on the Project site under the No Project-No Development Alternative, these land uses would be inconsistent with the LAX Master Plan. In contrast, the proposed Project would be consistent with LAX Plan policies and programs and the LAX Master Plan Program by providing aircraft maintenance area and parking facilities in the southwest portion of the airport. As such land use impacts would be greater under the No Project-No Development Alternative than the proposed Project.

Construction Surface Transportation

The No Project-No Development Alternative would not involve any of the construction activities associated with the development of the proposed Project. Construction traffic associated with demolition, construction of new facilities, delivery of materials and hauling, and employee trips that would be required for the construction of the proposed Project would not occur. As discussed in Section 4.7, *Construction Surface Transportation*, the proposed Project would have a less than significant impact during the Project's construction phase. However, as the No Project-No Development Alternative entirely avoids the proposed Project's construction traffic

impacts, it would have less impact than the proposed Project on existing traffic conditions in the area.

5.6.1.1 Relationship of the No Project-No Development Alternative to Proposed Project Objectives

The No Project-No Development Alternative would not provide for development of a consolidated aircraft maintenance facility at LAX, having aircraft parking apron areas, maintenance hangars, employee parking areas, and related storage, equipment and facilities. As no development would occur and the physical conditions associated with the site and its activities would remain essentially the same as under current conditions, the No Project-No Development Alternative would not meet any of the proposed Project's objectives listed above under Section 5.3. Specifically, the No Project-No Development Alternative would not meet the proposed Project's objective to support the improvement and modernization of aircraft maintenance facilities at LAX and to accommodate larger, newer generation aircraft. The No Project-No Development Alternative Project would also not develop aircraft maintenance hangars and aircraft parking areas within close proximity on the same site, which is counter to the objective of providing efficient and effective use of airport facilities. The No Project-No Development Alternative would also not support consistency with the LAX Master Plan, which provides for an aircraft maintenance area to be developed in the southwest portion of the airport to help replace maintenance facilities that were removed in conjunction with LAX Master Plan improvements.

5.6.2 No Project-Existing LAX Master Plan Alternative

Air Quality

Under the No Project-Existing LAX Master Plan Alternative, development of aircraft maintenance facilities in the southwestern portion of the airport with aircraft parking apron areas, maintenance hangars, employee parking areas, and related storage, equipment and facilities would occur in a manner that replicates the exact program locations presented in the 2004 LAX Master Plan without the currently proposed Project refinements. The LAX Master Plan envisioned approximately 323,000 square feet of aircraft maintenance hangar area and 17 acres for the aircraft apron area and extensions of Taxiways B and C into the site. In comparison, the proposed Project would develop less hangar space (approximately 290,000 square feet) but would develop more apron area (approximately 29 acres).

Implementation of the No Project-Existing LAX Master Plan Alternative would result in construction-related air pollutant emissions anticipated to be generally comparable to those of the proposed Project. Construction activities for the facilities developed under the No Project-Existing LAX Master Plan Alternative would dispersed over three non-contiguous areas, which could require more construction equipment and/or further equipment/truck travel distances for Alternative-related improvements occurring deeper into the main airport area than would otherwise occur with construction of the proposed Project at a single consolidated location in close proximity to the main access route (Pershing Drive) for the western portion of the airport. Construction emissions associated with the smaller total apron area of the No Project-Existing LAX Master Plan Alternative (approximately 12-15 acres, including the 10 acres near the main hangar area and another two to five acres near the smaller hangar) compared to the amount of apron area associated with the proposed Project (approximately 29 acres) would be partially

offset by the comparatively greater amount of hangar area (323,000 square feet under the LAX Master Plan compared to 290,000 square feet under the proposed Project). Additionally, development of the improvements associated with the No Project-Existing LAX Master Plan Alternative would occur on areas that are currently occupied by aircraft apron areas or are otherwise paved/improved, which would require construction activities under this Alternative to include the removal, processing, and repaving of large areas of thick concrete (i.e., existing apron areas were designed for smaller, lighter aircraft and cannot support ADG VI aircraft), compared to the proposed Project site, which is largely unpaved. The No Project-Existing LAX Master Plan Alternative could potentially result in fewer export haul truck trips than the proposed Project during the anticipated development period of 2014 through 2018, given the fact that, as stated in Section 4.1, *Air Quality*, the proposed Project would include hauling activities including the export of approximately 295,000 cubic yards of soil stockpiled on the proposed Project site. While the export of this stockpiled soil would not be required as part of the No Project-Existing LAX Master Plan Alternative, it is likely that the export of the soils would still occur in the future, as their placement was intended to be temporary to begin with. Additionally, the No Project-Existing LAX Master Plan Alternative would involve certain hauling activities that would not occur under the proposed Project, such as for the removal of demolition materials associated with the removal/replacement of the existing Continental Airlines buildings formerly used for training and administration, and the hauling of materials associated with the removal/replacement of existing apron areas and other paved surfaces. The construction emissions from this Alternative would still exceed the daily regional significance threshold for NO_X following implementation of the same mitigation measures implemented under the proposed Project (see Section 4.1, *Air Quality*); hence, implementation of the No Project-Existing LAX Master Plan Alternative would not avoid or substantially reduce the construction-related air quality impacts of the proposed Project.

With regard to operational emissions, implementation of the No Project-Existing LAX Master Plan Alternative would not result in a material change in the estimated emissions compared to the proposed Project. As would be the case under the proposed Project, this Alternative would not result in a change in the number or types of aircraft operations, because aircraft operational decisions are currently, and are expected to continue to be, driven by air service demand and supply factors, not maintenance facilities.

The reduced maintenance hangar area associated with the proposed Project, compared to the amount under the No Project-Existing LAX Master Plan Alternative (approximately 290,000 square feet compared to 323,000 square feet), would not be materially different and is not expected to result in a material change in operational aircraft maintenance emissions. Maintenance emissions are driven by the number and type of aircraft, as well as the types of maintenance performed, which are not expected to change. Similar to the proposed Project, the redirection and consolidation of maintenance operations to the area envisioned under the No Project-Existing LAX Master Plan Alternative would result in longer distances between gates and maintenance with some minimal amount of taxiing/towing emissions compared to existing conditions.

Therefore, under the No Project-Existing LAX Master Plan Alternative, short-term construction-related air quality impacts would be similar to the proposed Project and long-term operational-related air quality impacts would be similar to the proposed Project. Overall, this Alternative would have similar impacts as compared to the proposed Project on existing air quality and

would have a significant impact as it would exceed the regional significance threshold for NO_X during construction even with implementation of control measures.

Regarding the Health Risk Assessment, the location of construction activities and subsequent aircraft maintenance activities under the No Project-Existing LAX Master Plan Alternative would be further from the western fence line, but approximately the same distance to the nearest residential receptors as the proposed Project. The level of construction would be similar as compared to the proposed Project; therefore, the health risks due to exposure to construction emissions under this Alternative would be similar to the Project and less than significant. Aircraft would be towed approximately a similar distance under this Alternative as under the proposed Project, therefore, operational emissions would also be similar and impacts would be less than significant.

Greenhouse Gas Emissions

Implementation of the No Project-Existing LAX Master Plan Alternative would result in similar construction-related GHG emissions as analyzed for the proposed Project. While the size of the apron area under the proposed Project site is greater than the size of the apron area under the this Alternative, the aircraft maintenance hangar area under the proposed Project would be less than this Alternative. In addition, this Alternative would potentially result in similar export haul truck trips as the proposed Project. While the No Project-Existing LAX Master Plan Alternative site does not have stockpiled soil, the Alternative would involve demolition and associated haul trips from the removal of debris.

With regard to operational emissions, implementation of the No Project-Existing LAX Master Plan Alternative would not result in a material change in the estimated GHG emissions compared to the proposed Project. As would be the case under the proposed Project, the No Project-Existing LAX Master Plan Alternative would not result in a change in the number or types of aircraft operations, because aircraft operational decisions are driven by air service demand and supply factors, not maintenance facilities.

The reduced maintenance hangar area associated with the proposed Project, compared to the No Project-Existing LAX Master Plan Alternative (approximately 290,000 square feet compared to 323,000 square feet), is not materially different and therefore is not expected to result in any material change in operational aircraft maintenance emissions. Similar to the proposed Project, the redirection and consolidation of maintenance operations to the area envisioned under the No Project-Existing LAX Master Plan Alternative would result in longer distances between gates and maintenance with some minimal amount of taxiing/towing GHG emissions compared to existing conditions.

Therefore, under the No Project-Existing LAX Master Plan Alternative, short-term construction-related GHG emissions would be similar to the proposed Project and long-term operational-related GHG emissions would be similar to the proposed Project. Overall, this Alternative would have a less than significant impact and similar impacts as compared to the proposed Project on existing GHG emissions.

Hazards and Hazardous Materials

Release of Hazardous Materials

Under the No Project-Existing LAX Master Plan Alternative, aircraft parking aprons and maintenance facilities would be constructed in the southwest portion of LAX, east of Taxiway

AA. The proposed location of improvements under this Alternative are known to contain subsurface groundwater contamination associated with a free product jet fuel plume which originated in the past at the former Continental Aircraft Maintenance Facility. This groundwater plume is currently being remediated through a VEFPR groundwater remediation system. In addition, a separate groundwater contamination plume consisting of Halogenated Volatile Organic Compounds (HVOCs) is also suspected to exist in the southwest portion of LAX, where improvements to accommodate aircraft maintenance and parking would occur under this Alternative. If contaminated soils and/or groundwater is encountered during grading, excavation, or other construction activities carried out under this Alternative, they would be handled in accordance with applicable federal, state, and local regulations, including LAWA's Procedure, prepared in accordance with LAX Master Plan Commitment HM-2, and LAWA's BMPs. Any hazardous materials found at the Project site that would be transported off-site would be done by licensed operators in accordance with all applicable federal, state, and local regulations.

In addition to subsurface contamination, this Alternative would require the removal of the former Continental Airlines training building, which is now vacant. Given the age of this facility, it is possible that the former Continental Airlines training building could contain hazardous materials, such as asbestos-containing materials (ACMs) and lead-based paints (LBPs). As noted in the LAX Master Plan Final Environmental Impact Statement (EIS)/EIR, the handling and disposal of hazardous building materials, including asbestos and ACMs, and LBPs, is strictly regulated by federal, state, and local laws. Among these laws and standards are the Toxic Substances Control Act (TSCA), Resources Conservation and Recovery Act (RCRA), the National Emission Standards for Hazardous Air Pollutants (NESHAP), and the California Hazardous Waste Control Law (HWCL). In addition, SCAQMD Rule 1403, Asbestos Emissions from Renovation/Demolition Activities, requires the surveying of structures for ACMs; agency notification of intention to remove asbestos; ACM removal procedures and time schedules; ACM handling and clean up procedures; and disposal and landfill requirements. Prior to the demolition of the former training facility, a site-specific Asbestos Abatement Specification would be completed to determine the presence of hazardous materials in the structures. If found to be present, these materials would be removed in accordance with the above regulations. As a result, the removal of ACMs or previously undiscovered hazardous materials would result in a less than significant impact.

In comparison to the proposed Project, both the Project site and the proposed location of maintenance areas assumed under this Alternative are suspected to contain subsurface soil and/or groundwater contamination that could be encountered during construction activities, although no abandoned oil wells are suspected at maintenance areas under the No Project-LAX Master Plan Alternative. Further, the proposed location of maintenance and parking areas under the No Project-LAX Master Plan Alternative would not be located within a City of Los Angeles-designated methane zone. However, both the proposed Project and No Project-Existing LAX Master Plan Alternative would be carried out in accordance with LAX Master Plan Commitment HM-2, which provides guidance for LAX projects involving excavation and grading of soils, and LAWA's BMPs. Therefore, the No Project-Existing LAX Master Plan Alternative would have a similar impact as the proposed Project during construction.

With regard to operational impacts, the relocation of aircraft maintenance and parking areas to the area east of Taxiway AA under the No Project-Existing LAX Master Plan Alternative would also consolidate maintenance operations as under the proposed Project, and thus, would not

materially change the amount of hazardous materials utilized at LAX. Under both the proposed Project and the No Project-Existing LAX Master Plan Alternative, maintenance operations and any potential spills would be required to follow applicable federal, state, and Los Angeles Fire Department (LAFD) regulations. These regulations and provisions are in place so potential spills and releases would not create a hazard to the public or the environment, and would not result in contamination of soil or groundwater. Thus, impacts with respect to the handling of hazardous materials would not create a hazard to the public or the environment and impacts would be less than significant. Therefore, this Alternative would have a similar impact as the proposed Project with regard to a potential release of hazardous materials during operation.

Exposure of Workers to Hazardous Materials

As with the proposed Project, previously unidentified soil and/or perched groundwater contamination could be encountered during construction activities for this Alternative. Further, the former Continental Airlines training building, which is now vacant, could possibly contain hazardous materials, such as ACMs and LBPs. Exposure of construction workers to contaminated materials would be minimized by implementing the measures required by federal, state, and local laws and regulations. In addition, LAWA would implement LAX Master Plan Commitment HM-2, Handling of Contaminated Materials Encountered During Construction, to further reduce the potential adverse effects of excavating contaminated materials. Implementation of this Commitment would ensure that contaminated materials encountered during construction are properly identified and remediated and disposed of in accordance with all applicable regulations, including those governing worker health and safety. As such, potential construction impacts associated with the excavation of contaminated materials would be less than significant.

With regard to operations, the No Project-Existing LAX Master Plan Alternative would have a less than significant impact regarding exposure of workers to hazardous materials because exposure of maintenance workers to contaminated materials would be minimized by handling all materials in accordance with applicable regulations and implementing the measures required by federal, state, and local laws and regulations.

When compared to the proposed Project, an eastward shift in the location of maintenance facilities would not materially change the potential for exposure of workers to hazardous materials. During construction, there is the potential at both locations for unknown subsurface contamination to occur, although the areas east of Taxiway AA are not within a City of Los Angeles-designated methane zone. Any encountered subsurface hazardous materials would be addressed in accordance with LAX Master Plan Commitment HM-2, and workers would not be exposed to vapors in excess of OSHA and CalOSHA standards. Further, any hazardous materials encountered during the removal of the former Continental Airlines training building would be handled in accordance with federal, state, and SCAQMD regulations. As a result, the No Project-LAX Master Plan Alternative would result in a less than significant impact with regard to worker exposure to hazardous materials during construction.

During operation, maintenance personnel would utilize similar materials and quantities of these materials at either location. Further, the location of proposed aircraft parking and maintenance activities under this Alternative is not located within a City of Los Angeles-designated methane zone. As a result, the design recommendations of Los Angeles Methane Seepage Regulations (e.g., methane barriers, venting) would not apply to final building design. In comparison, the Project site is located within a designated Methane Zone; however, adherence to the design

recommendations of the Los Angeles Methane Seepage Regulations would prevent methane intrusion into interior spaces under the proposed Project. Therefore, impacts related to the exposure of workers to hazardous materials would be less than significant during operation of the No Project-Existing LAX Master Plan Alternative and similar to impacts under the proposed Project.

Contamination of Soil and Groundwater/Prevention of Cleanup

The site for this Alternative is east of Taxiway AA, and above the groundwater contamination plume originating from the former Continental Airlines Aircraft Maintenance Facility. The VEFPR groundwater remediation system for this groundwater contamination plume currently includes 120 recovery wells and 36 groundwater monitoring wells, the majority of which occur in the proposed location of aircraft maintenance facilities under the No Project-Existing LAX Master Plan Alternative. Those wells and conveyance infrastructure are integral to the VEFPR groundwater remediation system, which will likely be in operation for 10 or more years.

In comparison to the proposed Project, the No Project-Existing LAX Master Plan Alternative would result in greater impacts to the VEFPR groundwater remediation system. For instance, with the proposed Project site shifted to the west of the specific location presented in the LAX Master Plan, the potential for new maintenance facilities to adversely affect an extensive number of groundwater extraction wells and associated conveyance piping located directly above the contamination plume would be avoided. Additionally, under the No Project-Existing LAX Master Plan Alternative, the placement of a concrete slab above the free product jet fuel plume could substantially limit the ability to monitor, maintain, and service much of the VEFPR groundwater remediation system, which could hinder and delay groundwater clean-up efforts. Furthermore, as the VEFPR is a regulatory enforcement action by the State Water Resources Control Board, with Continental Airlines being the responsible party, there could be substantial limitations on LAWA's ability to develop a maintenance hangar and apron area at the location identified under the No Project-Existing LAX Master Plan Alternative. This is especially true if the Los Angeles Regional Water Quality Control Board (LARWQCB) determines in the future that the current remediation strategy for the site needs to be modified or supplemented. Therefore, the No Project-Existing LAX Master Plan Alternative would have a greater impact than the proposed Project on existing groundwater cleanup. Whereas the proposed Project impacts on this system are less than significant, under the No Project-Existing LAX Master Plan Alternative impacts would be significant and would likely involve project-specific mitigation beyond implementation of LAX Master Plan Commitments HM-1 and HM-2 to reduce impacts to a less than significant level.

Impacts Related to Landfill Capacity

Under the No Project-Existing LAX Master Plan Alternative, material would continue to be stockpiled on the Project site in the near-term in association with projects under construction at LAX. Over the long-term, it is likely that stockpiled materials would be removed from the Project site, either being used as backfill for construction projects at LAX or disposed of at appropriate landfill facilities. Based on the findings of the recent Geosyntec Report, stockpiled materials currently on the Project site do not contain concentrations of contaminants that qualify them as Class I hazardous materials. Nonetheless, the stockpiled materials are not homogeneous in composition and may contain previously undiscovered hazardous materials. Further, the No Project-Existing LAX Master Plan Alternative would require the demolition of an existing training facility that would require the disposal of construction and demolition debris at an inert materials

landfill; the proposed Project does not require the demolition of an existing building. As discussed above, in-county landfills have adequate capacity to accommodate inert waste materials. If hazardous materials are found during construction of the No Project-Existing LAX Master Plan Alternative, they would be handled and disposed of in accordance with LAWA's Procedure, prepared in accordance with LAX Master Plan Commitment HM-2, and properly disposed of at a Class I Hazardous Waste Landfill.

During operation, the No Project-Existing LAX Master Plan Alternative would accommodate the same types of the routine maintenance activities that are currently occurring elsewhere at the airport; hence, the types of hazardous wastes generated under the No Project-Existing LAX Master Plan Alternative are expected to be similar to those now generated. Hazardous waste generated at LAX is removed by private contractors and delivered to treatment, recycling, and disposal facilities both within and outside the Los Angeles region. Existing disposal capacity adequately meets the needs of routine maintenance activities currently occurring at LAX. As a result, the No Project-Existing LAX Master Plan Alternative would result in a less than significant impact with respect to landfill capacity.

Therefore, the No Project-Existing LAX Master Plan Alternative would have a somewhat greater impact than the proposed Project on solid waste facilities because the existing stockpiled materials would likely be removed from the Project site in the long-term, and the Alternative would also require the demolition of an existing former training building that would require disposal of inert construction and debris materials at area landfills.

Hydrology and Water Quality

Drainage

Under the No Project-Existing LAX Master Plan Alternative, the 84-acre Project site would continue to consist of 12 acres of impervious surface area and 72 acres of pervious surface area. Surface water runoff would continue to flow to the north, south, east and west. The majority of the surface water runoff would continue to be from northeast and drain towards the southwest, consistent with the prevailing topography of the Project site, resulting in the majority of Project site runoff flowing directly to the Pershing RCB. The northern portion of the Project site would continue to flow northward to the RCB along World Way West, and a small eastern portion of the Project site would flow eastward to a small drainage channel running along the west side of Taxiway AA, which in turn drains to the World Way West RCB. Under the No Project-Existing LAX Master Plan Alternative, the existing peak flow deficiencies would continue to occur in the four conveyance structures serving the Project site during a Capital Flood event.

The area proposed for aircraft parking aprons and maintenance facilities under the No Project-Existing Master Plan Alternative (i.e., the southwest portion of LAX adjacent to the east side of Taxiway AA) flows to the Imperial Drain, which as with the Project site, ultimately drains to the Santa Monica Bay. The No Project-Existing LAX Master Plan Alternative would increase the amount of impervious surface area flowing into the Santa Monica Bay by approximately 6 percent.[2] Given the paved/developed nature of the southwest portion of LAX where aircraft parking and maintenance facilities would occur under the No Project-Existing LAX Master Use

[2] City of Los Angeles. Final Environmental Impact Statement/Environmental Impact Report for Master Plan Improvements at Los Angeles International Airport (LAX), Table F4.7-5, *Total Impervious Area Within the Hydrology and Water Quality Study Area*, and pg. 4-780. April 2004.

Plan Alternative, this Alternative would not materially increase the amount of impervious surface area at the southwest portion of LAX and any change would represent a marginal increase in regional impervious surface area. As concluded in a hydrologic analysis completed for the LAX Master Plan Final EIS/EIR, the additional impervious surface area and surface water runoff associated with the development of the LAX Master Plan improvement, including aircraft parking and maintenance areas at the southwest portion of LAX, would not exceed the capacity of the Imperial Drain System and no flooding would occur. As a result, implementation of the No Project-Existing LAX Master Plan Alternative would not substantially alter the drainage or increase runoff such that it would exacerbate flooding or result in substantial erosion, and a less than significant impact would result.

Although the No Project-Existing LAX Master Plan Alternative would not exceed the conveyance capacity of existing infrastructure, it would result in greater impacts to drainage than the proposed Project. For instance, while the proposed Project would increase the amount of impervious surface area on the Project site, it would also include a proposed detention/infiltration basin to shave peak stormwater flows to area infrastructure. This detention/infiltration would serve to reduce existing deficiencies in stormwater infrastructure. Under the No Project-Existing LAX Master Plan Alternative, this detention/infiltration basin would not be realized and existing deficiencies would remain. The deficiencies are associated with sections of the conveyance infrastructure that do not serve the No Project-Existing LAX Master Plan Alternative site and as a result, this Alternative would have no impact on those deficiencies. Therefore, the No Project-LAX Master Plan Alternative would have a greater impact than the proposed Project on drainage because this Alternative would not address existing infrastructure deficiencies through structural BMPs to reduce peak stormwater flows.

Groundwater

Under the No Project-Existing LAX Master Plan Alternative, the Project site would continue to contain 12 acres of impervious surface area and 72 acres of pervious surface area. Based on these figures, existing recharge associated with the Project site would continue to be approximately 17.76 AFY, or approximately 0.27 percent, of total annual inflows to the West Coast Groundwater Basin. The LAX Master Plan Final EIS/EIR concluded that the associated increase in impervious surface area associated with development of the LAX Master Plan would reduce groundwater recharge at LAX from 171 AFY to 131 AFY; however, the reduction in groundwater recharge would not substantially change groundwater storage or groundwater elevations beneath LAX and groundwater production in the region would not be affected. In addition, the southwest portion of LAX where aircraft parking aprons and maintenance facilities would occur under the No Project-Existing LAX Master Use Plan Alternative is developed and covered with impervious surface area. Therefore, the replacement of existing impervious surface areas with aircraft parking aprons and maintenance facilities under this Alternative would not increase the amount of impervious surface area at the southwest portion of LAX. The No Project-Existing LAX Master Plan Alternative would not include the development of groundwater supply wells. Further, the negligible reduction in groundwater recharge under the No Project-Existing LAX Master Plan Alternative would not interfere with the productivity of pre-existing water wells because no groundwater production wells occur in the vicinity of LAX, and thus, groundwater within the vicinity of LAX is not utilized for the identified beneficial uses of the West Coast Groundwater Basin (i.e., municipal, agricultural, industrial). As a result, the No Project-Existing LAX Master Plan Alternative would result in a less than significant impact to groundwater withdrawal or recharge.

Impacts to groundwater infiltration would be less under the No Project-Existing LAX Master Plan Alternative than the proposed Project. Specifically, the proposed Project would increase the amount of impervious surface area on the Project site by 56 acres to a total of 68 acres of impervious surface area. This increase in impervious surface area would reduce groundwater infiltration occurring at the Project site from an estimated 17.76 AFY under existing conditions to 3.84 AFY under the proposed Project, which was found to be a less than significant impact. Although the Project site's current contribution to groundwater inflows constitute a negligible contribution (0.27 percent) to the West Coast Groundwater Basin, the proposed Project would nonetheless reduce current groundwater inflows occurring at the Project site by 78.4 percent when compared to existing conditions. In comparison, because the No Project-Existing LAX Master Plan Alternative site is currently covered with impervious surface areas, this Alternative would not reduce the amount of groundwater infiltration occurring at LAX. Under both the proposed Project and No Project-Existing LAX Master Plan Alternative, the negligible reduction in groundwater recharge would not interfere with the productivity of pre-existing water wells because no water production wells occur in the vicinity and groundwater in the vicinity of LAX is not used for the identified beneficial uses of the West Coast Groundwater Basin (i.e., municipal, agricultural, industrial). Therefore, although the reduction in groundwater inflows under the proposed Project is not materially considerable in the context of the West Coast Groundwater Basin, the No Project-Existing LAX Master Plan Alternative would result in less impact than the proposed Project with regard to groundwater recharge because this Alternative would not materially change the impervious surface area at LAX, and thus, would not reduce groundwater infiltration.

Water Quality

The area proposed for aircraft parking aprons and maintenance facilities under the No Project-Existing Master Plan Alternative (i.e., the southwest portion of LAX adjacent to the east side of Taxiway AA) flows to the Imperial Drain, which as with the Project site, ultimately drains to the Santa Monica Bay. The LAX Master Plan Final EIS/EIR recognized that the increased development and activity area in the portions of LAX that drain into the Imperial Drain and Santa Monica Bay would increase the amount of certain pollutants in surface water runoff, such as metals and petroleum hydrocarbons, and decrease the amount of other pollutants in surface water flows, such as sediments and bacteria. Any potential increase in pollutants of concern in surface water runoff from the portion of LAX that flows into the Imperial Drain would be reduced through the implementation of BMPs, as guided by the Conceptual Drainage Plan (LAX Master Plan Commitment HWQ-1). As with the proposed Project, these BMPs would be incorporated into the project-specific Standard Urban Stormwater Management Plan (SUSMP). The SUSMP would require approval by the City of Los Angeles Bureau of Sanitation – Watershed Protection Division prior to the start of construction. All BMPs would be required to be designed in accordance with the LAWA Design and Construction Handbook, which requires projects to be in compliance with the City's Low Impact Development (LID) Ordinance and includes technical approaches and BMPs to reduce stormwater pollutants in first-flush flows. Since the No Project-Existing LAX Master Use Plan Alternative would be required to comply with the municipal storm sewer system (MS4) Permit (through identification of project-specific BMPs in a SUSMP that serve to avoid a net increase in pollutant loading), it is not anticipated that the No Project-Existing LAX Master Plan Alternative would result in additional wet-weather pollutant loading of 303(d)-listed water bodies and associated impacts would be less than significant.

Therefore, the No Project-Existing LAX Master Plan Alternative would result in a less than significant impact with regard to water quality.

With regard to surface water quality, the No Project-Existing LAX Master Plan Alternative would result in a smaller net increase in the amount of impervious surface area and associated pollutants (e.g., metals, petroleum hydrocarbons) than the proposed Project. The increase in impervious surface area on the Project site was found to result in a less than significant impact on water quality through the implementation of on-site BMPs included as part of a project-specific SUSMP. These BMPs included structural BMPs such as a detention/infiltration basin, as well as media filters, hydrodynamic separators, and/or StormTraps. However, both the Project and the Alternative would include BMPs to reduce pollutant loads so that no increase in the amount of pollutants flowing into the Santa Monica Bay would occur in accordance with the SUSMP. Although the No Project-Existing LAX Master Plan Alternative would increase the amount of impervious surface area in the portion of LAX that drains to Santa Monica Bay by approximately 6 percent, development of aircraft parking aprons and maintenance facilities in the southwest portion of LAX would not contribute to the increase in impervious surface area because the area is already composed of impervious surface areas. In comparison, the increase on 56 acres of impervious surface area on the Project site under the proposed Project would increase this impervious area flowing to the Santa Monica watershed by approximately 1 percent, for a total increase of 7 percent when combined with other improvements under the LAX Master Plan. Compared to baseline conditions, neither is considered a significant increase when considering proposed drainage facilities and BMPs to reduce the potential for water quality impacts. Therefore, the No Project-Existing LAX Master Plan Alternative would result in similar impacts as the proposed Project, which was concluded to result in a less than significant impact, with regard to surface water quality.

Noise

The No Project-Existing LAX Master Plan Alternative would result in construction activities comparable in intensity to the proposed Project on a daily basis. The construction noise analysis conducted in support of the LAX Master Plan indicates that noise sensitive uses within 600 feet of construction activities may be significantly impacted. Under the No Project-Existing LAX Master Plan Alternative, the nearest noise-sensitive land use to the site is residential development to the south in El Segundo at approximately the same or similar distance as from the proposed Project site. The proposed Project would switch the east-west relationship of the future parking facility and the aircraft maintenance facility, which would not place either facility substantially closer to or farther from the nearest noise-sensitive uses. Therefore, noise impacts from construction activities under the No Project-Existing LAX Master Plan Alternative would be less than significant and similar to the proposed Project.

With regard to operational impacts, implementation of the No Project-Existing LAX Master Plan Alternative would not result in a change in the estimated noise levels compared to the proposed Project. As would be the case under the proposed Project, this Alternative would not result in a change in the number or types of aircraft operations, because aircraft operational decisions are driven by air service demand and supply factors, not maintenance facilities.

The reduced maintenance hangar area associated with the proposed Project, compared to the amount under the No Project-Existing LAX Master Plan Alternative (approximately 290,000 square feet compared to 323,000 square feet), would not result in a material difference or change in operational aircraft maintenance-related noise levels. Similar to the proposed

Project, the redirection and consolidation of maintenance operations to the area envisioned under the No Project-Existing Master Plan Alternative would result in longer distances between gates and maintenance with some minimal amount of taxiing/towing activities compared to existing conditions in this area of LAX. However, the noise associated with taxiing/towing would not affect the airport-related noise contours off the airport property.

Therefore, under the No Project-Existing Master Plan Alternative, short-term construction-related noise impacts would be similar to the proposed Project and long-term operational-related noise impacts would be similar to the proposed Project. Overall, this Alternative would have a less than significant impact and similar construction-related and operational-related noise impacts as compared to the proposed Project.

Land Use and Planning

Under the No Project-Existing LAX Master Plan Alternative, development of aircraft maintenance facilities in the southwestern portion of the airport with aircraft parking apron areas, maintenance hangars, employee parking areas, and related storage, equipment and facilities would occur as envisioned in the LAX Master Plan. As proposed under the LAX Master Plan, a new 275,000 square foot aircraft maintenance hangar would be constructed west of the existing United-Continental Hangar, with a new aircraft apron area placed between the new hangar and Taxiway C. The former Continental Airlines training building would be demolished and rebuilt as a 23,000 square foot ancillary building. Additionally, per the LAX Master Plan, another new maintenance hangar, approximately 25,000 square feet in size, would be located between the United-Continental Hangar and the American Airlines High-Bay Hangar.

As discussed in Section 4.6, *Land Use and Planning*, both the LAX Plan and the LAX Specific Plan, designate the entire western portion of the airport as “Airport Airside” which allows aircraft maintenance areas/facilities and parking areas/facilities and related airfield support services irrespective of location. Similar to the proposed Project, airport maintenance and parking uses developed under the No Project-Existing LAX Master Plan Alternative would be consistent and would not conflict with these plans.

As the No Project-Existing LAX Master Plan Alternative would construct aircraft maintenance and parking facilities as envisioned under the LAX Master Plan, the No Project-Existing LAX Master Plan Alternative would be consistent with the LAX Master Plan.

As discussed in Section 4.6, *Land Use and Planning*, changes in the locations of aircraft maintenance and parking facilities under the proposed Project would not materially change the conceptual framework for development in the Project area as set forth in the LAX Master Plan Program. The proposed Project would therefore remain consistent with the LAX Master Plan Program by providing an aircraft maintenance area in the southwest portion of the airport.

As such, land use impacts under the No Project-Existing LAX Master Plan Alternative would be similar to the proposed Project and would be less than significant.

Construction Surface Transportation

Under the No Project-Existing LAX Master Plan Alternative, development of aircraft maintenance facilities in the southwestern portion of the airport with aircraft parking apron areas, maintenance hangars, employee parking areas, and related storage, equipment and facilities would occur as envisioned in the LAX Master Plan.

Construction traffic impacts that would occur under the No Project-Existing LAX Master Plan Alternative would include potential temporary impacts expected to occur during construction/improvements. Similar to the proposed Project, construction traffic under the No Project-Existing LAX Master Plan Alternative would also access the Project site via World Way West and Pershing Drive. The volume of daily construction traffic associated with the No Project-Existing LAX Master Plan would be similar to the volume that might occur under the proposed Project. Similar to the proposed Project, no significant construction-related traffic impacts are anticipated to occur under the No Project-Existing LAX Master Plan Alternative.

Furthermore, both the No Project-Existing LAX Master Plan Alternative and the proposed Project would incorporate applicable transportation-related LAX Master Plan commitments to further reduce temporary construction impacts. Therefore, construction surface transportation impacts under the No Project-Existing LAX Master Plan Alternative would be similar to the proposed Project and would be less than significant.

5.6.2.1 Relationship of the No Project-Existing Master Plan Alternative to Proposed Project Objectives

As the No Project-Existing LAX Master Plan Alternative would construct aircraft maintenance and parking facilities as envisioned under the LAX Master Plan, the No Project-Existing LAX Master Plan Alternative would meet the proposed Project's objective that supports the provision of maintenance facilities in the southwest portion of the airport as envisioned in the LAX Master Plan.

However, compared to the proposed Project, the No Project-Existing LAX Master Plan Alternative would only partially meet the objective that encourages the provision of modern, efficient, and effective aircraft maintenance and parking areas that need to be replaced in conjunction with the LAX Master Plan as discussed further below. In addition, this Alternative also would only partially support the proposed Project's objective to provide maintenance and aircraft parking areas that meet the needs of existing aircraft at the airport, including modern ADG VI aircraft. Furthermore, the No Project-Existing LAX Master Plan Alternative would involve development above a groundwater contamination plume. This would have the potential to substantially limit the ability to continue to monitor, maintain, and service much of the existing VEFPR groundwater remediation system in the area, which could delay groundwater clean-up efforts and pose a significant constraint to development of maintenance facilities at that location such that the proposed Project's objectives might not be attained.

As the operational characteristics of larger aircraft at LAX are better understood today than when the LAX Master Plan was prepared, the ability to provide aircraft maintenance hangars and aircraft parking areas sized for ADG VI aircraft located in proximity to one another is not afforded through the exact aircraft maintenance facilities layout reflected in the 2004 LAX Master Plan. Specifically, the 2004 LAX Master Plan proposed to help offset the loss of existing aircraft maintenance facilities through the construction of three smaller hangar/maintenance facilities dispersed in the western portion of the airport as proposed in the No Project-Existing LAX Master Plan Alternative. Only one of those facilities, the hangar proposed on the east side of Taxiway AA, would be able to accommodate large aircraft such as ADG V and ADG VI aircraft. However, due to the relatively small/shallow apron area proposed in front of that hangar, encompassing only about 10 acres, this site would substantially limit the ability to park multiple large aircraft (i.e., possibly allowing only two ADG VI aircraft within the hangar and two

ADG VI aircraft parked on the apron outside the hangar). In contrast, the proposed Project would be able to accommodate up to 10 ADG VI aircraft, or a mix of smaller aircraft on the site.

Therefore, while the No Project-Existing LAX Master Plan Alternative would be consistent with the LAX Master Plan by providing an aircraft maintenance area in the southwest portion of the airport, this Alternative would not as effectively consolidate and modernize existing aircraft maintenance facilities that would serve existing aircraft needs at LAX, including new facilities that have been or will be replaced in conjunction with the LAX Master Plan.

5.6.3 Reduced Project Alternative

Air Quality

Under the Reduced Project Alternative, total construction emissions and the duration of impacts associated with these emissions would be less than the proposed Project given the reduced development footprint. However, although implementation of the Reduced Project Alternative would result in less development, this Alternative would still result in similar maximum daily emissions given that the intensity of construction activity would likely remain the same. As stated in Section 4.1, *Air Quality*, the thresholds of significance are based on maximum daily emissions and the proposed Project would have significant construction-related impacts with respect to maximum daily regional NO_X emissions. As the Reduced Project Alternative would have a similar intensity of construction activity, this Alternative would result in similar significant impacts with respect to maximum daily NO_X emissions as compared to the proposed Project. Construction emissions from this Alternative would still exceed the regional significance threshold for NO_X following implementation of the same control measures implemented under the proposed Project (see Section 4.1, *Air Quality*).

With regard to operational emissions, implementation of the Reduced Project Alternative would result in similar emissions compared to the proposed Project. As would be the case under the proposed Project, this Alternative would not result in a change in the number or types of aircraft operations, because aircraft operational decisions are driven by air service demand and supply factors, not maintenance facilities. The Reduced Project Alternative would eliminate one of the two aircraft maintenance hangars proposed; however, maintenance activities that would have been conducted at the second hangar would occur elsewhere at LAX. Therefore, emissions associated with maintenance activities at the hangars would not be materially different and therefore is not expected to result in any change in aircraft maintenance emissions. Similar to the proposed Project, the redirection and consolidation of maintenance operations to the site would result in longer distances between gates and maintenance with some minimal amount of taxiing/towing emissions compared to existing conditions. Therefore, this Alternative would result in similar operational emissions as compared to the proposed Project.

Therefore, under the Reduced Project Alternative, total construction-related emissions and the duration of emissions would be reduced, although daily construction emissions would be similar. Also, long-term operational-related air quality impacts would be similar compared to the proposed Project. Overall, this Alternative would have similar impacts as compared to the proposed Project on existing air quality. Peak construction emissions from this Alternative would still result in a significant and unavoidable impact as it would still exceed the daily regional significance threshold for NO_X to the same extent as the proposed Project following implementation of control measures.

Regarding the Health Risk Assessment, the Reduced Project Alternative would be located on the same general site as the proposed Project but would have fewer days of construction activity. Therefore, the health risk impacts due to construction would be slightly less than those for the proposed Project, which were less than significant. The number of aircraft maintained at the Site under the Reduced Project Alternative would also be slightly less than that under the proposed Project and therefore the health risk impacts due to operations would also be slightly less than those for the proposed Project, which were less than significant.

Greenhouse Gas Emissions

Implementation of the Reduced Project Alternative would result in less development and fewer total construction GHG emissions. Although the Reduced Project Alternative would result in the same intensity of construction activity, the total duration of construction would be reduced. Therefore, under this Alternative, impacts related to construction GHG emissions would be less than the proposed Project.

With regard to operational GHG emissions, implementation of the Reduced Project Alternative would result in slightly fewer estimated emissions compared to the proposed Project. As would be the case under the proposed Project, this Alternative would not result in a change in the number or types of aircraft operations, because aircraft operational decisions are driven by air service demand and supply factors, not maintenance facilities. The Reduced Project Alternative would eliminate one of the two aircraft maintenance hangars proposed; however, maintenance activities that would have been conducted at the second hangar would occur elsewhere at LAX. Therefore, emissions associated with maintenance activities at the hangars would not be materially different and therefore is not expected to result in any change in aircraft maintenance emissions. Similar to the proposed Project, the redirection and consolidation of maintenance operations to the site would result in longer distances between gates and maintenance with some minimal amount of taxiing/towing emissions compared to existing conditions. However, there would be fewer taxiing/towing trips to the site under this Alternative, given the reduction in hangar and apron area. Therefore, this Alternative would result in slightly fewer GHG emissions from taxiing/towing trips than the proposed Project.

Therefore, under the Reduced Project Alternative, construction-related GHG impacts would be less than the proposed Project and long-term operational-related GHG impacts would be slightly less than the proposed Project. Overall, this Alternative would have a less than significant impact and less impacts than the proposed Project on existing GHG emissions.

Hazards and Hazardous Materials

Release of Hazardous Materials

The Reduced Project Alternative would require the removal of an estimated 295,000 cubic yards of stockpiled materials. The stockpiled materials do not contain concentrations of contaminants that quality them as Class I hazardous materials. If previously undiscovered hazardous materials are encountered during stockpile removal or other portions of construction, they would be conducted in accordance with applicable federal, state, and local regulations, including LAWA's Procedure, which was prepared in accordance with LAX Master Plan Commitment HM-2, and LAWA's BMPs. Any hazardous materials found at the Project site that would be transported off-site would be done by licensed operators in accordance with all applicable federal, state, and local regulations. As a result, the removal of stockpiled soils or previously undiscovered hazardous materials would result in a less than significant impact.

Construction activities could encounter previously abandoned oil wells, resulting in a potentially significant release of hazardous materials. Mitigation Measure MM-HAZ (WAMA)-1 that applies to the proposed Project would also apply to the Reduced Project Alternative. This mitigation measure ensures proper confirmation and proper abandonment of any oil wells discovered. As with the proposed Project, with implementation of Mitigation Measure MM-HAZ (WAMA)-1, impacts with regard to abandoned oils wells under the Reduced Project Alternative would be reduced to a less than significant level.

Although the Project site is located in a City of Los Angeles-designated methane zone, a significant hazard associated with construction activities is generally not expected to occur because the methane hazard (combustion) occurs at concentrations above 50,000 parts per million (ppm). If subsurface methane were to be released into the atmosphere during construction, it would quickly disperse (reduce) to concentrations much lower than hazard levels once released to the surface.

With regard to operations, under the Reduced Project Alternative hazardous materials would be handled in accordance with applicable federal, state, and LAWA regulations. LAWA has procedures in place to reduce hazardous materials-related incidents and spills. If a spill were to occur, emergency response procedures would be implemented to contain and clean up the spill. With regard to methane, all building design would adhere to existing City regulations and requirements. Thus, operation of the Reduced Project Alternative would have a less than significant impact with regard to the potential release of hazardous materials.

When compared to the proposed Project, the reduced size of the proposed facilities would not alter hazardous materials impacts during construction because all stockpiled materials would still require removal, the location of oil wells is unknown and surveys would continue to be required, and construction would still be located in a City of Los Angeles-designated methane zone. With regard to operations, the Reduced Project Alternative would not reduce the overall amount of hazardous materials used at LAX as maintenance operations proposed for the Project site would occur at other airport locations. Therefore, the Reduced Project Alternative would have a similar impact as the Proposed Project with regard to the potential release of hazardous materials into the environment.

Exposure of Workers to Hazardous Materials

As discussed above, contaminated soils could be unexpectedly encountered during the removal of stockpiled material and during grading and excavation activities; however, compliance with the Procedure currently in place by LAWA sets forth appropriate procedures and requirements for the identification and handling of excavated contaminated materials, including those governing worker health and safety. In the event that Project-related excavation unexpectedly encounters VOC-contaminated soil, the continuation of such excavation would be carried out in accordance with SCAQMD Rule 1166. As discussed above, the off-gassing of methane is not anticipated to result in a significant impact during construction because the methane hazard (combustion) occurs at concentrations above 50,000 ppm. If subsurface methane were to be released into the atmosphere during construction, it would quickly disperse (reduce) to concentrations much lower than hazard levels once released to the surface. In addition, the exposure of workers to methane is regulated by OSHA and CalOSHA, as well as through the Procedure. These regulations would prevent worker exposure to a “hazardous atmosphere”. As a result, construction of the Reduced Project Alternative would result in a less than significant impact with regard to exposing workers to hazardous materials.

During operation, the Reduced Project Alternative would accommodate the same types of routine maintenance activities that are currently occurring at various places throughout LAX. As with current operations, maintenance workers would continue to comply with all applicable regulations. For instance, exposure of maintenance workers to contaminated materials would be minimized by implementing the measures required by federal, state, and local laws and regulations. Interior methane levels would be regulated in accordance with Los Angeles Methane Seepage Regulations, which could require design features such as methane barriers, methane detection systems, and venting systems should hazardous levels of methane be detected during pre-construction investigations.

When compared to the proposed Project, all stockpiled materials would still require removal and construction workers could still encounter previously undiscovered subsurface soil contamination, abandoned oil wells, or methane, all conditions which would be reduced to a less than significant level through adherence with federal, state, and LAWA regulations, procedures, LAX Master Plan mitigation measures, and the Project specific mitigation measure. With regard to operations, the Reduced Project Alternative would not reduce the overall amount of hazardous materials used at LAX as maintenance operations proposed for the Project site would occur at other airport locations, all of which would be handled in accordance with applicable federal and state regulations, as well as manufacturers' recommendations. All buildings would be designed in accordance with Los Angeles Methane Seepage Regulations regardless of the size of the proposed aircraft maintenance facilities. Therefore, the Reduced Project Alternative would have a similar impact as the Proposed Project with regard to potentially exposing workers to hazardous materials.

Contamination of Soil & Groundwater/Prevention of Cleanup

Only one ongoing remediation effort is occurring in the vicinity of the Project site; the VEFPR for a groundwater contamination plume originating at the former Continental Airlines Maintenance Facility; the VEFPR includes three on-site groundwater monitoring wells (i.e., CMW-31, CMW-32, CMW-33). As part of the construction of the Reduced Project Alternative, these monitoring wells would be protected in place, enclosed in concrete vaults with load bearing grates at the surface to provide for continued access. LAWA would coordinate with the operator of the remediation system and with the RWQCB, as appropriate, for approval of the protect-in-place details. Impacts, if any, to the remediation system would be less than significant.

When compared to the proposed Project, both the proposed Project and the Reduced Project Alternative would require the installation of pavement over the three on-site monitoring wells, which would be protected in place to maintain access under both the proposed Project and the Reduced Project Alternative. Therefore, the Reduced Project Alternative would result in similar impacts as the proposed Project with regard to ongoing remediation efforts.

Impacts Related to Landfill Capacity

The Reduced Project Alternative would require the removal of an estimated 295,000 cubic yards of stockpiled soils. Based on the findings of the recent Geosyntec Report, the stockpiled soils do not contain concentrations of contaminants that qualify them as Class I hazardous materials. As a result, the stockpiled soils could be disposed of at a Class III Municipal Solid Waste (MSW) landfill. As discussed in Section 4.3, *Hazards and Hazardous Materials*, of this EIR, as of December 31, 2011, the most recent information available, the MSW capacity of landfills in Los Angeles County is estimated at 127 million tons. As a result, MSW landfills in Los Angeles

County have ample capacity to accommodate the 295,000 cubic yards of soil required to be hauled from the Project site. Should hazardous materials be unexpectedly encountered during construction activities, they would be disposed of in accordance with the Procedure, which would identify disposal options for previously unidentified hazardous materials. Therefore, construction of the proposed Project would not generate hazardous materials which would exceed the available disposal capacity and a less than significant impact would result.

During operation, the Reduced Project Alternative would accommodate the same types of the routine maintenance activities that are currently occurring elsewhere at the airport; hence, the types of hazardous wastes generated under the proposed Project are expected to be similar to those now generated. Because the Reduced Project Alternative would relocate existing maintenance operations, there would not be an increase in the amount of hazardous materials generated at LAX as a whole. Hazardous waste generated at LAX is removed by private contractors and delivered to treatment, recycling, and disposal facilities both within and outside the Los Angeles region. As existing disposal capacity adequately meets the needs of routine maintenance activities currently occurring at LAX, the proposed Project would not exceed the hazardous waste disposal capacity and a less than significant impact would result.

During construction of both the Reduced Project Alternative and the proposed Project, approximately 295,000 cubic yards of stockpiled material would be removed from the Project site. As discussed above, adequate landfill capacity is available to accommodate stockpiled materials. During operation, the generation of hazardous waste would be similar under both Alternatives, and both Alternatives would be similar to existing conditions because the Alternatives would consolidate existing maintenance operations at LAX. As discussed above, adequate hazardous waste disposal capacity is available to accommodate these wastes. Therefore, the Reduced Project Alternative would have a similar impact as the proposed Project with regard to landfill capacity.

Hydrology and Water Quality

Drainage

Under the Reduced Project Alternative, the aircraft apron area would be reduced by half and employee parking would be reduced by 150 spaces. The developed area of the site would be reduced by approximately 22 acres (10 acre reduction in hangar area/parking and 12 acres of apron area) resulting in a total development area of approximately 45 acres. The increase in impervious surfaces on the Project site under the Reduced Project Alternative would increase surface water flows from the Project site. As discussed above, peak flow deficiencies occur in the four conveyance structures serving the Project site during a Capital Flood event. Thus, the increase in stormwater flows during a Capital Flood event would further exacerbate these deficiencies. As with the proposed Project, the Reduced Project Alternative would be developed in accordance with LAX Master Plan Commitment HWQ-1 and would include structural BMPs such as the detention/infiltration basin to shave peak stormwater flows, provide some groundwater recharge, and remove contaminants from surface water flows before discharging into the Pershing Drive RCB. In accordance with LAX Master Plan Commitment HWQ-1, the structural BMPs would be adequately sized to reduce peak flow rates or increase the structure's capacity, so that drainage facilities adequately convey storm water runoff and prevent flooding by adhering to the procedures set forth by the Peak Rate Method/Los Angeles County Modified Rational Method. With provision of structural BMPs similar to those planned for the proposed Project, the Reduced Project Alternative would not result in an increase in

runoff or substantially alter the existing drainage pattern so that flooding or substantial erosion would occur. Therefore, the Reduced Project Alternative would result in a less than significant impact.

The Reduced Project Alternative would result in similar drainage impacts as the proposed Project. Although the Reduced Project Alternative would not increase the amount of on-site impervious surface area to the extent that the proposed Project would, both Alternatives would include adequately sized structural BMPs to shave peak flows into the Pershing Drive RCB to ensure that this drainage infrastructure adequately conveys stormwater flows and does not result in flooding in accordance with LAX Master Plan Commitment HWQ-1. Therefore, the Reduced Project Alternative would have a similar impact as the proposed Project with regard to drainage.

Groundwater

Under the Reduced Project Alternative, approximately 45 acres of the Project site would be developed with impervious surface area, resulting in a net increase of 33 acres over existing conditions. The West Coast Groundwater Basin has a groundwater recharge rate of approximately 0.24 AFY per pervious acre. Based on this rate, the Reduced Project Alternative would result in a decrease in the on-site volume of groundwater infiltration, from an estimated 17.76 AFY under existing conditions to 7.20 AFY under the Reduced Project Alternative. This reduction in groundwater infiltration would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge as the Project site only represents a negligible contribution (0.2 percent) to groundwater infiltration under existing conditions and the reduction would represent a 0.16 percent reduction in the total average annual inflows (6,700 AFY) to the West Coast Groundwater Basin. This negligible reduction in groundwater infiltration would not interfere with the productivity of pre-existing water wells as no water production wells occur in the vicinity and groundwater under LAX is not utilized for the identified beneficial uses of the West Coast Groundwater Basin (i.e., municipal, agricultural, industrial). As a result, the Reduced Project Alternative would result in no impact to groundwater withdrawal or recharge.

In comparison, the proposed Project would increase the amount of impervious surface area on the Project site by 56 acres to a total of 68 acres of impervious surface area. This increase in impervious surface area would reduce groundwater infiltration occurring at the Project site from an estimated 17.76 AFY under existing conditions to 3.84 AFY. Therefore, the Reduced Project Alternative would have less impact than the proposed Project with regard to groundwater infiltration.

Water Quality

The Reduced Project Alternative would develop approximately 45 acres of the Project site with impervious surfaces such as aircraft maintenance and parking areas, resulting in an increase in stormwater runoff from the Project site. The proposed uses under the Reduced Project Alternative have the potential to increase pollutant concentrations in on-site stormwater flows. However, as discussed above, drainage conveyance associated with the Reduced Project Alternative would be developed in accordance with LAX Master Plan Commitment HWQ 1, Conceptual Drainage Plan, which requires that a range of site-specific BMPs should be incorporated into development projects at LAX to reduce pollutant concentrations in on-site stormwater flows. It is anticipated that site-specific BMPs used for the Reduced Project Alternative would be similar to those utilized under the proposed Project and would be

incorporated into the Project-specific SUSMP. The SUSMP would require approval by the City of Los Angeles Bureau of Sanitation – Watershed Protection Division prior to the start of construction. These BMPs are anticipated to include, but not be limited to, a detention/infiltration basin, oil-water separators, media filters, a water recycling system, porous pavement, and hangar roof drains. Additional measures may also include but are not necessarily limited to drain inserts/water quality inlets in combination with the media filters, or other equivalent measures, as determined adequate by the Los Angeles Bureau of Sanitation in the final SUSMP. All BMPs would be required to be designed in accordance with the LAWA Design and Construction Handbook, which requires projects to be in compliance with the City's LID Ordinance and includes technical approaches and BMPs to reduce stormwater pollutants in first-flush flows. Since the Reduced Project Alternative would be required to comply with the MS4 permit (through identification of project-specific BMPs in a SUSMP that serve to avoid a net increase in pollutant loading), it is not anticipated that the Alternative would result in additional wet-weather pollutant loading of 303(d)-listed water bodies and associated impacts would be less than significant. Regarding dry weather pollutant loads, the same site-specific BMPs utilized to treat stormwater flows would also reduce pollutant loading in dry weather flows, and as a result the Reduced Project Alternative would result in a less than significant impact with regard to dry weather flows.

In comparison to the proposed Project, although both the proposed Project and the Alternative would include site-specific BMPs to reduce pollutants in both wet and dry weather flows, the Reduced Project would not include the provision of a wash rack, and thus, would not discharge dry weather flows into the sanitary sewer system (under an industrial waste permit from the City's Industrial Waste Division) for treatment and disposal at the Hyperion Wastewater Treatment Plant. Therefore, the Reduced Project Alternative would have less impact than the proposed Project with regard to water quality.

Noise

Overall, the Reduced Project Alternative would include less development (in terms of square footage) compared to the Project. As such, the total amount of construction activities would be less than the Project. However, this Alternative would still result in similar daily noise impacts given that the intensity of construction activity would likely remain the same, though occurring over a shorter number of months. As the Reduced Project Alternative would result in the same intensity of construction activity, this Alternative would result in similar impacts with respect to maximum daily noise levels as compared to the proposed Project.

With regard to operational noise impacts, implementation of the Reduced Project Alternative would result in slightly lower estimated noise levels compared to the proposed Project. As would be the case under the proposed Project, this Alternative would not result in a change in the number or types of aircraft operations, because aircraft operational decisions are driven by air service demand and supply factors, not maintenance facilities. The Reduced Project Alternative would eliminate one of the two aircraft maintenance hangars proposed; however, maintenance activities that would have been conducted at the second hangar would occur elsewhere at LAX. Therefore, noise associated with maintenance activities at the hangars would not be different and therefore is not expected to result in any change in aircraft maintenance related noise levels. Similar to the proposed Project, the redirection and consolidation of maintenance operations to the site would result in longer distances between gates and maintenance areas with some minimal amount of taxiing/towing emissions compared

to existing conditions. However, there would be fewer taxiing/towing trips to the site under this Alternative, given the reduction in hangar and apron area. Therefore, this Alternative could result in slightly lower noise levels from taxiing/towing trips than the proposed Project, although noise from taxiing/towing trips would not affect the aircraft-related noise contours off the airport.

Therefore, under the Reduced Project Alternative, construction-related noise impacts would be similar to the proposed Project and long-term operational-related noise impacts would be slightly less than the proposed Project. Overall, this Alternative would have a less than significant impact and slightly less noise impacts than the proposed Project.

Land Use and Planning

While the Reduced Project Alternative would eliminate one of the two aircraft maintenance hangars and reduce the number of parking spaces and apron area, it would include the same type and mixture of land uses (hangar, maintenance area, employee parking, and ancillary facilities) as the proposed Project. Similar to the proposed Project, the Reduced Project Alternative would not increase passenger or gate capacity and would not increase flights and/or aircraft operations at LAX.

Similar to the proposed Project, the Reduced Project Alternative would be consistent with the land uses permitted under the LAX Plan and LAX Specific Plan. However, as only one aircraft hangar would be developed under the Reduced Project Alternative, this Alternative would not maintain ADG VI aircraft and other aircraft at LAX as efficiently and effectively as the proposed Project. Therefore, while this Alternative would be consistent with the permitted land uses under the LAX Plan, it would not fulfill to the same degree as the proposed Project LAX Plan policies and programs that aim to provide for more efficient and effective use of airport facilities, update airport facilities to accommodate New Large Aircraft, and modernize, upgrade, and improve LAX.

Similar to the proposed Project, the Reduced Project Alternative would not materially change the conceptual framework for development in the Project area as set forth in the LAX Master Plan. The Reduced Project Alternative would provide an aircraft maintenance area in the southwest portion of the airport, consistent with the LAX Master Plan. However, as only one hangar would be developed, the Reduced Project Alternative would provide less in the way of replacement maintenance facilities required in conjunction with LAX Master Plan improvements, than the proposed Project, and less maintenance facilities than identified in the LAX Master Plan. Therefore, the Reduced Project Alternative would be less consistent with the LAX Master Plan and the LAX Plan than the proposed Project. Therefore, land use impacts under the Reduced Project Alternative would be greater than under the proposed Project, however, as with the proposed Project, the impacts would be less than significant.

Construction Surface Transportation

Similar to the proposed Project, construction employee parking and material staging for deliveries associated with the construction of the Reduced Project Alternative would be located on the west side of the Airport and construction employees would access the site from Pershing Drive. The Reduced Project Alternative would also incorporate applicable transportation-related LAX Master Plan commitments to further reduce temporary construction impacts.

Therefore, construction surface transportation impacts under the Reduced Project Alternative would be similar to the proposed Project and would be less than significant. However, as the

Reduced Project Alternative would have a shorter construction period, would involve fewer construction materials, construction employee vehicles, material delivery trucks, and construction equipment, it would have less impact than the proposed Project on existing traffic conditions in the area.

5.6.3.1 Relationship of the Reduced Project Alternative to Proposed Project Objectives

The Reduced Project Alternative would meet the proposed Project's objective that supports consistency with the LAX Master Plan by providing an aircraft maintenance area in the southwest portion of the airport. The Reduced Project Alternative would also meet the objective to provide maintenance facilities and RON/RAD parking areas that are sized to accommodate ADG VI aircraft and other aircraft in one location. However, as only one aircraft hangar would be developed under the Reduced Project Alternative, it would be less able to accommodate the need for maintenance facilities removed by pending projects and therefore would result in the need for use of various other maintenance facilities currently in use at LAX with the potential need for some maintenance to be accommodated at other airports. As such, the Reduced Project Alternative only partially meets the objectives that support the consolidation, relocation, and modernization of the existing aircraft maintenance facilities at LAX. In addition, as only one hangar would be developed under the Reduced Project Alternative, it would only partially support the objective that seeks to provide aircraft maintenance hangars and aircraft parking areas sized to accommodate ADG VI aircraft and other aircraft in one location.

5.6.4 Alternate Site Alternative

Air Quality

Implementation of this Alternative would result in similar development as the proposed Project. However, demolition activities would be required in order to accommodate the two new maintenance hangars. Demolition activities require the use of heavy-duty diesel equipment and haul trucks to remove debris and would result in worker vehicle trips. Therefore, this Alternative would result in somewhat greater maximum daily emissions given that the intensity of construction activity could increase due to the need for demolition activities and associated equipment usage and vehicle trips. As stated in Section 4.1, *Air Quality*, the thresholds of significance are based on maximum daily emissions. The proposed Project would result in construction-related significant impacts with respect to maximum daily regional NO_X emissions. As this Alternative would result in greater construction emissions, this Alternative would exceed the regional significance threshold for NO_X following implementation of the same control measures implemented under the proposed Project (see Section 4.1, *Air Quality*) and would result in significant impacts that would be somewhat greater than the proposed Project.

Additionally, development under the Alternate Site Alternative would occur closer to downwind off-site sensitive receptors. The prevailing winds in the area are from the southwest. Therefore, sensitive uses to the northeast, which include multi-family residential uses along Belford Avenue (approximately 2,300 feet to the northeast of the Alternate Site) and on Airport Boulevard south of Arbor Vitae Street (approximately 2,900 feet to the northeast of the Alternate Site), could potentially experience greater localized construction-related impacts and construction-related health impacts compared to the proposed Project due to the proximity of construction-related emissions occurring upwind from these sensitive receptor locations.

With regard to operational emissions, implementation of this Alternative would result in similar estimated emissions compared to the proposed Project. As would be the case under the proposed Project, this Alternative would not result in a change in the number or types of aircraft operations, because aircraft operational decisions are driven by air service demand and supply factors, not maintenance facilities. This Alternative would result in similar development of aircraft maintenance hangars associated with the proposed Project. Therefore, emissions associated with maintenance activities at the hangars would not be materially different and therefore is not expected to result in any change in aircraft maintenance emissions. Similar to the proposed Project, the redirection and consolidation of maintenance operations to the site would result in slightly longer distances between gates and maintenance with some minimal amount of taxiing/towing emissions compared to existing conditions. Therefore, this Alternative would result in similar operational emissions as compared to the proposed Project.

Therefore, under this Alternative, construction-related air quality impacts would be greater than the proposed Project and long-term operational-related air quality impacts would be similar to the proposed Project. Overall, this Alternative would have greater impacts than the proposed Project on existing air quality. Construction emissions from this Alternative would have a significant impact as it would exceed the regional significance threshold for NO_X to a greater degree than the Project.

Regarding the Health Risk Assessment analysis, under this Alternative, several existing facilities would need to be demolished before construction of the proposed maintenance facilities could begin, resulting in more construction emissions than under the proposed Project. Therefore, the health risks associated with exposure to construction emissions under the Alternate Site Alternative would be slightly higher than under the proposed Project. In addition, the Alternate Site Alternative is closer to the airport fence line in the downwind direction, also indicating that construction-related health risk impacts associated with the Alternate Site Alternative could be greater than under the proposed Project. With this Alternative, it is anticipated that the acute impacts from construction would likely be greater than the significance threshold of 1.0. For this qualitative evaluation, it is assumed that the acute impacts would be significant for off-site workers during construction of this Alternative even after implementation of the same control measures as the proposed Project (see Section 4.1, *Air Quality*).

With respect to operational health impacts, since the Alternate Site Alternative is closer to the fence line than the proposed Project site, fence line impacts for off-site workers would be higher than under the proposed Project. However, it is unlikely that the impacts would be two orders of magnitude higher than the proposed Project. Therefore, while operational health risk impacts would be greater than the proposed Project, they are expected to be less than significant.

Greenhouse Gas Emissions

Under this Alternative, development would occur at a different location in the eastern portion of the airport, south of Century Boulevard and east of Sepulveda Boulevard within the Delta and United Airlines Complex. The existing hangars on the Alternate Site Alternative would need to be demolished in order to include two maintenance hangars, with a design similar to that described for the proposed Project.

Implementation of this Alternative would result in similar development as the proposed Project. However, as stated above, demolition activities would occur in order to include two maintenance hangars. Demolition activities require the use of heavy-duty diesel equipment and haul trucks to

remove debris and would result in worker vehicle trips. Therefore, this Alternative would result in greater GHG emissions given that the intensity of construction activity could increase due to the need for demolition activities and associated equipment usage and vehicle trips. As this Alternative would result in greater construction GHG emissions, this Alternative would result in impacts that would be greater than the proposed Project.

With regard to operational emissions, implementation of this Alternative would result in similar estimated GHG emissions compared to the proposed Project. As would be the case under the proposed Project, this Alternative would not result in a change in the number or types of aircraft operations, because aircraft operational decisions driven by air service demand and supply factors, not maintenance facilities. This Alternative would result in the development of the same aircraft maintenance hangars proposed. Therefore, emissions associated with maintenance activities at the hangars would not be materially different and therefore is not expected to result in any change in aircraft maintenance GHG emissions. Similar to the proposed Project, the redirection and consolidation of maintenance operations to the site would result in longer distances between gates and maintenance with some minimal amount of taxiing/towing GHG emissions compared to existing conditions. Therefore, this Alternative would result in similar operational GHG emissions as compared to the proposed Project.

Therefore, under this Alternative, construction-related GHG impacts would be greater than the proposed Project and long-term operational-related GHG impacts would be similar to the proposed Project. Overall, this Alternative would have greater impacts than the proposed Project on existing GHG impacts, although impacts would still be less than significant.

Hazards and Hazardous Materials

Release of Hazardous Materials

Under the Alternate Site Alternative, the Project site would continue to be used as a staging and stockpiling area for airport construction projects. Although the stockpiled materials currently on the Project site do not contain concentrations of contaminants that qualify them as Class I hazardous materials, they are not homogeneous in composition and may contain undiscovered hazardous materials. Although stockpiled materials on the Project site under the Alternate Site Alternative would not be removed completely in the near-term, in the long term, the potential for encountering previously unidentified hazardous materials associated with the stockpiled materials under both the proposed Project and Alternate Site Alternative would be similar with full removal of the materials ultimately occurring. If previously undiscovered hazardous materials are encountered during long-term stockpile removal, they would be conducted in accordance with applicable federal, state, and local regulations, including LAWA's Procedure, which was prepared in accordance with LAX Master Plan Commitment HM-2, and LAWA's BMPs. Therefore, this Alternative would have a similar impact than the proposed Project with regard to the potential release of hazardous materials from stockpiled materials and impacts would be less than significant.

Construction of the Alternate Site Alternative would require the demolition of two existing maintenance hangars on the Alternate Site. No airport-wide surveys for hazardous building materials have been completed. The LAX Master Plan Final EIS/EIR recognized that most of the facilities within the LAX Master Plan boundaries were constructed before there were regulations governing the use of these materials. Consequently, many of the buildings may contain hazardous building materials, and it is possible that the two hangars on the Alternate

Site contain such materials (namely ACMs and LBPs). As noted in the LAX Master Plan Final EIS/EIR, the handling and disposal of hazardous building materials, including asbestos and ACMs, and LBPs, is strictly regulated by federal, state, and local laws. Among these laws and standards are the TSCA, RCRA, NESHAP, and the California HWCL. In addition, SCAQMD Rule 1403, Asbestos Emissions from Renovation/Demolition Activities, requires the surveying of structures for ACMs; agency notification of intention to remove asbestos; ACM removal procedures and time schedules; ACM handling and clean up procedures; and disposal and landfill requirements. Prior to the demolition of the two hangars, a site-specific Asbestos Abatement Specification would be completed to determine the presence of hazardous materials in the structures. If found present, these materials would be removed in accordance with the above regulations. Adherence to applicable regulations would ensure that impacts would remain less than significant during removal of the two existing hangars.

The LAX Master Plan Final EIS/EIR identified one groundwater remediation effort at the location of the Alternate Site Alternative. Specifically, a groundwater remediation was completed for subsurface groundwater contamination from a Delta Airlines Facility for volatile organic compounds (VOCs) (i.e., BTEX, TPH, VOCs). The remediation efforts included vapor extraction, which was completed and post-remedial action monitoring is occurring on the Alternate Site Alternative. Nonetheless, contaminated soils may be encountered during excavation and grading for the Alternate Site Alternative. However, if contaminated soils are encountered, they would be treated in accordance with applicable federal, state, and LAWA regulations. These regulations include LAX Master Plan Commitment HM-2, which provides guidance for LAX projects involving excavation and grading of soils, and LAWA's BMPs. Adherence to these regulations would ensure that if contaminated soils are encountered, they would not pose a significant hazard through the release of hazardous materials to the environment, and a less than significant impact would result.

With regard to operations, as with the proposed Project, the Alternate Site Alternative would consolidate hazardous materials currently used throughout LAX. All hazardous materials would be handled in accordance with applicable federal, state, and LAWA regulations. LAWA has procedures already in place to reduce hazardous materials-related incidents and spills. If a spill were to occur, emergency response procedures would be implemented to contain and clean up the spill. Thus, operation of the Alternate Site Alternative would result in a less than significant impact with regard to the potential release of hazardous materials.

Compared to the proposed Project, the Alternate Site Alternative is not suspected to contain abandoned oil wells. As a result, no construction impacts related to this issue would occur under the Alternate Site Alternative and there would be no need for the Project-specific mitigation that is required for the proposed Project. As the Alternate Site Alternative is not located within a City of Los Angeles-designated methane zone, the Alternate Site Alternative would result in less impact associated with potential methane hazards associated with construction activities.

When compared to the proposed Project, the Alternate Site Alternative may require alterations to the post-remedial monitoring system, however there is no active remediation occurring at the Alternate Site Alternative as there is at the Project site. Therefore, the Alternate Site Alternative would have less impact than the proposed Project with regard to existing remediation efforts. When compared to the proposed Project, construction of the Alternate Site Alternative would result in less potential impacts associated with the release of hazardous materials.

The Alternate Site Alternative has the potential to result in the release of hazardous building materials through the demolition of the existing buildings. The potential impacts would be reduced to a less than significant level through adherence with applicable regulations. During operation, the potential impacts would be nearly identical between the proposed Project and the Alternate Site Alternative, as both Alternatives would consolidate existing maintenance activities occurring throughout LAX and would not result in overall increase in the amount of hazardous materials at LAX. All materials would be handled in accordance with applicable regulations. Therefore, the Alternate Site Alternative would have somewhat less impact than the proposed Project with regard to the release of hazardous materials into the environment.

Exposure of Workers to Hazardous Materials

As discussed above, hazardous building materials may be present in the two hangars on the Alternate Site Alternative. If these materials are found present during the site-specific Asbestos Abatement Specification, the removal of these materials would occur in accordance with applicable regulations, such as the TSCA, RCRA, NESHAP, the California HWCL, and SCAQMD Rule 1403. With adherence to these regulations, worker exposure to potential hazardous building materials would be less than significant.

The Project site would continue to be used as a construction staging area under the Alternate Site Alternative and materials would continue to be stockpiled on-site. Routine maintenance would continue to occur throughout LAX in accordance with applicable regulations and manufacturers' recommendations. Worker exposure to hazardous materials associated with the stockpiling of materials on the Project site would be similar to existing conditions. Adherence to applicable plans and regulations would ensure that any potential contamination in stockpiled soils does not result in a significant impact to workers.

In addition, contaminated soils associated with previous subsurface contamination could be unexpectedly encountered during grading and excavation activities; however, compliance with the Procedure currently in place by LAWA sets forth appropriate procedures and requirements for the identification and handling of excavated contaminated materials, including those governing worker health and safety. In the event that Alternative project-related excavation unexpectedly encounters VOC-contaminated soil, the continuation of such excavation would be carried out in accordance with SCAQMD Rule 1166. As a result, construction of the Alternate Site Alternative would result in a less than significant impact with regard to worker exposure to hazardous materials.

During operation, the Alternate Site Alternative would accommodate the same types of routine maintenance activities that are currently occurring at various places throughout LAX. As with current operations, maintenance workers would continue to comply with all applicable regulations. For instance, exposure of maintenance workers to contaminated materials would be minimized by implementing the measures required by federal, state, and local laws and regulations. As a result, operation of the Alternate Site Alternative would result in a less than significant impact with regard to worker exposure to hazardous materials.

The Alternate Site Alternative also has the potential to encounter subsurface soil contamination during construction, although there would be no potential to encounter methane or abandoned oil wells. All potential hazardous materials impacts during construction would be reduced to a less than significant level through adherence with federal, state, and LAWA regulations and procedures. With regard to operations, the Alternate Site Alternative would not reduce the

overall amount of hazardous materials used at LAX as the overall level of maintenance operations at LAX would remain similar under both Alternatives. All hazardous materials utilized during maintenance activities would be handled in accordance with applicable federal and state regulations, as well as manufacturers' recommendations. Therefore, the Alternate Site Alternative would have a similar impact as the proposed Project with regard to potential worker exposure to hazardous materials.

Contamination of Soil and Groundwater/Prevention of Cleanup

As discussed above, a groundwater remediation effort was completed for subsurface groundwater contamination from a Delta Airlines Facility for VOCs (i.e., BTEX, TPH, VOCs). This groundwater remediation effort included vapor extraction, which was completed and post-remedial action monitoring is occurring on the Alternate Site Alternative. Although remediation efforts have been completed, the development of the Alternate Site Alternative could interrupt post-remedial action monitoring. To reduce this impact, development of the Alternate Site Alternative would occur in accordance with LAX Master Plan Commitment HM-1, which would ensure that remediation is complete to the extent feasible prior to the start of construction. Further, coordination with the LARWQCB would occur prior to the start of construction under LAX Master Plan Commitment HM-1, and if required, post-remedial monitoring would be reinstated as soon as possible following construction, per LARWQCB recommendations. With implementation of LAX Master Plan Commitment HM-1, impacts to the post-remedial monitoring efforts would be less than significant.

When compared to the proposed Project, although development of the Alternate Site Alternative may require alterations to the post-remedial monitoring system, there is no active remediation occurring at the Alternate Site Alternative as there is at the Project site. Therefore, the Alternate Site Alternative would have less impact than the proposed Project with regard to existing remediation efforts.

Impacts Related to Landfill Capacity

Construction of the Alternate Site Alternative would require the removal of two existing maintenance hangars. Given the relatively limited amount of material associated with these structures in relation to landfill capacity, it is anticipated that adequate capacity would be available to accommodate removal of the buildings. With regard to operation, the Alternate Site Alternative would accommodate the same types of the routine maintenance activities that are currently occurring elsewhere at the airport; hence, the types of hazardous wastes generated under the proposed Project are expected to be similar to those now generated. Because the Alternate Site Alternative would relocate existing maintenance operations, there would not be an increase in the amount of hazardous materials generated at LAX as a whole. Hazardous waste generated at LAX is removed by private contractors and delivered to treatment, recycling, and disposal facilities both within and outside the Los Angeles region. As existing disposal capacity adequately meets the needs of routine maintenance activities currently occurring at LAX, the Alternate Site Alternative would not exceed the hazardous waste disposal capacity and a less than significant impact would result.

When compared to the proposed Project, approximately 295,000 cubic yard of stockpiled material would not need to be removed under the Alternate Site Alternative. During operation, the generation of hazardous waste would be similar under both Alternatives, and both Alternatives would be similar to existing conditions because the Alternatives would consolidate

existing maintenance operations at LAX. As discussed above, adequate hazardous waste disposal capacity is available to accommodate these wastes. Therefore, the Alternate Site Alternative would have less impacts than the proposed Project with regard to landfill capacity.

Hydrology and Water Quality

Drainage

The Alternate Site Alternative would flow to the Dominguez Channel, which ultimately discharges to the San Pedro Bay. As discussed in the LAX Specific Plan Amendment Study Draft EIR, the capacity of the of the Dominguez Channel Watershed was studied and it was found that stormwater peak flow rates associated with the Capital Flood event would result in flooding in some areas. This was found to especially be the case where the Dominguez Channel sub-basin drains into a Los Angeles County conveyance that was designed for a 10-year design storm. In general, peak stormwater flow rates correlate with the amount of impervious surface area within a watershed. Thus, a change in land use that would produce a change in the amount of impervious surface area would be expected to produce a corresponding change in stormwater peak flow rates. The Alternate Site Alternative is developed with impervious surface areas. As such, the Alternate Site Alternative, which would replace one impervious surface area with another and would not increase the overall impervious surface area of the Alternate Site Alternative, would not materially increase stormwater flows from the Site. In addition, drainage improvements at the Alternate Site Alternative would be designed in accordance with LAX Master Plan Commitment HWQ-1, which requires adequately sized on-site BMPs to reduce peak flow rates or increase the conveyance structure's capacity, so that drainage facilities adequately convey storm water runoff and prevent flooding by adhering to the procedures set forth by the Peak Rate Method/Los Angeles County Modified Rational Method. With provision of the structural BMPs in accordance with LAX Master Plan Commitment HWQ-1, the Alternate Site Alternative would not result in an increase in stormwater runoff or substantially alter the existing drainage pattern so that flooding or substantial erosion would occur. Therefore, the Alternate Site Alternative would result in a less than significant impact.

When compared to the proposed Project, although both the proposed Project and Alternate Site Alternative would convey stormwater flows into conveyance infrastructure with identified deficiencies, the Alternate Site Alternative would not result in a material increase in the amount of on-site impervious surface area, and would thus not result in a corresponding increase in stormwater peak flow rates from the Alternate Site Alternative. In addition, while the proposed Project would increase the amount of impervious surface area on the Project site, it would also include a proposed detention/infiltration basin to reduce peak flows to area infrastructure. This detention/infiltration would serve to reduce existing deficiencies. Under the Alternate Site Alternative, a detention/infiltration basin would not be realized at the Project Site and existing deficiencies would remain. Therefore, the Alternate Site Alternative would result in a similar impact as the proposed Project with regard to drainage.

Groundwater

The Alternate Site Alternative would replace one impervious surface area with another and would not increase the overall impervious surface area of the Alternate Site Alternative. As a result, the Alternate Site Alternative would not result in a change in the groundwater infiltration rate at LAX and no impact would result.

Impacts to groundwater infiltration would be less than under the Alternate Site Alternative. Specifically, the Alternate Site Alternative would not result in an increase in impervious surface area or infiltration rates. In comparison, the proposed Project would increase the amount of impervious surface area on the Project site by 56 acres and would reduce groundwater infiltration occurring at the Project site from an estimated 17.76 AFY under existing conditions to 3.84 AFY.

Water Quality

The Alternate Site Alternative would replace one impervious surface area with another and would not increase the overall impervious surface area of the Alternate Site Alternative. In addition, activities occurring at the Alternate Site Alternative under this Alternative would be similar to those already occurring at the Alternate Site Alternative. As a result, the Alternate Site Alternative is not anticipated to materially increase pollutant concentrations in surface water flows from the Alternate Site Alternative. In addition, drainage conveyance associated with the Alternate Site Alternative would be developed in accordance with LAX Master Plan Commitment HWQ 1, Conceptual Drainage Plan, which requires that a range of site-specific BMPs should be incorporated into development projects at LAX to reduce pollutant concentrations in on-site stormwater flows. These BMPs would be incorporated into the project-specific SUSMP. The SUSMP would require approval by the City of Los Angeles Bureau of Sanitation – Watershed Protection Division prior to the start of construction. These BMPs are anticipated to include, but not be limited to, a detention/infiltration basin, oil-water separators, media filters, a water recycling system, porous pavement, and hangar roof drains. Additional measures may also include but are not necessarily limited to drain inserts/water quality inlets in combination with the media filters, or other equivalent measures, as determined adequate by the Los Angeles Bureau of Sanitation in the final SUSMP. All BMPs would be required to be designed in accordance with the LAWA Design and Construction Handbook, which requires project's to be in compliance with the City's LID Ordinance and includes technical approaches and BMPs to reduce stormwater pollutants in first-flush flows. Since the Alternate Site Alternative would be required to comply with the MS4 permit (through identification of project-specific BMPs in a SUSMP that serve to avoid a net increase in pollutant loading), it is not anticipated that the Alternative would result in additional wet-weather pollutant loading of 303(d)-listed water bodies and associated impacts would be less than significant. Regarding dry weather pollutant loads, the same site-specific BMPs utilized to treat stormwater flows would also reduce pollutant loading in dry weather flows, and as a result the Alternate Site Alternative would result in a less than significant impact with regard to dry weather flows.

When compared to the proposed Project, both the proposed Project and the Alternate Site Alternative would include site-specific BMPs to reduce pollutants in both wet and dry weather flows, although the Alternate Site Alternative would be developed on a portion of LAX already comprised of impervious surface area, and thus, would not increase the total amount of impervious surface area at LAX. Therefore, the Alternate Site Alternative would have less impact than the proposed Project with regard to water quality.

Noise

Implementation of this Alternative would result in similar development as the proposed Project. However, demolition activities would be required in order to accommodate the two new maintenance hangars. Demolition activities require the use of heavy-duty construction equipment and haul trucks to remove debris and would result in worker vehicle trips. Therefore,

this Alternative would result in potentially greater maximum daily noise levels given that the intensity of construction activity could increase due to the need for demolition activities and associated equipment usage and vehicle trips. This Alternate Site Alternative is located on the south side of Century Boulevard and would be located approximately 250 feet from the hotel uses on the north side of Century Boulevard. The construction noise analysis conducted in support of the Master Plan indicates that noise sensitive uses within 600 feet of construction activities may be significantly impacted. Thus, this Alternative would result in potentially significant noise impacts given the distance to the nearest sensitive receptors. In comparison, the proposed Project would be located approximately 1,550 feet from the residential uses to the south of the West Aircraft Maintenance Area site boundary. Thus, this Alternative would result in greater construction-related noise impacts than the Project.

With regard to operational noise impacts, implementation of this Alternative would result in similar estimated noise levels compared to the proposed Project. As would be the case under the proposed Project, this Alternative would not result in a change in the number or types of aircraft operations, because aircraft operational decisions are driven by air service demand and supply factors, not maintenance facilities. This Alternative would result in the development of the same aircraft maintenance hangars proposed. Therefore, noise associated with maintenance activities at the hangars would not be different and is not expected to result in any change in overall aircraft maintenance noise levels. The hangars that would be constructed on the site would have openings directed towards the interior of the airport; therefore, noise from maintenance occurring within the hangars would be directed away from the nearest sensitive receptors. Similar to the proposed Project, the redirection and consolidation of maintenance operations to the site would result in longer distances between gates and maintenance areas with some minimal amount of taxiing/towing emissions compared to existing conditions. However, noise from taxiing/towing would not be substantially different from nearby existing taxing/towing operations between the south runway and the terminals adjacent to the west and would be masked by traffic-related noise on Century Boulevard. As a result, this Alternative would not substantially change the airport-related noise contours in the area. Therefore, this Alternative would result in similar operational noise levels as compared to the proposed Project.

Therefore, under this Alternative, construction-related noise impacts would be greater to the proposed Project and long-term operational-related noise impacts would be similar to the proposed Project. Overall, this Alternative would have greater impacts than the proposed Project, although impacts would be less than significant.

Land Use and Planning

The Alternate Site Alternative is located entirely within the LAX Plan area, as well as the LAX Specific Plan area, and is designated in the LAX Plan as "Airport Airside" which permits aspects of passenger and cargo movement associated with aircraft operating under power and related airfield support services such as runways, taxiways, maintenance areas, airfield operation areas, air cargo areas, passenger handling facilities, fire protection facilities, and other ancillary airport facilities. The Alternate Site Alternative is also located within the LAX-A Zone which permits surface and structured parking lots; aircraft under power; airline maintenance and support; air cargo facilities; commercial passenger vehicle staging and holding area; runways, taxiways, aircraft parking aprons, and service roads; passenger handling facilities; aggregate/asphalt grinding and recycling facilities, and other ancillary airport facilities. The Alternate Site Alternative would be consistent with the LAX Plan and LAX Specific Plan.

Under the LAX Master Plan, the Alternate Site Alternative is designated for "Existing Maintenance Facility", "Proposed Ancillary Facility", "Proposed Cargo Building" as well as "Taxiways/Aircraft Aprons," and "Airport Landside/Parking". The Proposed Ancillary Facility is identified as a potential area for a GRE. Under the LAX Master Plan, approximately 176,000 square feet of existing cargo space and 172,000 acres of aircraft maintenance hangars would be retained and 90,000 square feet future GRE would be developed. Implementation of this Alternative could limit or preclude the ability to retain the 176,000 square feet of cargo space contemplated in the LAX Master Plan, would replace existing aircraft maintenance hangars in this area with new maintenance hangars, and would still allow future development of a GRE onsite. The Alternative would not preclude locating a GRE on this site, however, the actual location of the GRE identified for the site with or without this Alternative, will be dependent on the outcome of an airport-wide GRE siting study being undertaken independent of the proposed Project.

Construction Surface Transportation

Under the Alternate Site Alternative, construction related traffic is anticipated to access the site from Century Boulevard. As discussed within Section 4.7, *Construction Surface Transportation*, traffic volumes are substantially higher on the eastern area of LAX than the western area due to the presence of the CTA, main entrances to LAX, close proximity to the I-405, nearby hotel and commercial uses, and more intense urban development. While the Alternate Site Alternative is comparable in design as the proposed Project, due to the location of the Alternate Site on the eastern area of the airport, this Alternative would likely create transportation related impacts along Century Boulevard that would be greater than impacts that would occur under the proposed Project.

Other Environmental Considerations (Historic Resources)

Under this Alternative, demolition of the Mercury Air Group Cargo buildings, United Maintenance Hangar, including the former Western Airlines double-arched hangar, would need to occur in order to support construction of two modern maintenance hangars that could accommodate ADG VI and other aircraft, with a design similar to that described for the proposed Project. Some of the existing hangars and office space are part of the Intermediate Terminal Complex, located east of the concourse and terminal facilities and south of Century Boulevard. The Intermediate Terminal Complex was previously evaluated and determined ineligible for listing in the National Register by the FAA due to alterations and loss of some structures. However, as a representative milepost in the evolution of LAX, the complex may be historically significant under Los Angeles Historic Cultural Monuments criteria and, thus, appeared eligible for local designation. It also appeared to meet Criterion 1 under the California Register for the same reasons as previously noted.[3] As such, the Intermediate Terminal Complex is considered a historical resource pursuant to *CEQA Guidelines* Section 15064.5, and demolition of a part of the Intermediate Terminal Complex would be considered a significant impact due to building demolition and proximate indirect impacts, which would materially impair the eligibility of the Intermediate Terminal Complex for inclusion in the California Register and for listing as a Los Angeles Historic Cultural Monument. Therefore, impacts to Historical

[3] City of Los Angeles, Final EIR for the LAX Proposed Master Plan Improvements, Appendix S-G, Supplemental Section 106 Report, prepared by PCR Services Corporation, June 2003.

Resources under the Alternate Site Alternative, would be greater than the proposed Project, as the proposed Project would have no impact on historical resources.

5.6.4.1 Relationship of the Alternate Site Alternative to Proposed Project Objectives

As the Alternate Site Alternative would be able to accommodate up to 10 ADG VI aircraft, or a mix of smaller aircraft it would meet the proposed Project's objectives to provide maintenance facilities and RON/RAD parking areas that are sized to accommodate ADG VI aircraft and other aircraft in one location. However, as the Alternate Site Alternative would be located on the eastern portion of LAX, it would not meet the proposed Project's objective to support consistency with the LAX Master Plan by providing an aircraft maintenance area in the southwest portion of the airport. Furthermore, as some of the existing aircraft maintenance and cargo facilities that would need to be demolished under this Alternative could not be accommodated with redevelopment of the site, and would need to be relocated to other areas of LAX or to other airports, this Alternative would only partially meet the Project objectives that support the consolidation, relocation, and modernization of existing aircraft maintenance facilities LAX.

5.7 Environmentally Superior Alternative

Section 15126.6(e)(2) of the *CEQA Guidelines* indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR. The *CEQA Guidelines* also state that should it be determined that the No Project Alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives. With respect to identifying an environmentally superior alternative among those analyzed in this EIR, the range of feasible alternatives includes the No Project-No Development Alternative; the No Project-Existing LAX Master Plan Alternative; the Reduced Project Alternative; and the Alternate Site Alternative.

A comparative summary of the environmental impacts anticipated under each Alternative with the environmental impacts associated with the proposed project is provided in **Table 5-1**. A more detailed description of the potential impacts associated with each alternative is provided above. Pursuant to Section 15126.6(c) of the *CEQA Guidelines*, the analysis below addresses the ability of the Alternatives to "avoid or substantially lessen one or more of the significant effects" of the project.

As discussed above, and as depicted in Table 5-1, the No Project-No Development Alternative is considered to be the overall environmentally superior alternative as it would avoid all construction and operational impacts of the proposed Project and is the only Alternative that would not have a significant unavoidable impact with respect to construction-related regional NO_X emissions. However, as indicated above, this Alternative would not meet any of the objectives established for the proposed Project.

In accordance with the *CEQA Guidelines* requirement to identify an environmentally superior alternative other than the No Project-No Development Alternative, a comparative evaluation of the remaining alternatives indicates that the Reduced Project Alternative would be the environmentally superior alternative relative to the other Alternatives. Due to the reduced

project size and shorter construction period, compared to the proposed Project, the Reduced Project Alternative would result in less construction related impacts to air quality, health risks, greenhouse gases, and construction surface transportation. In addition, due to the reduced project size, impacts to groundwater withdrawal or recharge and water quality would be less compared to the proposed Project. Given the reduction in hangar and apron area, the Reduced Project Alternative would also result in slightly reduced noise levels from taxiing/towing trips.

It is important to note, while the Reduced Project Alternative is considered the environmentally superior alternative, it would not avoid or reduce the significant unavoidable impact that would occur under the proposed Project with respect to construction-related regional NO_X emissions. In addition, as all of the proposed Project's impacts are either less than significant, or would be reduced to less than significant levels following implementation of the mitigation measures provided in this EIR; environmental impacts would not be materially different between the proposed Project and the Reduced Project Alternative. Accordingly, the environmentally superior Reduced Project Alternative would not eliminate any significant and unavoidable impacts, but would serve to incrementally reduce some of the less than significant impacts of the proposed Project related to groundwater, water quality, and operational noise and would have a similar significant impact related to the release of hazardous materials prior to mitigation.

The No Project-Existing LAX Master Plan Alternative and the Alternate Site Alternative would result in greater environmental impacts compared to the Reduced Project Alternative. Most notably, in comparison to the other Alternatives and the proposed Project, the No Project-Existing LAX Master Plan Alternative would result in significant impacts to the VEFPR groundwater remediation system that would likely require additional project-specific mitigation beyond implementation of LAX Master Plan Commitments HM-1 and HM-2 to reduce impacts to a less than significant level. The No Project-Existing Master Plan Alternative would incrementally reduce some of the less than significant impacts of the proposed Project related to groundwater. Air quality impacts would be similar as the proposed Project and it would not reduce the significant unavoidable impact that would occur under the proposed Project with respect to construction-related regional NO_X emissions.

Regarding the Alternate Site Alternative, as several existing facilities would need to be demolished before construction of the proposed maintenance facilities could begin, construction impacts related to air quality, noise, and greenhouse gases would be greater. In addition, as the Alternate Site Alternative is closer to the airport fence line in the downwind direction, construction-related health risk impacts associated with the Alternate Site Alternative would be greater, resulting in potentially significant and unavoidable impacts. Traffic impacts would also be greater as the Alternate Site Alternative is located on the eastern area of LAX where existing traffic volumes are higher. As the Alternate Site Alternative contains the Intermediate Terminal Complex, a historically significant resource pursuant to CEQA, impacts to cultural and historical resources would be significant and could be significant and unavoidable. Regarding hazards and hazardous materials, compared to the proposed Project and other Alternatives, there is no active groundwater remediation occurring at the Alternate Site Alternative, therefore the Alternate Site Alternative would have less impact with regard to existing groundwater remediation efforts. Impacts to groundwater infiltration and the release of hazardous materials would also be less under the Alternate Site Alternative. Impacts to landfill capacity would be similar as the proposed Project.

While the Reduced Project Alternative is considered the environmentally superior alternative, it would not fully support three of the proposed Project's five objectives. As only one aircraft hangar would be developed under the Reduced Project Alternative, it could not fully accommodate the need for maintenance facilities removed by pending projects and therefore would result in the continued need for use of various other maintenance facilities currently in use at LAX as well as the potential for some maintenance to be accommodated at other airports. As such, the Reduced Project Alternative only partially meets the objectives to consolidate, relocate, and modernize some of the existing aircraft maintenance facilities consistent with the LAX Master Plan; to provide for more efficient and effective maintenance of existing aircraft at the airport; and to provide aircraft maintenance hangars and aircraft parking areas sized to accommodate ADG VI aircraft and other aircraft in one location.

Therefore, although the Reduced Project Alternative is the environmentally superior alternative, it would have a similar significant unavoidable impact related to air quality and a similar significant impact (prior to mitigation) related to the release of hazardous materials. Furthermore, the Reduced Project Alternative would not fully support three of the five objectives of the proposed Project.

Table 5-1

Comparison of Impacts Associated with the Alternatives and Impacts of the Proposed Project

	Project Impact	Alternative 1 No Project-No Development Alternative	Alternative 2 No Project-Existing LAX Master Plan Alternative	Alternative 3 Reduced Project Alternative	Alternative 4 Alternate Site Alternative
Air Quality					
Construction	Significant and Unavoidable (NO_X)	Less (No Impact)	Similar (Significant and Unavoidable)	Similar (Significant and Unavoidable)	Greater (Significant and Unavoidable)
Operation	Less Than Significant	Greater (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Health Risk Assessment					
Construction	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Less (Less Than Significant)	Greater (Significant and Unavoidable)
Operation	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)	Greater (Less Than Significant)
Greenhouse Gas Emissions					
Greenhouse Gas Emissions	Less Than Significant	Greater (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)	Greater (Less Than Significant)
Hazards and Hazardous Materials					
Release of Hazardous Materials	Less Than Significant with Project-specific Mitigation	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant with Project-specific Mitigation)	(Less) (Less Than Significant)
Exposure of Workers to Hazardous Materials	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)

Table 5-1

Comparison of Impacts Associated with the Alternatives and Impacts of the Proposed Project

	Project Impact	Alternative 1 No Project-No Development Alternative	Alternative 2 No Project-Existing LAX Master Plan Alternative	Alternative 3 Reduced Project Alternative	Alternative 4 Alternate Site Alternative
Contamination of Soil & Groundwater/Prevention of Cleanup	Less Than Significant	Less (No Impact)	Greater (Less Than Significant with Project-specific Mitigation)	Similar (Less Than Significant)	Less (Less Than Significant)
Impacts Related to Landfill Capacity	Less Than Significant	Similar (Less Than Significant)	Greater (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Hydrology and Water Quality					
Drainage	Less Than Significant	Greater (Less Than Significant)	Greater (Less Than Significant)	Similar (Less Than Significant)	Similar (Less Than Significant)
Groundwater	Less Than Significant	Less (No Impact)	Less (Less Than Significant)	Less (No Impact)	Less (No Impact)
Water Quality	Less Than Significant	Greater (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)	Less (Less Than Significant)
Noise					
Construction	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Similar (Less Than Significant)	Greater (Less Than Significant)
Operations	Less Than Significant	Less (Less Than Significant)	Similar (Less Than Significant)	Less (Less Than Significant)	Similar (Less Than Significant)

Table 5-1

Comparison of Impacts Associated with the Alternatives and Impacts of the Proposed Project

	Project Impact	Alternative 1 No Project-No Development Alternative	Alternative 2 No Project-Existing LAX Master Plan Alternative	Alternative 3 Reduced Project Alternative	Alternative 4 Alternate Site Alternative
Land Use and Planning					
Consistency with Plans	Less Than Significant	Greater (Less Than Significant)	Similar (Less Than Significant)	Greater (Less Than Significant)	Greater (Less Than Significant)
Construction Surface Transportation					
Construction Surface Transportation	Less Than Significant	Less (No Impact)	Similar (Less Than Significant)	Less (Less Than Significant)	Greater (Less Than Significant)
Other Environmental Considerations					
Historical Resources	Not applicable No impact	Not applicable No impact	Not applicable No impact	Not applicable No impact	Greater (Potentially Significant)

Source: PCR Services Corporation, 2013.

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