# Atlantic Aviation
# Los Angeles International Airport (LAX)
# Hangar and Office Development Project

## Initial Study – Proposed Negative Declaration

City of Los Angeles
Los Angeles City File No. NG-13-282-AD

*Lead Agency:*

City of Los Angeles
Los Angeles World Airports
One World Way, Room 218
Los Angeles, CA 90045

*Prepared by:*

CDM Smith
111 Academy Way, Suite 150
Irvine, California 92617

September 12, 2013

# CITY OF LOS ANGELES

OFFICE OF THE CITY CLERK
ROOM 615, CITY HALL
LOS ANGELES, CALIFORNIA 90012

**CALIFORNIA ENVIRONMENTAL QUALITY ACT**

# INITIAL STUDY AND CHECKLIST

**(Article IV City CEQA Guidelines)**

| **LEAD CITY AGENCY** | **COUNCIL DISTRICT** | **DATE** |
|---|---|---|
| Los Angeles World Airports (LAWA) | Council District 11 | September 12, 2013 |

**RESPONSIBLE AGENCIES**

| **PROJECT TITLE/NO.** | **CASE NO.** |
|---|---|
| Atlantic Aviation Los Angeles International Airport (LAX) Hangar & Office Development Project | NG-13-282-AD |

| **PREVIOUS ACTIONS CASE NO.** | ☐ **DOES have significant changes from previous actions.** |
|---|---|
| LAX Master Plan<br>Case No. CF-00-1774-S4 and CPC 2003-4647<br>GPA/ZC/CA/MPR<br>LAX Master Plan Environmental Impact Report (EIR), April 2004 (SCH#1997061047)<br>Mercury Air Group FBO Negative Declaration, May 2003 (Case No. AD 153-03) | ☒ **DOES NOT have significant changes from previous actions.** |

**PROJECT DESCRIPTION:**

Atlantic Aviation proposes to construct a hangar and office building on its leasehold located within the airport airside at LAX. The project site is located on the western portion of Atlantic Aviation's leasehold, which is on the northwest corner of Sepulveda Boulevard and Imperial Highway at 6411 West Imperial Highway, Los Angeles, CA 90045. The proposed hangar would be 36,550 square feet with an adjoining 4,900 square foot one-story office building and a 2,000 square foot one-story hangar support building.

**ENVIRONMENTAL SETTING:**

The environmental setting is characterized by a highly-built environment with vehicle, aircraft, and passenger movement activity within and adjacent to the site throughout the day and night. The adjacent area is a highly-developed, urbanized area consisting of airport, commercial, transportation (i.e., interstate highways) and residential uses.

**PROJECT LOCATION**

The project site is within LAX, which is situated within the City of Los Angeles, an incorporated city within Los Angeles County. The project site is located in the southern portion of LAX, and in the western portion of the Atlantic Aviation Fixed Base Operation (FBO) leasehold, in an area currently used for vehicle parking.

| **PLANNING DISTRICT** | **STATUS:** |
|---|---|
| LAX Specific Plan | ☐ **PRELIMINARY**<br>☐ **PROPOSED**<br>☒ **ADOPTED**(December 14, 2004, as amended May 21, 2013) |
| **EXISTING ZONING**<br>LAX - A Zone: Airport Airside Sub-Area | ☒ **DOES CONFORM TO PLAN** |
| **PLANNED LAND USE & ZONE**<br>Airport-related airside uses; no change in zone is proposed | ☐ **DOES NOT CONFORM TO PLAN** |
| **SURROUNDING LAND USES**<br>North – Airport Airside (South Runways); East – Airport Airside (Atlantic Aviation FBO customer service building); South – Airport Airside (Atlantic Aviation parking lot, FAA Airport Surface Detection Tower [ASDE-3]); West – Airport Airside (Nippon Cargo Airlines and Thai Cargo) | ☐ **NO DISTRICT PLAN** |

**DETERMINATION (To be completed by Lead Agency)**

**On the basis of this initial evaluation:**

☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions on the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

| | |
|---|---|
| | CITY PLANNER |
| **SIGNATURE** | **TITLE** |

**EVALUATION OF ENVIRONMENTAL IMPACTS:**

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less that significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of a mitigation measure has reduced an effect from "Potentially Significant Impact" to "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than

5) Earlier analysis must be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR, or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    1) Earlier Analysis Used. Identify and state where they are available for review.
    2) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    3) Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A sources list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whichever format is selected.

9) The explanation of each issue should identify:
    1) The significance criteria or threshold, if any, used to evaluate each question; and
    2) The mitigation measure identified, if any, to reduce the impact to less than significance.

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**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below will be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Hazards and Hazardous Materials | ☐ Public Services |
| ☐ Agricultural and Forest Resources | ☐ Hydrology and Water Quality | ☐ Recreation |
| ☐ Air Quality | ☐ Land Use and Planning | ☐ Transportation/Circulation |
| ☐ Biological Resources | ☐ Mineral Resources | ☐ Utilities |
| ☐ Cultural Resources | ☐ Noise | ☐ Mandatory Findings of Significance |
| ☐ Geology and Soils | ☐ Population and Housing | |
| ☐ Greenhouse Gas Emissions | | |

**INITIAL STUDY CHECKLIST (To be completed by the Lead City Agency)**

☞ **BACKGROUND**

| **PROPONENT NAME** | **PHONE NUMBER*** |
|---|---|
| Los Angeles World Airports - Evelyn Quintanilla | (800) 919-3766 |
| **PROPONENT ADDRESS** | |
| One World Way, Room 218, Los Angeles, CA 90045 | |
| **AGENCY REQUIRING CHECKLIST** | **DATE SUBMITTED** |
| Los Angeles World Airports | September 12, 2013 |
| **PROPOSAL NAME (If Applicable)*** | |
| Atlantic Aviation LAX Hangar and Office Development Project | |

☞ ☐ **ENVIRONMENTAL IMPACTS** (Explanations of all potentially and less than significant impacts are required to be attached on separate sheets)

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **I. AESTHETICS.** Would the project: | | | | |
| a. Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☒ | ☐ |
| b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, or other locally recognized desirable aesthetic natural feature within a state or city-designated scenic highway? | ☐ | ☐ | ☒ | ☐ |
| c. Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | ☒ | ☐ |
| d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ |
| **II. AGRICULTURAL AND FORESTRY RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: | | | | |
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| b. Conflict with the existing zoning for agricultural use, or a Williamson Act Contract? | ☐ | ☐ | ☐ | ☒ |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | ☐ | ☐ | ☐ | ☒ |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **III. AIR QUALITY.** The significance criteria established by the South Coast Air Quality Management District (SCAQMD) may be relied upon to make the following determinations. Would the project: | | | | |
| a. Conflict with or obstruct implementation of the applicable South Coast Air Quality Management District plans? | ☐ | ☐ | ☒ | ☐ |
| b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☐ | ☐ | ☒ | ☐ |
| c. Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is non-attainment ($O_3$, $NO_2$, PM10, PM2.5, and lead) under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | ☐ | ☐ | ☒ | ☐ |
| d. Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ |
| e. Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |
| **IV. BIOLOGICAL RESOURCES.** Would the project: | | | | |
| a. Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☒ |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☒ |
| c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ☒ |
| d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☐ | ☒ |
| e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)? | ☐ | ☐ | ☐ | ☒ |
| f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **V. CULTURAL RESOURCES:** Would the project: | | | | |
| a. Cause a substantial adverse change in significance of a historical resource as defined in State CEQA §15064.5? | ☐ | ☐ | ☐ | ☒ |
| b. Cause a substantial adverse change in significance of an archaeological resource pursuant to State CEQA §15064.5? | ☐ | ☐ | ☐ | ☒ |
| c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☐ | ☐ | ☒ |
| d. Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☐ | ☐ | ☒ |
| **VI. GEOLOGY AND SOILS.** Would the project: | | | | |
| a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving: | | | | |
| i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☒ | ☐ |
| ii. Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii. Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv. Landslides? | ☐ | ☐ | ☐ | ☒ |
| b. Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☒ | ☐ |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Los Angeles Building Code (2002), creating substantial risks to life or property? | ☐ | ☐ | ☒ | ☐ |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ☒ |
| **VII. GREENHOUSE GAS EMISSIONS.** Would the project: | | | | |
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ |
| b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☒ | ☐ |
| **VIII. HAZARDS AND HAZARDOUS MATERIALS.** Would the project: | | | | |
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☐ | ☒ |
| d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |
| e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☒ | ☐ |
| f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for the people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☒ |
| h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☐ | ☐ | ☐ | ☒ |
| **IX. HYDROLOGY AND WATER QUALITY.** Would the project: | | | | |
| a. Violate any water quality standards or waste discharge requirements? | ☐ | ☐ | ☒ | ☐ |
| b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned land uses for which permits have been granted)? | ☐ | ☐ | ☐ | ☒ |
| c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | ☐ | ☐ | ☒ | ☐ |
| d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | ☐ | ☐ | ☒ | ☐ |
| e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or | ☐ | ☐ | ☒ | ☐ |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| provide substantial additional sources of polluted runoff? | | | | |
| f. Otherwise substantially degrade water quality? | ☐ | ☐ | ☒ | ☐ |
| g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | ☐ | ☐ | ☐ | ☒ |
| h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | ☐ | ☐ | ☐ | ☒ |
| i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | ☐ | ☐ | ☐ | ☒ |
| j. Inundation by seiche, tsunami, or mudflow? | ☐ | ☐ | ☐ | ☒ |
| **X. LAND USE AND PLANNING**. Would the project: | | | | |
| a. Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| b. Conflict with applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☐ | ☒ |
| c. Conflict with any applicable habitat conservation plan or natural community conservation plan? | ☐ | ☐ | ☐ | ☒ |
| **XI. MINERAL RESOURCES**. Would the project: | | | | |
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☒ |
| b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☐ | ☒ |
| **XII. NOISE.** Would the project result in: | | | | |
| a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☐ | ☒ | ☐ |
| b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☒ | ☐ |
| d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☒ | ☐ |
| e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |
| **XIII. POPULATION AND HOUSING.** Would the project: | | | | |
| a. Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☐ | ☒ |
| b. Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |
| c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |
| **XIV. PUBLIC SERVICES.** Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| a. Fire protection? | ☐ | ☐ | ☐ | ☒ |
| b. Police protection? | ☐ | ☐ | ☐ | ☒ |
| c. Schools? | ☐ | ☐ | ☐ | ☒ |
| d. Parks? | ☐ | ☐ | ☐ | ☒ |
| e. Other governmental services (including roads)? | ☐ | ☐ | ☐ | ☒ |
| **XV. RECREATION.** | | | | |
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | ☒ |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☒ |
| **XVI. TRANSPORTATION/TRAFFIC.** Would the project: | | | | |
| a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | ☐ | ☐ | ☒ | ☐ |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | ☐ | ☐ | ☒ | ☐ |
| c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | ☐ | ☐ | ☐ | ☒ |
| d. Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☐ | ☒ |
| e. Result in inadequate emergency access? | ☐ | ☐ | ☐ | ☒ |
| f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | ☐ | ☐ | ☐ | ☒ |
| **XVII. UTILITIES AND SERVICE SYSTEMS.** Would the project: | | | | |
| a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ☐ | ☒ |
| b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☐ | ☒ |
| c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☐ | ☒ |
| d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ☐ | ☐ | ☒ |
| e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☐ | ☒ |
| f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ☒ | ☐ |
| g. Comply with federal, state, and local statutes and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ |

**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.**

| | | | | |
|---|---|---|---|---|
| a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☐ | ☒ | ☐ |
| b. Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects). | ☐ | ☐ | ☒ | ☐ |
| c. Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☐ | ☒ | ☐ |

☞ ☐ **DISCUSSION OF THE ENVIRONMENTAL EVALUATION (Attach additional sheets if necessary)**

**(See Attachment B)**

# ATTACHMENT A
# PROJECT DESCRIPTION

## 1.0 PURPOSE OF INITIAL STUDY

The general purpose of this Initial Study is to determine if the Atlantic Aviation Los Angeles International Airport (LAX) Hangar and Office Development Project ("proposed project") may have a significant effect on the environment and to serve as an informational document for the public and the decision-makers.

The Los Angeles World Airports (LAWA) has completed the following Initial Study for the proposed project in accordance with the California Environmental Quality Act or CEQA (Section 21000 et seq., California Public Resources Code), implementing State CEQA Guidelines (Section 15000 et seq. Title 14, California Code of Regulations), and L.A. CEQA Thresholds Guide (2006). The Initial Study for the proposed project was prepared in accordance with the requirements set forth in Section 15063 of the State CEQA Guidelines. As determined in this Initial Study and as further described in Attachment B, Explanation of Checklist Determinations, there is no substantial evidence that the proposed project may have a significant effect on the environment. Therefore, in accordance with Section 15070 of the State CEQA Guidelines, a Negative Declaration is hereby proposed.

This Draft Initial Study/Negative Declaration (IS/ND) will be circulated for review and comment by the public and other interested parties, agencies, and organizations for 20 days in accordance with Section 15073 of the State CEQA Guidelines. All comments or questions about the Draft IS/ND should be addressed to the following individual:

Ms. Evelyn Quintanilla
Los Angeles World Airports
One World Way West, 2nd Floor
Los Angeles, CA 90045
(800) 919-3766

Upon completion of the public comment period, a Final IS/ND will be prepared that provides written responses to comments received on the Draft IS/ND. These comments and their responses will be included in the Final IS/ND for consideration by LAWA.

## 2.0 INTRODUCTION

Atlantic Aviation proposes the implementation of the proposed project on its leasehold located at 6411 West Imperial Highway, Los Angeles, California. The main purpose of the project is to provide a greater level of service to the users of its Fixed Based Operations (FBO), enabling them to store their aircraft inside a hangar rather than park them outside. By providing hangar storage for aircraft, some of Atlantic Aviation's current LAX customers would be able to base their aircraft at LAX, rather than at outlying airports, thereby reducing the number of aircraft operations at LAX, and eliminating unnecessary flights to and from LAX from outlying airports. This would allow FBO users to be more responsive to their customers and operate more cost effectively.

## 2.0 PROJECT LOCATION AND SURROUNDING USES

### Regional Setting

As shown in Figure 1, Regional Location Map, the project site is located within the City of Los Angeles, at LAX on LAWA property. The project site is located within the LAX Plan area of the City of Los Angeles, which is in the County of Los Angeles. LAX is the primary airport for the greater Los Angeles area, encompassing approximately 3,650 acres, and is situated at the western edge of the City of Los Angeles. In 2012, LAX was the world's sixth busiest passenger airport, serving approximately 63.6 million annual passengers (LAWA, 2013).

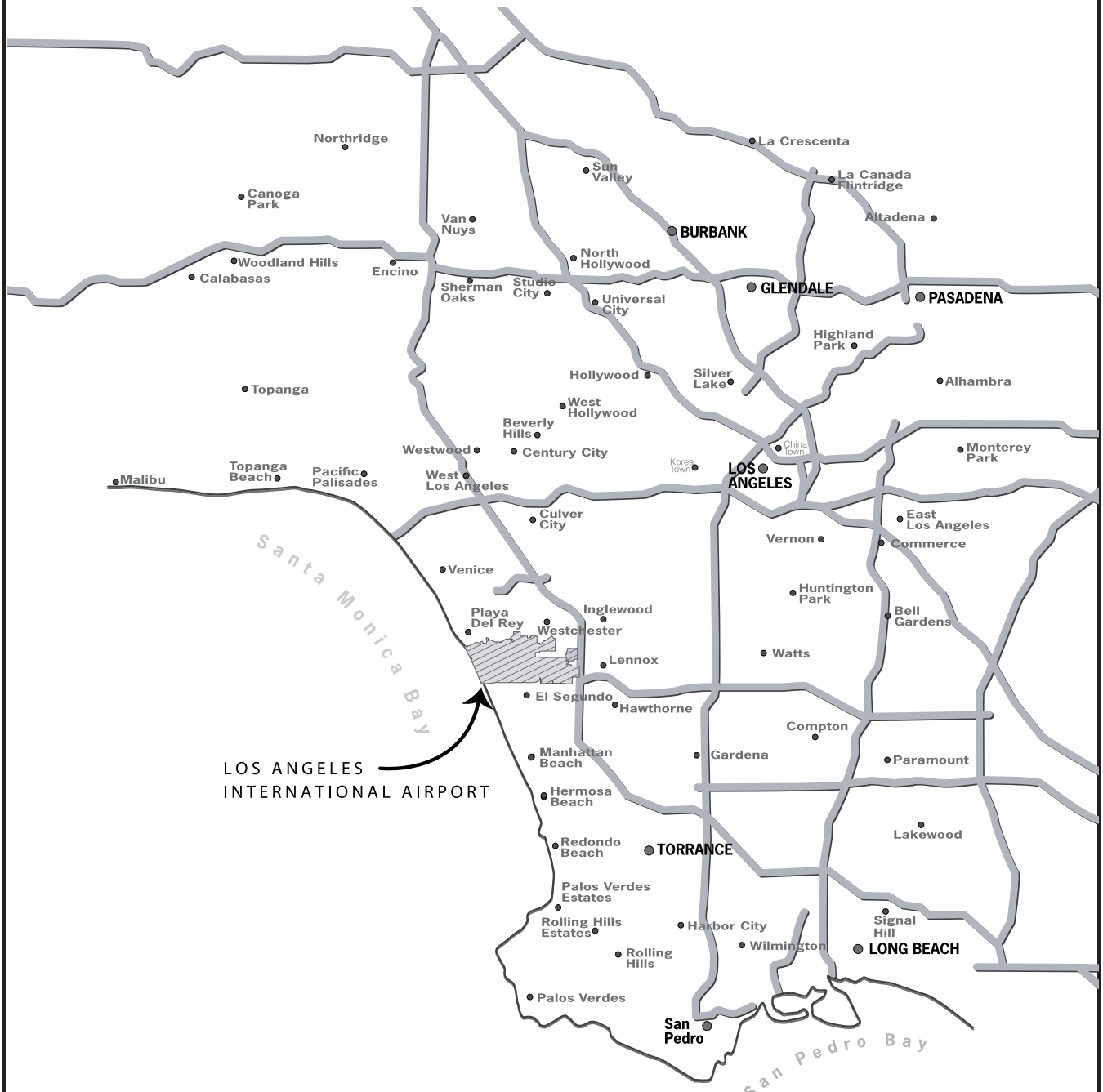
In the LAX vicinity, the community of Westchester is located to the north, the City of El Segundo is to the south, the City of Inglewood and unincorporated portions of Los Angeles County are to the east, and the Pacific Ocean lies to the west. Regional access to LAX is provided by Interstate 105, which runs east-west and is located adjacent to LAX on the south, and the San Diego Freeway (Interstate 405), which runs north-south and is located east of LAX. The main arterial streets serving LAX include Sepulveda Boulevard, Century Boulevard, Imperial Highway and Lincoln Boulevard.

### Local Setting and Land Uses

The project site is located within the southern portion of the airport, approximately 1,120 feet west of the intersection of Sepulveda Boulevard and Imperial Highway. The site is located south of the south airfield at LAX and north of Imperial Highway and Interstate 105. Figure 2 illustrates the project location. Nearby land uses to the west of the site include cargo and freight tenants and a LAWA police facility. The Atlantic Aviation apron and FBO customer service building are located to the east, followed by Sepulveda Boulevard, which separates the Atlantic Aviation leasehold from another FBO and cargo facilities. Immediately south of the site is a portion of the Atlantic Aviation parking area and a Federal Aviation Administration (FAA) Airport Surface Detection Tower (ASDE-3). The project site is designated as Airport Airside in the LAX Plan and as LAX – A Zone (Airport Airside Sub-Area) in the LAX Specific Plan. FBOs are permitted within the Airport Airside Sub-Area; such uses normally include aircraft hangar storage. Access to the site is provided by an airport access road via Imperial Highway and California Street.

## 3.0 PROJECT BACKGROUND

On December 29, 2003, Mercury Air Group, Inc. (Mercury) executed a land lease for 15.3 acres of land with the City of Los Angeles to develop an FBO at LAX. In 2007, Atlantic Aviation purchased Mercury Air Group, Inc.'s LAX interest and is now doing business as Atlantic Aviation, Inc. at the leasehold and is in full compliance with all of LAWA rules and regulations.




Prepared by: CDM, 2013.

| Atlantic Aviation FBO LAX Hangar Project | Regional Location Map | Figure 1 |
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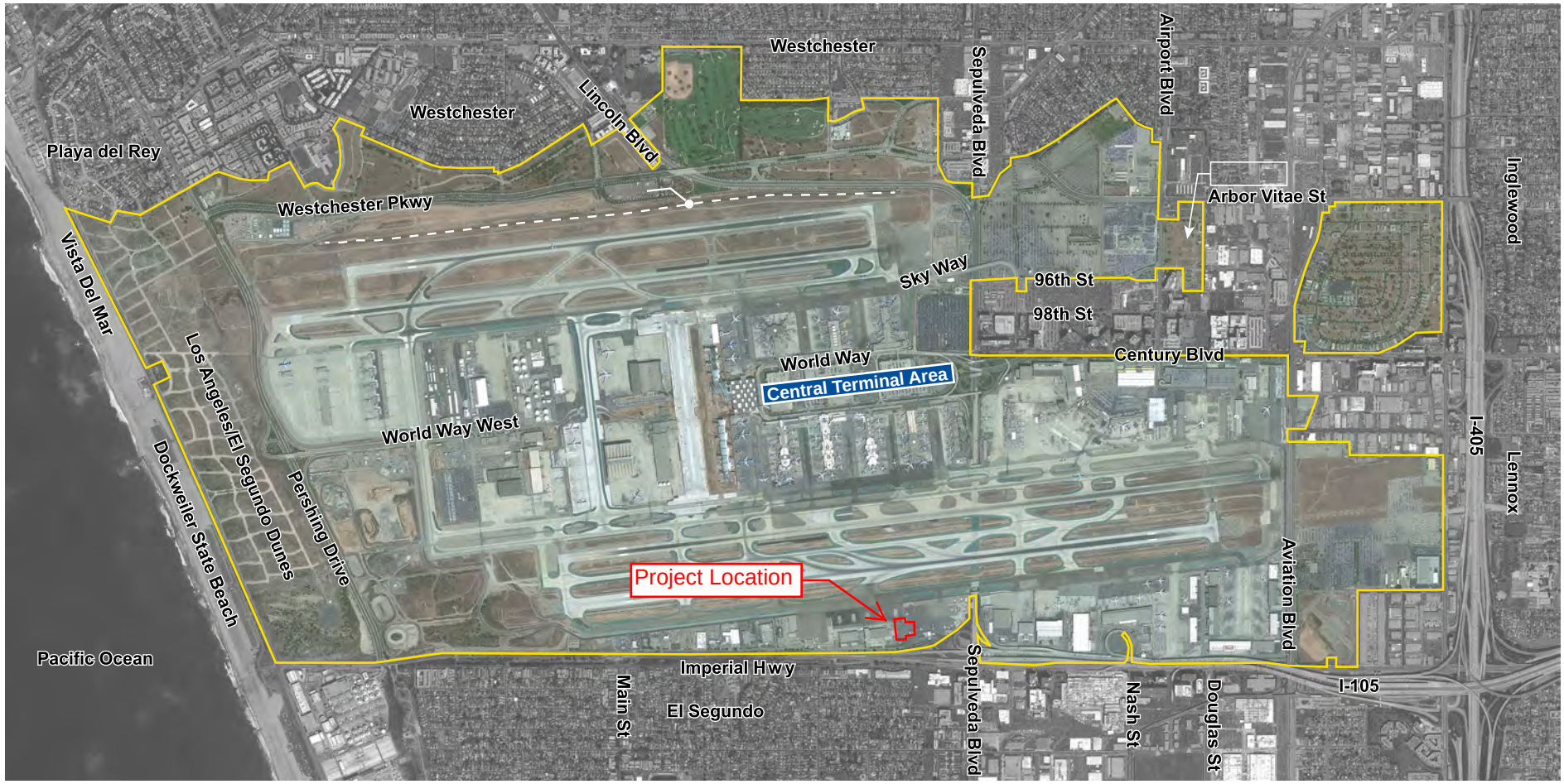


0 1200 2400 ft

Scale

north

Source: Los Angeles World Airports, 2011.
Prepared by: CDM Smith, 2012.

| Atlantic Aviation FBO LAX Hangar Project | Project Location | Figure 2 |
|---|---|---|

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When Mercury executed its land lease, Mercury agreed to demolish and remove the B4 hangar and Air Freight Building 12 (AF12), which were located on the site. These improvements totaled 83,600 square feet, although only about 59,000 square feet were in use at the time. In 2004, Mercury completed demolition of the B4 and AF12 improvements and constructed a new 10,059 square foot FBO customer service and customs building, a vehicle parking lot, and a new concrete aircraft parking apron. Initially, Mercury contemplated construction of a 3,400 square foot airline maintenance building to support their airline maintenance service to commercial airliners. This building, however, was never built as Mercury sold off that portion of their business and discontinued commercial airliner maintenance on their FBO ramp.

Atlantic Aviation is currently seeking to construct a 36,550 square foot hangar on the western portion of the leasehold, as well as a 4,900 square foot one-story office building and 2,000 square foot one-story hangar support area, for a total of 43,450 square feet in improvements. With these improvements, the total building area on the leasehold would be 53,509 square feet. This is less building area than existed on the leasehold when Mercury executed its original lease.

In addition, the LAX Master Plan identified a proposed 121,000 square foot general aviation facility at the site currently occupied by Atlantic Aviation.[1] Implementation of the proposed project would be consistent with the improvements assumed in the LAX Master Plan and consistent with the Master Plan's primary goals and objectives to ensure safe and efficient operations at LAX.

## 4.0 STATEMENT OF PROJECT OBJECTIVES

The proposed hangar and office building would enable Atlantic Aviation to provide a greater level of service to the users of its FBO, enabling them to store their aircraft inside a hangar rather than park them outside. Some of these users currently base their aircraft at other airports, requiring the aircraft to fly into LAX to pick up and drop off passengers before returning the aircraft to their home airport. Relocating these aircraft to LAX would reduce the number of aircraft operations (i.e. takeoffs and landings) from four per customer trip to two. Basing the aircraft in the proposed hangar would also allow FBO users to be more responsive to their customers and operate more cost effectively, by eliminating unnecessary flights to and from LAX from a distant home base.

The primary objective of the proposed project is to provide tenants the opportunity to park their planes in a protective storage hangar. The proposed modernization would improve the quality of service provided to FBO tenants. The specific objectives of the proposed project are to:

- Provide a modern, state-of-the-art facility to meet tenant needs by providing a facility to store planes in a protective hangar
- Reduce total Atlantic Aviation airport operations at LAX

[1] City of Los Angeles, Los Angeles International Airport Final Master Plan, Section 2.6, April 2004.

## 5.0 PROJECT DESCRIPTION

### Proposed Facilities and Operations

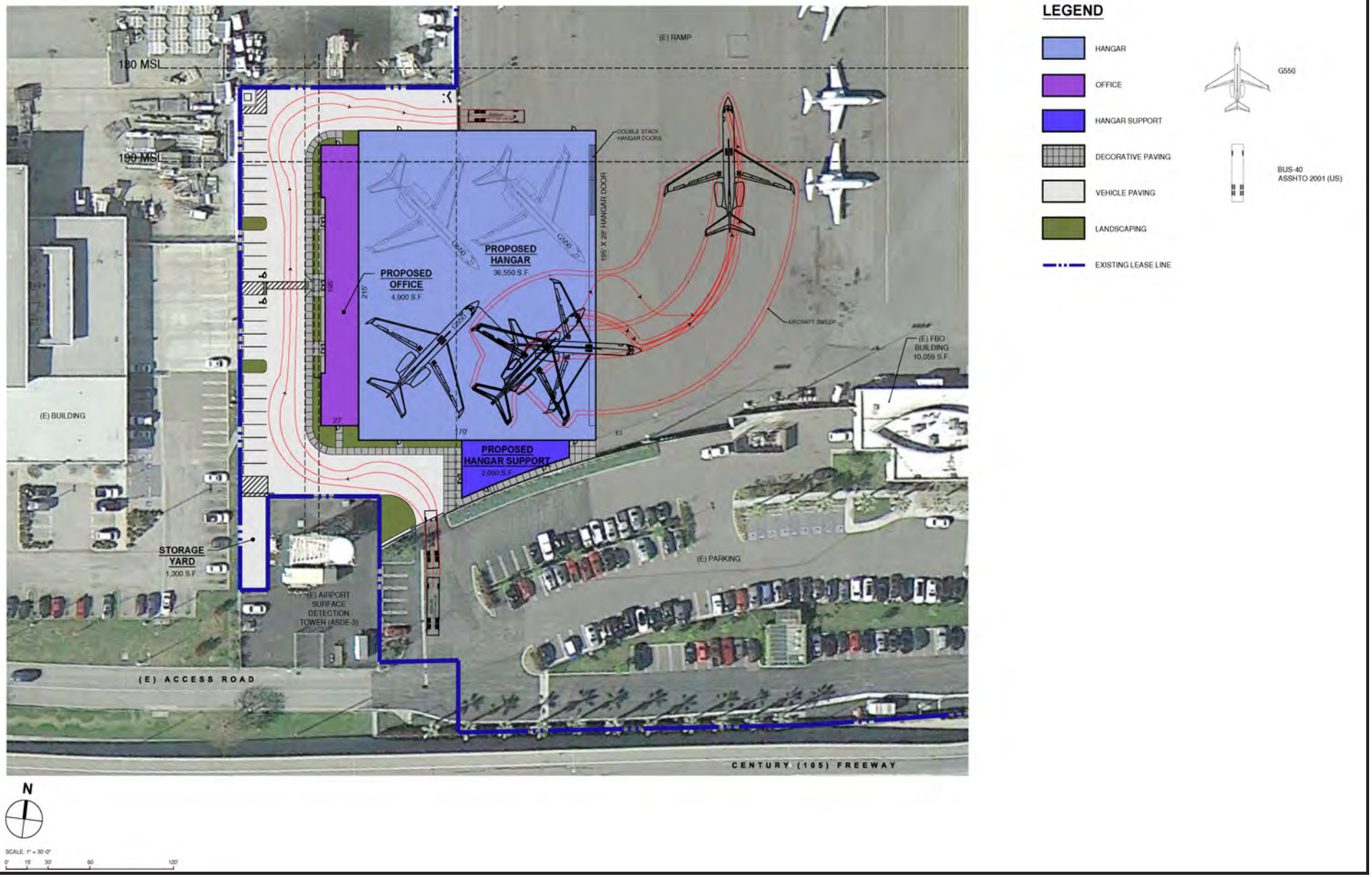
Atlantic Aviation proposes to construct a 36,550 square foot hangar, a 4,900 square foot office building, and a 2,000 square foot hangar support building for total new improvements of 43,450 square feet. The hangar would be a one-story, metal building, 215 feet by 170 feet and 42 feet tall at its maximum, with horizontal wall panels on the sides and a hangar door located on the east side that is 195 feet wide by 28 feet tall. The hangar door would be a traditional powered, bi-directional metal rolling door. There would be no heavy aircraft maintenance performed within the proposed hangar.

The office building would be a one-story, 27 foot by 195 foot steel-frame building with an exterior stucco side finish to match the FBO customer service building. The office building would be located on the west side of the hangar and would share a common wall with the hangar. There would be four office suites included in the office building for the use of the tenants who store their aircraft in the hangar. The office building itself would be located outside the airport operations area (AOA) boundary line, which would be located between the office building and the hangar. There would be one security door from the office building into the hangar that would be controlled by card key access.

The hangar support area would be a one-story, 2,000 square foot building located on the south side of the hangar and would have an exterior stucco finish to match the FBO customer service building and proposed office building. This building would contain a foam fire suppression system, electrical room, hangar rest rooms, and tenant storage areas.

On the west side of the office building, a vehicle parking lot would be included for tenants and passengers using the hangar and office building. The vehicle parking lot would be outside of the AOA. On the north side of the hangar, a vehicle emergency access security gate would be constructed to allow access to the AOA, which would be controlled by card key access from the vehicle parking lot. Figure 3 provides a project site plan detailing the proposed improvements and Figure 4 provides a conceptual rendering of the completed structure.

The proposed project would result in minimal changes to the existing uses at the Atlantic Aviation FBO. All of the aircraft that would be housed in the hangar currently operate out of the Atlantic Aviation FBO, although one of the aircraft is currently based out of the Van Nuys Airport (VNY). The aircraft based at VNY is flown from VNY to Atlantic's FBO at LAX to pick up customers for departure to their destination, thereby requiring four operations (i.e., landings/takeoffs) for every round trip flight. By relocating its home base to LAX, only two operations would be required for every round trip flight. Of the four aircraft that would use the hangar, two aircraft generally operate one to two times per week, one operates approximately twice per week, and one operates about four times per week. With two operations per flight (one departure, one arrival), on average, the total number of operations per week for the four aircraft is estimated to be 20. Each flight requires two pilots. Aircraft departure and arrival times vary throughout the day, and occur any day of the week, including weekends.




| | | |
|---|---|---|
| **Atlantic Aviation FBO LAX Hangar Project** | **Project Site Plan** | Figure **3** |

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| Atlantic Aviation FBO LAX Hangar Project | Conceptual Rendering | Figure 4 |
|---|---|---|

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All four aircraft are currently serviced at LAX (e.g., flight kitchen services, fueling); no increase in services would occur with implementation of the proposed project. No heavy aircraft maintenance would be conducted at the FBO.

The office building would be used by Atlantic Aviation customers, specifically aircraft crew and support staff. Aircraft crew travel to and from the site would be based on flight schedules, would not ordinarily occur on a daily basis, and could occur in both peak and non-peak travel times. The office building working hours would not mirror the same working hours as other commercial office uses.

The staff members and crew of three of the aircraft currently operate out of LAX and do not represent new employees at the site. The aircraft crew and support staff of the fourth aircraft are currently located at VNY and would represent new employees on the site. It is estimated that relocating this aircraft to LAX would only generate eight additional pilot vehicle trips per week (two pilots per operation, two operations per week, two trips per pilot per operation, consisting of one arrival and one departure) to Atlantic's FBO at LAX as well as additional trips by aircraft mechanics who perform light maintenance on the aircraft when required. All of the executives that would fly out of the Atlantic FBO at LAX are current passengers at the FBO and would not represent new trips to LAX.

The pilots would arrive a few hours prior to the scheduled departure time to manage the provision of the aircraft with fuel and catering, file a flight plan, and take care of other logistics. Upon arrival back at Atlantic's FBO, the pilots would complete any flight termination documentation and plan for their next departure. These activities currently occur in the FBO main building, but would be conducted in the new office building with implementation of the proposed project.

**Access and Parking**

The western portion of the project site is currently used for parking. A portion of this parking would be removed to accommodate the hangar and office building. Parking for the staff and clientele associated with the proposed project would be provided within the western portion of the project site and in the existing FBO parking area. The City of Los Angeles Department of City Planning is requiring 36 parking spaces for the proposed project. To the west side of the hangar and office building, a vehicle parking lot would be constructed that would include 25 stalls. Of the existing parking on the leasehold, 137 parking spaces would remain, for a total of 162 stalls on the leasehold. The total number of required parking spaces for the leasehold, including the existing FBO main building and the proposed building, is 57. Therefore, the total number of parking stalls on the leasehold would exceed the Department of City Planning minimum parking requirements. The access gate from Atlantic Aviation's current parking lot would be adjusted to fit with the proposed site plan. The entire vehicle parking lot would be outside of the AOA.

**Construction**

Construction is anticipated to take approximately 12 months to be completed and is expected to begin March 2014. Construction activities would be limited to daytime hours (7:00 am to 7:00 pm) for the duration of the project. During construction, the existing site paving would be removed from the site and exported as miscellaneous crushed material. Approximately 50 percent of the construction debris

would be recycled offsite. The proposed project would export approximately 2,365 cubic yards of asphalt concrete and import approximately 2,365 cubic yards of asphalt concrete and sand.

The proposed project would be constructed with several design features to meet the California Green Building Standards Code, also known as the CALGreen Code (Part 11 of the 2010 Title 24 Building Standards Code), as follows:

- The primary structural system of the building would be a pre-engineered metal building that uses an average of 75 percent recycled content steel. Steel fabrication would occur within 500 miles of the project site to reduce materials transportation.
- Exterior building materials would be primarily metal wall and roof panels which also have an average recycled content of 75 percent. The panels that would be used have a 20-year finish, which minimizes the life cycle maintenance and environmental impact of future painting.
- Low wattage interior lighting with occupancy sensors would be used throughout the building to automatically turn off lighting when not in use.
- Heating, ventilation, and air conditioning (i.e., HVAC) equipment with Seasonal Energy Efficiency Ratio (SEER) and Energy Efficiency Ratio (EER) that exceeds the minimum energy efficiency ratings of Title 24 would be used at conditioned spaces.
- Natural ventilation in conjunction with a low-speed industrial ceiling fan in the hangar would maintain thermal comfort inside the unconditioned hangar and would contribute to the energy efficiency of the building
- The office areas would use a high performance glazing comprised of Solar Control Low E insulated glazing in exterior wall assemblies that have a minimum R-value of 19.
- The hangar areas would be naturally illuminated with clerestory polycarbonate glazing at the walls and hangar doors. In addition, the roof area would have a minimum area of 5 percent skylights with accommodation for future photovoltaic panels.
- The roof assembly would be a cool roof design with a Solar Reflectance Index (SRI) of 78 or greater, which would reduce the heat island effect and lower the temperature of the air surrounding the building and save energy used to condition the building.
- In lieu of a traditional epoxy coated floor, the hangar would have a diamond polished concrete floor that is eco-friendly and maintenance free. The highly reflective surface also reduces the need for artificial light.

## 6.0 NECESSARY APPROVALS

Approvals required for the proposed project include, but may not be limited to, the following:

- Project approval by LAWA
    - Recommendation of the Executive Director regarding LAX Plan Compliance Review
    - Project approval by the Board of Airport Commissioners, adoption of the Negative Declaration, finding of compliance with the LAX Plan and LAX Specific Plan, recommendation that City Council concur with the actions of the Board of Airport Commissioners and grant LAX Plan Compliance approval

- Grant of LAX Plan Compliance by the Los Angeles City Council
- Building and other permits from the City of Los Angeles Department of Building and Safety
- FAA Form 7460 submittal for notice of proposed construction or alternative to FAA and approval in consideration of Part 77 requirements
- Any additional actions as may be determined necessary

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## ATTACHMENT B
## EXPLANATION OF CHECKLIST DETERMINATION

**I. AESTHETICS.** *Would the project*:

**a. Have a substantial adverse effect on a scenic vista?**

**b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, or other locally recognized desirable aesthetic natural feature within a state or city-designated scenic highway?**

*a-b. Less Than Significant Impact*. The project site is currently occupied by an aircraft parking apron and surface parking lots. The site is visible from Sepulveda Boulevard to the east and from Interstate 105, which runs along the southern boundary of the site. The project site has no landscaping or other features of aesthetic value, nor is it located adjacent to or within the viewshed of a designated scenic highway or scenic vista. The nearest officially designated state scenic highway is approximately 22 miles northwest of the proposed project site (State Highway 2, from approximately 3 miles north of Interstate 201 in La Canada to the San Bernardino County Line). The nearest eligible state scenic highway (which is not officially designated by the state, but is a City-designated scenic highway) is State Highway 1, which has a starting point at Lincoln and Venice Boulevards, approximately 5 miles from the project site, and proceeds northwesterly to Point Mugu.[2] Vista del Mar, the nearest City-designated scenic highway, is located 2 miles west of the project site; the project site is not visible from Vista del Mar.

The Los Angeles/El Segundo Dunes are located approximately 1.7 miles west of the project site, opposite Pershing Drive. The project site is not visible from the dunes and the proposed project would not obstruct any views of dunes. The proposed project is not located within the viewshed of any other scenic resources, historic buildings, or other locally recognized desirable aesthetic natural feature. The proposed project would be visible from the El Segundo bluffs, which are located on the south side of Imperial Highway. Benches along the bluff-top greenbelt are frequently used by the public for viewing arriving and departing aircraft as well as for taking in scenic long-range views of the Santa Monica Mountains. The proposed project would also be visible from the upper floors of the Embassy Suites Hotel, which is located on Imperial Avenue. However, the proposed project would be visually consistent with adjacent airport-related uses and would not disrupt views of the airfield. Therefore, impacts related to scenic vistas and scenic resources, including scenic highways, would be less than significant with the implementation of the proposed project and no mitigation is required.

**c. Substantially degrade the existing visual character or quality of the site and its surroundings?**

*Less Than Significant Impact*. The project site is a disturbed area surrounded by airport-related uses. Currently, the project site is occupied by an aircraft parking apron and surface parking lot. Operation of the proposed project would be consistent in visual character with existing airport-related

[2] California Department of Transportation, California Scenic Highway Mapping System website. Available: http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm, accessed August 14, 2013.

uses, including the existing Atlantic Aviation building and operations east of the project site and Nippon Cargo Airlines and Thai Cargo located to the west of the project site. The proposed hangar would be a metal building that would be 42 feet tall at its maximum height. The proposed building would be similar in height and architectural style to the surrounding buildings. Further, construction activities at the project site would be visually consistent with the current use of the site and surroundings. Therefore, impacts on the existing visual character or quality of the site and its surroundings would be less than significant with the implementation of the proposed project, and no mitigation is required.

**d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

*Less Than Significant Impact*. The project site is in an urban area with existing sources of ambient lighting, such as street lights and lighting of the airfield and other airport facilities. Existing lighting in the vicinity of the project site includes lighting along Interstate 105 to the south, lighting of the Nippon Cargo Airlines/Thai Cargo facility to the west, and existing lights within the Atlantic Aviation leasehold, including lights in the northeast corner of the proposed parking lot and along the northern portion of the main FBO parking lot directly south of the proposed hangar support building. Lighting associated with the proposed project would be consistent with the type of lighting found in the southern portion of the airport and would be in compliance with applicable FAA standards and in conformance with relevant LAWA guidelines.

In compliance with LAWA approved LAX Master Plan Commitments LI-2 and LI-3, below, the building material used for the proposed project would incorporate substantial amounts of non-reflective materials, which would ensure that no light sources or building materials would be introduced that interfere with daytime or nighttime views in the area. The applicable LAX Master Plan Commitments are as follows:

***LI-2. Use of Non-Glare Generating Building Materials.***

Prior to approval of final plans, LAWA will ensure that proposed LAX facilities will be constructed to maximize use of non-reflective materials and minimize use of undifferentiated expanses of glass.

***LI-3. Lighting Controls.***

Prior to final approval of plans for new lighting, LAWA will conduct reviews of lighting type and placement to ensure that lighting will not interfere with aeronautical lights or otherwise impair Airport Traffic Control Tower or pilot operations. Plan reviews will also ensure, where feasible, that lighting is shielded and focused to avoid glare or unnecessary light spill-over. In addition, LAWA or its designee will undertake consultation in selection of appropriate lighting type and placement, where feasible, to ensure that new lights or changes in lighting will not have an adverse effect on the natural behavior of sensitive flora and fauna within the Habitat Restoration Area.

Therefore, impacts related to light and glare would be less than significant with the implementation of the proposed project, and no mitigation is required.

**II. AGRICULTURAL AND FORESTRY RESOURCES.** *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California agricultural land evaluation and site assessment model (1997) prepared by the*

*California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:*

**a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

**b. Conflict with the existing zoning for agricultural use, or a Williamson Act Contract?**

**c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?**

**d. Result in the loss of forest land or conversion of forest land to non-forest use?**

**e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

*a-e. No Impact.* The project site is located within a developed airport and is surrounded by airport uses and urbanized areas. There are no agricultural or forest resources or operations at the project site or surrounding areas, including prime or unique farmlands or farmlands of statewide local importance. Further, there are no Williamson Act contracts in effect for the project site or surrounding areas.[3] The proposed project would represent a continuation of the current airport-related uses and would not convert farmland to non-agricultural use nor would it result in any conflicts with existing zoning for agricultural use or a Williamson Act contract.

There are no forest land or timberland resources or operations within the vicinity of the project site, including timberland zoned Timberland Production. The proposed project would be consistent with the current airport-related and urban uses and would not convert forest land or timberland to non-forest. Therefore, no impacts to agricultural or forest land or timberland resources would occur with implementation of the proposed project and no mitigation is required.

**III. AIR QUALITY.** *The significance criteria established by the South Coast Air Quality Management District (SCAQMD) may be relied upon to make the following determinations. Would the project:*

**a. Conflict with or obstruct implementation of the applicable South Coast Air Quality Management District plans?**

*Less Than Significant Impact*. The proposed project is located in the South Coast Air Basin (SCAB), which is under the jurisdiction of the SCAQMD. The SCAQMD is the regional agency responsible for air quality regulations within the SCAB including enforcing the California Ambient Air Quality Standards (CAAQS) and implementing strategies to improve air quality and to mitigate effects from new growth. The SCAQMD, in association with the California Air Resources Board (CARB) and the Southern California Association of Governments (SCAG), is responsible for

[3] City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.16, April 2004.

preparing the Air Quality Management Plan (AQMP) that details how the region intends to attain or maintain the state and federal ambient air quality standards.

The Final 2012 AQMP[4] describes the SCAQMD's plan to attain the federal fine particulate matter less than or equal to 2.5 microns (μm) in diameter (PM2.5) by 2014 and to continue improving ozone ($O_3$) levels. Proposed control measures include reducing PM2.5 and $NO_x$ emissions from on- and off-road vehicle engines. In 2007, CARB adopted a regulation to reduce diesel particulate matter and nitrogen oxides ($NO_x$) emissions from in-use (existing) off-road heavy-duty diesel vehicles. The Final 2012 AQMP proposes to carry forward control measures for ozone presented in the Final 2007 AQMP,[5] which includes requiring the use of cleaner (as compared to "baseline") off-road equipment. Any construction equipment necessary to construct the hangar, offices, and hangar support area would operate in compliance with state law and would be consistent with the objectives of the Final 2007 AQMP. Furthermore, the building would be constructed to meet the requirements of the 2010 California Green Building Standards Code (CALGreen) and will incorporate energy efficient measures, as identified in Section 5.0, Project Description. The project would meet the goals of the AQMP related to energy efficiency and conservation and, therefore, would not conflict with the AQMP.

The City of Los Angeles adopted an Air Quality Element that is part of the General Plan.[6] Objective 1.3 of the Air Quality Element is to reduce particulate matter emissions from unpaved areas, parking lots, and construction sites. All activities would be compliant with the SCAQMD's Rule 403 for fugitive dust control, thereby resulting in particulate matter emission reductions. Objective 5.1 of the Air Quality Element is to reduce energy consumption and shift to non-polluting sources of energy in buildings and operations. The proposed project would be designed and constructed in accordance with CALGreen standards, thereby meeting the requirements of the General Plan. The proposed project would reduce aircraft operations by eliminating trips made from an outlying airport where one of the aircraft that would be stored in the hangar is currently based. The proposed project would not change the basic operation of the FBO. For these reasons, the proposed project would be consistent with the Air Quality Element of the General Plan.

As discussed above, implementation of the proposed project would not obstruct or conflict with the applicable SCAQMD plan and thus, the impact is less than significant, and no mitigation is required.

**b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

*Less Than Significant Impact.* The California Clean Air Act, signed into law in 1988, established the CAAQS; all areas of the state are required to achieve and maintain the CAAQS by the earliest practicable date. Regions of the state that have not met one or more of the CAAQS are known as nonattainment areas, while regions that meet the CAAQS are known as attainment areas.

The project site is located in the Los Angeles County sub-area of the SCAB. Los Angeles County is designated as a state nonattainment area for $O_3$, fine particulate matter less than or equal to 2.5 μm in diameter (PM2.5), inhalable particulate matter less than or equal to 10 μm in diameter

[4] South Coast Air Quality Management District, Final 2012 Air Quality Management Plan, December 2012.
[5] South Coast Air Quality Management District, Final 2007 Air Quality Management Plan, June 2007.
[6] City of Los Angeles, Department of City Planning, Air Quality Element: An Element of the General Plan of the City of Los Angeles, November 1992.

(PM10), nitrogen dioxide ($NO_2$), and lead; and an attainment or unclassified area for carbon monoxide (CO), sulfur dioxide ($SO_2$), sulfates, hydrogen sulfide, and visibility reducing particles.[7]

The SCAQMD publishes thresholds of significance for these pollutants.[8] If the proposed project were to result in substantial emissions that would exceed the significance criteria, then a significant impact would occur. Table 1 summarizes the mass daily thresholds for construction and operation.

**Table 1**
**SCAQMD Mass Daily Pollutant Emission Thresholds**

| Pollutant | Construction | Operation |
|---|---|---|
| $NO_x$ | 100 lbs/day | 55 lbs/day |
| VOC | 75 lbs/day | 55 lbs/day |
| PM10 | 150 lbs/day | 150 lbs/day |
| PM2.5 | 55 lbs/day | 55 lbs/day |
| $SO_x$ | 150 lbs/day | 150 lbs/day |
| CO | 550 lbs/day | 550 lbs/day |
| Lead | 3 lbs/day | 3 lbs/day |

Source: SCAQMD 2011
Key:
CO = carbon monoxide
lbs/day = pounds per day
$NO_x$ = nitrogen oxides
PM10 = inhalable particulate matter
PM2.5 = fine particulate matter
$SO_x$ = sulfur oxides
VOC = volatile organic compounds

The California Emissions Estimator Model (CalEEMod), Version 2011.1.1, was used to estimate criteria and precursor pollutant emissions (volatile organic compounds [VOCs], $NO_x$, CO, $SO_2$, PM10, and PM2.5).[9,10] The analysis does not estimate lead emissions because no major sources of lead would occur at the site. CalEEMod is a statewide land use emissions computer model that

[7] California Air Resources Board, Area Designations Maps/State and National Homepage, Available: http://www.arb.ca.gov/desig/adm/adm.htm, accessed May 28, 2013.

[8] South Coast Air Quality Management District, SCAQMD Air Quality Significance Thresholds, March 2011.

[9] California Emissions Estimator Model (CalEEMod) Homepage, developed by ENVIRON International Corporation in collaboration with SCAQMD and other California Air Districts, Available: http://www.caleemod.com/, accessed May 28, 2013.

[10] A newer version of CalEEMod, Version 2013.2, was released on July 31, 2013, after emission modeling for the proposed project was already complete (California Emissions Estimator Model [CalEEMod] Homepage, developed by ENVIRON International Corporation in collaboration with SCAQMD and other California Air Districts, Available: http://www.caleemod.com/, accessed August 29, 2013). The revisions to CalEEMod include new emission factors for paved roads and mobile sources, among other changes. Due to the relatively low levels of activity associated with the project, including the low number of vehicle trips, and the fact that the modeled results using Version 2011.1.1 show that project impacts would be well below all thresholds (see Tables 2 and 3), it is not expected that use of Version 2013.2 would yield materially different results.

estimates construction and operational emissions from a variety of land use projects. CalEEMod also contains mitigation measures to reduce criteria pollutant emissions, if necessary.

Construction emissions were estimated for site preparation, demolition, building construction, paving, and architectural coatings. CalEEMod default data for equipment size (i.e., horsepower) and daily hours of operation were used. Construction emissions also include vendor and haul trips, construction worker commuting trips, and fugitive dust from demolition activities and paved road dust. Operational emissions would also occur from increase in employee vehicle trips as a result of the project and reapplication of architectural coatings for ongoing building maintenance. For purposes of this analysis, it was assumed that the proposed project would result in up to eight additional employees on the site. Refer to Appendix A of this IS/ND for the detailed model results. Table 2 summarizes maximum daily emissions that would occur from construction activities.

**Table 2**
**Construction Emissions Summary – Criteria Pollutants**

| | **Maximum Daily Emissions (pounds per day)** | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **$NO_x$** | **CO** | **$SO_2$** | **PM10** | **PM2.5** |
| Maximum Emissions | 62 | 55 | 33 | <1 | 7 | 4 |
| SCAQMD Construction Threshold | 75 | 100 | 550 | 150 | 150 | 55 |
| Significant Impact? | No | No | No | No | No | No |

Key:
CO = carbon monoxide
NOx = nitrogen oxides
PM10 = inhalable particulate matter
PM2.5 = fine particulate matter
$SO_2$ = sulfur dioxide
VOC = volatile organic compounds

As shown in Table 2, emissions for all criteria pollutants would be less than the SCAQMD's significance thresholds for construction emissions. Additionally, operational emissions for all criteria pollutants would be less than two pounds per day, well under the significance criteria shown in Table 1. Actual emissions may be lower, as sustainable design features, such as low maintenance wall and roof panels, low-wattage interior lighting with occupancy sensors, natural ventilation, natural illumination, and cool roof design, would be implemented. Annual emissions from construction and operation are estimated to be less than two tons per year for all analyzed pollutants.

Construction and operational emissions would not violate an air quality standard or contribute substantially to an existing or projected air quality standard. Therefore, the impact is less than significant, and no mitigation is required.

**c. Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is non-attainment ($O_3$, $NO_2$, PM10, PM2.5, and lead) under an applicable federal or state ambient air quality (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

*Less Than Significant Impact*. Cumulative impacts occur when the impact of one project when added to other past, present, or reasonably foreseeable probable future projects could cause a significant impact. In other words, although an individual project may be less than significant, the

combined impacts from the proposed project in conjunction with other projects could cause a significant impact. According to the SCAQMD[11], projects that do not exceed the significance thresholds are generally not considered to be cumulatively significant. As shown in Table 2, the construction emissions of the nonattainment pollutants (PM10, PM2.5, and $O_3$ precursors [$NO_x$ and VOC]), would be less than the SCAQMD significance thresholds. Therefore, the cumulative impact from the proposed project construction would be less than significant and no mitigation is required.

Emissions of the nonattainment pollutants (PM10, PM2.5, and $O_3$ precursors [$NO_x$ and VOC]) from project operation would be negligible and would be less than the SCAQMD significance thresholds. Therefore, the cumulative impact from project operation would be less than significant, and no mitigation is required.

**d. Expose sensitive receptors to substantial pollutant concentrations?**

*Less Than Significant Impact*. As described in Response III.b above, daily construction emissions would be below significance thresholds. Diesel particulate matter is listed as a toxic air contaminant in California and would be subject to human health risk standards of 10 in 1 million for the maximum individual cancer risk and 1.0 (project increment) for the chronic and acute hazard indices. The closest sensitive receptors (i.e., hospitals, K-12 schools, residences, and day care centers) are the residential areas within the City of El Segundo to the south.

The SCAQMD developed thresholds for local air quality impacts from construction activity.[12] Localized significance thresholds (LSTs) are only applicable to the following criteria pollutants: $NO_x$, CO, PM10, and PM2.5. LSTs are analogous to National Ambient Air Quality Standards (NAAQS) and CAAQS; pollutant levels below LSTs would not necessarily be expected to violate the NAAQS or CAAQS. LSTs consider ambient concentrations of pollutants for each source receptor area and distances to the nearest sensitive receptor.

SCAQMD recommends using the equipment type to determine the maximum daily disturbed acreage when analyzing air emissions with CalEEMod: each crawler tractor, grader, or rubber tired dozer operating at the project site could disturb 0.5 acres per workday; a scraper could disturb one acre per workday. The equipment list for the proposed project assumes that one grader and one dozer would operate during the grading phase, which would indicate that one acre would be disturbed per day. The one-acre LSTs were used for this project.

Table 3 summarizes the onsite emissions, which include fugitive dust and off-road construction equipment, and allowable emissions for emissions from a one-acre project located in the Southwest Coastal Los Angeles County Source-Receptor Area. LSTs consider ambient concentrations of pollutants for each source receptor area and distances to the nearest sensitive receptor. The closest receptor (i.e., Embassy Suites hotel) from the project site boundary is located at a distance of approximately 500 feet (150 meters); therefore, the LST thresholds for 150 meters (492 feet) were scaled from the 100 meter (328 foot) and 200 meter (656 foot) thresholds.

[11] South Coast Air Quality Management District, White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution, August 2003.

[12] South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, July 2008.

| Table 3<br>Onsite Emissions Summary – Criteria Pollutants | | | | | | |
|---|---|---|---|---|---|---|
| | **Maximum Onsite Daily Emissions (pounds per day)** | | | | | |
| | **VOC** | **$NO_x$** | **CO** | **$SO_2$** | **PM10** | **PM2.5** |
| **Construction** | | | | | | |
| Maximum Emissions | 62 | 26 | 17 | <1 | 4 | 2 |
| Construction LST | N/A | 123 | 1,692 | N/A | 42 | 15 |
| Significant Impact? | N/A | No | No | N/A | No | No |
| **Operations** | | | | | | |
| Maximum Emissions | 2 | <1 | <1 | <1 | <1 | <1 |
| Operational LST | N/A | 123 | 1,692 | N/A | 10.5 | 4 |
| Significant Impact? | N/A | No | No | N/A | No | No |

Key:
CO = carbon monoxide
LST = localized significance threshold
N/A = not available
$NO_x$ = nitrogen oxides
PM10 = inhalable particulate matter
PM2.5 = fine particulate matter
$SO_2$ = sulfur dioxide
VOC = volatile organic compounds

Anticipated maximum daily onsite emissions would be below the applicable LSTs. Therefore, implementation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations. The impact would be less than significant, and no mitigation is required.

**e. Create objectionable odors affecting a substantial number of people?**

*Less Than Significant Impact*. The use of diesel equipment during construction may generate near-field odors that are considered to be a nuisance. Diesel equipment emits a distinctive odor that may be considered offensive to certain individuals. Due to the short construction period and distance to sensitive receptors, odors from diesel exhaust would not affect a substantial number of people. Operation of the proposed project would not create objectionable odors. Therefore, implementation of the proposed project would not create objectionable odors affecting a substantial number of people. The impact is less than significant, and no mitigation is required.

## IV. BIOLOGICAL RESOURCES. *Would the project:*

**a. Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

**b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

**c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

**d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

**e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?**

**f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

*a-f. No Impact.* The project site is located in a highly developed area and devoid of biological resources. However, other areas within the airport boundary contain plant and animal species as well as habitats identified as sensitive. None of the identified sensitive plant or animal species have been identified on the project site or immediate vicinity. Therefore, no impacts to sensitive or special status species or habitats are expected to occur.

There are no riparian/wetland areas, trees, or wildlife movement corridors at or adjacent to the project site. Therefore, no impacts to any riparian or other sensitive natural community would occur. There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan that includes the project site or immediate vicinity. The Dunes Specific Plan Area (i.e., Los Angeles/El Segundo Dunes), a designated Los Angeles County Significant Ecological Area, is located in the western portion of LAX, approximately 1.7 miles west of the project site. The Dunes area is well removed from the project site and would not be affected by the proposed project. Therefore, no impacts to biological resources would occur with implementation of the proposed project and no mitigation is required.

## V. CULTURAL RESOURCES. *Would the project:*

**a. Cause a substantial adverse change in significance of a historical resource as defined in State CEQA §15064.5?**

*No Impact.* Previously-identified historical resources at LAX include the following:[13]

- Hangar One (listed on National Register) on the southeastern portion of LAX near the northwest corner of Aviation Boulevard and Imperial Highway, approximately 0.9 miles east of the project site;
- Theme Building (eligible for National Register) in the center of the Central Terminal Area;
- WWII Munitions Storage Bunker (eligible for National Register) near the western boundary of LAX; and
- Intermediate Terminal Complex (eligible for the California Register) on the south side of Century Boulevard between Sepulveda Boulevard and Airport Boulevard.

*13* City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.9.1, April 2004.

None of the above resources are at or near the project site; hence, no impacts to historic resources would occur with implementation of the proposed project, and no mitigation is required.

**b. Cause a substantial adverse change in significance of an archaeological resource pursuant to State CEQA §15064.5?**

*No Impact.* The project site is a highly disturbed area that has long been, and is currently being, used for airport and airport-related land uses. Any resources that may have existed on the site at one time are likely to have been displaced or damaged and, as a result, the overall sensitivity of the site with respect to buried resources is low. Excavation associated with project construction would be limited to shallow excavation associated with removal of existing pavement and replacement with the building foundation, which would further limit the potential for archaeological resources to be encountered. Therefore, no impacts to archaeological resources would occur with implementation of the proposed project, and no mitigation is required.

**c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

*No Impact.* The LAX property lies in the northwestern portion of the Los Angeles Basin, a broad structural syncline with a basement of older igneous and metamorphic rocks overlain by thick younger marine and terrestrial deposits. The older deposits that underlie the LAX area are assigned to the Palos Verdes Sand formation, which is one of the better known Pleistocene age deposits in southern California. The records search conducted for the LAX Master Plan Final Environmental Impact Report (EIR) identified the presence of two vertebrate fossil occurrences within the airport area, three more in the immediate vicinity of the airport, and one within approximately 2 miles of the airport. These fossils were found at depths ranging from 13 to 70 feet. As discussed for archaeological resources above, the project site is developed and excavation would be limited to shallow areas of previously disturbed soils. As a result, no direct or indirect impacts to unique paleontological resources or sites or unique geologic features are anticipated to occur with implementation of the proposed project, and no mitigation is required.

**d. Disturb any human remains, including those interred outside of formal cemeteries?**

*No Impact.* The proposed project includes excavation activities during construction a building housing an airplane hangar, office and airplane hangar support area. Currently, the project site is used as an aircraft parking apron and vehicle parking lot as part of the Atlantic Aviation leasehold, and is located within a highly developed area. Based on previous surveys conducted at LAX and the results of the record searches completed in 1995, 1997, 2000,[14] and 2011,[15] no traditional burial sites have been identified within the LAX boundaries or in the vicinity. However, if human remains are encountered, all grading and excavations activities in the vicinity would cease immediately and the appropriate LAWA authority would be notified. Therefore, no impacts to human remains would occur with implementation of the proposed project, and no mitigation is required.

[14] City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.9.1, April 2004.

[15] City of Los Angeles, Draft Environmental Impact Report for Los Angeles International Airport (LAX) Specific Plan Amendment Study Project, Section 4.5, and Appendix E-1, July 2012.

## VI. GEOLOGY AND SOILS. *Would the project:*

**a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

**i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

*Less Than Significant Impact.* Fault rupture is the surface displacement that occurs along the surface of a fault during an earthquake. The project site is located within the seismically active southern California region, but it is not located within an Alquist-Priolo Special Study Zone.[16] Geotechnical literature indicates that the Charnock Fault, a potentially active fault, may be located near or through the eastern portion of the project site. However, evaluation indicates that the Charnock Fault is considered to have low potential for surface rupture independently or in conjunction with movement on the Newport-Inglewood Fault Zone, which is located approximately three miles east of the project site.[17] The proposed project includes the construction of an airplane storage hangar, offices and an airplane hangar support area. The design and construction of the proposed project would comply with current Los Angeles Building Code (LABC) and Uniform Building Code (UBC) requirements. Moreover, the proposed project would not increase the number of people who use the site. Therefore, impacts to people or structures resulting from rupture of a known earthquake fault would be less than significant, and no mitigation is required.

**ii. Strong seismic ground shaking?**

*Less Than Significant Impact.* The project site is located in the seismically active southern California region; however, there is no evidence of faulting on the site, and it is not located within an Alquist-Priolo Special Study Zone.[18] The proposed project includes the construction of an airplane hangar, offices and an airplane hangar support area. The design and construction of the proposed project would comply with current LABC and UBC requirements. Therefore, implementation of the proposed project is not anticipated to adversely affect foundations or result in other structural or engineering modifications that could increase exposure of people or structures to risk associated with strong seismic ground shaking. Moreover, the proposed project would not increase the number of people who use the site. As such, impacts related to strong seismic ground shaking would be less than significant with the implementation of the proposed project, and no mitigation is required.

**iii. Seismic-related ground failure, including liquefaction?**

*Less Than Significant Impact*. Liquefaction is a seismic hazard that occurs when strong ground shaking causes saturated granular soil (such as sand) to liquefy and lose strength. The susceptibility of soil to liquefy tends to decrease as the density of the soil increases and the intensity of ground shaking decreases. The depth to groundwater at LAX is generally greater than 90 feet, which would indicate

[16] City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22, April 2004.

[17] City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22, April 2004.

[18] City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22, April 2004.

that the site has a very low susceptibility to liquefaction.[19] Perched groundwater has been noted at several locations and these areas could be subject to liquefaction; however, the overall potential for liquefaction at LAX is considered low.[20]

Strong ground shaking will also tend to densify loose to medium dense deposits of partially saturated granular soils and could result in seismic settlement of foundations and the ground surface at LAX. Due to variations in material type, seismic settlements would tend to vary considerably across LAX, but are generally estimated to be between negligible and 0.5 inch; the overall potential for damaging seismically-induced settlement is considered to be low.[21]

Seismically-induced ground shaking can also cause slope-related hazards through various processes including slope failure, lateral spreading,[22] flow liquefaction, and ground lurching.[23] Because the project site is flat, there is no potential for slope failures at the project site.

The California Department of Conservation (CDC) is mandated by the Seismic Hazards Act of 1990[24] to identify and map the state's most prominent earthquake hazards in order to help avoid damage resulting from earthquakes. The CDC's Seismic Hazard Zone Mapping Program charts areas prone to liquefaction and earthquake-induced landslides throughout California's principal urban and major growth areas. According to the Seismic Hazard Map for the Inglewood Quadrangle, no potential liquefaction zones are located within the LAX area. Isolated zones of potential seismic slope instability are identified within the dune area to the west of the proposed project site.[25] Given the flat topography of the project site, it would not be subject to slope instability and the potential instability within the dune area to the west would not pose a risk to the project site.

In summary, the potential for seismic-related ground failure at the proposed project site is considered low. As part of the proposed project, all construction would be designed in accordance with the provisions of the UBC and the LABC. Therefore, potential impacts associated with seismic-related ground failure would be less than significant, and no mitigation is required.

### iv. Landslides?

*No Impact.* The project site and vicinity are relatively flat and are primarily surrounded by existing airport and urban development. Furthermore, the City of Los Angeles Landslide Inventory and Hillside Areas map does not identify any areas in the vicinity of the project site that contain

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19 City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22, April 2004.

20 City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22, April 2004.

21 City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport Proposed (LAX) Master Plan Improvements, Section 4.22, April 2004.

22 Lateral Spreading: Deformation of very gently sloping ground (or virtually flat ground adjacent to an open body of water) that occurs when cyclic shear stresses caused by an earthquake induce liquefaction, reducing the shear strength of the soil and causing failure and "spreading" of the slope.

23 Ground Lurching: Ground lurching (and related lateral extension) is the horizontal movement of soil, sediments, or fill located on relatively steep embankments or scarps as a result of earthquake-induced ground shaking. Damage includes lateral movement of the slope in the direction of the slope face, ground cracks, slope bulging, and other deformations.

24 Public Resources Code 2690-2699.6.

25 City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22, April 2004.

unstable slopes which may be prone to seismically-produced landslides.[26] Implementation of the proposed project would not result in the exposure of people or structures to the risk of landslides during a seismic event. Therefore, no impacts resulting from landslides would occur with the implementation of the proposed project, and no mitigation is required.

**b. Result in substantial soil erosion or the loss of topsoil?**

*Less Than Significant Impact.* The potential for soil erosion on the project site is low due to the level topography of the project site. In addition, the project site is covered with impervious surfaces. The proposed project would result in the demolition of existing pavement and use of fill during construction. Conformance with LABC Sections 91.7000 through 91.7016, which include construction requirements for grading, excavation, and use of fill, would reduce the potential for wind or waterborne erosion. In addition, the LABC requires an erosion control plan that is reviewed by the Department of Building and Safety prior to construction if grading exceeds 200 cubic yards and occurs during the rainy season (between November 1 and April 15). The project applicant would be required to prepare an erosion control plan to reduce soil erosion. Therefore, proposed project impacts related to soil erosion would be less than significant, and no mitigation is required.

**c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?**

*Less Than Significant Impact.* Settlement of foundation soils beneath engineered structures or fills typically results from the consolidation and/or compaction of the foundation soils in response to the increased load induced by the structure or fill. The presence of undocumented and typically weak artificial fill at LAX creates the potential for settlement. The Lakewood Formation also includes some silt and clay layers prone to settlement. However, foundation design features and construction methods can reduce the potential for excessive settlement at LAX, and the overall potential for damaging settlement is considered low.[27] Therefore, impacts related to landslides, lateral spreading, subsidence, liquefaction, or collapse would be less than significant with the implementation of the proposed project, and no mitigation is required. See also Responses VI.a.iii and VI.a.iv above.

**d. Be located on expansive soil, as defined in Table 18-1-B of the Los Angeles Building Code (2002), creating substantial risks to life or property?**

*Less Than Significant Impact.* Expansive soils are typically composed of certain types of silts and clays that have the capacity to shrink or swell in response to changes in soil moisture content. Shrinking or swelling of foundation soils can lead to damage to foundations and engineered structures including tilting and cracking. Fill materials located in some portions of the LAX area could be prone to expansion, and some portions of the Lakewood Formation found beneath the eastern portion of LAX may also be susceptible, due to their higher content of clay and silt.[28] The new structures that would be constructed as part of the proposed project could be subject to the effects of expansive soils. As project construction would occur in accordance with LABC Sections 91.7000 through 91.7016,

[26] City of Los Angeles Planning Department, Safety Element of the City of Los Angeles General Plan, Exhibit C, Landslide Inventory & Hillside Areas in the City of Los Angeles, June 1994.

[27] City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22, April 2004.

[28] City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.22, April 2004.

which include construction requirements for grading, excavation, and foundation work, the potential for hazards to occur as a result of expansive soils would be minimized. Implementation of the proposed project would result in a less than significant Impact associated with expansive soils, and related risks to life or property would be less than significant with the implementation of the proposed project, and no mitigation is required.

**e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

*No Impact.* The project site is located in an urbanized area where wastewater infrastructure is currently in place. The proposed project would not use septic tanks or alternative wastewater disposal systems. Therefore, no impacts related to the ability of onsite soils to support septic tanks or alternative wastewater systems would occur with implementation of the proposed project, and no mitigation is required.

## VII. GREENHOUSE GAS EMISSIONS. *Would the project:*

**a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

*Less Than Significant Impact.* The proposed project could generate greenhouse gas (GHG) emissions from vehicle exhaust associated with construction-related activities, including off-road construction equipment, construction worker commuting, and haul/vendor truck trips. Operational emissions would also occur from the increase in employees, purchased electricity, indoor or outdoor water usage, and solid waste disposal.

The SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold for industrial projects where SCAQMD is the lead agency. This threshold is 10,000 metric tons of carbon dioxide equivalent per year ($MTCO_2eq/yr$). The SCAQMD staff-proposed thresholds for residential and commercial developments, including industrial parks and warehouses, is 3,000 $MTCO_2eq/yr$; however, the threshold was not adopted by the SCAQMD Board. For the purposes of this analysis, the 10,000 $MTCO_2eq/yr$ threshold was used.

GHG emissions for the proposed project were estimated using the California Emissions Estimator Model (CalEEMod), Version 2011.1.1.[29] The SCAQMD recommends that construction emissions be amortized over the project lifetime and then be added to operational emissions so that GHG emission reduction measures also capture construction.[30] Table 4 summarizes emissions from the proposed improvements.

[29] California Emissions Estimator Model (CalEEMod) Homepage, developed by ENVIRON International Corporation in collaboration with SCAQMD and other California Air Districts, Available: http://www.caleemod.com/, accessed May 28, 2013.

[30] South Coast Air Quality Management District, Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, October 2008.

| Table 4<br>Greenhouse Gas Emissions Summary from Proposed Project | | | | |
|---|---|---|---|---|
| **Source** | **Emissions (metric tons per year)** | | | |
| | **$CO_2$** | **$CH_4$** | **$N_2O$** | **$CO_2e$** |
| Total Operations | 1,636 | 11 | <1 | 1,914 |
| Construction | 321 | <1 | <1 | 322 |
| Amortized Construction[1] | 11 | <1 | <1 | 11 |
| **Total[2]** | **1,646** | **11** | **<1** | **1,925** |

Notes:
[1] Amortized construction emissions are defined as total construction emissions divided by the project lifetime. The project lifetime is assumed to be 30 years unless project-specific data is known.
[2] Total emissions are defined as annual operational emissions plus amortized construction emissions.
Key:
$CH_4$ = methane
$CO_2$ = carbon dioxide
$CO_2e$ = carbon dioxide equivalent
$N_2O$ = nitrous oxide

The proposed project would be designed and constructed in accordance with CALGreen standards. Actual emissions may be lower, as sustainable design features to reduce energy and electricity use would be implemented. As GHG emissions from the proposed project would be less than the SCAQMD adopted significance threshold, the impact is less than significant, and no mitigation is required.

**b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

*Less Than Significant Impact.* As discussed in Response VII.a above, GHG emissions that would occur from construction and operation of the proposed project would be less than the SCAQMD-adopted thresholds of significance. As a result, GHG emissions from the proposed project would not conflict with Assembly Bill 32, the purpose of which is to reduce statewide GHG emissions to 1990 levels by 2020. Therefore, the impact is less than significant, and no mitigation is required.

## VIII. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*

**a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

**b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

*a-b. Less Than Significant Impact*. The proposed project would not result in any changes in the use of hazardous materials at the project site. The aircraft that would be housed in the proposed hangar currently operate at the site. Construction of the proposed project would involve some use of hazardous materials, including vehicle fuels, oils, transmission fluids, and cleaning solvents. These types of materials are not acutely hazardous, and all storage, handling, and disposal of these materials are regulated. Compliance with existing federal, state and local regulations and routine precautions

would reduce the potential for accidental releases of a hazardous material to occur and would minimize the impact of an accident should one occur. As such, construction and operation of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials nor create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The impact is less than significant and no mitigation is required.

**c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

*No Impact.* As discussed in Response No. VIII.a-b above, a minimal increase in the handling of hazardous materials could occur during construction and no increase is expected during operation of the proposed project. However, there are no schools located or proposed within one-quarter mile of the project site. Therefore, no impacts related to the emitting of hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school would occur with implementation of the proposed project, and no mitigation is required.

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

*No Impact.* An Environmental Data Resources (EDR) regulatory database review, pursuant to Government Code Section 65962.5, was performed for all of LAX in August 2011.[31] A number of sites at LAX were listed in several databases searched by EDR as having underground storage tanks (USTs) or soil and/or groundwater contamination. This database review was supplemented by sites with known contamination that have been identified by LAWA. The project site is not included on the list of hazardous materials sites resulting from this review. The Pan American World Airways, Inc. site is located in close proximity to the project site. This site contained a UST; the state of this site is case closed. The proposed project would involve a minor amount of excavation within a limited area and is not expected to disturb any sites with known contamination. Therefore, no impacts related to a listed hazardous material site that could result in a significant hazard to the public or environment would occur with implementation of the proposed project, and no mitigation is required.

**e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**

*Less Than Significant Impact*. The project site is located within a public airport. Numerous safeguards are required by law to minimize the potential for and the effects from an accident if one were to occur. FAA's Airport Design Standards establish, among other things, land use related guidelines to protect people and property on the ground, including establishment of safety zones that keep areas near runways free of objects that could interfere with aviation activities. City of Los Angeles Ordinance No. 132,319 regulates building height limits and land uses within the Hazard Area established by the Planning and Zoning Code to protect aircraft approaching and departing from LAX from obstacles. In addition to the many safeguards required by law, LAWA and tenants of LAX

[31] Environmental Data Resources Inc. (EDR), EDR Data Map Area Study, Los Angeles, California, August 2011.

maintain Emergency Response and Evacuation Plans that also serve to minimize the potential for and the effects of an accident.

The proposed project would be designed to ensure that airplanes exiting and entering the site could do so safely without posing a risk to other aircraft or vehicles and that adequate maneuvering area is provided. The proposed project would marginally increase employment at the site and would not increase the passenger capacity at LAX. Therefore, impacts to safety for people working in the proposed project area would be less than significant, and no mitigation is required.

**f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for the people residing or working in the project area?**

*No Impact.* The project site is not located within the vicinity of a private airstrip but rather within a public airport. See Response VIII.e above. Therefore, no impacts related to a safety hazard for people residing or working within the vicinity of a private airstrip would result from the implementation of the proposed project, and no mitigation is required.

**g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

*No Impact.* LAWA and tenants of LAX maintain Emergency Response Evacuation Plans to minimize the potential for and the effects of an accident, should one occur. Construction of the proposed project is not anticipated to result any closures to local airport circulation roads or lanes within the project site. Emergency access routes in the vicinity of the project site would be kept clear and unobstructed at all times in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations. Following completion of construction, there would be no change in the use of the facility. Therefore, no impacts related to emergency response plans or emergency evacuation plans would occur with the implementation of the proposed project, and no mitigation is required.

**h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

*No Impact.* The project site is located within a developed airport and surrounded by airport uses, urbanized areas, and the Los Angeles/El Segundo Dunes. There are no fire hazard areas containing flammable brush, grass, or trees on the project site. Furthermore, the project site is not within a City of Los Angeles Wildfire Hazard Area, as delineated in the Safety Element of the General Plan.[32] Therefore, no impacts related to the exposure of people or structures to hazards associated with wildland fires would occur with the implementation of the proposed project, and no mitigation is required.

## IX. HYDROLOGY AND WATER QUALITY. *Would the project:*

**a. Violate any water quality standards or waste discharge requirements?**

*Less Than Significant Impact.* The agency with jurisdiction over water quality within the project area is the Los Angeles Regional Water Quality Control Board (LARWQCB). The Clean Water Act (CWA) prohibits the discharge of pollutants to waters of the United States from any point

[32] City of Los Angeles, Department of City Planning, Safety Element of the City of Los Angeles General Plan, Exhibit D, Selected Wildfire Hazard Areas In the City of Los Angeles, April 1996.

source unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In accordance with the CWA, the project site is within the region covered by NPDES Permit No. CAS004001 issued by the LARWQCB. As part of the storm water program associated with the NPDES Phase 1 Permit, LARWQCB adopted the Standard Urban Storm Water Mitigation Plan (SUSMP) to address storm water pollution from new development and redevelopment projects. A recent change to the Permit puts primary emphasis on Low Impact Development (LID) practices over treatment control BMPs. The Stormwater LID Ordinance approved by the City of Los Angeles outlines requirements for providing LID strategies for new development and redevelopment project.

Construction of the proposed project would require preparation of a Storm Water Pollution Prevention Plan (SWPPP) to address construction-related surface water quality impacts and delineate water quality control measures (i.e., Best Management Practices or BMPs) and/or LID practices to address those impacts. Temporary construction BMPs specified in LAWA's existing Construction SWPPP for LAX include, but are not limited to, the following: soil stabilization (erosion control) techniques; sediment control methods; contractor training programs; material transfer practices; waste management practices; roadway cleaning/tracking control practices; vehicle and equipment practices; and fueling practices.

Construction of the proposed project would occur on a site that is currently developed and fully paved. Following completion of construction, the amount of impervious area on the site would decrease slightly as the site plan includes pockets of ornamental landscaping. The proposed project and associated facilities would not materially alter existing drainage patterns or surface water runoff quantities on the project site and would not violate any water quality standards or waste discharge requirements. Therefore, impacts related water quality would be less than significant with implementation of the proposed project, and no mitigation is required.

**b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned land uses for which permits have been granted)?**

*No Impact.* The project site is located within the West Coast Groundwater Basin.[33] Groundwater beneath the project site is not used for municipal or agricultural purposes.[34] Construction and operation of the proposed project would not involve dewatering and, thus, would not deplete groundwater supplies. Moreover, the proposed project would not increase the amount of impervious surface on the site. Therefore, no impacts to groundwater supplies or groundwater recharge would occur with the implementation of the proposed project, and no mitigation is required.

**c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?**

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33 City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.7, April 2004.

34 City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.7, April 2004.

**d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?**

**e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

**f. Otherwise substantially degrade water quality?**

*c-f. Less Than Significant Impact.* As noted in Response IX.a above, the proposed project would be constructed on a site that is currently fully impervious. Implementation of the proposed project would not alter drainage patterns in a manner that would result in erosion or siltation offsite or increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite. Moreover, with implementation of a SWPPP and compliance with regulatory requirements, the project would not substantially degrade water quality. Therefore, impacts to water quality with implementation of the proposed project would be less than significant, and no mitigation is required.

**g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**

**h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

**i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

*g-i. No Impact.* No 100-year floodplain areas are located within LAX.[35] Moreover, the proposed project does not involve the construction of housing. In addition, as delineated on the City of Los Angeles Inundation and Tsunami Hazard Areas map,[36] the project site is not within a boundary of an inundation area from a flood control basin, nor is it located within the downstream influence of any levee or dam. Therefore, no impacts resulting from the placement of housing or other structures within a 100-year floodplain or due to the exposure of people or structures to a risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam would occur with the implementation of the proposed project, and no mitigation is required.

**j. Inundation by seiche, tsunami, or mudflow?**

*No Impact.* The project site is approximately 2.15 mile east of the Pacific Ocean and is not delineated as a potential inundation or tsunami impacted area in the City of Los Angeles Inundation and Tsunami Hazard Areas map.[37] Mudflows are not a risk as the project site is located on, and is surrounded by, relatively level terrain and urban development. Therefore, no impacts resulting from inundation by seiche, tsunami, or mudflow would occur with the implementation of the proposed project, and no mitigation is required.

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[35] City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.13, April 2004.

[36] City of Los Angeles, Department of City Planning, Safety Element of the City of Los Angeles General Plan, Exhibit G, Inundation & Tsunami Hazard Areas in the City of Los Angeles, March 1994.

[37] City of Los Angeles, Department of City Planning, Safety Element of the City of Los Angeles General Plan, Exhibit G, Inundation & Tsunami Hazard Areas in the City of Los Angeles, November 1996.

## X. LAND USE AND PLANNING. *Would the project:*

**a. Physically divide an established community?**

*No Impact.* The project sites are located entirely within the boundaries of a developed airport in an urbanized area and the proposed project would not disrupt or divide the physical arrangement of an established community. Therefore, no impacts resulting from physically dividing an established community would occur with the implementation of the proposed project, and no mitigation is required.

**b. Conflict with applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

*No Impact*. Land use designations and development regulations applicable to LAX are set forth in the LAX Plan[38] and LAX Specific Plan,[39] both approved by the Los Angeles City Council in December 2004 and subsequently amended. The project site is in an area designated in the LAX Plan as "Airport Airside." Within the LAX Specific Plan, the site is zoned LAX – A Zone: Airport Airside Sub-Area. Section 9.B of the LAX Specific Plan delineates the permitted uses within the Airport Airside Sub-Area. Of the numerous uses listed, the following permitted uses relate most directly to the proposed project:

- Aircraft under power
- FBOs
- Runways, taxiways, aircraft parking aprons, and service roads
- Uses customarily incident to any of the above uses, and accessory buildings or uses

The proposed project includes the construction of an airplane hangar, offices and an airplane hangar support area. These facilities are consistent with the LAX Plan land use designation and with the allowable uses under the LAX Specific Plan. Therefore, the proposed project would not conflict with applicable the land use plan, policy or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

In addition, the LAX Master Plan identified a proposed 121,000 square foot general aviation facility at the site currently occupied by Atlantic Aviation.[40] Implementation of the proposed project would be consistent with the improvements assumed in the LAX Master Plan and consistent with the Master Plan's primary goals and objectives to ensure safe and efficient operations at LAX.

Therefore, implementation of the proposed project would be consistent with the existing permitted uses. No impact or conflict with applicable land use plan, policy or regulation would occur with the implementation of the proposed project, and no mitigation is required.

[38] City of Los Angeles, LAX Plan, September 29, 2004, as amended.
[39] City of Los Angeles, Los Angeles International Airport Specific Plan, September 29, 2004, as amended.
[40] City of Los Angeles, Los Angeles International Airport Final Master Plan, Section 2.6, April 2004.

**c. Conflict with any applicable habitat conservation plan or natural community conservation plan?**

*No Impact.* The Dunes Specific Plan Area, a designated Los Angeles County Significant Ecological Area, is located approximately 1.7 miles to the west of the project site, opposite Pershing Drive. The proposed project would be located within an urbanized airport area within and adjacent to existing airport uses and would not affect the Dunes Specific Plan Area. There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved habitat conservation plan or other natural community conservation plan that includes the project sites. Therefore, no impacts to or conflict with any habitat or natural community conservation plans would occur with the implementation of the proposed project, and no mitigation is required.

## XI. MINERAL RESOURCES. *Would the project:*

**a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

*No Impact.* The State Mining and Geology Board classifies mineral resource zones throughout the State. The project site is contained within an MRZ-3 zone, which represents areas with mineral deposits whose significance cannot be evaluated from available data.[41] The project site is within the boundaries of the airport and surrounded by airport-related uses. There are no actively-mined mineral or timber resources on the project site, nor is the site available for mineral resource extraction given the existing airport use. Therefore, no impacts related to the loss of availability of a known valued mineral resources would occur with the implementation of the proposed project, and no mitigation is required.

**b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?**

*No Impact.* The project site is not within an area delineated on the City of Los Angeles Oil Field & Oil Drilling Areas map in the City of Los Angeles General Plan Safety Element.[42] Furthermore, the project site is disturbed and in an area that is not available for mineral resource extraction due to the existing airport use. Therefore, no impacts related the availability of a locally-important mineral resource recovery site would occur with the implementation of the proposed project, and no mitigation is required.

[41] City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.17, April 2004.

[42] City of Los Angeles, Department of City Planning, Safety Element of the City of Los Angeles General Plan, Exhibit E, Oil Field & Oil Drilling Areas in the City of Los Angeles, May 1994.

**XII. NOISE.** *Would the project result in:*

**a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

**b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**

**c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

**d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

*a-d. Less Than Significant Impact.* The proposed project involves construction and operation of general aviation facilities on a leasehold currently used for general aviation. The project site is within a public airport in an urban environment that operates 24 hours a day, seven days a week, and 365 days a year, with many existing sources of noise, including aviation noise and traffic noise. Construction of the proposed project, which would involve the use of various pieces of equipment, would result in a temporary increase in ambient noise levels immediately adjacent to the project site. Noise levels from outdoor construction activities, independent of background ambient noise levels, indicate that the noisiest phases of construction are typically during excavation and grading, and that noise levels from equipment with mufflers are typically 86 A-weighted decibels (dBA) in equivalent A-weighted sound level ($L_{eq}$) at 50 feet from the noise source. This type of sound typically dissipates at a rate of 4.5 dBA to 6.0 dBA for each doubling of distance. For the noise analysis of the proposed project, the more conservative attenuation rate of 4.5 dBA was used. As such, a sound level of 86 dBA at 50 feet from the noise source would be approximately 81.5 dBA at a distance of 100 feet, 77 dBA at a distance of 200 feet, and so on. That sound drop-off rate does not take into account any intervening shielding or barriers such as structures or hills between the noise source and noise receptor.

Development and operation of the proposed project would occur in an area generally removed from the communities near LAX. The nearest noise-sensitive land use is residential development approximately 660 feet to the south in El Segundo. Based on a noise attenuation rate of 4.5 dBA per doubling of distance, the noise levels from construction activities within the project site would be approximately 69.6 dBA $L_{eq}$ at the closest residences in El Segundo. The existing daytime ambient noise level at these residential uses is approximately 65 dBA $L_{eq}$,[43] with the nighttime ambient noise level being approximately 5 dBA lower. In accordance with the L.A. CEQA Thresholds Guide, construction activities are considered to have a significant impact relative to construction noise if construction activities lasting more than ten days in a three month period would exceed baseline ambient exterior noise levels by 5 dBA or more at a noise-sensitive use.[44] The noise level from construction activity within the project site would not exceed the existing daytime ambient noise level

[43] City of Los Angeles, Los Angeles World Airports, LAWA Noise Management, California State Airport Noise Standards Quarterly Report, Third Quarter 2012, and Noise Contour Map, Available: http://lawa.org/uploadedFiles/LAX/pdf/3Q12%20Quarterly%20Report.pdf, http://lawa.org/uploadedFiles/LAX/pdf/lax3q12%20noise%20contour%20map.pdf, accessed: May 23, 2011.

[44] City of Los Angeles, L.A. CEQA Thresholds Guide, Your Resource for Planning CEQA Analysis in Los Angeles, 2006.

by 5 dBA. Construction activities would be limited to daytime hours (7:00 am to 7:00 pm) for the duration of the project.

With regard to roadway noise associated with construction traffic on area roads, traffic volumes on roads with good operating conditions (i.e., Level of Service B or better) would have to increase at more than a three-fold rate to reach the City's threshold of significance and a 5 dBA increase, and would need to increase even more on roads with poor operating conditions (i.e., Level of Service C or worse). Given the limited scope of construction activities (a maximum additional 46 trips per day during peak of construction), only a minor amount of construction traffic would occur, and this would not result in a noise level increase that would exceed the threshold of significance.

As indicated previously, implementation of the proposed project would not result in an increase in activity within the leasehold, or an increase in aircraft operations. Therefore, operation of the proposed project would not generate any additional noise, nor would it increase the number of daily flights arriving and departing from LAX or the ambient growth in aviation activity at LAX that is projected to occur in the future. Implementation of the proposed project would not expose persons to, or result in the generation of, noise in levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies; expose people to, or result in the generation of, excessive groundborne vibration or groundborne noise levels; create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

In summary, impacts related to construction and operational noise would be less than significant with implementation of the proposed project, and no mitigation is required.

**e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

*No Impact.* Implementation of the proposed project involves the construction of an airplane hangar, offices and an airplane hangar support area. Although there would be a minor and temporary increase in ambient noise levels during construction, operation of the proposed project would not increase passenger or aircraft operations. As described above, the proposed project would slightly reduce aircraft operations at LAX. Therefore, no impacts would occur relative to the exposure of people residing or working in the project area to excessive noise from a project within two miles of a public airport with the implementation of the proposed project, and no mitigation is required.

**f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

*No Impact.* The project site is within a public airport and not located within the vicinity of a private airstrip. Therefore, no impact would occur relative to the exposure of people residing or working in the project area to excessive noise levels from a private airstrip with the implementation of the proposed project, and no mitigation is required.

## XIII. POPULATION AND HOUSING. *Would the project:*

**a. Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

*No Impact*. The proposed project does not include residential development. The proposed improvements would not increase existing passenger capacity or aircraft parking capacity at LAX. The proposed project would marginally increase long-term fixed based operator-related employment opportunities at LAX. However, this increase in employment represents a relocation of jobs and employees from VNY to LAX. With no increase in long-term employment, no increase in passenger capacity, and no new homes proposed, the proposed project would not induce population growth. Furthermore, the project site is located within a developed airport, and no new roads or extensions of existing roads or other growth-accommodating infrastructure are proposed. Therefore, the proposed project would not directly or indirectly induce substantial population growth through extension of roads or other infrastructure, and no mitigation is required.

**b. Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?**

**c. Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?**

*b-c. No Impact.* There are no existing residential properties on the project site. Implementation of the proposed project would not displace housing. Therefore, no impacts on housing would occur with the implementation of the proposed project, and no mitigation is required.

## XIV. PUBLIC SERVICES. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?*

**a. Fire protection?**

*No Impact.* The City of Los Angeles Fire Department (LAFD) provides fire protection services to the project site. Three LAFD fire stations are located at LAX (Fire Station Nos. 80, 51, and 95). Fire Station No. 80, located at 6911 World Way West, is approximately 1.2 mile northwest of the project site; Fire Station No. 51, located at 10435 South Sepulveda Boulevard, is approximately 0.56 mile northeast of the project site; and Fire Station No. 95, located at 10010 International Road, is approximately 1.4 miles northeast of the project site. In addition, Fire Station #5, located at 8900 Emerson Avenue, approximately 1.6 miles north of the project site, also serves LAX.[45] Construction of the proposed project would not result in temporary closures or partial closures to local airport circulation roads. Access to the project site during construction would be kept clear and unobstructed at all times in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations.

Fire service requirements are generally based on the size of the building and relationships to other structures and property lines. The project site is currently developed and the boundary of the

[45] City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, Section 4.26.1, April 2004.

proposed project would not extend beyond the current leasehold boundary. The proposed project would comply with all applicable city, state, and federal codes and ordinances, and architectural plans would be reviewed and approved by the LAFD prior to project implementation. Implementation of the proposed project would not result in an increase in demand for fire protection services that may result in the need for new or altered fire protection services, nor would it affect response times which could lead to a substantial adverse physical impact. Therefore, no impacts on fire protection services would occur with implementation of the proposed project, and no mitigation is required.

**b. Police protection?**

*No Impact.* Both the Los Angeles World Airports Police Division (LAWAPD) and the City of Los Angeles Police Department LAX Detail (LAPD LAX Detail) provide police protection services to the project site. The LAWAPD station is located a north of the Central Terminal Area (CTA) and the LAPD LAX Detail station is located within the CTA. Demand for on-airport police protection services is typically determined by increases in aircraft activity and employees. Implementation of the proposed project involves the construction of an airplane hangar, offices and an airplane hangar support area. The proposed project would not alter activities or aircraft operations at the Atlantic Aviation leasehold, and would not increase long-term employment or result in indirect growth that would result in need for additional police protection. Therefore, no impacts on airport police protection services would occur with implementation of the proposed project, and no mitigation is required.

**c. Schools?**

*No Impact.* Implementation of the proposed project involves the construction of an airplane hangar, offices and an airplane hangar support area. The proposed project does not include residential development and would not increase existing passenger capacity or increase long-term employment such that indirect growth would result in enrollment increases that would adversely impact schools. Therefore, no impacts to, or need for, new school facilities would occur with implementation of the proposed project, and no mitigation is required.

**d. Parks?**

*No Impact.* Implementation of the proposed project involves the construction of an airplane hangar, offices and an airplane hangar support area. The proposed project does not include residential development and would not increase existing passenger capacity or increase long-term employment such that additional demand for parks would occur. Therefore, no impacts to, or need for, new parks would occur from implementation of the proposed project, and no mitigation is required.

**e. Other governmental services (including roads)?**

*No Impact.* Implementation of the proposed project would have no impacts on governmental services, including roads, and no mitigation is required.

## XV. RECREATION.

**a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

**b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

*a-b. No Impact.* The proposed project does not include development of recreational facilities nor does it include residential development. The proposed project would not increase existing aircraft operations at LAX and would not increase long-term employment such that increased demand for neighborhood and regional parks or other recreational facilities would occur. Therefore, the proposed project would not result in substantial physical deterioration of existing area recreational facilities or require the construction or expansion of recreational facilities. As such, no impacts related to recreation facilities would occur with the implementation of the proposed project, and no mitigation is required.

## XVI. TRANSPORTATION/TRAFFIC. *Would the project:*

**a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

**b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

*a-b. Less Than Significant Impact.* Construction of the proposed project would generate a minimal amount of traffic associated with workers traveling to and from the project site, truck haul/delivery trips, and miscellaneous construction-related travel. It is conservatively estimated that a maximum daily total of 46 trips would occur during the peak of construction. These vehicle trips would access the project site from Interstate 105/Imperial Highway via California Street. During the peak of construction, the estimated 46 trips per day would not be sufficient to result in noticeable traffic impacts on the local roadway system during the construction period. Construction of the proposed project would not result in long-term lane closures or roadway closures within the airport or on surrounding roads. All roadways would be kept clear and unobstructed at all times in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations. In addition, during project construction, the applicant would comply with the following LAWA approved LAX Master Plan commitments pertaining to construction traffic to further reduce the potential for impacts.

***ST-9. Construction Deliveries.***

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

***ST-12. Designated Truck Delivery Hours.***

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

***ST-14. Construction Employee Shift Hours.***

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

***ST-18. Construction Traffic Management Plan.***

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

***ST-22. Designated Truck Routes.***

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

The proposed project would not increase existing passenger capacity or aircraft parking capacity at LAX, nor would it substantially increase the number of employees traveling to LAX each day**.** Operation of the proposed project would generate a minimal amount of traffic associated with employees and passengers traveling to and from the facility. As indicated in Section 5.0, Project Description, the majority of these trips currently occur at the leasehold, as three of the four aircraft that would be located within the proposed hangar are currently based at LAX. Only one of the four aircraft is currently based outside of LAX; the crew and maintenance personnel associated with this aircraft would represent new vehicle trips to the site. Many of the trips would not occur during peak hours but, rather, would be based on flight schedules. Therefore, operation of the proposed project would not substantially increase in traffic. Nevertheless, the applicant would be required to pay traffic impact assessment fees in accordance with the Coastal Transportation Corridor Specific Plan (CTCSP). The City of Los Angeles Department of Transportation (LADOT) has calculated project fees for a net peak hour trip increase of 10 trips, or $81,130. These calculations are based on an airport-wide trip generation rate, and do not necessarily reflect the expected number of peak hour trips associated with the proposed project as determined by the project's characteristics. These fees would offset the contribution of the proposed project to cumulative traffic in the CTCSP area.

With the implementation of construction-related traffic measures, and the payment of traffic impact assessment fees mandated by the CTCSP, the proposed project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, or conflict with an applicable congestions management program. Therefore, impacts associated with applicable transportation plans would be less than significant with implementation of the proposed project, and no mitigation is required.

**c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

*No Impact.* Implementation of the proposed project would have no effect on existing air traffic patterns or change the location of air traffic. As explained in Section 5.0, Project Description, by relocating one aircraft from its home base in VNY to LAX, total aircraft operations would slightly decrease. The location and design of the proposed facility would meet all applicable FAA requirements relative to airfield safety area surfaces, and aircraft taxiing and parking would occur within areas zoned for this purpose. Therefore, the proposed project would not result in a change in traffic patterns that would result in a substantial safety risk, and no mitigation is required.

**d. Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

*No Impact.* Construction and operation of the proposed project would not increase hazards due to design features or incompatible uses. Construction vehicles would use local roadways and would not create a safety hazard. In addition, no lane closures are anticipated that would cause or increase hazards. Design of the proposed project is such that it would not increase hazards by creating a source of light and glare, obstructing aircraft maneuvering, etc. The proposed project would be compatible with other uses on the Atlantic Aviation leasehold. Therefore, no impacts would occur with the implementation of the proposed project relative to increasing safety hazards or creating incompatible land uses, and no mitigation is required.

**e. Result in inadequate emergency access?**

*No Impact.* Construction of the proposed project would occur entirely on the current Atlantic Aviation leasehold. Emergency access to and from the site would be maintained at all times during construction in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations. Following completion of construction, the proposed hangar, offices and hangar support area would not obstruct emergency access, nor would the project generate vehicular traffic that would obstruct access. Therefore, no impacts related to emergency access would occur with the implementation of the proposed project, and no mitigation is required.

**f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

*No Impact*. Implementation of the proposed project is within the LAX boundary and would not conflict with nor hinder performance of policies, plans, or programs regarding alternative forms of transportation. Therefore, no impact related to public transit, bicycle, or pedestrian facilities would occur with the implementation of the proposed project, and no mitigation is required.

## XVII. UTILITIES AND SERVICE SYSTEMS. *Would the project:*

**a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

**b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

*a-b. No Impact.* Sanitary wastewater generated by activities on the Atlantic Aviation leasehold is treated at the Hyperion Treatment Plant. The City of Los Angeles has an approved plan to accommodate future and cumulative wastewater treatment capacity and is implementing the components that comprise its plan through the monitoring of triggers (i.e., population growth, regulatory changes, and other policy decisions) as part of their implementation strategy. Similarly, the City of Los Angeles Department of Water and Power (LADPW) has an adopted Urban Water Management Plan (UWMP) that indicates that water supplies in the city will be sufficient to meet projected demands through 2035.[46] The proposed improvements would not increase existing passenger capacity or aircraft operations at LAX. The proposed project would marginally increase long-term FBO-related employment opportunities at LAX. However, the potential increase in employment is not sufficient to result in any adverse impacts related to water demand or wastewater generation and would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. Therefore, no impacts relating to water supply or wastewater treatment would occur with implementation of the proposed project, and no mitigation is required.

**c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

*No Impact.* The proposed project would not increase the amount of permeable surface areas on the project site, or affect drainage patterns or stormwater drainage systems. Therefore, no impacts on stormwater drainage facilities would occur with the implementation of the proposed project, and no mitigation is required.

**d. Have sufficient water supplies available to serve the project from existing entitlements and resource, or are new or expanded entitlements needed?**

*No Impact.* As noted in Response XV11.b above LADWP is the water purveyor for the project site. LADWP is responsible for supplying, treating, and distributing water within the City. According to LADWP, it has met the immediate needs of its customers and is well positioned to continue to do so in the future.[47] As discussed in Response XVII.a-b above, the proposed project would marginally increase employment but would not increase the passenger capacity at LAX or otherwise affect water demand. As such, no new or expanded water supply entitlements are needed. Therefore, no impacts on the city's water supply would occur with implementation of the proposed project, and no mitigation is required.

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[46] City of Los Angeles, Department of Water and Power, Urban Water Management Plan, July 2010.

[47] City of Los Angeles, Department of Water and Power, Urban Water Management Plan, July 2010.

**e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

*No Impact.* As discussed in Response XVII.a-b above, the proposed project would marginally increase employment but would not increase the passenger capacity at LAX or otherwise affect wastewater generation. Therefore, no impacts to wastewater treatment capacity would occur with the implementation of the proposed project, and no mitigation is required.

**f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

**g. Comply with federal, state, and local statutes and regulations related to solid waste?**

*f-g. Less Than Significant Impact.* As indicated in Section 5.0, Project Description, the proposed project has been designed to incorporate materials with recycled content, including a structural system that uses an average of 75 percent recycled content steel, and exterior building materials which also have an average recycled content of 75 percent. Construction of the proposed project would result in demolition of the existing concrete pavement on the project site, which would generate approximately 2,365 cubic yards of materials that would need to be exported from the site. As indicated in Section 5.0, Project Description, approximately 50 percent of the construction debris would be recycled offsite. Construction debris that cannot be recycled would be disposed of at facility permitted to accept inert solid waste (e.g., concrete and asphalt from construction and demolition activities). The total remaining permitted inert[48] (or unclassified landfill) waste capacity in Los Angeles County was estimated to be approximately 60.2 million tons in 2010. Based on the average countywide 2010 disposal rate of 400 tons per day (tpd), this capacity would be exhausted in 412 years.[49] Therefore, there is no anticipated shortfall in disposal capacity for inert waste within the Los Angeles County.

It is anticipated that all solid waste generated by the project would be taken to the Sunshine Canyon Landfill. The Sunshine Canyon Landfill is a Class III landfill located at 14747 San Fernando Road in Sylmar, California, approximately 82 miles from the project site. Sunshine Canyon Landfill is owned and operated by BFI, and has a maximum permitted throughput of 12,100 tons per day, with 5,500 tons per day allotted for City use and 6,600 for County use.[50] As of July 31, 2007, this facility had a remaining capacity of 112,300,000 cubic yards, and currently has an estimated closure date of 2037.[51] The waste types accepted at this facility include construction and demolition debris, green materials, industrial, inert, and mixed municipal.

As noted above, the proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and would comply with federal,

48 Inert waste is waste that does not undergo any significant physical, chemical, or biological transformations. Examples of inert waste include construction and demolition debris.

49 County of Los Angeles, Department of Public Works, 2010 Annual Report on the Countywide Summary Plan and Countywide Siting Element, October 2011.

50 Sunshine Canyon Landfill website, Challenges, 2010, Available: http://www.sunshinecanyonlandfill.com/home/Future_Challenges.html, accessed: August 15, 2013.

51 California Integrated Waste Management Board (CIWMB)/CalRecycle, Solid Waste Information System, Facility/Site Summary Details: Sunshine Canyon City/County Landfill (19-AA-2000), Available: http://www.calrecycle.ca.gov/SWFacilities/Directory/19-AA-2000/Detail/, accessed August 15, 2013.

state, and local statutes and regulations related to solid waste. Moreover, the proposed project would incorporate recycled building materials into construction and a portion of the construction debris would be recycled. As such, impacts related to solid waste disposal would be less than significant with the implementation of the proposed project, and no mitigation is required.

## XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.

**a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

*Less Than Significant Impact.* The proposed project is located on a disturbed site within a developed airport. There are no plants or animal species listed on any state or federal lists of endangered, threatened or special status species or riparian/wetland areas, trees, or wildlife movement corridors at the project site. Therefore, the proposed project would not have an impact on biological resources, and no mitigation is required.

There are no known cultural resources located on-site and the proposed project is located on a previously developed highly disturbed site. Further, it does not involve extensive excavation and thus would not result in destruction of archaeological or paleontological resources, or eliminate important examples of the major periods of California history or prehistory. Therefore, impacts to cultural resources would be less than significant, and no mitigation is required.

**b. Does the project have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).**

*Less Than Significant Impact.* The environmental analysis in the sections above indicates that the proposed project would have no impact on agricultural and forest resources, biological resources, cultural resources, land use and planning, mineral resources, population and housing, public services, and recreation. In addition, the analysis above found that implementation of the proposed project will have less than significant impact on aesthetics, air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, transportation/circulation, and utilities. By its very nature, climate change is a cumulative phenomenon and is not possible to link a single project to specific climatological changes; therefore the GHG emission analysis completed in Response VII, Greenhouse Gas Emissions, is a cumulative analysis.

To evaluate the proposed project's contribution to cumulative impacts, a list of applicable past, approved, and pending projects (known as "related projects") in the project vicinity were identified. Following is a list of the projects:

1. South Airfield Improvement Project
2. Runway 7L/25R East End Reconstruction
3. Runway 7L/25R West End Runway Safety Area (RSA) Improvements
4. Runway 6L/24R East End RSA Improvements
5. Runway 6R/24L East End RSA Improvements
6. Taxiway R
7. Taxilane S and Taxiway T
8. Midfield Satellite Concourse Taxiways
9. American Eagle Commuter Facility Improvements
10. West Aircraft Maintenance Area
11. LAX Bradley West Project
12. Midfield Satellite Concourse
13. North Terminals Improvements
14. South Terminals Improvements
15. New Passenger Processor
16. Manchester Square/Belford
17. Central Utility Plant Replacement Project
18. Coastal Dunes Improvements
19. LAX Northside
20. Westchester Golf Course 3-Hole Expansion
21. Metro Crenshaw/LAX Transit Corridor and Station
22. Metro Green Line to LAX Project
23. City of Los Angeles Bureau of Sanitation Stormwater Infiltration and Treatment Facility
24. United Airlines LAX Terminal 7 Improvement Project
25. LAX Specific Plan Amendment Study (SPAS) Development
26. Miscellaneous Terminal Improvements

Figure 5 illustrates the location of the above projects in relationship to the project site. LAX SPAS Development and Miscellaneous Terminal Improvements (such as ongoing maintenance activities/improvements within the CTA) are not on Figure 5 because they occur at multiple locations throughout the airport. The operation of the proposed project consists of construction of an airplane hangar, offices, and hangar support area. The proposed project would not expand or increase passenger or aircraft use of the facility; therefore, the project would not contribute to any cumulatively considerable impacts during project operation. It is anticipated (based on current project schedules) that construction of several of the related projects could overlap with the proposed project's construction, which is estimated to begin in June 2014 and is expected to take approximately 12 months to complete. Potential cumulative impacts could occur during construction due to the proximity of the related projects to the project site and overlap in the construction periods; therefore, the proposed project could contribute to cumulative impacts during construction. However, based on the nature and location of the proposed project and the limited construction-related impacts (as detailed in each resource analysis above, construction-related impacts associated with the proposed project would be less than significant), the proposed project's contribution to the potential for construction-related cumulative impacts would not be cumulatively considerable.[52] Therefore, the impact is less than significant and no mitigation is required.

[52] South Coast Air Quality Management District, White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution, August 2003.


1. South Airfield Improvement Project
2. RWY 7L/25R East End Reconstruction
3. RWY 7L/25R West End RSA Improvements
4. RWY 6L/24R East End RSA Improvements
5. RWY 6R/24L East End RSA Improvements
6. Taxiway R
7. Taxilane S & Taxiway T
8. Midfield Satellite Concourse Taxiways
9. American Eagle Commuter Facility Imprv.
10. West Aircraft Maintenance Area
11. Bradley West Project
12. Midfield Satellite Concourse
13. North Terminals Improvements
14. South Terminals Improvements
15. New Passenger Processor
16. Manchester Square/Belford
17. Central Utility Plant Replacement
18. Coastal Dunes Improvement Project
19. LAX Northside
20. Westchester Golf Course 3-Hole Expansion
21. Metro Crenshaw/LAX Transit Corridor & Station
22. Metro Green Line to LAX Project
23. Stormwater Infiltration and Treatment Facility
24. United Airlines Terminal 7 Improvement Project

**Note: Development projects not shown on map occur at multiple locations within airport, (e.g., LAX SPAS Development)**

0 1,500 ft
Scale north

Source: Los Angeles World Airports 2011, CDM Smith, 2012.
Prepared by: CDM Smith, 2013.

**Atlantic Aviation FBO LAX Hangar Project**

**Related Projects**

Figure **5**

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**c. Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?**

*Less Than Significant Impact.* As discussed in the analysis above, implementation of the proposed project will result in a less than significant impact related to air quality and geology and soils, and no impact associated with biological resources. Therefore, no environmental effect which could cause substantial adverse effects on human beings, either directly or indirectly is associated with the proposed project. Therefore, the impact is less than significant and no mitigation is required.

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# *APPENDIX A*

## *Air Quality Calculations*

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## Atlantic Aviation LAX FBO Improvement Project
## Initial Study/Mitigated Negative Declaration

**Criteria Pollutants Emissions Summary**

| | Maximum Daily Construction Emissions (lb/day) | | | | | |
|---|---|---|---|---|---|---|
| | **CO** | **NOx** | **ROG** | **SOx** | **PM10** | **PM2.5** |
| **Demolition Total** | 22 | 34 | 4 | 0 | 4 | 2 |
| Construction Equipment Exhaust | 17 | 26 | 3 | 0 | 2 | 2 |
| Onsite Fugitive Dust | 0 | 0 | 0 | 0 | 1 | 0 |
| Offsite Vehicles | 6 | 8 | 1 | 0 | 1 | 0 |
| **Site Preparation Total** | 13 | 20 | 3 | 0 | 4 | 2 |
| Construction Equipment | 12 | 20 | 3 | 0 | 1 | 1 |
| Onsite Fugitive Dust | 0 | 0 | 0 | 0 | 3 | 1 |
| Offsite Vehicles | 1 | 0 | 0 | 0 | 1 | 0 |
| **Grading Total** | 33 | 55 | 6 | 0 | 7 | 4 |
| Construction Equipment | 10 | 17 | 2 | 0 | 1 | 1 |
| Onsite Fugitive Dust | 0 | 0 | 0 | 0 | 2 | 1 |
| Offsite Vehicles | 23 | 38 | 4 | 0 | 3 | 2 |
| **Building Construction Total** | 18 | 21 | 4 | 0 | 2 | 1 |
| Construction Equipment Exhaust | 15 | 19 | 4 | 0 | 1 | 1 |
| Offsite Vehicles | 3 | 2 | 0 | 0 | 1 | 0 |
| **Paving Total** | 9 | 11 | 2 | 0 | 1 | 1 |
| Construction Equipment | 8 | 11 | 2 | 0 | 1 | 1 |
| Onsite Fugitive VOC | 0 | 0 | 0 | 0 | 0 | 0 |
| Offsite Vehicles | 1 | 0 | 0 | 0 | 0 | 0 |
| **Architectural Coating Total** | 1 | 1 | 62 | 0 | 0 | 0 |
| Construction Equipment | 1 | 1 | 0 | 0 | 0 | 0 |
| Onsite Fugitive VOC | 0 | 0 | 62 | 0 | 0 | 0 |
| Offsite Vehicles | 0 | 0 | 0 | 0 | 0 | 0 |
| **Maximum Emissions** | 33 | 55 | 62 | 0 | 7 | 4 |
| **SCAQMD Thresholds** | 550 | 100 | 75 | 150 | 150 | 55 |
| **Exceeding Thresholds?** | NO | NO | NO | NO | NO | NO |

| | Maximum Daily Onsite Construction Emissions (lb/day) | | | | | |
|---|---|---|---|---|---|---|
| | **CO** | **NOx** | **ROG** | **SOx** | **PM10** | **PM2.5** |
| Demolition Total | 17 | 26 | 3 | 0 | 3 | 2 |
| Site Preparation Total | 12 | 20 | 3 | 0 | 4 | 2 |
| Grading Total | 10 | 17 | 2 | 0 | 3 | 2 |
| Building Construction Total | 15 | 19 | 4 | 0 | 1 | 1 |
| Paving Total | 8 | 11 | 2 | 0 | 1 | 1 |
| Architectural Coating Total | 1 | 1 | 62 | 0 | 0 | 0 |
| **Maximum Emissions** | 17 | 26 | 62 | 0 | 4 | 2 |
| LST Thresholds | 1,692 | 123 | N/A | N/A | 42 | 15 |
| Exceeding Thresholds? | NO | NO | N/A | N/A | NO | NO |

| | Annual Construction Emissions (tpy) | | | | | |
|---|---|---|---|---|---|---|
| | **CO** | **NOx** | **ROG** | **SOx** | **PM10** | **PM2.5** |
| 2014 | 1 | 2 | 0 | 0 | 0 | 0 |
| 2015 | 1 | 1 | 1 | 0 | 0 | 0 |
| Total Construction | 2 | 3 | 1 | 0 | 0 | 0 |

| | Maximum Daily Operational Emissions (lb/day) | | | | | |
|---|---|---|---|---|---|---|
| | **CO** | **NOx** | **ROG** | **SOx** | **PM10** | **PM2.5** |
| Area | 0 | 0 | 2 | 0 | 0 | 0 |
| Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Mobile | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 2 | 0 | 0 | 0 |
| SCAQMD Thresholds | 550 | 55 | 55 | 150 | 150 | 55 |
| Exceeding Thresholds? | NO | NO | NO | NO | NO | NO |
| LST Thresholds | 1,692 | 123 | N/A | N/A | 10.5 | 4 |
| Exceeding Thresholds? | NO | NO | NO | NO | NO | NO |

| | Annual Operational Emissions (tpy) | | | | | |
|---|---|---|---|---|---|---|
| | **CO** | **NOx** | **ROG** | **SOx** | **PM10** | **PM2.5** |
| Area | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 |
| Energy | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Mobile | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Waste | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Water | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 0.1 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 |

**Greenhouse Gas Emissions Summary**

| | Annual GHG Emissions (metric tons/year) | | | Annual GHG Emissions (MTCO2e/year) | | | |
|---|---|---|---|---|---|---|---|
| | **CO2** | **CH4** | **N2O** | **CO2** | **CH4** | **N2O** | **Total** |
| Total Construction | 321 | 0 | 0 | 321 | 1 | 0 | 322 |
| Amortized Construction | 11 | 0 | 0 | 11 | 0 | 0 | 11 |
| Area | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Energy | 139 | 0 | 0 | 139 | 0 | 0 | 139 |
| Mobile | 13 | 0 | 0 | 13 | 0 | 0 | 13 |
| Waste | 85 | 5 | 0 | 85 | 106 | 0 | 191 |
| Water | 1,398 | 6 | 0 | 1,398 | 123 | 50 | 1,571 |
| Total Operational | 1,636 | 11 | 0 | 1,636 | 229 | 50 | 1,914 |
| Total Project Emissions | 1,646 | 11 | 0 | 1,646 | 229 | 50 | 1,925 |
| SCAQMD Threshold | | | | | | | 10,000 |
| Exceeding Thresholds? | | | | | | | NO |

**Global Warming Potential**

| | |
|---|---|
| **CO2** | 1 |
| **CH4** | 21 |
| **N2O** | 310 |

*IPCC, 1996.*

**Project Lifetime**

30 years

Assumptions used in the emissions calculations:

1. Construction emissions include dust control by watering 2 times a day during demolition, site preparation, and grading.
2. Construction phases do not overlap. Construction starts in June 2014 and lasts for 12 months.
3. Localized Significance Thresholds (LSTs) from published 1-acre LSTs for sites 150 meters from the receptor in Southwest Coastal LA County Source-Receptor Area.
4. Amortized construction emissions is the total construction emissions divided by 30 years.

# Atlantic Aviation LAX FBO Improvement Project

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric |
|---|---|---|
| Unrefrigerated Warehouse-No Rail | 38.55 | 1000sqft |
| General Office Building | 4.9 | 1000sqft |
| Parking Lot | 20.4 | 1000sqft |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | | **Utility Company** | Los Angeles Department of Water & Power |
| **Climate Zone** | 11 | | 2.2 | | |
| | | **Precipitation Freq (Days)** | | | |
| | | | 33 | | |

### 1.3 User Entered Comments

Land Use - Hangar & hangar support = 38,550 sq ft. Office 4,900 sq ft. 25 parking spaces estimated to be approximately 20,400 sq ft. Atlantic LAX Concept Site Floor
Construction Phase - Default CalEEMod phase lengths starting in June 2014. Architectural coating phase extended to one month because of potentially large coating
Off-road Equipment - Default CalEEMod equipment list. Load factors updated with information provided by SJVAPCD.
Grading - 2,365 cy materials imported for base/AC.
Demolition - 2,365 cy base/AC demolished. Adjusted to tons based on number of haul trips.
Trips and VMT - Default worker trips rounded up to an even number. Water trucks added to demo, site prep, and grading phases.
Vehicle Trips - 8 more employees than existing.
Energy Use - Default CalEEMod
Water And Wastewater - Default CalEEMod
Solid Waste - Default CalEEMod
Construction Off-road Equipment Mitigation - Watering (x2 per day specified) is required by SCAQMD Rule 403 and is not mitigation.

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2014 | 5.97 | 53.17 | 31.72 | 0.08 | 9.48 | 2.42 | 11.90 | 1.33 | 2.42 | 3.75 | 0.00 | 8,216.50 | 0.00 | 0.38 | 0.00 | 8,224.47 |
| 2015 | 61.81 | 19.31 | 17.02 | 0.03 | 0.49 | 1.26 | 1.75 | 0.02 | 1.26 | 1.28 | 0.00 | 2,841.54 | 0.00 | 0.34 | 0.00 | 2,848.60 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

### 2.2 Overall Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 1.67 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Energy | 0.00 | 0.02 | 0.02 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 28.57 | | 0.00 | 0.00 | 28.74 |
| Mobile | 0.04 | 0.11 | 0.43 | 0.00 | 0.08 | 0.00 | 0.09 | 0.00 | 0.00 | 0.01 | | 79.36 | | 0.00 | | 79.42 |
| **Total** | **1.71** | **0.13** | **0.45** | **0.00** | **0.08** | **0.00** | **0.09** | **0.00** | **0.00** | **0.01** | | **107.93** | | **0.00** | **0.00** | **108.16** |

## 3.0 Construction Detail

### 3.1 Mitigation Measures Construction

Water Exposed Area

## 3.2 Demolition - 2014

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 1.44 | 0.00 | 1.44 | 0.00 | 0.00 | 0.00 | | | | | | 0.00 |
| Off-Road | 3.46 | 26.08 | 16.68 | 0.03 | | 1.54 | 1.54 | | 1.54 | 1.54 | 0.00 | 2,859.76 | | 0.31 | | 2,866.27 |
| **Total** | **3.46** | **26.08** | **16.68** | **0.03** | **1.44** | **1.54** | **2.98** | **0.00** | **1.54** | **1.54** | **0.00** | **2,859.76** | | **0.31** | | **2,866.27** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.76 | 7.24 | 4.19 | 0.01 | 6.93 | 0.32 | 7.25 | 0.04 | 0.32 | 0.36 | | 1,248.49 | | 0.04 | | 1,249.26 |
| Vendor | 0.03 | 0.31 | 0.20 | 0.00 | 0.02 | 0.01 | 0.03 | 0.00 | 0.01 | 0.01 | | 55.46 | | 0.00 | | 55.49 |
| Worker | 0.09 | 0.08 | 1.01 | 0.00 | 0.21 | 0.01 | 0.22 | 0.01 | 0.01 | 0.02 | | 176.97 | | 0.01 | | 177.18 |
| **Total** | **0.88** | **7.63** | **5.40** | **0.01** | **7.16** | **0.34** | **7.50** | **0.05** | **0.34** | **0.39** | | **1,480.92** | | **0.05** | | **1,481.93** |

## 3.3 Site Preparation - 2014

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.61 | 0.00 | 2.61 | 1.30 | 0.00 | 1.30 | | | | | | 0.00 |
| Off-Road | 2.54 | 20.05 | 12.12 | 0.02 | | 0.99 | 0.99 | | 0.99 | 0.99 | 0.00 | 2,197.75 | | 0.23 | | 2,202.52 |
| **Total** | **2.54** | **20.05** | **12.12** | **0.02** | **2.61** | **0.99** | **3.60** | **1.30** | **0.99** | **2.29** | **0.00** | **2,197.75** | | **0.23** | | **2,202.52** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Vendor | 0.03 | 0.31 | 0.20 | 0.00 | 0.02 | 0.01 | 0.03 | 0.00 | 0.01 | 0.01 | | 55.46 | | 0.00 | | 55.49 |
| Worker | 0.05 | 0.05 | 0.57 | 0.00 | 0.12 | 0.00 | 0.13 | 0.00 | 0.00 | 0.01 | | 101.13 | | 0.01 | | 101.25 |
| **Total** | **0.08** | **0.36** | **0.77** | **0.00** | **0.14** | **0.01** | **0.16** | **0.00** | **0.01** | **0.02** | | **156.59** | | **0.01** | | **156.74** |

## 3.4 Grading - 2014

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.24 | 0.00 | 2.24 | 1.12 | 0.00 | 1.12 | | | | | | 0.00 |
| Off-Road | 2.10 | 16.62 | 10.00 | 0.02 | | 0.82 | 0.82 | | 0.82 | 0.82 | 0.00 | 1,817.48 | | 0.19 | | 1,821.43 |
| **Total** | **2.10** | **16.62** | **10.00** | **0.02** | **2.24** | **0.82** | **3.06** | **1.12** | **0.82** | **1.94** | **0.00** | **1,817.48** | | **0.19** | | **1,821.43** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 3.79 | 36.19 | 20.95 | 0.06 | 7.09 | 1.59 | 8.68 | 0.21 | 1.59 | 1.79 | | 6,242.43 | | 0.18 | | 6,246.29 |
| Vendor | 0.03 | 0.31 | 0.20 | 0.00 | 0.02 | 0.01 | 0.03 | 0.00 | 0.01 | 0.01 | | 55.46 | | 0.00 | | 55.49 |
| Worker | 0.05 | 0.05 | 0.57 | 0.00 | 0.12 | 0.00 | 0.13 | 0.00 | 0.00 | 0.01 | | 101.13 | | 0.01 | | 101.25 |
| **Total** | **3.87** | **36.55** | **21.72** | **0.06** | **7.23** | **1.60** | **8.84** | **0.21** | **1.60** | **1.81** | | **6,399.02** | | **0.19** | | **6,403.03** |

## 3.5 Building Construction - 2014

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.83 | 19.14 | 14.69 | 0.02 | | 1.33 | 1.33 | | 1.33 | 1.33 | 0.00 | 2,241.48 | | 0.34 | | 2,248.71 |
| **Total** | **3.83** | **19.14** | **14.69** | **0.02** | | **1.33** | **1.33** | | **1.33** | **1.33** | **0.00** | **2,241.48** | | **0.34** | | **2,248.71** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Vendor | 0.15 | 1.54 | 0.99 | 0.00 | 0.09 | 0.05 | 0.15 | 0.01 | 0.05 | 0.06 | | 277.30 | | 0.01 | | 277.46 |
| Worker | 0.16 | 0.16 | 1.87 | 0.00 | 0.40 | 0.01 | 0.41 | 0.01 | 0.01 | 0.03 | | 328.66 | | 0.02 | | 329.06 |
| **Total** | **0.31** | **1.70** | **2.86** | **0.00** | **0.49** | **0.06** | **0.56** | **0.02** | **0.06** | **0.09** | | **605.96** | | **0.03** | | **606.52** |

## 3.5 Building Construction - 2015

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.48 | 17.77 | 14.40 | 0.02 | | 1.20 | 1.20 | | 1.20 | 1.20 | 0.00 | 2,241.48 | | 0.31 | | 2,248.04 |
| **Total** | **3.48** | **17.77** | **14.40** | **0.02** | | **1.20** | **1.20** | | **1.20** | **1.20** | **0.00** | **2,241.48** | | **0.31** | | **2,248.04** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Vendor | 0.13 | 1.40 | 0.90 | 0.00 | 0.09 | 0.05 | 0.14 | 0.01 | 0.05 | 0.06 | | 277.99 | | 0.01 | | 278.13 |
| Worker | 0.15 | 0.14 | 1.72 | 0.00 | 0.40 | 0.01 | 0.41 | 0.01 | 0.01 | 0.03 | | 322.07 | | 0.02 | | 322.43 |
| **Total** | **0.28** | **1.54** | **2.62** | **0.00** | **0.49** | **0.06** | **0.55** | **0.02** | **0.06** | **0.09** | | **600.06** | | **0.03** | | **600.56** |

## 3.6 Paving - 2015

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.79 | 11.18 | 8.12 | 0.01 | | 0.91 | 0.91 | | 0.91 | 0.91 | 0.00 | 1,171.78 | | 0.16 | | 1,175.15 |
| Paving | 0.12 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | | | | | | 0.00 |
| **Total** | **1.91** | **11.18** | **8.12** | **0.01** | | **0.91** | **0.91** | | **0.91** | **0.91** | **0.00** | **1,171.78** | | **0.16** | | **1,175.15** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Worker | 0.08 | 0.08 | 0.93 | 0.00 | 0.21 | 0.01 | 0.22 | 0.01 | 0.01 | 0.02 | | 173.42 | | 0.01 | | 173.62 |
| **Total** | **0.08** | **0.08** | **0.93** | **0.00** | **0.21** | **0.01** | **0.22** | **0.01** | **0.01** | **0.02** | | **173.42** | | **0.01** | | **173.62** |

### 3.7 Architectural Coating - 2015

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 61.60 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | | | | | | 0.00 |
| Off-Road | 0.17 | 1.07 | 0.79 | 0.00 | | 0.09 | 0.09 | | 0.09 | 0.09 | 0.00 | 117.16 | | 0.02 | | 117.48 |
| **Total** | **61.77** | **1.07** | **0.79** | **0.00** | | **0.09** | **0.09** | | **0.09** | **0.09** | **0.00** | **117.16** | | **0.02** | | **117.48** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Worker | 0.03 | 0.03 | 0.40 | 0.00 | 0.09 | 0.00 | 0.10 | 0.00 | 0.00 | 0.01 | | 74.32 | | 0.00 | | 74.41 |
| **Total** | **0.03** | **0.03** | **0.40** | **0.00** | **0.09** | **0.00** | **0.10** | **0.00** | **0.00** | **0.01** | | **74.32** | | **0.00** | | **74.41** |

## 4.0 Mobile Detail

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.04 | 0.11 | 0.43 | 0.00 | 0.08 | 0.00 | 0.09 | 0.00 | 0.00 | 0.01 | | 79.36 | | 0.00 | | 79.42 |
| Unmitigated | 0.04 | 0.11 | 0.43 | 0.00 | 0.08 | 0.00 | 0.09 | 0.00 | 0.00 | 0.01 | | 79.36 | | 0.00 | | 79.42 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Office Building | 8.00 | 8.00 | 8.00 | 25,549 | 25,549 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Unrefrigerated Warehouse-No Rail | 0.00 | 0.00 | 0.00 | | |
| Total | 8.00 | 8.00 | 8.00 | 25,549 | 25,549 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | |
|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW |
| General Office Building | 8.90 | 13.30 | 7.40 | 33.00 | 48.00 | 19.00 |
| Parking Lot | 8.90 | 13.30 | 7.40 | 0.00 | 0.00 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 8.90 | 13.30 | 7.40 | 59.00 | 0.00 | 41.00 |

## 5.0 Energy Detail

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.00 | 0.02 | 0.02 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 28.57 | | 0.00 | 0.00 | 28.74 |
| NaturalGas Unmitigated | 0.00 | 0.02 | 0.02 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 28.57 | | 0.00 | 0.00 | 28.74 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

### 5.2 Energy by Land Use - NaturalGas

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU | lb/day | | | | | | | | | | lb/day | | | | | |
| General Office Building | 146.732 | 0.00 | 0.01 | 0.01 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 17.26 | | 0.00 | 0.00 | 17.37 |
| Parking Lot | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 96.111 | 0.00 | 0.01 | 0.01 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 11.31 | | 0.00 | 0.00 | 11.38 |
| **Total** | | **0.00** | **0.02** | **0.02** | **0.00** | | **0.00** | **0.00** | | **0.00** | **0.00** | | **28.57** | | **0.00** | **0.00** | **28.75** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 1.67 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Unmitigated | 1.67 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

### 6.2 Area by SubCategory

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.41 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | | | | | | 0.00 |
| Consumer Products | 1.26 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | | | | | | 0.00 |
| Landscaping | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| **Total** | **1.67** | **0.00** | **0.00** | **0.00** | | **0.00** | **0.00** | | **0.00** | **0.00** | | **0.00** | | **0.00** | | **0.00** |

# Atlantic Aviation LAX FBO Improvement Project

**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric |
|---|---|---|
| Unrefrigerated Warehouse-No Rail | 38.55 | 1000sqft |
| General Office Building | 4.9 | 1000sqft |
| Parking Lot | 20.4 | 1000sqft |

### 1.2 Other Project Characteristics

| | | | |
|---|---|---|---|
| | | **Utility Company** | Los Angeles Department of Water & Power |
| **Urbanization** | Urban | **Wind Speed (m/s)** | |
| **Climate Zone** | 11 | | 2.2 |
| | | **Precipitation Freq (Days)** | |
| | | | 33 |

### 1.3 User Entered Comments

Land Use - Hangar & hangar support = 38,550 sq ft. Office 4,900 sq ft. 25 parking spaces estimated to be approximately 20,400 sq ft. Atlantic LAX Concept Site Floor
Construction Phase - Default CalEEMod phase lengths starting in June 2014. Architectural coating phase extended to one month because of potentially large coating
Off-road Equipment - Default CalEEMod equipment list. Load factors updated with information provided by SJVAPCD.
Grading - 2,365 cy materials imported for base/AC.
Demolition - 2,365 cy base/AC demolished. Adjusted to tons based on number of haul trips.
Trips and VMT - Default worker trips rounded up to an even number. Water trucks added to demo, site prep, and grading phases.
Vehicle Trips - 8 more employees than existing.
Energy Use - Default CalEEMod
Water And Wastewater - Default CalEEMod
Solid Waste - Default CalEEMod
Construction Off-road Equipment Mitigation - Watering (x2 per day specified) is required by SCAQMD Rule 403 and is not mitigation.

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2014 | 6.06 | 55.08 | 33.44 | 0.08 | 9.48 | 2.43 | 11.91 | 1.33 | 2.43 | 3.77 | 0.00 | 8,178.84 | 0.00 | 0.38 | 0.00 | 8,186.90 |
| 2015 | 61.81 | 19.39 | 17.05 | 0.03 | 0.49 | 1.26 | 1.75 | 0.02 | 1.26 | 1.28 | 0.00 | 2,815.74 | 0.00 | 0.34 | 0.00 | 2,822.80 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

### 2.2 Overall Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 1.67 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Energy | 0.00 | 0.02 | 0.02 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 28.57 | | 0.00 | 0.00 | 28.74 |
| Mobile | 0.05 | 0.12 | 0.42 | 0.00 | 0.08 | 0.00 | 0.09 | 0.00 | 0.00 | 0.01 | | 74.59 | | 0.00 | | 74.65 |
| **Total** | **1.72** | **0.14** | **0.44** | **0.00** | **0.08** | **0.00** | **0.09** | **0.00** | **0.00** | **0.01** | | **103.16** | | **0.00** | **0.00** | **103.39** |

## 3.0 Construction Detail

### 3.1 Mitigation Measures Construction

Water Exposed Area

## 3.2 Demolition - 2014

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 1.44 | 0.00 | 1.44 | 0.00 | 0.00 | 0.00 | | | | | | 0.00 |
| Off-Road | 3.46 | 26.08 | 16.68 | 0.03 | | 1.54 | 1.54 | | 1.54 | 1.54 | 0.00 | 2,859.76 | | 0.31 | | 2,866.27 |
| **Total** | **3.46** | **26.08** | **16.68** | **0.03** | **1.44** | **1.54** | **2.98** | **0.00** | **1.54** | **1.54** | **0.00** | **2,859.76** | | **0.31** | | **2,866.27** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.78 | 7.62 | 4.53 | 0.01 | 6.93 | 0.32 | 7.25 | 0.04 | 0.32 | 0.36 | | 1,242.52 | | 0.04 | | 1,243.31 |
| Vendor | 0.03 | 0.32 | 0.23 | 0.00 | 0.02 | 0.01 | 0.03 | 0.00 | 0.01 | 0.01 | | 55.06 | | 0.00 | | 55.09 |
| Worker | 0.09 | 0.10 | 0.95 | 0.00 | 0.21 | 0.01 | 0.22 | 0.01 | 0.01 | 0.02 | | 163.95 | | 0.01 | | 164.15 |
| **Total** | **0.90** | **8.04** | **5.71** | **0.01** | **7.16** | **0.34** | **7.50** | **0.05** | **0.34** | **0.39** | | **1,461.53** | | **0.05** | | **1,462.55** |

## 3.3 Site Preparation - 2014

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.61 | 0.00 | 2.61 | 1.30 | 0.00 | 1.30 | | | | | | 0.00 |
| Off-Road | 2.54 | 20.05 | 12.12 | 0.02 | | 0.99 | 0.99 | | 0.99 | 0.99 | 0.00 | 2,197.75 | | 0.23 | | 2,202.52 |
| **Total** | **2.54** | **20.05** | **12.12** | **0.02** | **2.61** | **0.99** | **3.60** | **1.30** | **0.99** | **2.29** | **0.00** | **2,197.75** | | **0.23** | | **2,202.52** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Vendor | 0.03 | 0.32 | 0.23 | 0.00 | 0.02 | 0.01 | 0.03 | 0.00 | 0.01 | 0.01 | | 55.06 | | 0.00 | | 55.09 |
| Worker | 0.05 | 0.06 | 0.54 | 0.00 | 0.12 | 0.00 | 0.13 | 0.00 | 0.00 | 0.01 | | 93.69 | | 0.01 | | 93.80 |
| **Total** | **0.08** | **0.38** | **0.77** | **0.00** | **0.14** | **0.01** | **0.16** | **0.00** | **0.01** | **0.02** | | **148.75** | | **0.01** | | **148.89** |

## 3.4 Grading - 2014

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Fugitive Dust | | | | | 2.24 | 0.00 | 2.24 | 1.12 | 0.00 | 1.12 | | | | | | 0.00 |
| Off-Road | 2.10 | 16.62 | 10.00 | 0.02 | | 0.82 | 0.82 | | 0.82 | 0.82 | 0.00 | 1,817.48 | | 0.19 | | 1,821.43 |
| **Total** | **2.10** | **16.62** | **10.00** | **0.02** | **2.24** | **0.82** | **3.06** | **1.12** | **0.82** | **1.94** | **0.00** | **1,817.48** | | **0.19** | | **1,821.43** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 3.88 | 38.09 | 22.67 | 0.06 | 7.09 | 1.60 | 8.69 | 0.21 | 1.60 | 1.81 | | 6,212.61 | | 0.19 | | 6,216.57 |
| Vendor | 0.03 | 0.32 | 0.23 | 0.00 | 0.02 | 0.01 | 0.03 | 0.00 | 0.01 | 0.01 | | 55.06 | | 0.00 | | 55.09 |
| Worker | 0.05 | 0.06 | 0.54 | 0.00 | 0.12 | 0.00 | 0.13 | 0.00 | 0.00 | 0.01 | | 93.69 | | 0.01 | | 93.80 |
| **Total** | **3.96** | **38.47** | **23.44** | **0.06** | **7.23** | **1.61** | **8.85** | **0.21** | **1.61** | **1.83** | | **6,361.36** | | **0.20** | | **6,365.46** |

## 3.5 Building Construction - 2014

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.83 | 19.14 | 14.69 | 0.02 | | 1.33 | 1.33 | | 1.33 | 1.33 | 0.00 | 2,241.48 | | 0.34 | | 2,248.71 |
| **Total** | **3.83** | **19.14** | **14.69** | **0.02** | | **1.33** | **1.33** | | **1.33** | **1.33** | **0.00** | **2,241.48** | | **0.34** | | **2,248.71** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Vendor | 0.16 | 1.61 | 1.13 | 0.00 | 0.09 | 0.06 | 0.15 | 0.01 | 0.06 | 0.06 | | 275.29 | | 0.01 | | 275.45 |
| Worker | 0.18 | 0.18 | 1.77 | 0.00 | 0.40 | 0.01 | 0.41 | 0.01 | 0.01 | 0.03 | | 304.48 | | 0.02 | | 304.86 |
| **Total** | **0.34** | **1.79** | **2.90** | **0.00** | **0.49** | **0.07** | **0.56** | **0.02** | **0.07** | **0.09** | | **579.77** | | **0.03** | | **580.31** |

## 3.5 Building Construction - 2015

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 3.48 | 17.77 | 14.40 | 0.02 | | 1.20 | 1.20 | | 1.20 | 1.20 | 0.00 | 2,241.48 | | 0.31 | | 2,248.04 |
| **Total** | **3.48** | **17.77** | **14.40** | **0.02** | | **1.20** | **1.20** | | **1.20** | **1.20** | **0.00** | **2,241.48** | | **0.31** | | **2,248.04** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Vendor | 0.14 | 1.45 | 1.03 | 0.00 | 0.09 | 0.05 | 0.14 | 0.01 | 0.05 | 0.06 | | 275.91 | | 0.01 | | 276.06 |
| Worker | 0.16 | 0.17 | 1.62 | 0.00 | 0.40 | 0.01 | 0.41 | 0.01 | 0.01 | 0.03 | | 298.34 | | 0.02 | | 298.70 |
| **Total** | **0.30** | **1.62** | **2.65** | **0.00** | **0.49** | **0.06** | **0.55** | **0.02** | **0.06** | **0.09** | | **574.25** | | **0.03** | | **574.76** |

## 3.6 Paving - 2015

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.79 | 11.18 | 8.12 | 0.01 | | 0.91 | 0.91 | | 0.91 | 0.91 | 0.00 | 1,171.78 | | 0.16 | | 1,175.15 |
| Paving | 0.12 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | | | | | | 0.00 |
| **Total** | **1.91** | **11.18** | **8.12** | **0.01** | | **0.91** | **0.91** | | **0.91** | **0.91** | **0.00** | **1,171.78** | | **0.16** | | **1,175.15** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Worker | 0.09 | 0.09 | 0.87 | 0.00 | 0.21 | 0.01 | 0.22 | 0.01 | 0.01 | 0.02 | | 160.65 | | 0.01 | | 160.84 |
| **Total** | **0.09** | **0.09** | **0.87** | **0.00** | **0.21** | **0.01** | **0.22** | **0.01** | **0.01** | **0.02** | | **160.65** | | **0.01** | | **160.84** |

### 3.7 Architectural Coating - 2015

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Archit. Coating | 61.60 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | | | | | | 0.00 |
| Off-Road | 0.17 | 1.07 | 0.79 | 0.00 | | 0.09 | 0.09 | | 0.09 | 0.09 | 0.00 | 117.16 | | 0.02 | | 117.48 |
| **Total** | **61.77** | **1.07** | **0.79** | **0.00** | | **0.09** | **0.09** | | **0.09** | **0.09** | **0.00** | **117.16** | | **0.02** | | **117.48** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Worker | 0.04 | 0.04 | 0.37 | 0.00 | 0.09 | 0.00 | 0.10 | 0.00 | 0.00 | 0.01 | | 68.85 | | 0.00 | | 68.93 |
| **Total** | **0.04** | **0.04** | **0.37** | **0.00** | **0.09** | **0.00** | **0.10** | **0.00** | **0.00** | **0.01** | | **68.85** | | **0.00** | | **68.93** |

## 4.0 Mobile Detail

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 0.05 | 0.12 | 0.42 | 0.00 | 0.08 | 0.00 | 0.09 | 0.00 | 0.00 | 0.01 | | 74.59 | | 0.00 | | 74.65 |
| Unmitigated | 0.05 | 0.12 | 0.42 | 0.00 | 0.08 | 0.00 | 0.09 | 0.00 | 0.00 | 0.01 | | 74.59 | | 0.00 | | 74.65 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Office Building | 8.00 | 8.00 | 8.00 | 25,549 | 25,549 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Unrefrigerated Warehouse-No Rail | 0.00 | 0.00 | 0.00 | | |
| Total | 8.00 | 8.00 | 8.00 | 25,549 | 25,549 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | |
|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW |
| General Office Building | 8.90 | 13.30 | 7.40 | 33.00 | 48.00 | 19.00 |
| Parking Lot | 8.90 | 13.30 | 7.40 | 0.00 | 0.00 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 8.90 | 13.30 | 7.40 | 59.00 | 0.00 | 41.00 |

## 5.0 Energy Detail

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.00 | 0.02 | 0.02 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 28.57 | | 0.00 | 0.00 | 28.74 |
| NaturalGas Unmitigated | 0.00 | 0.02 | 0.02 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 28.57 | | 0.00 | 0.00 | 28.74 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

### 5.2 Energy by Land Use - NaturalGas

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU | lb/day | | | | | | | | | | lb/day | | | | | |
| General Office Building | 146.732 | 0.00 | 0.01 | 0.01 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 17.26 | | 0.00 | 0.00 | 17.37 |
| Parking Lot | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 96.111 | 0.00 | 0.01 | 0.01 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 11.31 | | 0.00 | 0.00 | 11.38 |
| **Total** | | **0.00** | **0.02** | **0.02** | **0.00** | | **0.00** | **0.00** | | **0.00** | **0.00** | | **28.57** | | **0.00** | **0.00** | **28.75** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 1.67 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| Unmitigated | 1.67 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

### 6.2 Area by SubCategory

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | lb/day | | | | | | | | | | lb/day | | | | | |
| Architectural Coating | 0.41 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | | | | | | 0.00 |
| Consumer Products | 1.26 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | | | | | | 0.00 |
| Landscaping | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| **Total** | **1.67** | **0.00** | **0.00** | **0.00** | | **0.00** | **0.00** | | **0.00** | **0.00** | | **0.00** | | **0.00** | | **0.00** |

# Atlantic Aviation LAX FBO Improvement Project

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric |
|---|---|---|
| Unrefrigerated Warehouse-No Rail | 38.55 | 1000sqft |
| General Office Building | 4.9 | 1000sqft |
| Parking Lot | 20.4 | 1000sqft |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Utility Company** | Los Angeles Department of Water & Power |
| **Climate Zone** | 11 | **Precipitation Freq (Days)** | 33 | | |

### 1.3 User Entered Comments

Project Characteristics -

Land Use - Hangar & hangar support = 38,550 sq ft. Office 4,900 sq ft. 25 parking spaces estimated to be approximately 20,400 sq ft. Atlantic LAX Concept Site Floor

Construction Phase - Default CalEEMod phase lengths starting in June 2014. Architectural coating phase extended to one month because of potentially large coating area.

Off-road Equipment - Default CalEEMod equipment list. Load factors updated with information provided by SJVAPCD.

Grading - 2,365 cy materials imported for base/AC.

Demolition - 2,365 cy base/AC demolished. Adjusted to tons based on number of haul trips.

Trips and VMT - Default worker trips rounded up to an even number. Water trucks added to demo, site prep, and grading phases.

Vehicle Trips - 8 more employees than existing.

Energy Use - Default CalEEMod

Water And Wastewater - Default CalEEMod

Solid Waste - Default CalEEMod

Construction Off-road Equipment Mitigation - Watering (x2 per day specified) is required by SCAQMD Rule 403 and is not mitigation.

## 2.0 Emissions Summary

### 2.1 Overall Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2014 | 0.32 | 1.79 | 1.42 | 0.00 | 0.13 | 0.11 | 0.24 | 0.01 | 0.11 | 0.12 | 0.00 | 219.24 | 219.24 | 0.03 | 0.00 | 219.77 |
| 2015 | 0.89 | 0.77 | 0.68 | 0.00 | 0.02 | 0.05 | 0.07 | 0.00 | 0.05 | 0.05 | 0.00 | 101.59 | 101.59 | 0.01 | 0.00 | 101.85 |
| **Total** | **1.21** | **2.56** | **2.10** | **0.00** | **0.15** | **0.16** | **0.31** | **0.01** | **0.16** | **0.17** | **0.00** | **320.83** | **320.83** | **0.04** | **0.00** | **321.62** |

### 2.2 Overall Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 0.30 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 139.15 | 139.15 | 0.00 | 0.00 | 139.62 |
| Mobile | 0.01 | 0.02 | 0.08 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 12.55 | 12.55 | 0.00 | 0.00 | 12.56 |
| Waste | | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 85.44 | 0.00 | 85.44 | 5.05 | 0.00 | 191.47 |
| Water | | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 1,398.38 | 1,398.38 | 5.85 | 0.16 | 1,569.66 |
| **Total** | **0.31** | **0.02** | **0.08** | **0.00** | **0.01** | **0.00** | **0.01** | **0.00** | **0.00** | **0.00** | **85.44** | **1,550.08** | **1,635.52** | **10.90** | **0.16** | **1,913.31** |

## 3.0 Construction Detail

### 3.1 Mitigation Measures Construction

Water Exposed Area

## 3.2 Demolition - 2014

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Off-Road | 0.03 | 0.26 | 0.17 | 0.00 | | 0.02 | 0.02 | | 0.02 | 0.02 | 0.00 | 25.94 | 25.94 | 0.00 | 0.00 | 26.00 |
| **Total** | **0.03** | **0.26** | **0.17** | **0.00** | **0.01** | **0.02** | **0.03** | **0.00** | **0.02** | **0.02** | **0.00** | **25.94** | **25.94** | **0.00** | **0.00** | **26.00** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.01 | 0.07 | 0.04 | 0.00 | 0.06 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 11.30 | 11.30 | 0.00 | 0.00 | 11.31 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 | 0.50 | 0.00 | 0.00 | 0.50 |
| Worker | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.52 | 1.52 | 0.00 | 0.00 | 1.52 |
| **Total** | **0.01** | **0.07** | **0.05** | **0.00** | **0.06** | **0.00** | **0.06** | **0.00** | **0.00** | **0.00** | **0.00** | **13.32** | **13.32** | **0.00** | **0.00** | **13.33** |

## 3.3 Site Preparation - 2014

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Off-Road | 0.00 | 0.02 | 0.01 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 1.99 | 1.99 | 0.00 | 0.00 | 2.00 |
| **Total** | **0.00** | **0.02** | **0.01** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **1.99** | **1.99** | **0.00** | **0.00** | **2.00** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.00 | 0.05 |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.00 | 0.09 |
| **Total** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.14** | **0.14** | **0.00** | **0.00** | **0.14** |

## 3.4 Grading - 2014

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Off-Road | 0.00 | 0.03 | 0.02 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 3.30 | 3.30 | 0.00 | 0.00 | 3.30 |
| **Total** | **0.00** | **0.03** | **0.02** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **3.30** | **3.30** | **0.00** | **0.00** | **3.30** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.01 | 0.07 | 0.04 | 0.00 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 11.30 | 11.30 | 0.00 | 0.00 | 11.31 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.10 | 0.10 | 0.00 | 0.00 | 0.10 |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.17 | 0.00 | 0.00 | 0.17 |
| **Total** | **0.01** | **0.07** | **0.04** | **0.00** | **0.01** | **0.00** | **0.02** | **0.00** | **0.00** | **0.00** | **0.00** | **11.57** | **11.57** | **0.00** | **0.00** | **11.58** |

## 3.5 Building Construction - 2014

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.24 | 1.21 | 0.93 | 0.00 | | 0.08 | 0.08 | | 0.08 | 0.08 | 0.00 | 129.09 | 129.09 | 0.02 | 0.00 | 129.50 |
| **Total** | **0.24** | **1.21** | **0.93** | **0.00** | | **0.08** | **0.08** | | **0.08** | **0.08** | **0.00** | **129.09** | **129.09** | **0.02** | **0.00** | **129.50** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.01 | 0.10 | 0.07 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 15.93 | 15.93 | 0.00 | 0.00 | 15.94 |
| Worker | 0.01 | 0.01 | 0.11 | 0.00 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 17.95 | 17.95 | 0.00 | 0.00 | 17.98 |
| **Total** | **0.02** | **0.11** | **0.18** | **0.00** | **0.03** | **0.00** | **0.03** | **0.00** | **0.00** | **0.00** | **0.00** | **33.88** | **33.88** | **0.00** | **0.00** | **33.92** |

## 3.5 Building Construction - 2015

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.13 | 0.65 | 0.53 | 0.00 | | 0.04 | 0.04 | | 0.04 | 0.04 | 0.00 | 74.20 | 74.20 | 0.01 | 0.00 | 74.42 |
| **Total** | **0.13** | **0.65** | **0.53** | **0.00** | | **0.04** | **0.04** | | **0.04** | **0.04** | **0.00** | **74.20** | **74.20** | **0.01** | **0.00** | **74.42** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.01 | 0.05 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.18 | 9.18 | 0.00 | 0.00 | 9.18 |
| Worker | 0.01 | 0.01 | 0.06 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 10.11 | 10.11 | 0.00 | 0.00 | 10.12 |
| **Total** | **0.02** | **0.06** | **0.10** | **0.00** | **0.01** | **0.00** | **0.01** | **0.00** | **0.00** | **0.00** | **0.00** | **19.29** | **19.29** | **0.00** | **0.00** | **19.30** |

## 3.6 Paving - 2015

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.01 | 0.06 | 0.04 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 5.31 | 5.31 | 0.00 | 0.00 | 5.33 |
| Paving | 0.00 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | **0.01** | **0.06** | **0.04** | **0.00** | | **0.00** | **0.00** | | **0.00** | **0.00** | **0.00** | **5.31** | **5.31** | **0.00** | **0.00** | **5.33** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.75 | 0.75 | 0.00 | 0.00 | 0.75 |
| **Total** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.75** | **0.75** | **0.00** | **0.00** | **0.75** |

### 3.7 Architectural Coating - 2015

#### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.74 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Off-Road | 0.00 | 0.01 | 0.01 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 1.28 | 1.28 | 0.00 | 0.00 | 1.28 |
| **Total** | **0.74** | **0.01** | **0.01** | **0.00** | | **0.00** | **0.00** | | **0.00** | **0.00** | **0.00** | **1.28** | **1.28** | **0.00** | **0.00** | **1.28** |

#### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.77 | 0.77 | 0.00 | 0.00 | 0.77 |
| **Total** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.77** | **0.77** | **0.00** | **0.00** | **0.77** |

## 4.0 Mobile Detail

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Unmitigated | 0.01 | 0.02 | 0.08 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 12.55 | 12.55 | 0.00 | 0.00 | 12.56 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| General Office Building | 8.00 | 8.00 | 8.00 | 25,549 | 25,549 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Unrefrigerated Warehouse-No Rail | 0.00 | 0.00 | 0.00 | | |
| Total | 8.00 | 8.00 | 8.00 | 25,549 | 25,549 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | |
|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW |
| General Office Building | 8.90 | 13.30 | 7.40 | 33.00 | 48.00 | 19.00 |
| Parking Lot | 8.90 | 13.30 | 7.40 | 0.00 | 0.00 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 8.90 | 13.30 | 7.40 | 59.00 | 0.00 | 41.00 |

## 5.0 Energy Detail

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Unmitigated | | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 134.42 | 134.42 | 0.00 | 0.00 | 134.86 |
| NaturalGas Unmitigated | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 4.73 | 4.73 | 0.00 | 0.00 | 4.76 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

### 5.2 Energy by Land Use - NaturalGas

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU | tons/yr | | | | | | | | | | MT/yr | | | | | |
| General Office Building | 53557 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 2.86 | 2.86 | 0.00 | 0.00 | 2.88 |
| Parking Lot | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 35080.5 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 1.87 | 1.87 | 0.00 | 0.00 | 1.88 |
| **Total** | | **0.00** | **0.00** | **0.00** | **0.00** | | **0.00** | **0.00** | | **0.00** | **0.00** | **0.00** | **4.73** | **4.73** | **0.00** | **0.00** | **4.76** |

### 5.3 Energy by Land Use - Electricity

| | Electricity Use | ROG | NOx | CO | SO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | kWh | tons/yr | | | | MT/yr | | | |
| General Office Building | 71197 | | | | | 40.00 | 0.00 | 0.00 | 40.13 |
| Parking Lot | 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 168078 | | | | | 94.42 | 0.00 | 0.00 | 94.73 |
| **Total** | | | | | | **134.42** | **0.00** | **0.00** | **134.86** |

## 6.0 Area Detail

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.07 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Consumer Products | 0.23 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | **0.30** | **0.00** | **0.00** | **0.00** | | **0.00** | **0.00** | | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 7.0 Water Detail

| | Indoor/Outdoor Use | ROG | NOx | CO | SO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | Mgal | tons/yr | | | | MT/yr | | | |
| General Office Building | 0.870895 / 0.533775 | | | | | 9.71 | 0.03 | 0.00 | 10.51 |
| Parking Lot | 0 / 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 189.548 / 0 | | | | | 1,388.67 | 5.82 | 0.16 | 1,559.15 |
| **Total** | | | | | | **1,398.38** | **5.85** | **0.16** | **1,569.66** |

## 8.0 Waste Detail

| | Waste Disposed | ROG | NOx | CO | SO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | tons | tons/yr | | | | MT/yr | | | |
| General Office Building | 4.56 | | | | | 0.93 | 0.05 | 0.00 | 2.07 |
| Parking Lot | 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 416.34 | | | | | 84.51 | 4.99 | 0.00 | 189.40 |
| **Total** | | | | | | **85.44** | **5.04** | **0.00** | **191.47** |