
Summary of Revisions to the April 2004 Mitigation Monitoring & Reporting Program

As a result of comments received on the LAX Master Plan Alternative D Mitigation Monitoring and Reporting Program (April 2004), nine new Master Plan commitments were added as indicated below. Further, mitigation measure MM-AQ-1 has been refined to clarify the intent of the measure and its associated performance standard.

Surface Transportation – Off Airport

Two new Master Plan commitments were added under this section.

1. ST-23. Expanded LAX Gateway Improvements/Greening of Impacted Communities
2. ST-24. Fair Share Contribution to Congestion Management Plan (CMP) Improvements

Environmental Justice

Four new Master Plan commitments were added under this section. Although adoption of Master Plan commitments may be influenced by funding constraints, LAWA will investigate, pursue, and implement Master Plan commitments that relate to environmental justice as feasible and allowable by law.

1. EJ-1. Aviation Curriculum
2. EJ-2. Aviation Academy
3. EJ-3. Job Outreach Center
4. EJ-4. Community Mitigation Monitoring

Air Quality

Three new Master Plan commitments were added under this section:

1. AQ-1. Air Quality Source Apportionment Study
2. AQ-2. School Air Filters
3. AQ-3. Mobile Health Research Lab

Preface

Los Angeles International Airport (LAX) is the primary commercial air transportation hub of the Los Angeles region and is the dominant U.S. international gateway to the Pacific Rim. It is the third busiest airport in the United States in terms of aircraft operations and the world's fifth busiest in terms of passengers. It plays an essential role in meeting the current and projected transportation needs of passengers and shippers, and in producing economic vitality, within the surrounding five-county region. But LAX's aircraft and traffic activity produce noise, congestion, air pollution and other environmental impacts that need to be mitigated. In 1995, Los Angeles World Airports (LAWA), the operator of LAX, began the LAX Master Plan Program with the goal of producing plans, policies, and mitigation programs that would strike an appropriate balance in addressing these challenges.

In November 2000, LAWA published the Draft LAX Master Plan describing and analyzing four alternatives: the No Action/No Project Alternative and Alternatives A, B and C. In accord with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), a Draft Environmental Impact Statement/ Environmental Impact Report (Draft EIS/EIR) was published in January 2001, which used the Draft LAX Master Plan as the basis for its project descriptions of each alternative, analyzed the potential environmental impacts of these alternatives. At that time, the Draft EIS/EIR was publicly circulated to start the agency review and comment process and obtain public input.

Taking into account the public comments on Alternatives A, B and C and the Draft EIS/EIR, as well as the September 11, 2001 terrorist attacks, the Mayor of the City of Los Angeles directed LAWA to develop a security and safety plan now known as Alternative D as a fifth LAX Master Plan alternative, which is the staff-preferred alternative. In mid-2003, a two-volume Addendum to the Draft LAX Master Plan was published, describing Alternative D in the same manner that the previous alternatives were described. Additionally, using the two-volume Addendum as the basis for its project description of Alternative D, a Supplement to the Draft EIS/EIR, evaluating the potential environmental impacts of the new alternative, was prepared and publicly circulated at that time.

The proposed Final LAX Master Plan, which is based on the two-volume Addendum published in mid-2003, presents the essential elements of the staff-preferred alternative, Alternative D. Accordingly, this document has provided the basis for LAWA's preparation of the following proposed regulatory entitlements and/or mitigation measures that would implement Alternative D: the LAX Plan, the LAX Specific Plan, the Airport Layout Plan, the Tentative Tract Maps, the Mitigation Monitoring and Reporting Program, and the LAX Master Plan Program Relocation Plan. It is anticipated that the City Planning Commission and the Los Angeles City Council will review and approve this Final LAX Master Plan. Upon such approval, LAWA would use this document as a broad policy

statement regarding the conceptual strategic framework for future improvements at LAX and as working guidelines to be consulted by LAWA as it formulates and processes future site-specific projects under the LAX Master Plan Program.

The documents comprising the regulatory entitlements and mitigation measures that implement Alternative D are as follows:

- ◆ **LAX Plan.** The LAX Plan is the City's general plan for the airport, setting out goals, policies, objectives and programs for the long-term development and use of the airport consistent with the vision established by the preferred alternative, Alternative D. It also sets forth policy for the LAX/El Segundo Dunes and LAX Northside. As a component of the City's land use element of the General Plan, the LAX Plan establishes land use categories that are consistent with the goals and objectives for modernization of the airport, first identified in the LAX Master Plan, and provides policies and programs that further these goals and objectives.
- ◆ **LAX Specific Plan.** Whereas the LAX Plan establishes a land use policy framework, the LAX Specific Plan establishes zoning and development regulations and standards consistent with the LAX Plan for the airport and LAX Northside. It is a principal mechanism by which the goals and objectives of the LAX Plan are achieved and the policies and programs are implemented. It establishes procedures for processing future specific projects and activities that are anticipated under the LAX Master Plan Program. The LAX Specific Plan is also to be approved by the Los Angeles City Council.
- ◆ **Airport Layout Plan.** The proposed Airport Layout Plan (ALP) consists of a series of drawings that illustrate the layout of existing facilities at the airport and proposed facilities that are consistent with Alternative D. The FAA-required ALP is intended to serve as a record drawing for the airport, as well as a guide for the airport's future development. The ALP package also includes a narrative description of the drawings that explains the reasoning behind, and the key features of, the ALP. More specifically, the ALP provides a graphic depiction of existing and proposed airport layouts for runways, roadways, parking, and other airport facilities. It shows (a) the existing and proposed boundaries of the airport and all off-site area owned and controlled by the airport for airport purposes, (b) the location of existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and roads), and (c) the location of all existing and proposed non-aviation areas and of all existing improvements thereon. The ALP also includes an airport airspace plan, runway protection zone plan, and a property inventory map. Planning, budgeting, and implementation for FAA activities on airports are based on the ALP. LAWA will review and approve the proposed ALP before it is forwarded to the FAA. Revisions, modifications, and alterations of an ALP must be approved by the FAA before they take effect, and will be reviewed by that agency in terms of airport safety, utility, and efficiency.

- ◆ **Proposed Tentative Tract Maps.** The primary purpose of the tentative tract maps is to vacate public streets that would no longer be necessary if Alternative D is approved and to provide for the orderly and proper abandonment or relocation of utilities that may be affected. It will also consolidate parcels that are no longer necessary. The proposed tentative tract maps fulfill requirements under the California Subdivision Map Act and the Division of Land Regulations. All subdivision maps are consistent with the applicable general and specific plans. The proposed tract maps must be approved by the City's Advisory Agency, and their approval is subject to appeal to the City Planning Commission and to the Los Angeles City Council.
- ◆ **Mitigation Monitoring and Reporting Program.** The Mitigation Monitoring and Reporting Program (MMRP) is a program by which compliance with the proposed mitigation measures identified in the Final EIR is ensured. It also includes various master plan commitments. The MMRP describes the method and timing of implementation, monitoring frequency, and actions indicating compliance. Oversight will be conducted by way of annual status reports submitted to the Board of Airport Commissioners and the City Planning Department. The MMRP will be approved by the Los Angeles City Council as part of the Final EIR environmental review process.
- ◆ **LAX Master Plan Program Relocation Plan.** To address the acquisition of properties and relocation of businesses and residents, if any, associated with Alternative D, LAWA will adopt a residential and business relocation plan in compliance with federal, state, and local law prior to the commencement of acquisition. The objectives of the relocation plan, as discussed in Section 4.4.2.5 of the Final EIR, include fully informing eligible residential occupants and business owners of the nature of and procedures for obtaining relocation assistance and benefits, and providing such assistance and benefits in accordance with federal, state, and local law. The plan is also to be approved by the Los Angeles City Council and provided to the FAA for reference.
- ◆ **Other General Plan Amendments.** Other general plan amendments are required in order to approve the project and establish consistency between the LAX Plan and other elements of the City's General Plan. These amendments include changes to the boundaries of the Westchester Playa del Rey Community Plan, to incorporate all airport property and master plan program boundaries into one plan under the LAX Plan, to delete or otherwise amend policies, programs, and any other LAX references (land use, transportation improvements, recreation facilities) to those areas. Amendments to the City's Framework Element include updating references to the "LAX Interim Plan" and the "Department of Airports" to the "LAX Plan" and "LAWA" and revising various maps as a result of new LAX boundaries. Changes to the Noise Element will update new noise contours based on the approved plan and will update several facts regarding LAX, such as airport background, statistics, zoning, noise, and master plan efforts. Transportation Element amendments will mostly involve revisions to various maps as transportation improvements

and classifications will be revised with the adoption of the LAX Master Plan Program. Lastly, the LAX Interim Plan will be amended to replace its text and maps with the LAX Plan text and maps.

- ◆ **Other Zoning Actions.** Other zoning actions include changes to the Los Angeles Municipal Zoning Code to add the new LAX Zone and any references to that zone that may be pertinent in other sections of the code.

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List of Acronyms

ACHP.....	Advisory Council on Historic Preservation
ANMP.....	Aircraft Noise Mitigation Program
AOA.....	Air Operations Area
APE.....	Area of Potential Effect
APM.....	Automated People Mover
ATCS.....	Adaptive Traffic Control System
ATP.....	Archaeological Treatment Plan
ATSAC.....	Automated Travel Surveillance and Control
BMP.....	Best Management Practices
CARB.....	California Air Resources Board

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CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CTA	Central Terminal Area
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FAA	Federal Aviation Administration
GFE	Good Faith Effort
GSE	Ground Support Equipment
GTC	Ground Transportation Center
HABS	Historic American Building Survey
HMP	Habitat Management Plan
HTP	Hyperion Treatment Plant
IPWP	Integrated Plan for the Wastewater Program
ITC	Intermodal Transportation Center
ITS	Intelligent Transportation Systems
LADBS	Los Angeles Department of Building and Safety
LADOT	Los Angeles Department of Transportation
LADPW	Los Angeles Department of Public Works
LAFD	Los Angeles Fire Department
LAPD	Los Angeles Police Department
LARWQCB	Los Angeles Regional Water Quality Control Board
LAWA	Los Angeles World Airports
LAWAPD	Los Angeles World Airports Police Department
LAX	Los Angeles International Airport
LAX MP-MPAQ	LAX Master Plan Mitigation Plan for Air Quality
MBE/DBE	Minority Business Enterprises/Disadvantaged Business Enterprises
MEP	Mechanical, Electrical, Plumbing
NFPA	National Fire Protection Agency
NHPA	National Historic Preservation Act
NPS	National Park Service

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OHP	Office of Historic Preservation
PMTP	Paleontological Management Treatment Plan
RAC	Consolidated Rent-a-Car Center
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SEL	Single Event Noise
SHPO	State Historic Preservation Office
SULEV	Super Ultra Low Emission Vehicle
SUSMP	Standard Urban Stormwater Mitigation Plan
SWPPP	Storm Water Pollution Prevention Plan
NPS	National Park Service
ULEV	Ultra Low Emission Vehicle
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VMT	Vehicle Miles Travelled
ZEV	Zero Emission Vehicle

Introduction

The California Environmental Quality Act (“CEQA”) requires that the City of Los Angeles establish a reporting and monitoring program for mitigation measures adopted as part of the environmental review process to mitigate or avoid significant effects on the environment.¹ Pursuant to the National Environmental Policy Act (“NEPA”), the Federal Aviation Administration’s (“FAA”) Record of Decision must include a monitoring and enforcement program for each mitigation measure.² This Mitigation Monitoring and Reporting Program (“MMRP”) is designed to comply with these requirements by ensuring that the mitigation measures identified in the Final EIS/EIR are implemented.

In addition to identifying and describing the applicable mitigation measures, the LAX Master Plan MMRP includes LAX Master Plan commitments which are primarily activities, policies, and practices that were formulated to avoid or reduce adverse environmental impacts where mitigation measures would not be appropriate: (1) where standards and regulations exist with which compliance is already required by the applicable regulating agency; (2) where impacts would be adverse but not significant; and (3) where design refinements could be incorporated into the project to reduce or avoid potential impacts. The funding and implementation of the Master Plan commitments, as well as the mitigation measures, are subject to LAWA’s ability to use airport revenue to the extent permissible under federal law and policies, or to develop other state or federal funding sources.

The MMRP, as set forth in the following table, describes the timing of implementation, monitoring frequency and actions indicating compliance for each Master Plan commitment and mitigation measure. Annual reports, detailing among other things, status and compliance, will be submitted to the City Planning Department and the Board of Airport Commissioners. The MMRP’s content is described briefly below.

Master Plan Commitments/Mitigation Measures: Each Master Plan commitment and mitigation measure in the Final EIS/EIR is listed verbatim and maintains the same assigned number. They are categorized by the environmental discipline to which they pertain. Although much project-level information is included, the Final EIS/EIR has been prepared to address the more general level of detail that is required for program-level entitlements. As individual projects of the Master Plan are advanced for implementation and future environmental analyses occur, as appropriate, additional mitigation details may be provided. As such, the mitigation measures (or equivalent types of mitigation measures) and how they should be applied at the project level may evolve as each project is developed.

¹ Pub. Res. Code § 21081.6(a).

² 40 C.F.R. 1505.2(c).

Monitoring Agency: The monitoring agency is the city department responsible for various aspects of monitoring or reporting, including ensuring compliance with the Master Plan commitment and mitigation measure. Los Angeles World Airports has lead responsibility for administering the program and support responsibilities.

Timing of Implementation: The appropriate time by which the Master Plan commitment/mitigation measure must be implemented in order to effectively accomplish the intended outcome. This is based on current information. Although much project-level information is included, the Final EIS/EIR has been prepared to address the more general level of detail that is required for program-level entitlements. As individual projects of the Master Plan are advanced for implementation and future environmental evaluation occurs, as appropriate, additional mitigation details may be provided. As such, the timing may evolve as each project is developed.

Monitoring Frequency: Frequency at which the monitoring agency will verify that the measure is being implemented.

Actions Indicating Compliance: The means by which the monitoring agency will verify that the measure is being carried out. This is based on current information. Compliance may be demonstrated through alternative means, subject to the approval of the monitoring agency. If an alternative means for demonstrating compliance is approved, the monitoring frequency may be adjusted accordingly.

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<i>Noise</i>					
N-1 Monitoring Agency: LAWA	Maintenance of Applicable Elements of Existing Aircraft Noise Abatement Program. All components of the current airport noise abatement program that pertain to aircraft noise will be maintained.	Noise impacts that may result from airport operations without the measures in place	Already being implemented. Will continue noise abatement program throughout implementation and use	Ongoing	Submission of Annual Report per Variance Conditions to County of Los Angeles
MM-N-4 Monitoring Agency: LAWA	Update the Aircraft Noise Abatement Program Elements as Applicable to Adapt to the Future Airfield Configuration. When existing runways are relocated or reconstructed as part of the Master Plan, the aircraft noise abatement actions associated with those runways shall be modified and re-established as appropriate to assure continuation of the intent of the existing program.	Noise impacts that may result from air traffic dispersion without the measures in place	Upon commissioning of relocated runways	Once, upon commissioning of each relocated runway and then on-going	Update of Aircraft Noise Abatement Program to reflect relocated runways and submission of Annual Report per Variance Conditions to County of Los Angeles
MM-N-5 Monitoring Agency: LAWA	Conduct Part 161 Study to Make Over-Ocean Procedures Mandatory. A 14 CFR Part 161 Study shall be initiated to seek federal approval of a locally-imposed Noise and Access Restriction on departures to the east during Over-Ocean Operations, or when Westerly Operations remain in effect during the Over-Ocean Operations time period.	Night noise impacts generated by aircraft departing to the east when over-ocean procedures are in effect	Initiation within 30 days from City Council approval of the LAX Plan	Once, upon submission of Part 161 Application to the FAA, or upon execution of voluntary agreement between LAWA and the Airlines	Submission of Part 161 application and supporting documents to the FAA for approval, or execution of a voluntary agreement between LAWA and the Airlines to implement restrictions
MM-N-7 Monitoring Agency: LAWA	Construction Noise Control Plan. A Construction Noise Control Plan will be prepared to provide feasible measures to reduce significant noise impacts throughout the construction period for all projects near noise sensitive uses. For example, noise control devices shall be used and maintained, such as equipment mufflers, enclosures, and barriers. Natural and artificial barriers such as ground elevation changes and existing	Significant noise impacts at noise-sensitive receivers during construction	Prior to the earliest of either the issuance of a grading permit, issuance of a demolition permit, or construction commencement	Once, upon completion of Noise Control Plan for each project and as specified in the Noise Control Plan	Inclusion of requirement for a Noise Control Plan in subcontract agreement & subsequent approval of the noise control plan by

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-N-7	(Cont'd) buildings may be used to shield construction noise.		of each project with noise sensitive uses within 600 feet of project site		LAWA.
MM-N-8 Monitoring Agency: LAWA	Construction Staging. Construction operations shall be staged as far from noise-sensitive uses as feasible.	Significant noise impacts at noise- sensitive receivers during construction	Prior to the earliest of either the issuance of a grading permit, issuance of a demolition permit, or construction commencement of each project with noise sensitive uses within 600 feet of project site	Once, upon approval of construction staging area by LAWA	Approval of construction staging area by LAWA
MM-N-9 Monitoring Agency: LAWA	Equipment Replacement. Noisy equipment shall be replaced with quieter equipment (for example, rubber tired equipment rather than track equipment) when technically and economically feasible.	Significant noise impacts at noise sensitive receivers during construction	Prior to the earliest of either the issuance of a grading permit, issuance of a demolition permit, or construction commencement of each project with noise sensitive uses within 600 feet of the project site	Once, upon completion of Noise Control Plan for each project and as specified in the Noise Control Plan	Inclusion of requirement for a Noise Control Plan in subcontract agreement and subsequent approval of the Noise Control Plan by LAWA
MM-N-10 Monitoring Agency: LAWA	Construction Scheduling. The timing and/or sequence of the noisiest on-site construction activities shall avoid sensitive times of the day, as feasible (9 p.m. to 7 a.m. Monday -Friday; 8 p.m. to 6 a.m. Saturday; anytime on Sunday or Holidays).	Significant noise impacts at noise- sensitive receivers during construction	Prior to the earlier of either the issuance of a grading permit, issuance of a demolition permit, or construction commencement of	Once, upon completion of Noise Control Plan for each project and as specified in the Noise Control Plan.	Inclusion of requirement for a Noise Control Plan in subcontract agreement and subsequent approval of the Noise Control Plan by

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-N-10	(Cont'd)		each project with noise sensitive uses within 600 feet of project site		LAWA
MM-N-11 Monitoring Agency: LAWA	<p>Automated People Mover (APM) Noise Assessment and Control Plan. In conjunction with detailed design and engineering of the proposed APM systems, a noise control plan shall be prepared specifying noise attenuation measures to reduce APM noise levels at the two significantly impacted hotels to acceptable level (i.e. less than 67 dBA CNEL for the Courtyard by Marriott and the Four Points Sheraton). Potential options for such noise control/reduction include but are not limited to, the following:</p> <ul style="list-style-type: none"> ◆ <i>Measures that Mitigate Noise at the Source</i> <ul style="list-style-type: none"> – Stringent vehicle and equipment noise specifications – Operational restrictions – Vehicle skirts (i.e., steel/fiberglass panels that extend down to enclose wheel and undercarriage noise) – Undercar sound absorption – Limited turning radii ◆ <i>Measures that Mitigate Noise Along the Source-to-Receptor Propagation Path</i> <ul style="list-style-type: none"> – Sound barriers close to vehicles – Sound barriers at Right-of-Way line – Alteration of horizontal and vertical alignments (i.e., altering the height or path of the APM alignment to reduce the exposure of noise sensitive receptors) – Acquisition of buffer zones – Resilient support on aerial guideway 	To avoid significant noise levels/impacts to the hotels indicated in the mitigation measure	Prior to issuance of any permit for the APM	Once, upon completion of the APM Noise Control Plan	Completion of APM Noise Control Plan

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-N-11	(Cont'd) ♦ <i>Measures that Mitigate Noise at the Receptor</i> – Construction of sound barriers within affected properties – Building noise insulation or insulation upgrades				

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<i>Land Use</i>					
LU-1 Monitoring Agency: LAWA	Incorporation of City of Los Angeles Ordinance No. 159,526 [Q] Zoning Conditions for LAX Northside into the LAX Northside/Westchester Southside Project. To the maximum extent feasible, all [Q] Conditions (Qualifications of Approval) from City of Los Angeles Ordinance No. 159,526 that address the Northside project area will be incorporated by LAWA into a new LAX Zone/LAX Specific Plan for the LAX Northside/Westchester Southside project. Accepting that certain conditions may be updated, revised, or determined infeasible as a result of changes to the LAX Northside project, the final conditions for the LAX Northside/Westchester Southside project will ensure that the level of environmental protection afforded by the full set of existing LAX Northside project [Q] conditions is maintained or increased.	Incompatibility of LAX Northside with adjacent residential uses to the north	Upon City Council approval of the LAX Zone/LAX Specific Plan	Once, upon City Council approval of LAX Zone/LAX Specific Plan	Adoption of LAX Zone/LAX Specific Plan to include the [Q] conditions as feasible
LU-2 Monitoring Agency: LAWA	Establishment of a Landscape Maintenance Program for Parcels Acquired Due to Airport Expansion. Land acquired and cleared for airport development will be fenced, landscaped, and maintained regularly until the properties are actually developed for airport purposes.	Incompatibility with adjacent uses during acquisition	Prior to first land acquisition	On-going throughout Master Plan development	Approval of Landscape Maintenance Program by LAWA
LU-4 Monitoring Agency: LAWA	Neighborhood Compatibility Program. Ongoing coordination and planning will be undertaken by LAWA to ensure that the airport is as compatible as possible with surrounding properties and neighborhoods. Measures to enforce this policy will include: 1) Along the northerly and southerly boundary areas of the airport, LAWA will provide and maintain landscaped buffer areas that will include setbacks, landscaping, screening or other appropriate view sensitive uses with the goal of avoiding land use conflicts, shielding lighting, enhancing privacy and better screening views of airport facilities from adjacent residential uses. Use of existing facilities in buffer areas may continue as required until LAWA can develop alternative facilities. 2) Locate airport uses and activities	Land use incompatibility with nearby residential uses	Throughout Master Plan development	On-going throughout Master Plan development	Compliance with the provisions of the LAX Zone/LAX Specific Plan and LAX Plan

Area: Land Use

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
LU-4	(Cont'd) with the potential to adversely affect nearby residential land uses through noise, light spill-over, odor, vibration and other consequences of airport operations and development as far from adjacent residential neighborhoods as feasible. 3) Provide community outreach efforts to property owners and occupants when new development on airport property is in proximity to and could potentially affect nearby residential uses.				
LU-5 Monitoring Agency: LAWA	Comply with City of Los Angeles Transportation Element Bicycle Plan. LAWA will comply with bicycle policies and plans in the vicinity of LAX, most notably those outlined in the City of Los Angeles Transportation Element Bicycle Plan and the General Plan Framework, including Pershing Drive, Sepulveda Boulevard, and Aviation Boulevard. As a priority, a Class I bike path will be incorporated on Aviation Boulevard, as practical and feasible, per the standards identified in the City of Los Angeles Transportation Element Bicycle Plan generally extending from the Inglewood City limits (Arbor Vitae Street) to the north to Imperial Highway to the south. As a primary objective, LAWA will provide maximum feasible incorporation of other bike paths and bike lanes into the design of projects that will be constructed under the LAX Master Plan program with a fundamental emphasis on ensuring safe and efficient bicycle and vehicular circulation. In addition, bicycle access and parking facilities will be provided at the Ground Transportation Center, Intermodal Transportation Center, and major parking lots. Bicycle facilities such as lockers and showers will also be provided where feasible to promote employee bicycle use.	Insufficient bicycle facilities	Prior to issuance of certificate of occupancy for each project that will incorporate bicycle facilities	Once, upon issuance of certificate of occupancy for each project that will incorporate bicycle facilities	Issuance of permits by LADOT, LADPW or LADBS, as appropriate
MM-LU-1	Implement Revised Aircraft Noise Mitigation Program. LAWA shall expand and revise the existing Aircraft Noise	Residential and other noise-sensitive uses	Initiation upon City Council approval of	Annually	Submission of Annual ANMP Progress

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-LU-1 Monitoring Agency: LAWA	<p>(Cont'd)</p> <p>Mitigation Program (ANMP) in coordination with affected neighboring jurisdictions, the State, and the FAA. The expanded Program shall mitigate land uses that would be rendered incompatible by noise impacts associated with implementation of the LAX Master Plan, unless such uses are subject to an existing aviation easement and have been provided with noise mitigation funds. LAWA shall accelerate the ANMP's timetable for achieving full compatibility of all land uses within the existing noise impact area pursuant to the requirements of the California Airport Noise Standards (California Code of Regulations, Title 21, Subchapter 6) and current Noise Variance. With the exception of a possible new interior noise level standard for schools to be established through the study required by Mitigation Measure MM-LU-3, Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn, the relevant performance standard to achieve compatibility for land uses that are incompatible due to aircraft noise (i.e., residences, schools, hospitals and churches) is adequate acoustic performance (sound insulation) to ensure an interior noise level of 45 CNEL or less. As an alternative to sound insulation, incompatible property may also achieve compatibility if the incompatible use is converted to a noise-compatible use.</p> <p>LAWA shall revise the ANMP to incorporate new, or expand existing measures, including, but not necessarily limited to, the following:</p> <ul style="list-style-type: none"> ◆ Continued implementation of successful programs to convert existing incompatible land uses to compatible land uses through sound insulation of structures and the acquisition and conversion of incompatible land use to compatible land use. 	newly exposed to high noise levels or significant increases in existing noise levels	the LAX Plan		Reports and Periodic ANMP Report Updates to County of Los Angeles

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-LU-1	<p>(Cont'd)</p> <ul style="list-style-type: none"> ◆ Ongoing monitoring and provision of annual updates in support of the requirements of the current LAX Noise Variance pursuant to the California Airport Noise Standards, with the updates made available (upon request) to affected local jurisdictions, the Airport Land Use Commission of Los Angeles County, and other interested parties. ◆ Continue the current pre- and post-insulation noise monitoring to ensure achievement of interior noise levels at or below 45 CNEL. ◆ Accelerated rate of land use mitigation to eliminate noise impact areas in the most timely and efficient manner possible through: <ul style="list-style-type: none"> – Increased annual funding by LAWA for land use mitigation; – Reevaluating aviation easements requirements with sound insulation mitigation; – Provision by LAWA of additional technical assistance, where needed, to local jurisdictions to support more rapid and efficient implementation of their land use mitigation programs; – Reduction or elimination, to the extent feasible, of structural and building code compliance constraints to mitigation of sub-standard housing. ◆ Revised criteria and procedures for selection and prioritization of properties to be sound insulated or acquired in consideration of the following: <ul style="list-style-type: none"> – Insulation or acquisition of properties within the highest CNEL measurement zone; 				

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-LU-1	(Cont'd) <ul style="list-style-type: none"> – Acceleration of the fulfillment of existing commitments to owners wishing to participate within the current ANMP boundaries prior to proceeding with newly eligible properties; – Insulation or acquisition of incompatible properties with high concentrations of residents or other noise-sensitive occupants such as those housed in schools or hospitals. ◆ Amend ANMP to include libraries as noise-sensitive uses eligible for aircraft noise mitigation. ◆ Upon completion of acquisition and/or soundproofing commitment under the current Program, expand the boundaries of the ANMP as necessary over time. LAWA will continue preparing quarterly reports that monitor any expansion of the 65 CNEL noise contours beyond the current ANMP boundaries. Based upon these quarterly reports, LAWA will evaluate and adjust the ANMP boundaries, periodically as appropriate, so that as the 65 CNEL noise contours expand, residential and noise sensitive uses newly impacted by 65 CNEL noise levels would be included within the Program. 				
MM-LU-2 Monitoring Agency: LAWA	Incorporate Residential Dwelling Units Exposed to Single Event Awakenings Threshold into Aircraft Noise Mitigation Program. In addition to any restrictive measures that may be implemented resulting from completion of Mitigation Measure MM-N-5, Conduct Part 161 Study to Make Over-Ocean Departure Procedures Mandatory, the boundaries of the ANMP will be expanded to include residential uses newly exposed to single event exterior nighttime noise levels of 94 dBA SEL, based on the Master Plan alternative that is ultimately approved and periodic reevaluation and adjustments by LAWA. Uses that are newly exposed would be identified based on annual average conditions as derived from the most current monitored	Residential uses newly exposed to high single event noise levels that result in nighttime awakening that are located outside the current ANMP boundaries	Initiation upon City Council approval of the LAX Plan	Annually	Submission of Annual ANMP Progress Reports and Periodic ANMP Report Updates to County of Los Angeles

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-LU-2	(Cont'd) data.				
MM-LU-3 Monitoring Agency: LAWA	Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn. Current studies of aircraft noise and the ability of children to learn have not resulted in the development of a statistically reliable predictive model of the relative effect of changes in aircraft noise levels on learning. Therefore a comprehensive study shall be initiated by LAWA to determine what, if any, measurable relationship may be present between learning and the disruptions caused by aircraft noise at various levels. An element of the evaluation shall be the setting of an acceptable replacement threshold of significance for classroom disruption by both specific and sustained aircraft noise events.	Classroom disruption due to exposure to high single event or cumulative noise levels	Initiation of study upon City Council approval of the LAX Plan	Once, upon approval of the study by LAWA	LAWA approval of completed study
MM-LU-4 Monitoring Agency: LAWA	Provide Additional Sound Insulation for Schools Shown by MM-LU-3 to be Significantly Impacted by Aircraft Noise. Prior to completion of the study required by Mitigation Measure MM-LU-3, Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn, and within six months of the commissioning of any relocated runways associated with implementation of the LAX Master Plan, LAWA shall conduct interior noise measurements at schools that could be newly exposed to noise levels that exceed the interim LAX interior noise thresholds for classroom disruption of 55 dB L max, 65 dB Lmax, or 35 Leq(h), as presented in Section 4.1, <i>Noise</i> , of the Final EIS/EIR. All school classroom buildings (except those within schools subject to an aviation easement) that are found through the noise measurements to exceed the interim interior noise thresholds, as compared to the 1996 baseline conditions presented in the Final EIS/EIR, would become eligible for soundproofing under the ANMP.	Classroom disruption due to exposure to noise levels in excess of threshold of significance established in MM-LU-3	Within six (6) months of commissioning of any relocated runways (for interim LAX interior noise thresholds component); and upon completion of the study in Mitigation Measure MM-LU-3 (for MM-LU-3 component)	Annually	Conduct noise measurements based on interim LAX interior noise thresholds and on newly established noise thresholds set by MM-LU-3, and make schools eligible for ANMP participation, as appropriate

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-LU-4	(Cont'd) Upon completion of the study required by Mitigation Measure MM-LU-3 and acceptance of its results by peer review of industry experts, any schools found to exceed a newly established threshold of significance for classroom disruption based on comparison with 1996 baseline conditions due to implementation of the LAX Master Plan, shall be eligible for participation in the ANMP administered by LAWA, unless they are subject to an existing aviation easement. A determination of which schools become eligible will be made following application of the new threshold based on measured data.				
MM-LU-5 Monitoring Agency: LAWA	Upgrade and Expand Noise Monitoring Program. LAWA shall upgrade and expand its existing noise monitoring program in surrounding communities through new system procurement, noise monitor siting, and equipment installation. Permanent or portable monitors shall be located in surrounding communities to record noise data 24 hours per day, seven days per week for correlation with FAA radar data to cross-reference noise episodes with flight patterns. The upgraded system will support LAWA and other jurisdictional ANMP's when considering adjustments to airport noise mitigation boundaries.	Residential and other noise-sensitive uses newly exposed to high noise levels or significant increases in existing noise levels	Initiation of system upgrade within 30 days from City Council approval of the LAX Plan	Once, upon Caltrans certification	Caltrans certification of upgraded system

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
Surface Transportation (On-Airport)					
ST-2 Monitoring Agency: LAWA	Non-Peak CTA Deliveries. Deliveries to the CTA terminal reconstruction projects will be limited to non-peak traffic hours whenever possible.	Traffic congestion and delays as they relate to the LAX Master Plan program construction activities	During construction of any LAX Master Plan related CTA terminal reconstruction projects	On-going during construction	Periodic reporting by the Construction Coordination Office
ST-7 Monitoring Agency: LAWA	Adequate GTC, ITC, and APM Design. LAWA will ensure that the surface transportation system and curbfront for the GTC and ITC, commercial vehicle staging areas, and APM systems will be designed to adequately accommodate all forecast vehicular activity through 2015.	Over- crowding, congested curbfront space for passenger and commercial vehicles	Advance design stage	Once, at approval of design plans	Approval of design plans by Bureau of Engineering, LADOT, and LADBS, as appropriate
ST-8 Monitoring Agency: LAWA	Limited Short-Term Lane Closures. When construction of any new ramps at the Century Boulevard/Sepulveda Boulevard interchange or construction for the GTC, ITC, or APM elevated structures require short-term lane closures, the lane closures will be for as brief a period as practical, with a goal that closures would principally be scheduled for non-peak periods.	Traffic Congestion and delays as they relate to the LAX Master Plan program construction activities	During construction of new ramps at Century Boulevard/ Sepulveda Boulevard interchange; construction of elevated structures for the GTC, ITC or APM	When short-term lane closures are scheduled during construction	Periodic reporting by Construction Coordination Office
MM-ST-1 Monitoring Agency: LAWA	Require CTA Construction Vehicles to Use Designated Lanes. Whenever feasible, construction vehicles shall be restricted to designated roadways or lanes of traffic on CTA roadways adjacent to the existing close-in parking, thus limiting the mix of construction vehicles and airport traffic.	Traffic congestion and delay as they relate to the LAX Master Plan program construction activities	During CTA reconstruction projects	On-going during construction	LAWA approval of Construction Traffic Management Plan
MM-ST-2 Monitoring Agency: LAWA	Modify CTA Signage. During construction, additional signage will be installed, as required, to separate construction traffic from non-construction traffic to the extent feasible.	Traffic congestion and delays as they relate to the LAX Master Plan program construction activities	Prior to start of construction of CTA reconstruction projects	As stipulated in the Construction Traffic Management Plan, approved by LAWA's Construction Coordination Office	Sign installation

Area: Surface Transportation (On-Airport)

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ST-3 Monitoring Agency: LAWA	Develop Designated Shuttle Stops for Labor Buses and ITC-CTA Buses. Develop shuttle stops for labor buses (i.e. buses carrying construction workers) and the ITC-CTA shuttle buses at the CTA arrivals level. All ITC-CTA shuttle buses will be routed to these lower level (arrivals) curb areas. These buses will not circulate through the upper level (departures) curbside.	Traffic congestion and delays as they relate to the LAX Master Plan program construction activities	Prior to demolition of CTA parking structures	As stipulated in the Construction Traffic Management Plan, approved by LAWA's Construction Coordination Office	Establishment of new CTA shuttle stops

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
Surface Transportation (Off-Airport)					
ST-9 Monitoring Agency: LAWA	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.	Traffic congestion and delays as they relate to the LAX Master Plan program construction activities	During construction	On-going during construction	Periodic reporting by Construction Coordination Office
ST-12 Monitoring Agency: LAWA	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.	Traffic congestion and delays as they relate to the LAX Master Plan program construction activities	LAWA approval of delivery schedule as part of the Construction Traffic Management Plan	On-going during construction	Periodic reporting by Construction Coordination Office
ST-14 Monitoring Agency: LAWA	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.	Traffic congestion and delays as they relate to the LAX Master Plan program construction activities	Prior to construction activity for each Master Plan project	Once, upon approval of employees' work schedule on a project-by-project basis	LAWA approval of employee work schedule as part of the Construction Traffic Management Plan
ST-16 Monitoring Agency: LAWA	Designated Haul Routes. Every effort will be made to ensure that haul routes are located away from sensitive noise receptors.	Traffic noise	At issuance of approved haul route	Once, at approval of each haul route	Approval of haul route by LADBS
ST-17 Monitoring Agency: LAWA	Maintenance of Haul Routes. Haul routes on off-airport roadways will be maintained periodically and will comply with City of Los Angeles or other appropriate jurisdictional requirements for maintenance. Minor striping, lane configurations, and signal phasing modifications will be provided as needed.	Roadway safety	As dictated by LAWA's Construction Coordination Office and LADBS	On-going during construction	Field inspection report; maintenance logs
ST-18	Construction Traffic Management Plan. A complete construction traffic plan will be developed to designate detour	Traffic congestion, delay and safety, as	Prior to commencement of	On-going during construction, as	LAWA approval of Construction Traffic

Area: Surface Transportation (Off-Airport)

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
ST-18 Monitoring Agency: LAWA	(Cont'd) 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.	they relate to the LAX Master Plan program construction activities	construction	stipulated by LAWA's Construction Coordination Office	Management Plan by LAWA's Construction Coordination Office
ST-19 Monitoring Agency: LAWA	Closure Restrictions of Existing Roadways. Other than short time periods during nighttime construction, existing roadways will remain open until they are no longer needed for regular traffic or construction traffic, unless a temporary detour route is available to serve the same function. This will recognize that there are three functions taking place concurrently: (1) airport traffic, (2) construction haul routes, and (3) construction of new facilities.	Traffic congestion and delays as they relate to the LAX Master Plan program construction activities	As construction dictates	As stipulated in the Construction Traffic Management Plan, approved by LAWA's Construction Coordination Office	Street closure permit; approval by LAWA's Construction Coordination Office
ST-20 Monitoring Agency: LAWA	Stockpile Locations. Stockpile locations will be confined to the eastern area of the airport vicinity, to the extent practical and feasible. After the eastern facilities are under construction in Alternative D, stockpile locations will be selected that are as close to I-405 and I-105 as possible, and can be accessed by construction vehicles with minimal disruption to adjacent streets. Multiple stockpile locations may be provided, as required.	Traffic congestion and delays as they relate to the LAX Master Plan program construction activities	Prior to construction of each eastern facility	Once, upon approval of stockpile locations by LAWA's Construction Coordination Office	LAWA approval of stockpile locations as part of the Construction Management Traffic Plan
ST-21 Monitoring Agency: LAWA	Construction Employee Parking Locations. During construction of the eastern airport facilities, employee parking locations will be selected that are as close to I-405 and I-105 as possible and can be accessed by employee vehicles with minimal disruption to adjacent streets. Shuttle buses will transport employees to construction sites. In addition, remote parking locations (of not less than 1 mile away from project construction activities) will be established for construction employees with shuttle service to the airport. An emergency return system will be established for employees that must leave unexpectedly.	Traffic congestion and delays as they relate to the LAX Master Plan program construction activities	Prior to construction of each eastern facility	Once, upon approval of Employee Parking Locations by LAWA's Construction Coordination Office	LAWA approval of parking locations as part of Construction Traffic Management Plan

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
ST-22 Monitoring Agency: LAWA	<p>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.</p>	Traffic congestion and delay as they relate to the LAX Master Plan program construction activities	At issuance of haul route approval	Once, upon approval of each haul route	Approval of haul route by LADBS
ST-23 Monitoring Agency: LAWA	<p>Expanded Gateway LAX Improvements/Greening of Impacted Communities. Gateway LAX improvements will be enabled through transportation improvements along Century Boulevard to the east as they are proposed to extend into low-income and minority communities in the City of Inglewood. LAWA anticipates making financial contribution, on a fair-share basis up to a maximum of ten million dollars, to various off-airport surface transportation related components which may include:</p> <p>Roadway Improvements - Construct roadway improvements on streets heavily trafficked for LAX.</p> <p>Special Landscaping - Extend the Century Boulevard Traffic Corridor Mitigation Program and LAX Beautification Enhancements Program to include landscaping requirements along Century Boulevard in the City of Inglewood.</p>	Traffic congestion and delays as they relate to the Master Plan program construction activities	Initiation within six (6) months of the Record of Decision (ROD)	Annually, upon approval of funding	Approval of funding in accordance with proposed expenditure plan

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
ST-23	(Cont'd) Street Signage - Install aesthetically pleasing branding, signage and way finding in impacted communities to improve airport-related circulation and to help direct airport users to services in those areas.				
ST-24	Fair Share Contribution to CMP Improvements. At the time of substantial completion of the LAX Master Plan, LAWA will contribute funding on a fair-share basis to future transportation improvements identified through the Congestion Management Plan (CMP) analysis completed for Alternative D. Potential future improvements are identified below. LAWA's financial contribution will be based upon, and coordinated with, traffic impacts attributable to implementation of the LAX Master Plan, and will occur at the time the individual future improvements at the locations listed above are implemented, subject to federal approval regarding airport revenue diversion.	Traffic congestion and delays as they relate to the Master Plan program construction activities	Upon substantial completion of the LAX Master Plan	Once, upon substantial completion of the LAX Master Plan	Approval of fair-share contribution by LADOT or appropriate jurisdiction and/or agency
Monitoring Agency: LAWA					
	<div><div></div><div>Estimate of LAWA's Fair-Share Contribution</div></div>				
	Jurisdiction	Impacted Facility	Potential Future Improvement		
	Manhattan Beach	Sepulveda, Marine to Manhattan Beach Bl.	Signal Synchronization	\$12,400	
		Sepulveda, Manhattan Beach Bl. to Artesia	Signal Synchronization	\$33,200	
	Culver City	Venice, I-405 to Overland	Signal Synchronization	\$26,550	
	Los Angeles	La Cienega, Fairfax to Jefferson	Contribution to Transit	\$10,950	
		La Cienega, Jefferson to Rodeo	Contribution to Transit	\$28,500	
		Manchester, Sepulveda to La Tijera	Contribution to Transit	\$6,900	
	LA County	La Cienega, Rodeo to Stocker	Signal Synchronization	\$125,650	
		La Cienega, Stocker to Slauson	Signal Synchronization	\$31,400	
	Inglewood	La Cienega, Slauson to Centinela	Signal Synchronization	\$87,000	
	Caltrans	I-405 at Santa Fe Ave.	Future Freeway Improvements	\$308,000	
I-405 s/o I-110 at Carson Scales		Future Freeway Improvements	\$670,000		
I-405 n/o Inglewood Ave.		Future Freeway Improvements	\$4,050,000		

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ST-6 Monitoring Agency: LAWA	Add New Traffic Lanes. Traffic lanes shall be added to select intersections to the satisfaction of LADOT or other appropriate jurisdiction, sufficient to increase the capacity of the intersection without unnecessarily reducing sidewalk widths, removing on-street parking, or encroaching onto other land uses. By 2008: Arbor Vitae Street & La Cienega Boulevard, Aviation Boulevard & 111th Street, Aviation Boulevard & Imperial Highway, Centinela Avenue & Sepulveda Boulevard, Continental City Drive & Imperial Highway, I-105 off-ramp and Imperial Highway, La Cienega Boulevard & 111th Street, Lincoln Boulevard & 83rd Street, Centinela Avenue & La Cienega Boulevard, Century Boulevard & La Brea Avenue. By 2015: Imperial Highway and Main Street, Imperial Highway & Pershing Drive, Lincoln Boulevard and Manchester Boulevard.	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Acceptance of construction by LADOT and LADPW, or affected jurisdiction
MM-ST-7 Monitoring Agency: LAWA	Restripe Existing Facilities. Existing traffic lanes shall be restriped to the satisfaction of LADOT or other appropriate jurisdiction, so that additional lane capacity will be provided without adding any new pavement to the intersection or road segment. By 2008: Airport Boulevard & Arbor Vitae Street, Aviation Boulevard & El Segundo Boulevard, Century Boulevard & Sepulveda Boulevard, Florence Avenue & La Cienega Boulevard, La Cienega Boulevard & Manchester Avenue, La Tijera Boulevard & Sepulveda Boulevard, Manchester Avenue & Sepulveda Boulevard, Hawthorne Boulevard & Imperial Highway, Imperial Highway & Inglewood Avenue. By 2015: Airport Boulevard & Manchester Avenue, Aviation Boulevard & Manchester Boulevard, Century Boulevard & La Cienega Boulevard, Grand Avenue & Vista del Mar, La Tijera Boulevard & Manchester Avenue, Centinela Avenue & Culver Boulevard, Arbor Vitae Street & Inglewood Avenue.	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of restriping by LADOT or affected jurisdiction
MM-ST-8	Add ATSAC, ATCS or Equivalent. Automated Traffic Surveillance and Control (ATSAC) or Adaptive Traffic Control	Traffic congestion and delays as they relate to	By 2008 or 2015, or prior to certificate of	Once, at issuance of certificate of	Approval of signal upgrade from LADOT

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ST-8 Monitoring Agency: LAWA	(Cont'd) System (ATCS) capability or equivalent shall be added to select intersections to the satisfaction of LADOT or other appropriate jurisdiction. The improved capability will result in a more effective traffic signal network. By 2008: Aviation Boulevard & El Segundo Boulevard, El Segundo Boulevard & Sepulveda Boulevard, Continental City Drive & Imperial Highway, I-105 off-ramp & Imperial Highway, Mariposa Avenue & Sepulveda Boulevard, Rosecrans Avenue & Sepulveda Boulevard, I-105 W/B off-ramp & Sepulveda Boulevard, Hawthorne Boulevard & Imperial Highway, Century Boulevard & Inglewood Avenue, Imperial Highway & Inglewood Avenue, Overland Avenue S/O Venice Boulevard (link). By 2015: Aviation Boulevard & Manchester Avenue, El Segundo Boulevard & La Cienega Boulevard, Arbor Vitae Street & La Brea Avenue, Centinela Avenue E/O La Brea Avenue (link), Imperial Highway W/O Hawthorne Boulevard (link), El Segundo Boulevard W/O Hawthorne Boulevard (link).	the LAX Master Plan program activities	occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	occupancy of related project	and LADPW, or appropriate jurisdiction
MM-ST-10 Monitoring Agency: LAWA	Modify Signal Phasing. The traffic signal phasing of select intersections shall be modified to the satisfaction of LADOT or other appropriate jurisdiction, to allow more efficient use of the intersections, particularly those that will experience a notable change in traffic characteristics as a result of the project. By 2008: Aviation Boulevard and Rosecrans Avenue, Centinela Avenue & Jefferson Boulevard, Douglas Street & Imperial Highway, El Segundo Boulevard & Sepulveda Boulevard, Florence Avenue & La Cienega Boulevard, Imperial Highway & Sepulveda Boulevard, La Cienega Boulevard & 111th Street, La Cienega Boulevard & Manchester Avenue, Lincoln Boulevard & 83rd Street, Manchester Avenue & Sepulveda Boulevard. By 2015: Highland Avenue/Vista del Mar & Rosecrans Boulevard, Imperial Highway & Main Street, Imperial Highway & Vista del Mar.	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of signal improvement from LADOT or appropriate jurisdiction

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

	Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ST-12 Monitoring Agency: LAWA	Provide New Ramps Connecting I-105 to LAX Between Aviation Boulevard and La Cienega Boulevard. These ramps shall be provided to allow for direct access and egress to/from the ITC and GTC via I-105, between Aviation Boulevard and La Cienega Boulevard. A feasibility study is underway to determine the best design for these ramps.	Traffic congestion and delays as they relate to the LAX Master Plan program activities	Prior to certificate of occupancy for GTC	Twice: Once, upon LAWA's approval of design plans; Once, upon Caltrans approval of design plans	Approved design plans; Issuance of Caltrans encroachment permit; Start of construction
MM-ST-13 Monitoring Agency: LAWA	Create A New Interchange at I-405 and Lennox Boulevard. This interchange shall provide grade-separated ramps from I-405 directly into airport property, and vice-versa. It shall be located approximately mid-way between Century Boulevard and Imperial Highway. A feasibility study is underway to determine the best design for the interchange. Should this proposed interchange not be constructed, suitable and alternate traffic mitigation measures shall be designed and implemented to the satisfaction of LADOT and the Bureau of Engineering.	Traffic congestion and delays as they relate to the LAX Master Plan program activities	Prior to certificate of occupancy for GTC	Once, upon LAWA's approval of design plans	LAWA approval of design plans
MM-ST-14 Monitoring Agency: LAWA	Ground Transportation/Construction Coordination Office Outreach Program. The construction coordination office proposed in Master Plan Commitment C-1, Establishment of a Ground Transportation/Construction Coordination Office, shall establish appropriate mechanisms to involve and coordinate with other major airport-area development projects to the extent feasible, to ensure that the cumulative impacts of construction in the airport area are coordinated and minimized.	Traffic congestion and delays as they relate to the LAX Master Plan program construction activities	Prior to commencement of construction of any major development project within the vicinity of LAX	As major development projects occur in airport area	LAWA approval of outreach program
MM-ST-15 Monitoring Agency: LAWA	Provide Fair-Share Contributions to Transit Improvements. Provide fair-share contributions to benefit transit to and from LAX to the satisfaction of LADOT and/or other appropriate jurisdiction or agency. By 2008: Imperial Highway & Sepulveda Boulevard, Jefferson Boulevard & Lincoln Boulevard, La Tijera Boulevard & Sepulveda Boulevard, Lincoln Boulevard & Teale Street, Lincoln Boulevard and Washington Boulevard, Manchester Avenue & Sepulveda Boulevard, Mariposa Avenue & Sepulveda Boulevard, I-105 W/B off-ramp at Sepulveda Boulevard, Overland Avenue S/O Venice Boulevard (link). By	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of fair-share contribution by LADOT or appropriate jurisdiction and/or agency

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ST-15	(Cont'd) 2015: Howard Hughes Parkway & Sepulveda Boulevard, Lincoln Boulevard & Manchester Avenue, Sepulveda Boulevard & 76th Street/77th Street, Fiji Way & Lincoln Boulevard, Lincoln Boulevard and Marina Expressway, Sepulveda Boulevard & 79th Street/80th Street, Sepulveda Boulevard & 83rd Street, Lincoln Boulevard S/O Venice Boulevard (link), Centinela Avenue S/O Venice Boulevard (link), Sawtelle Boulevard S/O Venice Boulevard (link), Sepulveda Boulevard S/O Venice Boulevard (link), Jefferson Boulevard E/O Lincoln Boulevard (link), Lincoln Boulevard S/O Jefferson Boulevard (link), Culver Boulevard W/O Jefferson Boulevard (link)				
MM-ST-16 Monitoring Agency: LAWA	Provide Fair-Share Contribution to LA County's Project to Extend the Marina Expressway. Provide fair-share contribution to Los Angeles County's project to extend the Marina Expressway (Route 90) to Admiralty Way or complete alternative off-site improvements at the following intersections: By 2015: Lincoln Boulevard & Washington Boulevard, Bali Way & Lincoln Boulevard, Fiji Way & Lincoln Boulevard, Lincoln Boulevard & Marina Expressway, Lincoln Boulevard & Maxella Avenue, Lincoln Boulevard & Mindanao Way	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of fair-share contribution or alternative improvement by LADOT and/or Los Angeles County

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<i>Relocation of Residences and Businesses</i>					
RBR-1 Monitoring Agency: LAWA	<p>Residential and Business Relocation Program. To address the acquisition of properties and relocation of businesses and residents associated with the proposed Master Plan, LAWA will prepare a Residential and Business Relocation Plan (Relocation Plan) in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, state and local regulations, and FAA Advisory Circular 150/5100-17, prior to the commencement of acquisition. LAWA will achieve the following objectives:</p> <ul style="list-style-type: none"> ◆ Fully inform eligible project-area residential occupants and business owners of the nature of and procedures for obtaining relocation assistance and benefits. ◆ Determine the needs of each residential relocatee and business owner. ◆ Provide an adequate number of referrals to comparable, decent, safe, and sanitary housing units within a reasonable time prior to relocation. No residential occupant would be required to move until comparable decent, safe, and sanitary housing is made available. ◆ Provide at least 90 days advance written notice to vacate, as required by law. The notice period may be extended according to the needs of the affected relocatees. ◆ Provide current and continuously updated information concerning replacement housing and business choices and opportunities. ◆ Ensure that the relocation process does not result in different or separate treatment because of race, religion, national origin, gender, marital status, or other arbitrary circumstances. ◆ Ensure that the unique needs of minority and low-income persons and businesses are addressed, including the provision of assistance and materials in Spanish and other languages as necessary. 	Minimize adverse acquisition or relocation impacts	Prior to commencement of relocation activities	Once, upon approval of the Relocation Plan	City Council approval of the Relocation Plan

Area: Relocation of Residences and Businesses

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
RBR-1	<p>(Cont'd)</p> <ul style="list-style-type: none"> ◆ Supply information concerning federal, state, city, and other governmental programs providing assistance to displaced persons or businesses. ◆ Assist each eligible person or business in the completion of all applications and claims for payment of benefits. ◆ Make relocation payments in accordance with Federal Relocation Regulations, including the provisions of Last Resort Housing, where applicable. ◆ Inform all affected occupants of LAWA's policies with regard to eviction and property management. ◆ Establish and maintain a formal grievance procedure for use by relocatees seeking administrative review of LAWA decisions with respect to relocation assistance. <p>Although it is expected that comparable replacement housing resources are available, LAWA will take all reasonable steps to make such resources available, including but not limited to the following:</p> <ul style="list-style-type: none"> ◆ Provide vacated project structures to agencies that could relocate the structures to new sites and make them available for program-affected residents. ◆ Provide funding for possible construction of replacement housing. ◆ Provide funding for rehabilitation of housing units being sold or rented to program-affected residents. ◆ Consider other innovative actions to ensure the availability of replacement housing. 				

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
RBR-1	<p>(Cont'd)</p> <p>In addition to the above services, distinct business assistance services will include but not be limited to the following:</p> <ul style="list-style-type: none"> ◆ LAWA will implement a business relocation assistance program to insure prompt and equitable relocation and re-establishment of businesses displaced as a result of the proposed Master Plan. The business relocation assistance program will include: 1) a determination of the relocation needs and preferences of each business to be displaced; 2) the maintenance of listings and contacts with commercial real estate brokers, commercial lenders, and government economic development agencies to assist displaced businesses in locating suitable replacement sites; 3) the provision to displaced businesses of information on programs administered by the Small Business Administration and other federal and state programs offering assistance to displaced persons; 4) the provision of special assistance to those who wish to remain close to their current sites or close to an airport in finding such sites, including sites on the airport such as LAX Northside/Westchester Southside, or other airport owned properties or developments; and 5) the provision of special assistance to address the specific needs of minority-owned businesses. ◆ LAWA will coordinate with the County of Los Angeles and the cities of Inglewood, Hawthorne, and El Segundo to locate properties within their jurisdictions suitable for businesses displaced by the acquisition program. ◆ LAWA will investigate and consider the use of the separate and ongoing Aircraft Noise Mitigation Program to redevelop noise impacted residential areas into commercial areas suitable for businesses displaced by the Master Plan acquisition program. As part of these efforts, LAWA will 				

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
RBR-1	(Cont'd) coordinate with the City of Inglewood and the County of Los Angeles to identify areas east of I-405 where land acquisition and conversion to compatible land uses is contemplated under applicable plans or is otherwise deemed appropriate. <ul style="list-style-type: none"> ◆ LAWA will provide opportunities for air freight, flight kitchens and other airport-related uses displaced by the acquisition program to relocate onto airport property, to the maximum extent practicable. ◆ LAWA will, to the maximum practicable extent, develop its property in LAX Northside/Westchester Southside so as to provide relocation opportunities for businesses displaced by the acquisition program. ◆ With respect to any and all residential acquisition under Alternative D, LAWA will implement a housing program similar to the existing "Move On Housing Program," which is currently being implemented in conjunction with the existing ANMP Relocation Plan. The Move On Housing Program is a collaborative effort between public and not-for-profit organizations to move and rehabilitate Manchester Square and Belford area structures in order to transfer housing assets to residential areas in Los Angeles County, provide reasonable housing for displaced tenants, and provide construction-related employment opportunities to community residents. 				
MM-RBR-1	Phasing for Business Relocations. To maximize opportunities for airport/airport-dependent businesses and other businesses	Minimize adverse acquisition or	Prior to commencement of	Once, upon approval of phasing plan	LAWA approval of phasing plan for

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-RBR-1 Monitoring Agency: LAWA	(Cont'd) being acquired to relocate in proximity to their current sites, LAWA shall, to the maximum degree feasible, schedule acquisition phasing and/or development phasing to accommodate interested parties on airport property in a manner that would avoid delays to the overall construction and development schedule. First priority shall be given to airport/airport-dependent businesses, such as air freight forwarders and hotels, whose relocation off of the airport would present a unique hardship. Master Plan Commitment RBR-1, Residential and Business Relocation Program, can also serve to mitigate significant effects stemming from the acquisition program by using LAWA ANMP funds to redevelop noise impacted residential property for industrial uses.	relocation impacts	relocation activities	for business relocation	business relocation
MM-RBR-2 Monitoring Agency: LAWA	Relocation Opportunities through Aircraft Noise Mitigation Program. As a special project under the Aircraft Noise Mitigation Program (ANMP) for LAX, LAWA shall coordinate with the City of Inglewood and the County of Los Angeles to identify residential land uses that are subject to high levels of aircraft noise where land acquisition and conversion to compatible land uses is contemplated under applicable plans or is otherwise deemed appropriate. As residential uses are relocated outside of noise impacted areas under the ANMP, in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, LAWA will work with the jurisdictions to identify airport-related businesses interested in these sites. With support from the jurisdictions, as well as other businesses and organizations such as Gateway to L.A. that interact with LAWA, LAWA will promote these sites for businesses subject to acquisition as part of the proposed LAX Relocation Plan business relocation assistance program. The multiple objectives of the effort shall be to mitigate noise impacted land uses, retain and promote local	Minimize adverse acquisition or relocation impacts	Within 60 days from City Council approval of the Relocation Plan, LAWA shall initiate coordination efforts with the County of Los Angeles and City of Inglewood	Once, upon initiation of coordination efforts with the County of Los Angeles and City of Inglewood	Provide evidence of coordination

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-RBR-2	(Cont'd) businesses dependent on airport proximity, and support local employment and economic growth. Areas under the City of Inglewood General Plan and redevelopment plan that are proposed for land use recycling along Century Boulevard shall be given high priority.				

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<i>Environmental Justice</i>					
EJ-1 Monitoring Agency: LAWA	Aviation Curriculum. LAWA will work with local school districts to offer aviation-related curriculum at elementary schools, middle schools, high schools and colleges in affected communities near the Los Angeles International Airport. Potential pilot schools could include: Beulah Payne Elementary School, Lennox Middle School, Hillcrest Continuation School, Inglewood High School, Morningside High School, and Los Angeles Southwest College.	Disproportionately high and adverse effects on minority and/or low-income communities, particularly those that would remain significant after implementation of mitigation measures. Would also help ensure that such communities have access to benefits flowing from the LAX Master Plan	Throughout Master Plan development	Annually	Implementation of proposed aviation curriculum
EJ-2 Monitoring Agency: LAWA	Aviation Academy. LAWA will work with local school districts to provide comprehensive educational and trade training for aviation-related careers, targeting students in the affected communities to provide them with increased career opportunities.	Disproportionately high and adverse effects on minority and/or low-income communities, particularly those that would remain significant after implementation of mitigation measures. Would also help ensure that such communities have access to benefits flowing from the LAX Master Plan	Throughout Master Plan development	Annually	Implementation of proposed aviation academy

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
EJ-3	<p>Job Outreach Center</p> <p>Construction and Other LAX-Related Job Outreach - LAWA will create or utilize an existing resource center to assist historically underrepresented and at-risk local residents to find construction and other substantive jobs with LAWA and surrounding airport-related businesses through training and comprehensive outreach. Written materials regarding job training and placements should be compiled and disseminated from the existing LAWA Job Outreach Center. The Job Outreach Center will accomplish the following:</p> <ul style="list-style-type: none"> ◆ Fund outreach efforts; ◆ Encourage minority firms within the affected communities to participate in each phase of the plan, including the design phase; ◆ Coordinate with local organizations (including, among others, The Urban League, National Association for the Advancement of Colored People (NAACP), Southern Christian Leadership Conference (SCLC), Watts Labor Community Action Committee (WLCAC), Brotherhood Crusade, First African Methodist Episcopal (FAME) Renaissance, Concerned Citizens of South Central Los Angeles (CCSCLA), Black Business Association (BBA), Greater Los Angeles African American Chamber of Commerce (GLAAACC), and LA X Coalition for Economic, Environmental and Educational Justice) regarding job training, outreach and incubator programs to ensure expansive outreach; ◆ Establish specific outreach and/or training programs for special targeted populations such as local ex-offenders, welfare recipients, homeless person, and low-income area residents; ◆ Hold workshops and training classes for professional development across disciplines that may provide service to LAX pre-and post-employment; 	Disproportionately high and adverse effects on minority and/or low-income communities, particularly those that would remain significant after implementation of mitigation measures. Would also help ensure that such communities have access to benefits flowing from the LAX Master Plan	Throughout Master Plan development	Annually	Implementation of proposed Job Outreach Center

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
EJ-3	<p>(Cont'd)</p> <ul style="list-style-type: none"> ◆ Establish educational/training/internship programs for local students; ◆ Provide referrals and linkages to manufacturing (assembly line) job opportunities in impacted communities, especially South Los Angeles, that produce materials and/or devices used by the airport. This would help to revitalize the community through the provision of long-term work for existing industrial businesses. <p>Community Job Database - LAWA will coordinate data gathering, outreach and counseling through the following:</p> <ul style="list-style-type: none"> ◆ Research and assess existing specialties and current capabilities of local work force to assist with targeted training and outreach efforts; ◆ Develop and manage a complete database of minority contractors; ◆ Produce a database of potential jobs and specialties needed, per Master Plan phase, and disseminate the information throughout the communities and to local Minority Business Enterprises/Disadvantaged Business Enterprises (MBE/DBE) companies. <p>MBE/DBE Business Outreach - LAWA will implement proactive measures that further State and local initiatives to ensure meaningful contract participation of MBE/DBE firms as follows:</p> <ul style="list-style-type: none"> ◆ Research and assess existing specialties and capabilities of local MBE/DBE firms to assist with targeted training and outreach efforts; 				

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
EJ-3	<p>(Cont'd)</p> <ul style="list-style-type: none"> ◆ Good Faith Effort (GFE) Outreach Training - to assist prime contractors with their outreach to local and MBE/DBE firms by providing them use of relevant databases and referring them to other local organizations that may be able to assist them in their efforts; ◆ Encourage use of MBE/DBE local subcontractors; ◆ LAWA shall adopt policies to promote the use of MBE/WBE/DBE subcontractors by requiring Prime Contractors to document outreach to MBE/WBE/DBEs; dividing projects into smaller component parts, or tasks to permit maximum participation by smaller entities; placing qualified MBE/WBE/DBEs on solicitation lists available to Prime Contractors; and advertising the availability of services of the Small Business Administration and Minority Business Development Agency of the Department of Commerce to Prime Contractors; ◆ Monitor and implement specific GFE guidelines for outreach to MBE/DBE firms. <p>Small Business Outreach - LAWA will establish the below-listed proactive measures to ensure meaningful contract participation of small businesses. The resources obtained through small business outreach will be compiled in a user-friendly brochure or report and disseminated from the existing LAWA Job Outreach Center. Contacts and loan conditions will be included where available. Counselors will be available to provide one-on-one assistance.</p> <ul style="list-style-type: none"> ◆ Fund and institute sub-contractor training/apprentice programs to be instituted pre-construction and during construction; 				

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
EJ-3	(Cont'd) <ul style="list-style-type: none"> ◆ Establish sensitivity training - educate prime contractors of the concerns and needs of the local business owners and MBE/DBE contractors; ◆ Develop special work packages to provide small businesses prime contracting opportunities; ◆ Establish loan assistance information programs that would provide counseling to small businesses in need of loans and, through potential partnerships with local banks, facilitate relationships with lenders; ◆ Establish incentives to large businesses for mentorship of, or partnering with local small businesses; ◆ Provide bonding assistance; ◆ Provide licensing assistance; ◆ Ensure prime and subcontracting opportunities for local small businesses. 				
EJ-4 Monitoring Agency: LAWA	Community Mitigation Monitoring. LAWA will include community participation in monitoring the implementation of the final Mitigation Measures and Master Plan Commitments in order to ensure agency compliance and accountability. The community participation will include a diverse group of residents, stakeholders, environmental specialists and community leaders that will convene on a regular basis.	Disproportionately high and adverse effects on minority and/or low-income communities, particularly those that would remain significant after implementation of mitigation measures. Would also help ensure that such communities have access to benefits flowing from the LAX Master Plan	Throughout Master Plan development	Annually	Inclusion of community participation as a component of the Mitigation Monitoring and Reporting Program

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<i>Air Quality</i>					
AQ-1 Monitoring Agency: LAWA	Air Quality Source Apportionment Study. In cooperation with FAA, the U.S Environmental Protection Agency (USEPA), the California Air Resources Board (CARB), and the South Coast Air Quality Management District (SCAQMD), LAWA will conduct an air quality source apportionment study to evaluate the contribution of on-airport aircraft emissions to off-airport air pollutant concentrations. For the study, LAWA will monitor aircraft emissions at the eastern end of the runways at LAX and will monitor air pollutant concentrations in nearby surrounding communities. On-airport emissions will be compared to the monitored concentrations in the communities to determine the contribution of these emissions to local air pollution.	Air pollutant levels in the general area of LAX, particularly in areas east of the airport, as specifically influenced by emissions from aircraft operating at LAX	Resume efforts on Source Apportionment Study within six (6) months from City Council approval of the LAX Plan	Annually	Completion of Study
AQ-2 Monitoring Agency: LAWA	School Air Filters. LAWA will provide funding for air filtration at qualifying public schools with air conditioning systems in place. The qualifying schools will be determined based upon review of the conclusions and recommendations of the Air Quality Source Apportionment Study to be conducted in Master Plan Commitment AQ-1.	The potential for air pollutants, specifically particulate matter, to impacts students in public schools near LAX	Identification/confirmation of qualifying schools to begin upon completion of the Air Quality Source Apportionment Study in Master Plan Commitment AQ-1; Work plan, including schedule for installation, to be provided within six (6) months thereafter. Installation of air filtration at all qualifying schools to be completed by 2015	Annually	First annual report to confirm preparation of work plan, including installation schedule; Subsequent annual reports to document progress on the installations
AQ-3	Mobile Health Research Lab. LAWA will explore the ability to fund/co-fund, to the extent feasible and permissible by federal	The potential for LAX-related air	Feasibility assessment to begin upon City	Annually	First annual report to indicate conclusions

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
AQ-3 Monitoring Agency: LAWA	(Cont'd) and local regulations, or seek funding sources to support the goal of a Mobile Health Research Lab. The goal of the Mobile Health Research Lab will be to research and study, not diagnose or treat, upper respiratory and hearing impacts that may be directly related to the operation of LAX.	pollutant and noise emissions to affect minority and/or low-income communities nearby	Council approval of the LAX Plan		of feasibility assessment. Subsequent annual reports to document status/activities of Mobile Health Research Lab, as appropriate
MM-AQ-1 Monitoring Agency: LAWA	LAX Master Plan - Mitigation Plan for Air Quality. LAWA shall expand and revise the existing air quality mitigation programs at LAX through the development of an LAX Master Plan Mitigation Plan for Air Quality (LAX MP-MPAQ). The LAX MP-MPAQ shall be developed in consultation with the FAA, the U.S Environmental Protection Agency (USEPA), the California Air Resources Board (CARB), and the South Coast Air Quality Management District (SCAQMD), as appropriate, and shall include all feasible methods to reduce air pollutant emissions from aircraft, Ground Support Equipment (GSE), traffic, and construction equipment both on and off the airport. The goal of the LAX MP-MPAQ shall be to reduce potential air pollutant emissions associated with implementation of the LAX Master Plan to levels equal to, or less than, the thresholds of significance identified in the Final EIS/EIR for the project. At a minimum, air pollutant emissions associated with implementation of the LAX Master Plan will be reduced to levels equal to those identified in Table AD5-8, Total Operational and Construction Emission - Mitigated. The LAX MP-MPAQ shall include feasible mitigation measures that are grouped into the following three (3) categories: 1. Construction-Related Measure; 2. Transportation-Related Measure; and 3. Operations-Related Measure.	Overall air pollutant emissions associated with construction and operation of the LAX Master Plan	Basic LAX MP-MPAQ and the Construction-Related component to be completed prior to issuance of grading or demolition permit for first Master Plan project. The Transportation-Related component and the Operations-Related component to be completed in conjunction with implementation of the Master Plan components that materially affect surface transportation emissions and operations emissions	Twice: Once, upon confirmation of the basic LAX MP-MPAQ (i.e., basic framework of Plan), and once upon confirmation of the full LAX MP-MPAQ, when all three implementation plans (one for each category of air quality mitigation measures) are complete	Annual progress reports, summarizing the nature and effectiveness of air quality mitigation measures that were implemented during the year, will be prepared

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MM-AQ-1	<p>(Cont'd)</p> <p>The LAX MP-MPAQ will, initially, present the basic framework of the overall air quality mitigation program (basic LAX MP-MPAQ), and will, ultimately, define the specific measures to be implemented within the context of three (3) individual components specific to the categories of emissions indicated above (full LAX MP-MPAQ). Implementation of Mitigation Measure MM-AQ-2, Construction-Related Mitigation Measure, will define the specific measures to be included in the construction-related component; Mitigation Measure MM-AQ-3, Transportation-Related Mitigation Measure, will define the specific measures to be included in the surface transportation-related component; and Mitigation Measure MM-AQ-4, Operations-Related Mitigation Measure, will define the specific measures to be included in the operations-related component. The basic framework of the LAX MP-MPAQ and the Construction-Related component will be developed prior to initiation of construction activities for the first project to be developed under the LAX Master Plan, and the development of the other two components will occur in conjunction with implementation of the Master Plan components that materially affect surface transportation emissions and operations emissions.</p>				

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Table AD5.8

Total Operational and Construction Emissions - Mitigated (tons per year)

Pollutant and Source	Interim Year					Horizon Year 2015				
	NA/NP ^{1, 2}	A	B	C	D	NA/NP ¹	A	B	C	D
VOC - On-Airport	1,652	1,385	1,330	1,384	1,513	1,513	1,497	1,578	1,534	1,473
VOC - Off-Airport	2,795	2,286	2,261	2,163	1,365	1,606	1,282	1,271	1,270	1,091
VOC - Construction	909	170	148	155	86	-	44	39	40	-
VOC - Total	5,356	3,841	3,739	3,702	2,964	3,119	2,823	2,888	2,844	2,564
CO - On-Airport	11,842	9,555	9,459	9,578	9,077	9,451	9,053	9,553	9,412	8,266
CO - Off-Airport	31,114	29,405	29,385	28,691	16,719	15,188	16,368	16,227	16,336	13,166
CO - Construction	667	1,094	955	995	556	-	352	307	320	-
CO - Total	43,623	40,054	39,799	39,264	26,352	24,639	25,773	26,087	26,068	21,432
NO _x - On-Airport	6,356	5,504	5,503	5,543	5,760	5,729	6,357	6,440	5,999	5,474
NO _x - Off-Airport	4,665	4,420	4,514	4,463	2,628	2,368	2,723	2,718	2,741	2,102
NO _x - Construction	405	2,237	1,952	2,034	1,141	-	494	431	449	-
NO _x - Total	11,426	12,161	11,969	12,040	9,529	8,097	9,574	9,589	9,189	7,576
SO ₂ - On-Airport	405	382	382	382	436	449	494	513	489	436
SO ₂ - Off-Airport	52	50	51	50	24	27	30	30	30	24
SO ₂ - Construction	3	7	7	7	3	-	2	2	2	-
SO ₂ - Total	460	439	440	439	463	476	526	545	521	460
PM ₁₀ - On-Airport	181	128	126	132	182	167	165	168	158	177
PM ₁₀ - Off-Airport	1,617	1,833	1,603	1,572	1,752	1,780	2,089	2,078	2,060	1,658
PM ₁₀ - Construction	68	531	463	482	335	-	137	119	124	-
PM ₁₀ - Total	1,866	2,492	2,192	2,186	2,269	1,947	2,391	2,365	2,342	1,835

¹ NA/NP=No Action/No Project Alternative.

² As described in the introduction to Chapter 4, the evaluation of mitigation measures is not a part of the No Action/No Project Alternative analysis. Emissions provided in this table for the No Action/No Project Alternative are the same as those reported in **Table F4.6-11a** and have been included here for comparative purposes.

³ Interim year is 2005 for NA/NP and Alternatives A, B, and C and 2013 for Alternative D.

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-AQ-2 Monitoring Agency: LAWA	<p>Construction-Related Measure. The required components of the construction-related air quality mitigation measure are itemized below. These components include numerous specific actions to reduce emissions of fugitive dust and of exhaust emissions from on-road and nonroad mobile sources and stationary engines. All of these components must be in place prior to commencement of the first Master Plan construction project and must remain in place through build out of the Master Plan. An implementation plan will be developed which provides available details as to how each of the elements of this construction-related mitigation measure will be implemented and monitored. Each construction subcontractor will be responsible to implement all measures that apply to the equipment and activities under his/her control, an obligation which will be formalized in the contractual documents, with financial penalties for noncompliance. LAWA will assign one or more environmental coordinators whose responsibility it will be to ensure compliance with the construction-related measure by use of direct inspections, records reviews, and investigation of complaints with reporting to LAWA management for follow-up action. The estimated ranges of emissions reductions quantified for this mitigation measure for Alternative D are shown in Table F5-8, Estimated Ranges of Emission Reductions for Construction-Related Air Quality Mitigation Measures. Reliable emissions reductions were not able to be quantified for all of these components.</p>	Construction-related air pollutant emissions	Prior to issuance of grading or demolition permit for first Master Plan project	Once, upon completion of implementation plan for construction-related measures, and as specified in the implementation plan	Completion of implementation plan for construction-related measures within the LAX MP-MPAQ

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance												
MM-AQ-2	<div>(Cont'd)</div> <div>Table F5-8</div> <div>Estimated Ranges of Emission Reductions for Construction-Related Air Quality Mitigation Measures</div> <table><thead><tr><th>Pollutant</th><th>Alternative D¹ (tons)</th></tr></thead><tbody><tr><td>ROG</td><td>1 - 10</td></tr><tr><td>NO_x</td><td>300 - 1,100</td></tr><tr><td>CO</td><td>10 - 30</td></tr><tr><td>PM₁₀</td><td>140 - 400</td></tr><tr><td>SO_x</td><td>1 - 10</td></tr></tbody></table> <div>¹ In the year of peak construction emissions. Source: Camp Dresser & McKee, Inc., 2004.</div> <div>The specific components of this construction-related air quality mitigation measure include:</div> <div>1. <u>Fugitive Dust Source Controls:</u></div> <div><ul style="list-style-type: none">◆ Apply non-toxic soil stabilizer to all inactive construction areas (i.e., areas with disturbed soil).◆ Following the addition of materials to, or removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing non-toxic soil stabilizer.◆ Post a publicly visible sign with the telephone number and person to contact regarding dust complaints; this person shall respond and take corrective action within 24 hours.◆ Prior to final occupancy, the applicant demonstrates that all ground surfaces are covered or treated sufficiently to minimize fugitive dust emissions.◆ All roadways, driveways, sidewalks, etc. being installed as part of project should be completed as soon as possible; in addition, building pads should be laid as soon as possible after grading.</div>	Pollutant	Alternative D ¹ (tons)	ROG	1 - 10	NO _x	300 - 1,100	CO	10 - 30	PM ₁₀	140 - 400	SO _x	1 - 10				
Pollutant	Alternative D ¹ (tons)																
ROG	1 - 10																
NO _x	300 - 1,100																
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MM-AQ-2	<p>(Cont'd)</p> <ul style="list-style-type: none"> ◆ Pave all construction access roads at least 100 feet on to the site from the main road. <p>2. <u>On-Road Mobile Source Controls:</u></p> <ul style="list-style-type: none"> ◆ To the extent feasible, have construction employees work/commute during off-peak hours. ◆ Make available on-site lunch trucks during construction to minimize off-site worker vehicle trips. <p>3. <u>Nonroad Mobile Source Controls:</u></p> <ul style="list-style-type: none"> ◆ Prohibit staging or parking of construction vehicles (including workers' vehicles) on streets adjacent to sensitive receptors such as schools, daycare centers, and hospitals. ◆ Prohibit construction vehicle idling in excess of ten minutes. ◆ Utilize on-site rock crushing facility, when feasible, during construction to reuse rock / concrete and minimize off-site truck haul trips. <p>4. <u>Stationary Point Source Controls:</u></p> <ul style="list-style-type: none"> ◆ Specify combination of electricity from power poles and portable diesel- or gasoline-fueled generators using "cleaner burning diesel" fuel and exhaust emission controls. <p>5. <u>Mobile and Stationary Source Controls:</u></p> <ul style="list-style-type: none"> ◆ Specify combination of construction equipment using "cleaner burning diesel" fuel and exhaust emission controls. ◆ Suspend use of all construction equipment during a second-stage smog alert in the immediate vicinity of LAX. ◆ Utilize construction equipment having the minimum practical engine size (i.e., lowest appropriate horsepower rating for intended job). 				

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-AQ-2	(Cont'd) <ul style="list-style-type: none"> ◆ Require that all construction equipment working on site is properly maintained (including engine tuning) at all times in accordance with manufacturers' specifications and schedules. ◆ Prohibit tampering with construction equipment to increase horsepower or to defeat emission control devices. 6. <u>Administrative Controls</u> <ul style="list-style-type: none"> ◆ The contractor or builder shall designate a person or persons to ensure the implementation of all components of the construction-related measure through direct inspections, records reviews, and investigations of complaints. 				
MM-AQ-3 Monitoring Agency: LAWA	Transportation-Related Mitigation Measure. The primary feature of the transportation-related air quality mitigation measure is the development and construction of at least eight (8) additional sites with FlyAway service similar to the service provided by the Van Nuys FlyAway currently operated by LAWA. The intent of these FlyAway sites is to reduce the quantity of traffic going to and from LAX by providing regional locations where LAX employees and passengers can pick up an LAX-dedicated, clean-fueled bus that will transport them from a FlyAway closer to their home or office into LAX and back. The reduction in vehicle miles traveled (VMT) translates directly into reduced air emissions, as well as a reduction in traffic	Surface Transportation-related air pollutant emissions	Prior to issuance of building permit for ITC and within 6 months following City Council approval of the LAX Plan	Once, upon completion of implementation plan for transportation-related measures and as specified in the implementation plan	Completion of implementation plan for transportation-related measures within the LAX MP-MPAQ

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance												
MM-AQ-3	<p>(Cont'd)</p> <p>congestion in the vicinity of the airport. An implementation plan will be developed which provides available details as to how each of the elements of this transportation-related mitigation measure will be implemented and monitored. The estimated emissions reductions associated with this component of the transportation-related air quality mitigation measure are shown in Table F5-9.</p> <p style="text-align: center;">Table F5-9</p> <p style="text-align: center;">Estimated Emissions Reductions (Tons) for Eight (8) New FlyAway Terminals-2015</p> <table><tr><td><u>Pollutant</u>¹</td><td><u>Alternative D</u></td></tr><tr><td>ROG</td><td>56.0</td></tr><tr><td>NO_x</td><td>82.9</td></tr><tr><td>CO</td><td>1064.5</td></tr><tr><td>PM₁₀</td><td>152.6</td></tr><tr><td>SO_x</td><td>1.7</td></tr></table> <p>Note: Reductions are the combined totals from all new FlyAway capacity, and many include expansion of the existing FlyAway.</p> <p>¹ Based on EMFAC2002 Emission Factors for Calendar Year 2015.</p> <p>Source: Camp Dresser & McKee Inc., 2004.</p>	<u>Pollutant</u> ¹	<u>Alternative D</u>	ROG	56.0	NO _x	82.9	CO	1064.5	PM ₁₀	152.6	SO _x	1.7				
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MM-AQ-3	<p>(Cont'd)</p> <p>The required two (2) elements of this transportation-related air quality mitigation measure include:</p> <p>1. <u>Development of New FlyAway Capacity:</u></p> <p>Additional service capacity from at least eight (8) FlyAway service terminals are required under this measure, and all eight must be operational by 2015. LAWA has already begun analyzing potential FlyAway locations. Selection of the eight general locations should be made and included in the overarching air quality mitigation program plan discussed in Mitigation Measure MM-AQ-1, LAX Master Plan Mitigation Plan for Air Quality, as well as in the implementation plan for the transportation-related measures noted above. Final selection of the sites must be completed on a schedule that allows for property acquisition or leasing, terminal design, construction, and implementation of all sites by 2015.</p> <p>The sites may include, but are not limited to the following:</p> <ul style="list-style-type: none"> ◆ West San Fernando Valley/Eastern Ventura County ◆ Santa Monica/Pacific Palisades ◆ Central Los Angeles ◆ Long Beach/South Bay/San Pedro ◆ East San Fernando Valley ◆ San Gabriel Valley ◆ Southeast Los Angeles County ◆ North Los Angeles County <p>2. <u>Public Outreach Program for FlyAway Service:</u></p> <p>This measure also requires a public outreach program to inform potential users of the terminals about their existence and their locations. The outreach program would be geared towards encouraging the use of the FlyAways with convenience and low cost being the primary selling points.</p>				

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Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<p>MM-AQ-3 (Cont'd)</p> <p>Other feasible mitigation elements may be developed to ensure that the emission reductions for this transportation-related measure are achieved. These may include, for example:</p> <ul style="list-style-type: none"> ◆ <u>Transit Ridership measures such as:</u> <ul style="list-style-type: none"> – Constructing on-site or off-site bus turnouts, passenger benches, or shelters to encourage transit system use. – Constructing on-site or off-site pedestrian improvements/including showers for pedestrian employees to encourage walking/bicycling to work by LAX employees. ◆ <u>Highway and Roadway Improvements measures such as:</u> <ul style="list-style-type: none"> – Linking ITS (Intelligent Transportation System) with off-airport parking facilities with ability to divert/direct trips to these facilities to reduce traffic/parking congestion and associate air emissions in the immediate vicinity of the airport. – Expanding ITS/ATCS systems, concentrating on I-405 and I-105 corridors, extending into South Bay and Westside surface street corridors to reduce traffic/parking congestion and associate air emissions in the immediate vicinity of the airport. – Linking LAX traffic management system with airport cargo facilities, with ability to reroute cargo trips to/from these facilities to reduce traffic/parking congestion and associate air emissions in the immediate vicinity of the airport. – Developing a program to minimize the use of conventional-fueled fleet vehicles during smog alerts to reduce air emissions from vehicles at the airport. 				

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Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<p>MM-AQ-3 (Cont'd)</p> <ul style="list-style-type: none"> ◆ <u>Parking measures such as:</u> <ul style="list-style-type: none"> – Providing free parking and preferential parking locations for ULEV/SULEV/ZEV in all (including employee) LAX lots; providing free charging stations for ZEV; including public outreach to reduce air emissions from automobiles accessing airport parking. – Measures to reduce air emissions of vehicles in line to exit parking lots such as pay-on-foot (before getting into car) to minimize idle time at parking check out, including public outreach . – Implementing on-site circulation plan in parking lots to reduce time and associated air emissions from vehicles circulating through lots looking for parking. – Encouraging video conferencing and providing video conferencing capabilities at various locations on the airport to reduce VMT and associated air emissions in the vicinity of the airport. ◆ <u>Additional Ridesharing measures such as:</u> <ul style="list-style-type: none"> – Expanding the airport's ridesharing program to include all airport tenants ◆ <u>Clean Vehicle Fleets measures such as:</u> <ul style="list-style-type: none"> – Promoting commercial vehicles/trucks/vans using terminal areas (LAX and regional intermodal) to install SULEV/ZEV engines to reduce vehicle air emissions. – Promoting "best-engine" technology (SULEV/ZEV) for rental cars using on-airport RAC facilities to reduce vehicle air emissions. – Consolidating nonrental car shuttles using SULEV/ZEV engines to reduce vehicle air emissions. 				

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-AQ-3	<p>(Cont'd)</p> <ul style="list-style-type: none"> ◆ <u>Energy Conservation measures such as:</u> <ul style="list-style-type: none"> – Covering, if feasible, any parking structures that receive direct sunlight, to reduce volatile emissions from vehicle gasoline tanks; and installing solar panels on these roofs where feasible to supply electricity or hot water to reduce power production demand and associated air emissions at utility plants. <p>These other components may require the approval of other federal, state, regional, and/or local government agencies. It should be noted that no air quality benefit (i.e., pollutant reduction) was estimated in the Final EIS/EIR for these additional components; hence, implementation of any of these other components would, in conjunction with the FlyAways described above, provide for additional air quality benefits over and above the amount of transportation-related pollutant reductions accounted for in the Final EIS/EIR.</p>				
MM-AQ-4	Operations-Related Mitigation Measure. The primary component of the operations-related air quality	Operations-related air pollutant emissions	Within six (6) months following City Council	Once, upon completion of	Completion of implementation plan

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-AQ-4 Monitoring Agency: LAWA	<p>(Cont'd)</p> <p>mitigation measure consists of one airside item, the conversion of ground support equipment (GSE) to extremely low emission technology (such as electric power, fuel cells, or other future technological developments). Due to the magnitude of the effort to convert GSE, it must be a phased program and must be completed at build out of the Master Plan in 2015. An implementation plan will be developed which provides available details as to how each of the elements of this operations-related mitigation measure will be implemented and monitored. Because this effort will apply to all GSE in use at LAX, both LAWA-owned equipment and tenant-owned equipment, the effort must begin upon City approval of the LAX Plan with a detailed inventory of the number, types, sizes, and usage history of all GSE at LAX. Because some of the tenant organizations (mainly the major domestic commercial airlines) have signed a memorandum of understanding (MOU) with the California Air Resources Board (CARB) that requires the signatories to replace a proportion of their GSE fleet with clean-fuel alternatives (including zero-emission equipment), it will be necessary for LAWA to evaluate the level of its commitment within the framework of the MOU. Because LAWA anticipates facilitating this component by providing incentives or tenant lease requirements, early negotiations with tenant organizations may allow LAWA to accommodate cost-sharing agreements to implement the GSE conversions in a timely manner, to make LAWA's financial commitment as cost effective as possible. LAWA will assign a GSE coordinator whose responsibility it will be to ensure the successful conversion of GSE in a timely manner. This coordinator must have adequate authority to negotiate on behalf of the City and have sufficient technical support to evaluate technical issues that arise during implementation of this measure. The estimated ranges of</p>		approval of the LAX Plan	implementation plan for operations-related measures and as specified in the implementation plan	for operations-related measures within the LAX MP-MPAQ

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance												
MM-AQ-4	<p>(Cont'd)</p> <p>emissions reductions quantified for this component of the operations-related measure for Alternative D are shown in Table F5-10.</p> <p style="text-align: center;">Table F5-10</p> <p style="text-align: center;">Estimated Ranges of Emission Reductions for GSE Conversion</p> <table><tr><td><u>Pollutant</u></td><td><u>Alternative D¹ (tons)</u></td></tr><tr><td>ROG</td><td>10 - 100</td></tr><tr><td>NO_x</td><td>300 - 400</td></tr><tr><td>CO</td><td>500 - 1000</td></tr><tr><td>PM₁₀</td><td>1 - 10</td></tr><tr><td>SO_x</td><td>1 - 5</td></tr></table> <p style="text-align: center;">¹ In the build-out year, 2015.</p> <p style="text-align: center;">Source: Camp Dresser & McKee Inc., 2004.</p> <p>The successful conversion of all GSE at LAX to extremely low or zero emission equipment by 2015 is the required element of this mitigation measure.</p> <p>Consideration of other operations-related measures may include components such as contracting with commercial landscapers who operate lowest emitting equipment. Reliable emissions reductions have not been quantified for these other components.</p>	<u>Pollutant</u>	<u>Alternative D¹ (tons)</u>	ROG	10 - 100	NO _x	300 - 400	CO	500 - 1000	PM ₁₀	1 - 10	SO _x	1 - 5				
<u>Pollutant</u>	<u>Alternative D¹ (tons)</u>																
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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
Hydrology and Water Quality					
HWQ-1 Monitoring Agency: LAWA	<p>Conceptual Drainage Plan. Once a Master Plan alternative is selected, and in conjunction with its design, LAWA will develop a conceptual drainage plan of the area within the boundaries of the Master Plan alternative (in accordance with FAA guidelines and to the satisfaction of the City of Los Angeles Department of Public Works, Bureau of Engineering). The purpose of the drainage plan will be to assess area-wide drainage flows as related to the Master Plan project area, and at a level of detail sufficient to identify the overall improvements necessary to provide adequate drainage capacity to prevent flooding. The conceptual drainage plan will provide the basis and specifications from which detailed drainage improvement plans will be designed in conjunction with site engineering specific to each Master Plan project. Best Management Practices (BMPs) will be incorporated to minimize the effect of airport operations on surface water quality and to prevent a net increase in pollutant loads to surface water resulting from the selected Master Plan alternative.</p> <p>To evaluate drainage capacity, LAWA will use either the Peak Rate Method specified in Part G - Storm Drain Design of the City of Los Angeles' Bureau of Engineering Manual or the Los Angeles County Modified Rational Method, both of which are acceptable to the LADPW. In areas within the boundary of the selected alternative where the surface water runoff rates are found to exceed the capacity of the storm water conveyance infrastructure with the potential to cause flooding, LAWA will take measures to either reduce peak flow rates or increase the structure's capacity. These drainage facilities will be designed to ensure that they adequately convey storm water runoff and prevent flooding by adhering to the procedures set forth by the Peak Rate Method/Los Angeles County Modified Rational Method.</p>	Significant changes in surface hydrology or adverse impacts to surface water quality due to new development associated with the Master Plan	Prior to issuance of a grading/building permit for the first Master Plan project involving substantial surface alternations or substantial changes to existing operations	Once, upon completion of conceptual drainage plan	Completion of conceptual drainage plan

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
HWQ-1	<p>(Cont'd)</p> <p>Methods to reduce the peak flow of surface water runoff could include:</p> <ul style="list-style-type: none"> ◆ Decreasing impervious area by removing unnecessary pavement or utilizing porous concrete or modular pavement ◆ Building storm water detention structures ◆ Diverting runoff to pervious areas (reducing directly-connected impervious areas) ◆ Diverting runoff to outfalls with additional capacity (reducing the total drainage area for an individual outfall) ◆ Redirecting storm water flows to increase the time of concentration <p>Measures to increase drainage capacity could include:</p> <ul style="list-style-type: none"> ◆ Increasing the size and slope (capacity) of storm water conveyance structures (pipes, culverts, channels, etc.). ◆ Increasing the number of storm water conveyance structures and/or outfalls. <p>To evaluate the effect of the selected Master Plan alternative on surface water quality, LAWA will prepare a specific Standard Urban Stormwater Mitigation Plan (SUSMP) for the selected alternative, as required by the LARWQCB. The SUSMP addresses water quality and drainage issues by specifying source control, structural, and treatment control BMPs with the objective of reducing the discharge of pollutants from the stormwater conveyance system to the maximum extent practicable. Once BMPs are identified, an updated pollutant load estimate will be calculated that takes into account reductions from treatment control BMPs.</p>				

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HWQ-1	<p>(Cont'd)</p> <p>These BMPs will be applied to both existing and future sources with the goal of achieving no net increase in loadings of pollutants of concern to receiving water bodies. LAWA will therefore address water quality issues, including erosion and sedimentation, and comply with the SUSMP requirements by designing the storm water system through incorporation of the structural and treatment control BMPs specified in the SUSMP.</p> <p>The following list includes some of the BMPs that could be employed to infiltrate or treat storm water runoff and dry weather flows, and control peak flow rates.</p> <ul style="list-style-type: none"> ◆ Vegetated swales and strips ◆ Oil/Water separators ◆ Clarifiers ◆ Media filtration ◆ Catch basin inserts and screens ◆ Continuous flow deflective systems ◆ Bioretention and infiltration ◆ Detention basins ◆ Manufactured treatment units ◆ Hydrodynamic devices <p>Other structural BMPs may also be selected from the literature and the many federal, state and local guidance documents available. Performance of structural BMPs varies considerably based on their design. USEPA has published estimated ranges of pollutant removal efficiencies for structural BMPs based on substantial document review.</p>				

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HWQ-1	(Cont'd)				
	These ranges of removal efficiencies are presented in Table F5-1, Structural BMP Expected Pollutant Removal Efficiency.				
	Table F5-1				
	Structural BMP Expected Pollutant Removal Efficiency				
	Typical Pollutant Removal (percent)				
	<u>BMP Type</u>	<u>Suspended Solids</u>	<u>Nitrogen</u>	<u>Phosphorus</u>	<u>Metals</u>
	Dry Detention Basins	30-35	15-45	15-45	15-45
	Retention Basins	50-80	30-65	30-65	50-80
	Infiltration Basins	50-80	50-80	50-80	50-80
	Infiltration Trenches/Dry Wells	50-80	50-80	15-45	50-80
Porous Pavement	65-100	65-100	30-65	65-100	
Grassed Swales	30-65	15-45	15-45	15-45	
Vegetated Filter Strips	50-80	50-80	50-80	30-65	
Surface Sand Filters	50-80	<30	50-80	50-80	
Other Media Filters	65-100	15-45	0	50-80	
Source: U.S. Environmental Protection Agency, Preliminary Data Summary of Urban Storm Water Best Management Practices Methodology, August 1999.					
In addition to the structural BMP types that will be used, non-structural/source control BMPs will continue to be a part of the LAX program to reduce pollutant loadings. Existing practices and potentially new ones will be extended to acquisition areas and to the areas where airport operations will increase in frequency or duration.					

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HWQ-1	<p>(Cont'd)</p> <p>These source control BMPs will be incorporated into the LAX Storm Water Pollution Prevention Plan (SWPPP) and will consequently be required of LAWA and all airport tenants at all locations where industrial activities occur that have the potential to impact water quality.</p> <p>The overall result of Master Plan Commitment HWQ-1 will be a drainage infrastructure that provides adequate drainage capacity to prevent flooding and control peak flow discharges, that incorporates BMPs to minimize the effect of airport operations on surface water quality, and that prevents a net increase of pollutant loads to either receiving water body as a result of the selected Master Plan alternative.</p>				
MM-HWQ-1	<p>Update Regional Drainage Facilities. Regional drainage facilities should be upgraded, as necessary, in order to accommodate current and projected future flows within the watershed of each stormwater outfall resulting from cumulative development. This could include upgrading the existing outfalls, or building new ones. The responsibility for implementing this mitigation measure lies with the Los Angeles County Department of Public Works and/or the City of Los Angeles Department of Public Works, Bureau of Engineering. A portion of the increased costs for the upgraded flood control and drainage facilities would be paid by LAX tenants and users in accordance with the possessory interest tax laws and other legal assessments, consistent with federal airport revenue diversion laws and regulations and in compliance with state, county and city laws. The new or upgraded facilities should be designed in accordance with the drainage design standards of each agency.</p>	Increased runoff from Master Plan improvements exacerbating existing deficiencies in offsite drainage facilities	Prepare status report on the status of regional drainage improvements prior to issuance of a grading or building permit for the first Master Plan project involving substantial surface alterations or substantial changes to existing operations	Annual reports	Annual updates on the status of improvements needed for offsite drainage facilities. Once the necessary improvements to the offsite facilities have been approved, the need for monitoring ceases
Monitoring Agency: LAWA					

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<i>Historical / Architectural and Archaeological / Cultural Resources</i>					
HR-1 Monitoring Agency: LAWA	Preservation of Historic Resources. In implementing the LAX Plan and conducting ongoing activities associated with operation of the airport, LAWA will support the preservation of identified significant historic/architectural resources through careful review of design and development adjacent to those resources and by undertaking any modifications to those resources in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. Additionally, where sound insulation is proposed for identified significant historic/architectural resources under the Aircraft Noise Mitigation Program, LAWA will ensure that methods are developed with the approval of a qualified architectural historian or historic architect, who meets the Secretary of the Interior's Professional Qualifications Standards, in compliance with the Secretary of the Interior's Standards for Rehabilitation.	Avoiding loss of significant historical resources, and their historic character, identified within the Area of Potential Effects (APE)	Prior to approval of final plans for demolition of buildings within the International Airport Industrial District associated with the GTC-ITC Roadways and Century Bridge, and associated open-space area (for preservation component); In conjunction with ongoing ANMP and prior to approval of sound proofing plan for affected historic resources (for sound insulation component)	Once, at sign-off of demolition plan. (preservation) Once, at sign-off of soundproofing plan. (sound insulation)	Plans signed off by qualified architectural historian or historic architect
MM-HA-1 Monitoring Agency: LAWA	Historic American Buildings Survey (HABS) Document. For historic properties eligible at the federal, state or local levels that are proposed for demolition or partial demolition (i.e., the International Airport Industrial District), a Historic American Buildings Survey (HABS) document shall be prepared by LAWA in accordance with the Secretary of the Interior's Guidelines for Architectural and Engineering Documentation Standards. The level of documentation (I, II, III) shall be determined by the National Park Service (NPS). Documentation shall adequately explicate and illustrate what is significant or valuable about each of the historic resources. Documentation data shall be collected prior to commencement of demolition of	Loss of important historical resources from demolition	Prior to issuance of demolition permits for affected historical resources	Twice: Once, upon review of draft HABS document by NPS and once, upon approval of final HABS document	Acceptance letter for final HABS document from NPS

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MM-HA-1	(Cont'd) the buildings. Archival copies of the recordation document shall be submitted to the National Park Service, Library of Congress, and the California Office of Historic Preservation. Non-archival copies of the document shall be distributed to the City of Los Angeles Planning Department, City of Los Angeles Cultural Affairs Department, Los Angeles Public Library (main branch), Los Angeles Conservancy, and LAWA's Public Relations Division.				
MM-HA-2 Monitoring Agency: LAWA	Historic Educational Materials. For the significant historic resources proposed for demolition or partial demolition, educational materials suitable for the general public, secondary school use, and/or aviation historians and enthusiasts shall be designed with the assistance of a qualified historic preservation professional and implemented by LAWA. The purpose of these materials shall be to present in two- or three-dimensional format, the history of the airport and surrounding area. Such materials shall include, but not be limited to, a video/film documentary, curriculum program and teacher's guide, architectural models, and a historical brochure or pamphlet. These materials shall be made available via LAWA's public relations department to the general public, local community school history programs, and related interest groups.	Demolition of historical resources	Initiate development of educational materials prior to demolition of affected historical resources. Complete educational materials no later than one year after demolition of affected historical resources	Once, prior to demolition of affected historical resources	Approval of educational materials by LAWA
MM-HA-4 Monitoring Agency: LAWA	Discovery. The FAA shall prepare an archaeological treatment plan (ATP), in consultation with SHPO, that ensures the long-term protection and proper treatment of those unexpected archaeological discoveries of federal, state, and/or local significance found within the APE of the selected alternative. The ATP shall include a monitoring plan, research design, and data recovery plan. The ATP shall be consistent with the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation; California Office of Historic Preservation's (OHP) <i>Archaeological Resources Management</i>	Loss or destruction of important archaeological resources	Prior to issuance of any excavation and grading permits associated with the first Master Plan project	Once, at approval of ATP	Approval of ATP by LAWA

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MM-HA-4	(Cont'd) <i>Report</i> ; Recommended Contents and Format (1989), and the <i>Guidelines for Archaeological Research Design</i> (1991); and shall also take into account the ACHP's publication <i>Treatment of Archaeological Properties: A Handbook</i> . The ATP shall also be consistent with the Department of the Interior's Guidelines for Federal Agency Responsibility under Section 110 of the NHPA. In addition, those steps outlined in Section 21083.2(i) of CEQA and Section 15064.5(f) of the CEQA Guidelines shall be implemented, as necessary.				
MM-HA-5 Monitoring Agency: LAWA	Monitoring. Any grading and excavation activities within LAX proper or the acquisition areas that have not been identified as containing redeposited fill material or having been previously disturbed shall be monitored by a qualified archaeologist. The archaeologist shall be retained by LAWA and shall meet the Secretary of the Interior's Professional Qualifications Standards. The project archaeologist shall be empowered to halt construction activities in the immediate area if potentially significant resources are identified. Test excavations may be necessary to reveal whether such findings are significant or insignificant. In the event of notification by the project archaeologist that a potentially significant or unique archaeological/cultural find has been unearthed, LAWA shall be notified and grading operations shall cease immediately in the affected area until the geographic extent and scientific value of the resource can be reasonably verified. Upon discovery of an archaeological resource or Native American remains, LAWA shall retain a Native American monitor from a list of suitable candidates obtained from the Native American Heritage Commission.	Loss or destruction of important archaeological resources	Retain archaeologist prior to issuance of excavation and grading permits for first Master Plan project, with continued monitoring efforts in accordance with the ATP	Once, upon retention of archaeologist and on-going during excavation and grading activities, as identified in ATP	Retention of archaeologist and filing of periodic monitoring reports with LAWA, as stipulated in the ATP
MM-HA-6	Excavation and Recovery. Any excavation and recovery of identified resources (features) shall be performed using standard	Loss or destruction of important	Upon discovery of potential	On-going during excavation and	Filing of appropriate reports (i.e.

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MM-HA-6 Monitoring Agency: LAWA	(Cont'd) archaeological techniques and the requirements stipulated in the ATP. Any excavations, testing, and/or recovery of resources shall be conducted by a qualified archaeologist selected by LAWA.	archaeological resources	archaeological resources by qualified archaeologist	grading activities as identified in ATP	excavation/recovery report) with LAWA by project archaeologist pursuant to ATP. If no resources are found, a report indicating as much should be filed
MM-HA-7 Monitoring Agency: LAWA	Administration. Where known resources are present, all grading and construction plans shall be clearly imprinted with all of the archaeological/cultural mitigation measures. All site workers shall be informed in writing by the on-site archaeologist of the restrictions regarding disturbance and removal as well as procedures to follow should a resource deposit be detected.	Loss or destruction of important archaeological resources	Prior to approval of excavation and grading plans (for MM/MPC imprint component); Prior to excavation and grading activities pursuant to ATP (for on-site training component)	Once, upon approval of excavation and grading plans (for MM/MPC imprint component); Prior to initiation of excavation and grading activities, and with construction staff change-outs, pursuant to ATP (for on-site training component)	Sign off of plans by project archaeologist (for MM/MPC imprint component); Filing of sign-in sheet with LAWA by project archaeologist, as specified by ATP (for on-site training component)
MM-HA-8 Monitoring Agency: LAWA	Archaeological/Cultural Monitor Report. Upon completion of grading and excavation activities in the vicinity of known archaeological resources, the Archaeological/Cultural monitor shall prepare a written report. The report shall include the results of the fieldwork and all appropriate laboratory and analytical studies that were performed in conjunction with the excavation. The report shall be submitted in draft form to the FAA, LAWA and City of Los Angeles-Cultural Affairs Department. City representatives shall have 30 days to comment on the report. All comments and concerns shall be addressed in a final report issued within 30 days of receipt of city comments.	Loss or destruction of important archaeological resources	Upon completion of grading & excavation activities per ATP	Once, upon completion of excavation and grading activities on a project by project basis, pursuant to ATP	Receipt of final report on a project by project basis by LAWA
MM-HA-9	Artifact Curation. All artifacts, notes, photographs, and other project-related materials recovered during the monitoring	Loss or destruction of important	Upon completion of each project during	Once, at completion of excavation and	Acceptance letter of curated artifacts from

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MM-HA-9 Monitoring Agency: LAWA	(Cont'd) program shall be curated at a facility meeting federal and state standards.	archaeological resources	which resources were recovered, as stipulated in ATP	grading activities on a project by project basis, as stipulated in ATP	selected repository, or offer letter from LAWA to repository
MM-HA-10 Monitoring Agency: LAWA	Archaeological Notification. If human remains are found, all grading and excavation activities in the vicinity shall cease immediately and the appropriate LAWA authority shall be notified: compliance with those procedures outlined in Section 7050.5(b) and (c) of the State Health and Safety Code, Section 5097.94(k) and (i) and Section 5097.98(a) and (b) of the Public Resources Code shall be required. In addition, those steps outlined in Section 15064.5(e) of the CEQA Guidelines shall be implemented.	Loss or destruction of important archaeological resources	During excavation and grading activities	When any bone material is encountered and project archaeologist identifies it as human remains	Completion of those steps outlined in Section 15064.5(e) of the CEQA Guidelines and sign off by project archaeologist and, if applicable, selected Native American monitor

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<i>Paleontological Resources</i>					
MM-PA-1 Monitoring Agency: LAWA	Paleontological Qualification and Treatment Plan. A qualified paleontologist shall be retained by LAWA to develop an acceptable monitoring and fossil remains treatment plan (that is, a Paleontological Management Treatment Plan - PMTP) for construction-related activities that could disturb potential unique paleontological resources within the project area. This plan shall be implemented and enforced by the project proponent during the initial phase and full phase of construction development. The selection of the paleontologist and the development of the monitoring and treatment plan shall be subject to approval by the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County to comply with paleontological requirements, as appropriate.	Loss or destruction of important paleontological resources	Prior to issuance of any excavation and grading permits for first Master Plan project	Once, upon retention of paleontologist and approval of the PMTP	Retention of paleontologist and approval of the PMTP by LAWA
MM-PA-2 Monitoring Agency: LAWA	Paleontological Authorization. The paleontologist shall be authorized by LAWA to halt, temporarily divert, or redirect grading in the area of an exposed fossil to facilitate evaluation and, if necessary, salvage. No known or discovered fossils shall be destroyed without the written consent of the project paleontologist.	Loss or destruction of important paleontological resources	Continued monitoring in accordance with the PMTP	On-going during excavation and grading activities as identified in the PMTP	Filing of periodic monitoring reports with LAWA, as stipulated in the PMTP
MM-PA-3 Monitoring Agency: LAWA	Paleontological Monitoring Specifications. Specifications for paleontological monitoring shall be included in construction contracts for all LAX projects involving excavation activities deeper than six feet.	Loss or destruction of important paleontological resources	Prior to finalization and approval of construction contracts for projects involving excavation deeper than six feet	Once, upon approval of each construction contract on a project-by-project basis	Review and approval of relevant construction contracts by project paleontologist and the filing of such contracts with LAWA
MM-PA-4 Monitoring Agency: LAWA	Paleontological Resources Collection. Because some fossils are small, it will be necessary to collect sediment samples of promising horizons discovered during grading or excavation monitoring for processing through fine mesh screens. Once the samples have been screened, they shall be examined microscopically for small fossils.	Loss or destruction of important paleontological resources	During excavation and grading activities, as stipulated in the PMTP	On-going during excavation and grading activities, as outlined in the PMTP	Filing of collection/recovery reports with LAWA by project paleontologist, as stipulated in the PMTP

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-PA-5 Monitoring Agency: LAWA	Fossil Preparation. Fossils shall be prepared to the point of identification and catalogued before they are donated to their final repository.	Loss or destruction of important paleontological resources	Upon discovery of significant fossils by project paleontologist	During grading and excavation activities as identified in the PMTP	Filing of appropriate reports by paleontologist with LAWA, as stipulated in the PMTP
MM-PA-6 Monitoring Agency: LAWA	Fossil Donation. All fossils collected shall be donated to a public, nonprofit institution with a research interest in the materials, such as the Los Angeles County Museum of Natural History.	Loss or destruction of important paleontological resources	Upon completion of each project during which fossils were discovered, as outlined in the PMTP	Once, upon completion of grading and excavation activities on a project-by-project basis	Acceptance letter of fossils from accepting repository, or offer letter from LAWA to repository
MM-PA-7 Monitoring Agency: LAWA	Paleontological Reporting. A report detailing the results of these efforts, listing the fossils collected, and naming the repository shall be submitted to the lead agency at the completion of the project.	Loss or destruction of important paleontological resources	Upon completion of excavation activities, as outlined in the PMTP	Once, upon completion of excavation activities on a project-by-project basis	Receipt of paleontological report by LAWA. If no resources are found, a report indicating as much should be filed

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<i>Biotic Communities</i>					
MM-BC-1 Monitoring Agency: LAWA	<p>Conservation of State-Designated Sensitive Habitat Within and Adjacent to the El Segundo Blue Butterfly Habitat Restoration Area. LAWA or its designee shall take all necessary steps to ensure that the state-designated sensitive habitats within and adjacent to the Habitat Restoration Area are conserved and protected during construction, operation, and maintenance.</p> <p>These steps shall, at a minimum, include the following:</p> <p><i>Implementation of construction avoidance measures in areas where construction or staging are adjacent to the Habitat Restoration Area.</i> Prior to the initiation of construction of LAX Master Plan components to be located adjacent to the Habitat Restoration Area, LAWA or its designee shall conduct a pre-construction evaluation to identify and flag specific areas of state-designated sensitive habitats located within 100 feet of construction areas. Subsequent to the pre-construction evaluation, LAWA or its designee shall conduct a pre-construction meeting and provide written construction avoidance measures to be implemented in areas adjacent to state-designated sensitive habitats. Construction avoidance measures include erecting a 10-foot-high tarped chain-link fence where the construction or staging area is adjacent to state-designated sensitive habitats to reduce the transport of fugitive dust particles related to construction activities. Soil stabilization, watering or other dust control measures, as feasible and appropriate, shall be implemented to reduce fugitive dust emissions during construction activities within 2,000 feet of the El Segundo Blue Butterfly Habitat Restoration Area, with a goal to reduce fugitive dust emissions by 90 to 95 percent. In addition, to the extent feasible, no grading or stockpiling for construction activities should take place within 100 feet of a</p>	Temporary construction impacts to sensitive areas and degradation of state-designated sensitive habitats	Preconstruction/construction	Once, upon completion of pre-construction evaluation and then ongoing during construction if within 100 feet of the Habitat Restoration Area; Annually during operation and maintenance	Completion of pre-construction evaluation and presence of environmental monitor when construction is within 100 feet of state-designated sensitive habitat; Periodic Monitoring Report

Area: Biotic Communities

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-BC-1	<p>(Cont'd)</p> <p>state-designated sensitive habitat. LAWA or its designee shall incorporate provisions for the identification of additional construction avoidance measures to be implemented adjacent to state-designated sensitive areas. All construction avoidance measures that address Best Management Practices shall be clearly stated within construction bid documents. In addition, LAWA shall include a provision in all construction bid documents requiring the presence of a qualified environmental monitor. Construction drawings shall indicate vegetated areas within the Habitat Restoration Area as "Off-Limits Zone."</p> <p><i>Ongoing maintenance and management efforts for the El Segundo Blue Butterfly Habitat Restoration Area.</i> LAWA or its designee shall ensure that maintenance and management efforts prescribed in the Habitat Management Plan (HMP) for the Habitat Restoration Area shall continue to be carried out as prescribed.</p>				
MM-BC-2 Monitoring Agency: LAWA	<p>Conservation of Floral Resources: Lewis' Evening Primrose. LAWA or its designee shall prepare and implement a plan to compensate for the loss of individuals of the sensitive Lewis' evening primrose, currently located at the westerly end of the north runway and within the Habitat Restoration Area. LAWA or its designee shall collect seed from those plants to be removed, and properly clean and store the collected seed until used. If possible, seeds shall be collected in multiple years to ensure an adequate seed supply for planting. A mitigation site of suitable habitat equal to the area of impact shall be delineated within areas of the Los Angeles/El Segundo Dunes as described in MM-BC-13. Collected seed shall be broadcast (distributed) after the first wetting rain. LAWA or its designee shall implement a monitoring plan to monitor the establishment of</p>	Loss of individuals of Lewis' evening primrose	At least five (5) years prior to initiation of construction of North Runways	As per Conservation Plan for Lewis' Evening Primrose	Preparation of Conservation Plan for Lewis' Evening Primrose; Periodic Monitoring Report

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-BC-2	(Cont'd) individuals of Lewis' evening primrose for a period of not more than five years. Performance criteria shall include the establishment of an equal number of plants as that impacted in the first year following the distribution of seed within the mitigation site. Performance criteria shall also include confirmation of recruitment for two years following the first year flowering is observed and establishment of individuals throughout the mitigation area within three years following the first year flowering is observed. Monitoring shall be undertaken in the manner set forth in MM-BC-8.				
MM-BC-3 Monitoring Agency: LAWA	Conservation of Floral Resources: Mature Tree Replacement. LAWA or its designee shall prepare and implement a plan to compensate at a ratio of 2:1 for the loss of approximately 300 mature trees, which would occur as a result of implementation of the LAX Northside project. The plan shall include provisions to census and map all mature trees with a diameter of at least 8 inches at breast height, which may be removed due to implementation of LAX Northside project. This information shall be gathered prior to initiation of construction. The plan shall include a program by which replacement (at a ratio of 2:1) of all impacted mature trees shall be included in plans prepared for landscape treatments within the Master Plan boundaries, which would then be implemented by LAWA. The species of newly planted replacement trees shall be local native tree species to the extent feasible. Each mitigation tree shall be at least a 15-gallon or larger specimen.	Loss of mature trees	Preparation of Replacement Plan for Mature Trees within one (1) year of City Council approval of the LAX Plan; Replanting as dictated by Replacement Plan; Preparation of survey prior to initiation of construction of LAX Northside project	As per Replacement Plan for Mature Trees	Completion of survey and preparation of Replacement Plan for Mature Trees; Periodic Monitoring Report
MM-BC-8 Monitoring Agency: LAWA	Replacement of Habitat Units. LAWA or its designee shall undertake mitigation for the loss of habitat units resulting from implementation of Alternative D. Implementation of Alternative D would result in the loss of 45.43 habitat units. These habitat units shall be replaced at a 1:1 ratio within the Los Angeles/El Segundo Dunes. Opportunities for compensation for the loss of	Loss of habitat/open space	Preparation of Replacement Plan for Habitat Units within three (3) years of City Council approval of the LAX Plan;	As per Replacement Plan for Habitat Units	Preparation of Replacement Plan for Habitat Units; Periodic Monitoring Report

Area: Biotic Communities

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-BC-8	<p>(Cont'd)</p> <p>45.43 habitat units include 13.52 habitat units (16.9 acres x 0.8 Habitat Value) from restoration of Non-Native Grassland/Ruderal habitat to a Valley Needlegrass Grassland; 14.4 habitat units from removal and restoration of 50 percent of the existing roadways to Southern Foredune (36.11 acres of streets within the Los Angeles/El Segundo Dunes x 0.5 x 0.8 Habitat Value); and 59.68 habitat units from restoration of Disturbed Dune Scrub/Foredune to Southern Foredune (74.6 acres x 0.8 Habitat Value). A habitat value of 0.8 is considered to be the maximum feasible target value for restoration and enhancement of biotic communities. The restoration and enhancement of biotic communities as related to the establishment or enhancement of wildlife habitat shall consider and comply with the provisions of FAA Advisory Circular 150/5200-33 regarding hazardous wildlife attractants on or near airports. Additionally, such restoration and enhancement shall take into account, as appropriate, the Memorandum of Agreement between FAA and other federal agencies, including the US Fish and Wildlife Service, pertaining to environmental conditions that could contribute to aircraft-wildlife strikes.</p> <p>Valley Needlegrass Grassland restoration efforts consist of site preparation, propagation and planting of species characteristic of the Valley Needlegrass Grassland community at the Los Angeles/El Segundo Dunes, and maintenance and monitoring of the restoration site. The species to be planted include native perennials as described in the Long-Term Habitat Management Plan for Los Angeles Airport/El Segundo Dunes. The characteristic species include nodding needlegrass (<i>Nasella cernua</i>): 1,500 plants/habitat unit; white everlasting (<i>Gnaphalium microcephalum</i>): 40 plants/habitat unit; doveweed (<i>Eremocarpus setigerus</i>): 40 plants/habitat unit; California</p>		Implementation per Replacement Plan		

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-BC-8	<p>(Cont'd)</p> <p>croton (<i>Croton californica</i>): 45 plants/habitat unit; and dune primrose (<i>Camissonia chieranthifolia</i>): 70 plants/habitat unit. Site preparation includes physical demarcation of the site, mapping of the restoration site onto a one inch equals 40 feet aerial photograph, and removal of all non-native species (weed abatement). Removal of non-native herbaceous species shall take place by mowing prior to seed set, raking to remove cut material, and hand-pulling the remainder. Removal of non-native shrubs shall be undertaken by cutting and daubing with herbicide. Propagation and planting of nodding needlegrass shall be accomplished by propagation from seed collected on-site during late spring/early summer. Seed shall be properly cleaned, dried, and stored until used. In late summer, nodding needlegrass seed shall be propagated at an on-site nursery in two-inch thimble pots and properly maintained. Nodding needlegrass shall be planted at a rate of 1,500 plants per habitat unit within Non-Native Grassland/Ruderal community, within the Los Angeles/El Segundo Dunes, which has undergone site preparation as described above. Planting shall take place in the fall or after the first wetting rain. Maintenance of restoration plantings shall consist of adequate irrigation and weed abatement. Given the irregularity of rainfall in southern California, supplemental irrigation shall be provided for two years to ensure the successful establishment of mitigation plantings. Irrigation of the site shall be adjusted to adequately provide for the establishment of the out-plantings. Weed abatement shall take place on a quarterly basis for a period of five years. Monitoring shall be undertaken on a quarterly basis for the first three years following planting, and twice a year thereafter. Monitoring shall consist of qualitative and quantitative monitoring; quantitative monitoring shall take place once a year. Performance criteria to be met include the</p>				

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-BC-8	<p>(Cont'd)</p> <p>attainment of at least a 10 percent cover of native cover in the first year and 20, 30, 40 and 45 percent cover of native species over a five-year period as determined by the point-intercept transect method (the CDFG has adopted a 10 percent threshold of native cover as its criteria for significance of native grasslands). This plan assumes the performance criteria outlined below shall be met. If monitoring discerns any failure in performance goals, remedial plantings shall be undertaken. Habitat restoration shall be conducted by a qualified habitat restoration specialist.</p> <p>Southern Foredune restoration efforts consist of site preparation, propagation, and planting of the species characteristic of the Southern Foredune community at the Los Angeles/El Segundo Dunes, and maintenance and monitoring of the restoration site. The species to be planted include primary and secondary perennial plants as described in the Long-Term Habitat Management Plan for Los Angeles Airport/El Segundo Dunes. Site preparation, propagation and planting, and maintenance and monitoring shall take place as described above. Performance criteria to be met include the attainment of 10, 20, 30, 40, and 45 percent cover of native species over a five-year period as determined by the point-intercept method. The Long-Term Habitat Management Plan for Los Angeles Airport/El Segundo Dunes assumes the performance criteria stated above shall be met. If monitoring discerns any failure in performance goals, remedial plantings shall be undertaken. Habitat restoration shall be conducted by a qualified habitat restoration specialist.</p> <p>Any combination of habitat replacement completed by LAWA or its designee drawn from the opportunities listed under</p>				

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-BC-8	(Cont'd) Alternative D that equals at least 45.43 habitat units shall be considered sufficient replacement for loss of habitat units resulting from implementation of Alternative D.				
MM-BC-9 Monitoring Agency: LAWA	Conservation of Faunal Resources. LAWA or its designee shall develop and implement a relocation and monitoring plan to compensate for the loss of 1.34 habitat units (0.3 habitat units + 1.04 habitat units) of occupied western spadefoot toad habitat and for the loss of western spadefoot toad individuals currently in the southwestern portion of the AOA. LAWA or its designee shall identify possible relocation sites in consultation with the CDFG and USFWS and shall develop and implement a monitoring plan to monitor the success of the relocated tadpoles for a period of not more than five years. LAWA or its designee shall relocate the western spadefoot toad population currently inhabiting three locations on the AOA. One potential site is the Madrona Marsh Nature Center in Torrance, 20 miles south of LAX, which supports several vernal pools and one large pond capable of supporting western spadefoot toads. Spadefoot toad experts suggest the best approach to accomplish relocation is to transport tadpoles and metamorphs only, as adults return to their birth site. Site preparation shall include confirmation by a permitted biologist that no predators, such as mosquitofish or bullfrogs, are present within the proposed relocation site or in waterways surrounding the relocation site. The CDFG has suggested that if the first relocation effort is not successful, another attempt should be made the following year. Therefore, western spadefoot toads shall be collected two consecutive years prior to construction activities taking place in existing occupied spadefoot toad habitat. In addition, since the western spadefoot toad is known to become reproductively mature within three years, an additional performance criterion shall be	Loss of habitat occupied by sensitive species	Preparation of Conservation Plan for Faunal Resources within three (3) years of City Council approval of the LAX Plan; Implementation per ConservationPlan. Toad relocation and monitoring component of the Conservation Plan to be undertaken in connection with MM-ET-1 (Riverside Fairy Shrimp Habitat Restoration)	As per Conservation Plan for Faunal Resources	Preparation of Conservation Plan for Faunal Resources; Periodic Monitoring Report

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-BC-9	<p>(Cont'd)</p> <p>the identification of tadpoles at the relocation site between years three and four. The success criteria should be 50 percent survival of all tadpoles and metamorphs for the first, second, and third years following the last relocation. This shall be accomplished through a five-year monitoring plan, with bi-monthly monitoring between January 31 and June 1, to document the success of this relocation effort.</p> <p>LAWA or its designee shall develop and implement a relocation and monitoring plan to compensate for the loss of 2.38 habitat units of occupied San Diego black-tailed jackrabbit habitat located within the AOA. LAWA or its designee shall relocate the San Diego black-tailed jackrabbit population currently inhabiting the AOA. Relocation efforts shall be coordinated with CDFG. The San Diego black-tailed jackrabbit shall be captured on the AOA using live traps and shall be released into the Habitat Restoration Area. Compensation for the loss of 2.38 habitat units shall be the utilization of at least 2.38 habitat units within the Los Angeles/El Segundo Dunes by the San Diego black-tailed jackrabbit individuals relocated to the site. Black-tailed jackrabbit is currently absent for the Los Angeles/El Segundo Dunes. Opportunities for compensation for the loss of 2.38 habitat units include 13.52 habitat units from restoration of Non-Native Grassland/Ruderal habitat to a Valley Needlegrass Grassland; 14.4 habitat units from removal and restoration of 50 percent of the existing roadways to Southern Foredune; and 59.68 habitat units from restoration of Disturbed Dune Scrub/Foredune to Southern Foredune. LAWA or its designee shall implement a monitoring plan to monitor the success of the relocated individuals for a period of not more than five years. Performance criteria shall include confirmed success of survival for three years of the San Diego black-tailed jackrabbit within</p>				

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-BC-9	<p>(Cont'd)</p> <p>the Habitat Restoration Area. This shall be accomplished through a quarterly monitoring plan to document the success or failure of this relocation effort.</p> <p>LAWA or its designee shall compensate for the loss of areas utilized by loggerhead shrike currently located on the western airfield and composed of 10.83 habitat units (equivalent to 83.25 acres). Compensation for the loss of 10.83 habitat units of habitat utilized by the loggerhead shrike shall be the utilization of at least 10.83 habitat units within the Los Angeles/El Segundo Dunes. Opportunities for compensation for the loss of 10.83 habitat units include 13.52 habitat units from restoration of Non-Native Grassland/Ruderal habitat to a Valley Needlegrass Grassland; 14.4 habitat units from removal and restoration of 50 percent of the existing roadways to Southern Foredune; and 59.68 habitat units from restoration of Disturbed Dune Scrub/Foredune to Southern Foredune. Compensation for the loss of at least 10.83 habitat units shall take place prior to construction. LAWA or its designee shall implement a monitoring program for a period of not more than five years. Performance criteria shall include the use of at least 10.83 habitat units of improved habitat by the loggerhead shrike for foraging and nesting. Monitoring shall take place quarterly for the first three years and biannually thereafter. Monitoring shall be timed appropriately to include monitoring during the breeding period, which is between February and June.</p> <p>As a means of minimizing incidental take of active nests of loggerhead shrike, LAWA or its designee shall have all areas to be graded surveyed by a qualified biologist at least 14 days before construction activities begin to ensure maximum avoidance to active nests for loggerhead shrike. Construction</p>				

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-BC-9	<p>(Cont'd)</p> <p>avoidance measures shall include flagging of all active nests for loggerhead shrike and a 300 feet wide buffer area shall be designated around the active nests. A biological monitor shall be present to ensure that the buffer area is not infringed upon during the active nesting season, March 15 to August 15. In addition, LAWA or its designee shall require that vegetation clearing within the designated 300 feet buffer be undertaken after August 15 and before March 15.</p> <p>LAWA or its designee shall conduct pre-construction surveys to determine the presence of individuals of sensitive arthropod species, the silvery legless lizard, the San Diego horned lizard, and the burrowing owl within the proposed area of impact within the Los Angeles/El Segundo Dunes. Surveys will be conducted at the optimum time to observe these species. Should an individual be observed, they will be relocated to suitable habitat for that species within the Habitat Restoration Area. Prior to construction, LAWA or its designee shall develop and implement a relocation plan to avoid the potential loss of individuals from the installation of navigational aids and associated service roads. Relocation efforts shall be undertaken by a qualified biologist, in coordination with CDFG.</p>				
MM-BC-13 Monitoring Agency: LAWA	Replacement of State-Designated Sensitive Habitats. LAWA or its designee shall undertake mitigation for the loss of State-designated sensitive habitat within the Los Angeles/El Segundo Dunes, including the Habitat Restoration Area. Installation of navigational aids and associated service roads under Alternative D would result in impacts to 66,675 square feet (1.53 acres) of State-designated sensitive habitat within the Los Angeles/El Segundo Dunes, including 33,334 square feet (0.77 acre) within the Habitat Restoration Area (of which 10,597	Loss of state designated sensitive habitat	Preparation of Replacement Plan for State-Designated Sensitive Habitats prior to relocation of navigational aids; Implementation per Replacement Plan	As per Replacement Plan for State-Designated Sensitive Habitats	Preparation of Replacement Plan for State-Designated Sensitive Habitats; Periodic Monitoring Report

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-BC-13	<p>(Cont'd)</p> <p>square feet (0.24 acre) are within habitat occupied by the El Segundo blue butterfly. These square feet shall be replaced at a no net loss ratio of 1:1 ratio within the Los Angeles/El Segundo Dunes. The replacement of 66,675 square feet (1.53 acres) of State-designated sensitive habitat shall be undertaken through restoration of 66,675 square feet (1.53 acres). Opportunities for restoration include: 16.9 acres of Non-Native Grassland/Ruderal habitat to a Valley Needlegrass Grassland; 36.11 acres from removal and restoration of 50 percent of the existing roadways to Southern Fordune; and 74.6 acres of Disturbed Dune Scrub/Foredune to Southern Fordune. The restoration and enhancement of biotic communities as related to the establishment or enhancement of wildlike habitat shall consider and comply with the provisions of FAA Advisory Circular 150/5200-33 regarding hazardous wildlife attractants on or near airports. Additionally, such restoration and enhancement shall take into account, as appropriate, the Memorandum of Agreement between the FAA and other federal agencies, including the US Fish and Wildlife Service (USFWS), pertaining to environmental conditions that could contribute to aircraft-wildlife strikes.</p> <p>Valley Needlegrass Grassland restoration efforts consist of site preparation, propagation and planting of Valley Needlegrass Grassland species, and maintenance and monitoring of the restoration site as described in Mitigation Measure MM-BC-8, Replacement of Habitat Units.</p> <p>Southern Fore dune restoration efforts consist of site preparation, propagation, and planting of the species characteristic of the Southern Fore dune community at the Los Angeles/El Segundo Dunes, and maintenance and monitoring of</p>				

**LAX MASTER PLAN ALTERNATIVE D
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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-BC-13	<p>(Cont'd)</p> <p>the restoration site as described in Mitigation Measure MM-BC-8, Replacement of Habitat Units.</p> <p>Replacement of the 10,597 square feet (0.24 acre) of habitat occupies by the El Segundo Blue Butterfly shall be undertaken as described in Mitigation Measure MM-ET-4, El Segundo Blue Butterfly Conservation: Habitat Restoration.</p>				

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
Endangered and Threatened Species					
MM-ET-1	<p>Riverside Fairy Shrimp Habitat Restoration. LAWA or its designee shall undertake mitigation for direct impacts to 0.04 acre (1,853 square feet) of degraded wetland habitat containing embedded cysts of Riverside fairy shrimp and potential indirect impacts to 1.26 acres of degraded wetland habitat containing embedded cysts of the Riverside fairy shrimp. As specified in the Biological Opinion, soils containing embedded cysts of the Riverside fairy shrimp in 0.04 acres (1,853 square feet) shall be salvaged and relocated to property owned by the FAA and designated a habitat preserve at the former Marine Corps Air Station at El Toro, or comparable site(s) approved by the USFWS at a ratio of not more than 3:1. The 1.26 acres of degraded wetland habitat containing embedded cysts of the Riverside fairy shrimp retained on the LAX airfield shall be avoided through the implementation of construction avoidance measures, including Best Management Practices (BMPs), and the creation of a buffer area around the occupied, degraded areas. The FAA shall oversee the development of a Vernal Pool Creation, Maintenance, and Monitoring Plan for the embedded cysts to ensure that Alternative D would be consistent with the recommendations provided in the <i>Recovery Plan for Vernal Pools of Southern California</i>, and with the conservation measures provided in the Biological Opinion. As specified in the Biological Opinion, LAWA shall be responsible for all costs identified in the Vernal Pool Creation, Maintenance, and Monitoring Plan related to off-site relocation of soils containing cysts of the Riverside fairy shrimp, including entitlement for use and designation for long-term conservation, site preparation, monitoring, and maintenance.</p> <p>Ongoing Section 7 consultation among LAWA, FAA, and USFWS has been necessary to identify suitable mitigation sites</p>	Loss of occupied habitat of endangered Riverside Fairy Shrimp	Preparation of Habitat Restoration Plan for Riverside Fairy Shrimp prior to issuance of grading or demolition permit for any project impacting the Riverside Fairy Shrimp; Implementation per Habitat Restoration Plan	As per Habitat Restoration Plan for Riverside Fairy Shrimp	Preparation of Habitat Restoration Plan for Riverside Fairy Shrimp; Periodic Monitoring Report

Area: Endangered and Threatened Species

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ET-1	<p>(Cont'd)</p> <p>pursuant to Section 7 of the Endangered Species Act. As a result, extensive research has been conducted to identify sites that historically or currently support vernal pools or vernal pool-associated species in southern California. Information was gathered from the <i>Recovery Plan for Vernal Pools of Southern California</i>, the California Natural Diversity Database (CNDDDB), and coordination with recognized experts in the field. This information was augmented through a review of geologic maps of the coastal portions of Los Angeles and topographic quadrangles for locations known to have historically supported vernal pools. A total of 35 potential relocation sites were identified for further site characterization (Figure F5-2, Vernal Pool Restoration Opportunities Considered).</p> <p>Each of the 35 sites was visited and inspected by teams of biologists and environmental analysts. Analysis of site topography, historic or extant vernal pools, historic or extant vernal pool species, drainage features, climate, and parent material (from regional geologic maps) was conducted. Hazardous materials databases were consulted for information on known potential sources of contamination for those sites. In-field soil texture analysis was conducted, followed by laboratory analysis of collected soil samples. Land use at the site and surrounding the site was characterized, plant communities were characterized, and the presence or absence of suitable hydrology was determined.</p> <p>Prioritization of the potential sites for the relocation of soils containing cysts of the Riverside fairy shrimp was based solely on the presence of physical and biological characteristics provided in the <i>Recovery Plan for Vernal Pools of Southern California</i> and did not reflect planning constraints indicated by</p>				

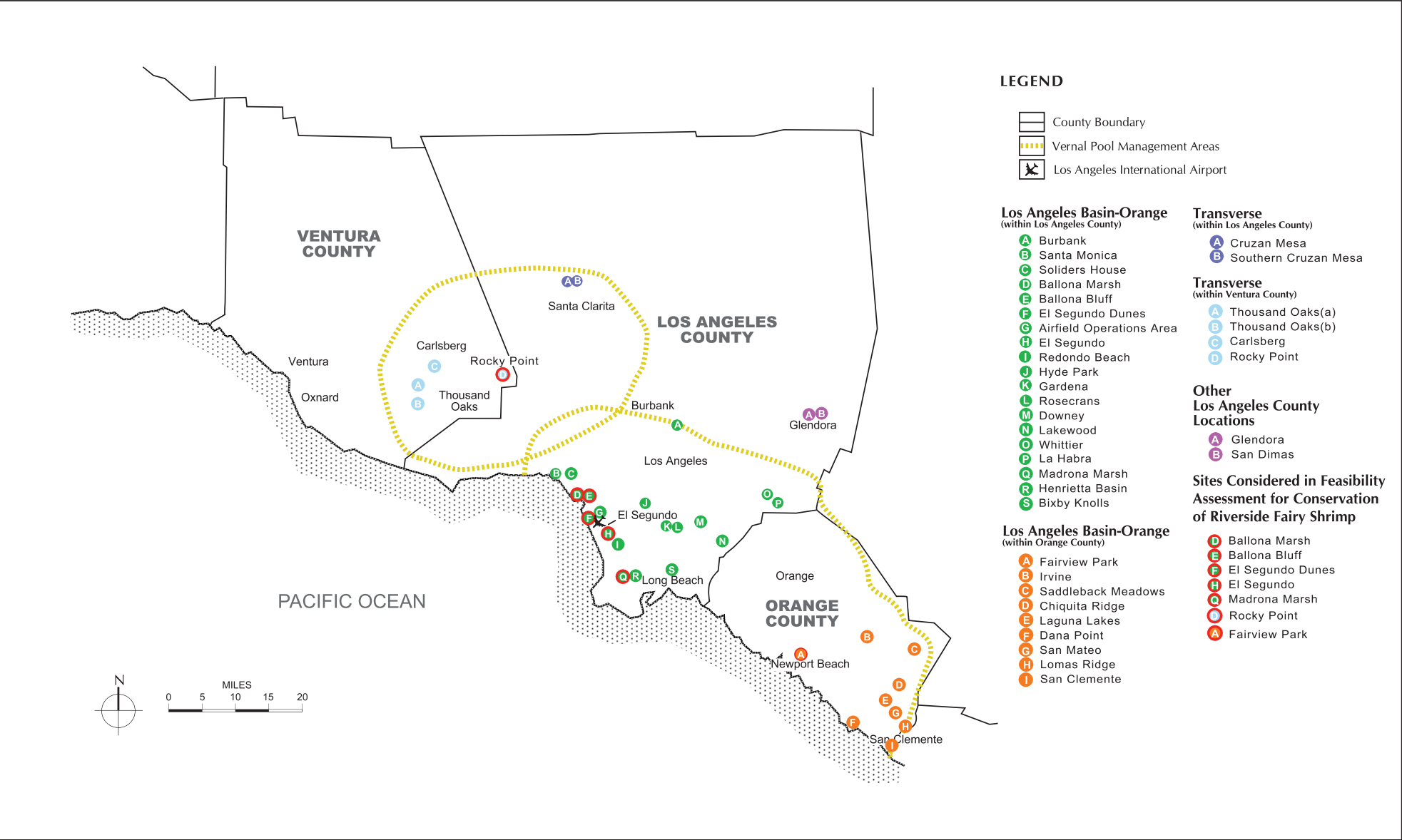
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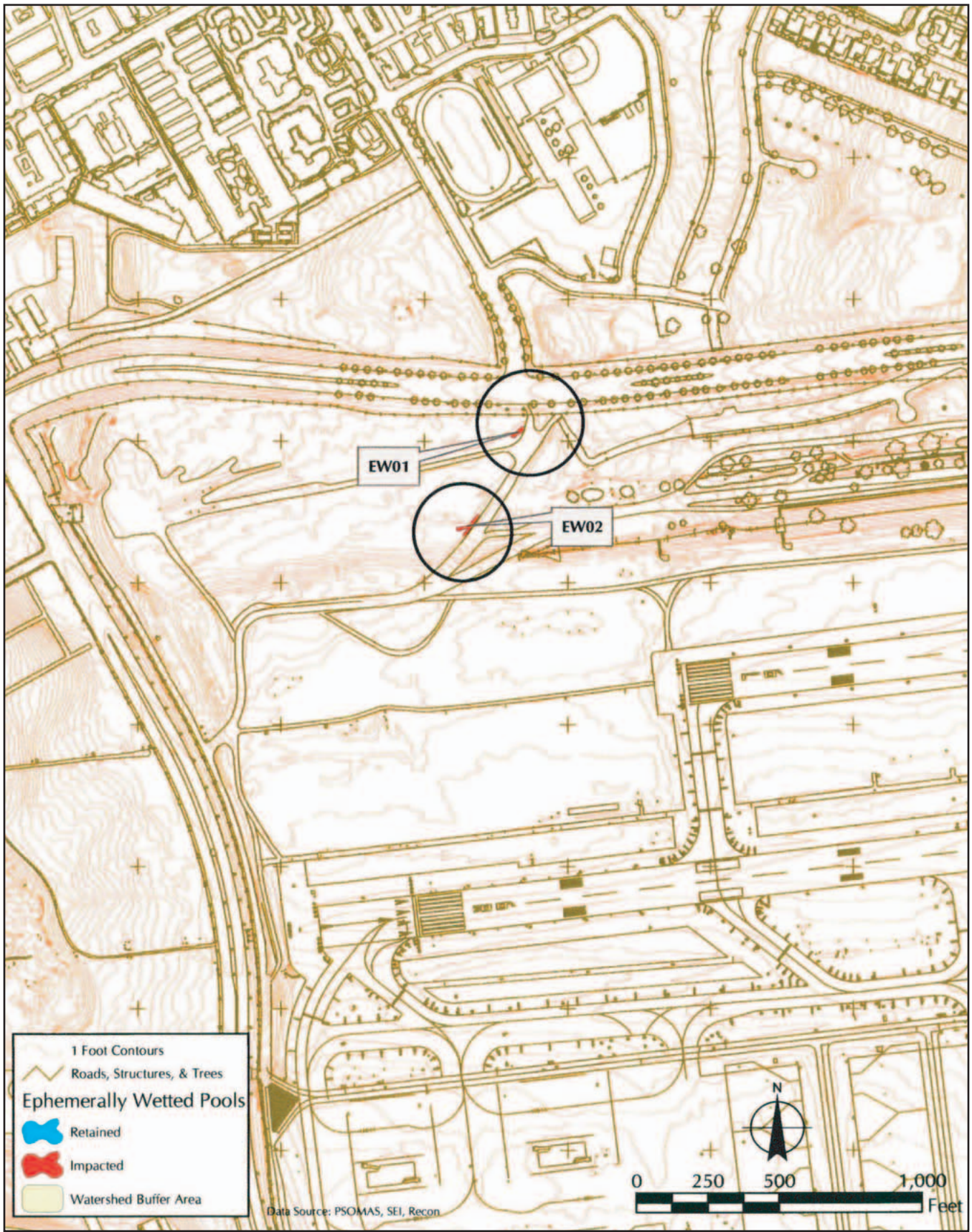
Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ET-1	<p>(Cont'd)</p> <p>current land uses. LAWA and FAA, in consultation with the USFWS, recommended the relocation of cysts to alternate locations within the Los Angeles County portion of the Los Angeles Basin-Orange Management Area for vernal pools (Figure F5-2). The use of these sites within Los Angeles County was determined infeasible and LAWA undertook evaluation of the feasibility of vernal pools or vernal pool complexes located in the Orange County portion of the Los Angeles Basin-Orange Management Area and the Ventura County portion of the Transverse Management Area. As a result of consultation with the USFWS, property owned by FAA and designated a habitat preserve at the former Marine Corps Air Station at El Toro was identified as a mitigation site for the receipt of soils containing embedded cysts of the Riverside fairy shrimp, or an alternate comparable site(s).</p> <p>Once a suitable mitigation site(s) is secured, vernal pool creation shall be undertaken by LAWA or its designee, in consultation with the USFWS. Methods of vernal pool creation may vary depending on the physical and biological characteristics of the selected sites. LAWA or its designee, in conjunction with the USFWS and a qualified wildlife biologist, shall develop a program to monitor the progress of vernal pool creation. LAWA or its designee shall undertake the relocation of soils containing embedded cysts of Riverside fairy shrimp from the western portion of the airfield to the vernal pool mitigation sites. Soils containing embedded cysts of the Riverside fairy shrimp shall not be salvaged and translocated until the created vernal pool(s) is established and has met certain success criteria as described in detail below and included in the 12 conservation measures within the Biological Opinion.</p>				

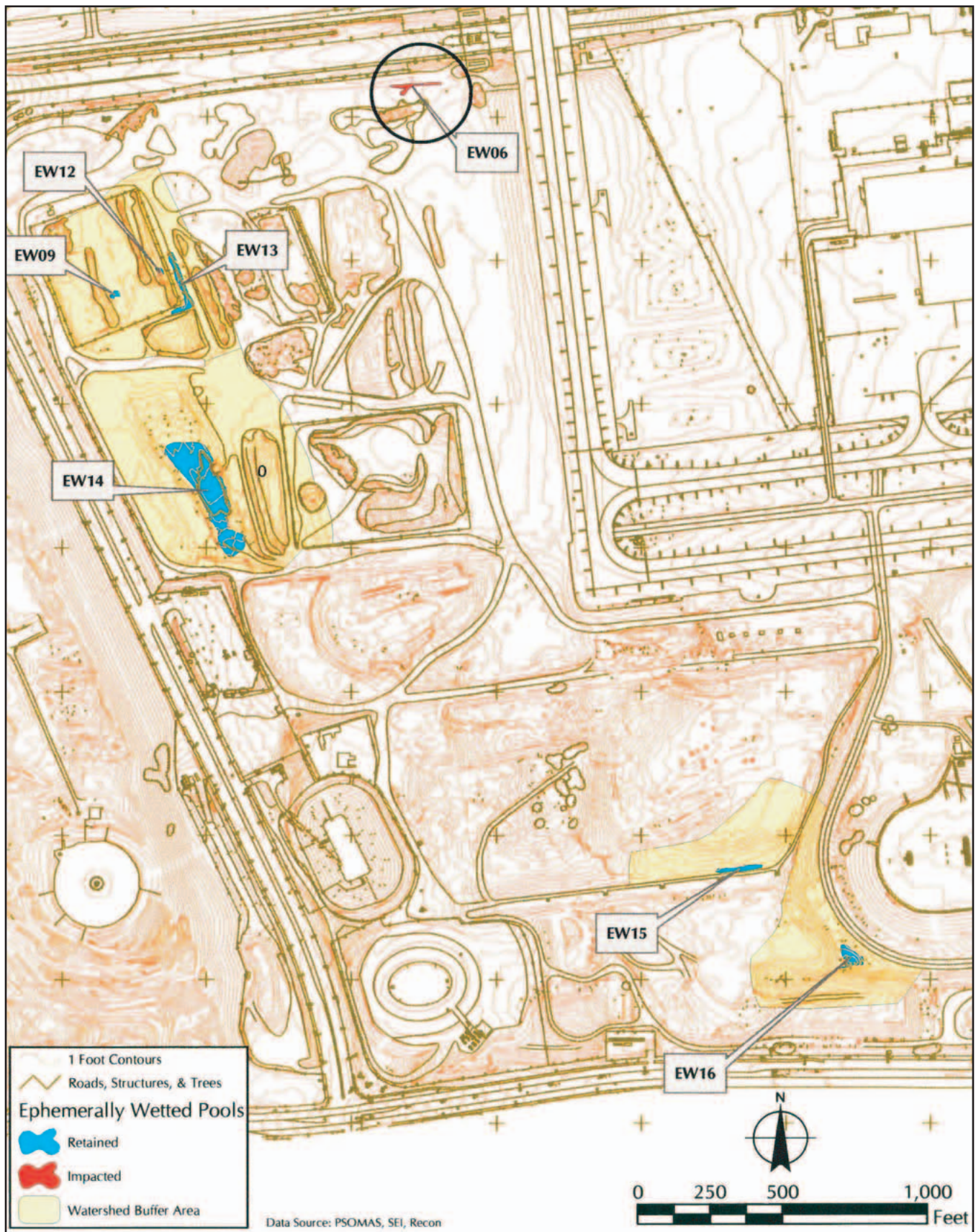
LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ET-1	<p>(Cont'd)</p> <p>Soils containing embedded cysts of the Riverside fairy shrimp from EW001 and EW002 (Figure F5-3, North Area Ephemeral Wetted Pools and Buffer Areas) shall be salvaged and translocated to created vernal pool habitat on property owned by the FAA and designated as a habitat preserve at the former Marine Corps Air Station at El Toro (El Toro), or another site as approved by Carlsbad Fish and Wildlife Office (CFWO). The created vernal pool(s) shall contain a minimum of 5,559 square feet of vernal pool surface area (as determined by a 3:1 mitigation ratio). Soils containing embedded cysts of the Riverside fairy shrimp from EW001 and EW002 will not be salvaged and translocated from LAX until the created vernal pool(s) is established and has met certain success criteria specified in the Biological Opinion. As a contingency measure, if the specified success criteria for the created vernal pools have not been attained within six years of project authorization, in spite of a good faith effort on the part of LAWA, soils containing embedded cysts of the Riverside fairy shrimp will be salvaged from EW001 and EW002 and placed in appropriate storage at the San Diego Zoological Society's Center for the Reproduction of Endangered Species. Soils containing embedded cysts of the Riverside fairy shrimp from EW006 (Figure F5-4, South Area Ephemeral Wetted Pools and Buffer Areas) shall be salvaged and stored prior to implementation of Alternative D and shall be translocated to the created vernal pool(s) with EW001 and EW002 once the success criteria are met. Soils containing embedded cysts of the Riverside fairy shrimp from EW006 shall be placed in appropriate storage at the San Diego Zoological Society's Center for the Reproduction of Endangered Species. Until soils bearing embedded cysts of the Riverside fairy shrimp have been appropriately salvaged and stored, or vernal pool creation has been completed and embedded cysts have been appropriately salvaged and translocated to the created vernal pool(s), habitat-altering activities associated with Alternative D in these areas shall be avoided.</p>				

Area: Endangered and Threatened Species







LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ET-1	<p>(Cont'd)</p> <p>LAWA shall be responsible for implementing construction avoidance measures for the six areas (EW009, EW012, EW013, EW014, EW015 and EW016) that would not be directly affected, as indicated in the Biological Opinion. Construction avoidance measures shall include implementation of construction avoidance measures, including BMPs required pursuant to the Standard Urban Stormwater Mitigation Plan and the LAX Stormwater Pollution Prevention Plan, and establishment of a buffer area around the six occupied areas retained on the LAX airfield (Figure F5-4). In addition, LAX operations personnel with vehicular access to the airfield operations area shall be apprised of these off-limit buffer areas annually. The construction avoidance measures shall be periodically inspected by LAWA, or its designee throughout construction to ensure the efficacy of the BMPs, and corrective action shall be undertaken as necessary to ensure that construction and operation of airport facilities do not result in adverse impacts to surface water quality.</p> <p>Soils containing embedded cysts of the Riverside fairy shrimp will not be translocated to the created vernal pool(s) until the vernal pool(s) is established and has met certain success criteria specified in the Biological Opinion. Success criteria for the created vernal pool(s) includes holding water for a minimum of 60 days, having less than 10 percent absolute cover of exotic herbaceous species in the pool(s), having less than 20 percent absolute cover of exotic herbaceous species with 300 feet of the</p>				

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ET-1	<p>(Cont'd)</p> <p>area from limits of the pool, removal of all non-herbaceous plant species within the pool and 300 feet from the pool annually, and provide suitable water quality for the Riverside fairy shrimp. Duration of inundation, exotic species removal, and water quality analyses may be undertaken within the first year after vernal pool creation. The performance criteria for percent absolute cover of exotic herbaceous species within 300 feet of the area from limits of the pool may be redesignated by mutual agreement of FAA, LAWA and USFWS.</p> <p>Upon meeting success criteria and approval from the USFWS, soils containing embedded cysts of the Riverside fairy shrimp may be brought to the pool(s). LAWA shall make every effort to collect all cyst-bearing soils from the entire surface area of EW001, EW002, and EW006, however, it is expected that some small number of undetected individual cysts will remain in the soil. Soil containing the cysts shall be salvaged and translocated during the dry season to minimize damage to the cysts during transport. The soil shall be collected using a hand trowel, removed in chunks, and kept out of direct sunlight to ensure viability. Soil shall be stored in properly labeled boxes or bags with adequate ventilation. The soils shall then be redeposited and spread out in small basins or pool-like areas of similar size without active mechanical compaction to minimize potential damage to the cysts. Any potential indirect environmental impacts resulting from vernal pool construction activities shall be compliant with BMPs and terms and conditions stipulated by the permitting agencies.</p> <p>LAWA or its designee, in conjunction with the USFWS and a qualified wildlife biologist, shall also develop a program to monitor created habitat for the presence of Riverside fairy</p>				

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ET-1	<p>(Cont'd)</p> <p>shrimp as described in the Vernal Pool Creation, Maintenance, and Monitoring Plan. As specified in the Biological Opinion, LAWA shall be responsible for implementing a monitoring and reporting program to demonstrate successful achievement of the performance standards for off-site relocation over a 25-year period:</p> <ul style="list-style-type: none"> ◆ Monthly during the first year, following relocation of soils containing embedded cysts of the Riverside fairy shrimp ◆ Quarterly in the second, third, and fourth years, following relocation of soils containing embedded cysts of the Riverside fairy shrimp ◆ Biannually in the fifth, seventh, and ninth years, following relocation of soils containing embedded cysts of the Riverside fairy shrimp ◆ Annually in the tenth, fifteenth, twentieth, and twenty-fifth years, following relocation of soils containing embedded cysts of the Riverside fairy shrimp <p>LAWA shall provide the USFWS with annual monitoring reports as specified in the Vernal Pool Creation, Maintenance, and Monitoring Plan. The monitoring report, due on September 1 of each specified monitoring year, shall provide information regarding the implementation of the vernal pool creation, restoration, and maintenance activities. The yearly report shall also discuss the effectiveness of the project as it pertains to the existing condition of the created vernal pool(s) and Riverside fairy shrimp population. To measure the effectiveness of the created vernal pool(s), the FAA and LAWA shall work with the USFWS to develop long-term goals and objectives as part of their habitat creation plan.</p>				

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ET-1	<p>(Cont'd)</p> <p>Lastly, LAWA shall coordinate with the USFWS to create educational materials on the Riverside fairy shrimp for integration into LAWA's public outreach program. Educational opportunities regarding federally endangered Riverside fairy shrimp include public outreach in the form of an educational brochure made available through the LAWA Public Affairs Department, information provided on LAWA's Web site describing the ephemeral habitat required to support the species, and LAWA's outreach to local schools.</p> <p>Implementation of Mitigation Measure MM-ET-1 would provide for the replacement of 0.04 acres (1,853 square feet) of degraded wetland habitat containing embedded cysts of the Riverside fairy shrimp, with an estimated habitat value of 0.15; with 0.12 acres (5,559 square feet) of created vernal pool habitat with an estimated habitat value of 0.75 (see Table F5-11, Mitigation Land Evaluation Procedure for the Mitigation Site). By relocating embedded cysts to habitat restoration sites that are managed for the existence of the species, the opportunity for embedded cysts to complete the adult phase of their life cycle would be enhanced.</p>				

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Table F5-11

Mitigation Land Evaluation Procedure for the Mitigation Site

	Habitat Reference Sites	Riverside Fairy Shrimp Wetland Habitat Mitigation Site
Topography/Hydrology	0.20	0.20
Mound-Depression Microrelief	0.05	0.05
Native Soils w/Slope <10%	0.05	0.05
Areas w/Period of Inundation ≥30 days	0.05	0.05
Summer Desiccation	0.05	0.05
Flora	0.20	0.20
>10% Vegetative Cover	0.05	0.05
Native Grasses >10%	0.05	0.05
Vernal Pool Associated Species	0.05	0.05
Listed Vernal Pool Associated Species	0.05	0.05
Fauna	0.20	0.15
Dominated by Native Fauna (reproducing)	0.05	0.05
Grassland-Associated Species (reproducing)	0.05	0.05
Sensitive Vernal Pool-Associated Species (reproducing)	0.05	0.05
Listed Vernal Pool-Associated Species (reproducing)	0.05	0.00
Ecosystem Functional Integrity	0.40	0.20
Contiguous w/Wetland and State-designated Sensitive Terrestrial Habitat	0.10	0.00
Under Regulatory Conservation	0.10	0.10
Variety of Pollinator/Dispersal Mechanisms Present (Wind, Wildlife)	0.10	0.10
Contiguous Native Habitat >40 acres	0.10	0.00
Total Habitat Value (HV)	1.00	0.75

Source: Sapphos Environmental, Inc. 2003.

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ET-3 Monitoring Agency: LAWA	El Segundo Blue Butterfly Conservation: Dust Control. To reduce the transport of fugitive dust particles related to construction activities, soil stabilization, watering or other dust control measures, as feasible and appropriate, shall be implemented with a goal to reduce fugitive dust emissions by 90 to 95 percent during construction activities within 2,000 feet of the El Segundo Blue Butterfly Habitat Restoration Area. In addition, to the extent feasible, no grading or stockpiling for construction activities should take place within 100 feet of occupied habitat of the El Segundo blue butterfly.	Temporary construction impacts	Preconstruction/ construction	Once, upon execution of contracts, and periodically during construction	Inclusion of measure in construction contracts; Periodic reporting by construction monitor
MM-ET-4 Monitoring Agency: LAWA	El Segundo Blue Butterfly Conservation: Habitat Restoration. LAWA or its designee shall take all necessary steps to avoid the flight season of the El Segundo blue butterfly (June 14 - September 30) when undertaking installation of navigational aids and associated service roads proposed under Master Plan Alternative D within habitat occupied by the El Segundo blue butterfly. Installation of navigational aids within the Habitat Restoration Area should be required to take place between October 1st and May 31st. In conformance with the Biological Opinion, activities associated with navigational aids development shall be limited to the existing roads and proposed impacts areas as depicted in the Final EIS/EIR. Coast buckwheat shall be planted a minimum of three years prior to the impact, not only to allow for establishment of the plants, but also to ensure that the plants are mature enough to bloom. The plantings of coast buckwheat shall be located within the southwest corner of subsite 23 of the Habitat Restoration Area, as depicted in Figure F5-5, and shall encompass 1.25 acres in conformance with the Biological Opinion. Coast buckwheat plants will be planted at an initial density of 200 plants per acre to ensure the long term planting density target (130 plants per acre). Coast buckwheat plants will be placed in clusters or groupings based on microtopographic features present within subsite 23 to better support the El Segundo Blue Butterfly, which is known to prefer large clusters of plants for nectaring and shelter.	Loss of habitat occupied by endangered El Segundo blue butterfly	Preparation of Habitat Restoration Plan for El Segundo Blue Butterfly 3 years prior to construction activities within its habitat, or as approved by USFWS; Monitoring for a period of not more than 5 years	As per Habitat Restoration Plan for the El Segundo Blue Butterfly	Preparation of Habitat Restoration Plan for El Segundo Blue Butterfly; Periodic Monitoring Report

Area: Endangered and Threatened Species

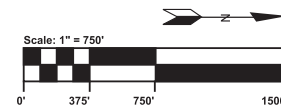
LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-ET-4	<p>(Cont'd)</p> <p>As possible, depending on the location and condition of individual plants, FAA and LAWA shall salvage existing coast buckwheat plants and any larvae on the plant or pupae in the soil below the plant that would be removed to accommodate the replacement navigational aids to further conserve this species. These plants shall be salvaged immediately prior to the installation of the replacement navigational aids outside of the butterfly flight season. These salvaged plants shall be transported in a suitable container and replanted after the onset of winter rains in subsite 23 near the restored area as described in MM-BC-13, Replacement of State-Designated Sensitive Habitats. This area shall be the designated mitigation site for planting coast buckwheat and the site to which El Segundo blue butterfly pupae shall be relocated. Gathering of coast buckwheat seed shall take place from September 15 through June 1. Propagation and planting methodologies successfully employed by LAWA during 1984 through 1994 restoration efforts shall be employed for propagation of additional coast buckwheat plants. An existing irrigation system proximal to subsite 23 will be used to increase the success of the restoration effort. Prior to navigational aid installation, a permitted and qualified biologist shall salvage El Segundo blue butterfly larvae in coordination with the USFWS in order to minimize impacts to the butterfly. Based on LAWA's restoration experience within the Habitat Restoration Area, occupation of restored habitat can occur within two to three years of restoration efforts. Therefore, there would be no net loss in acres or value of occupied habitat. Additionally, after the navigational aid system is in place and during the first subsequent flight season of the El Segundo blue butterfly, LAWA shall document El Segundo blue butterfly behavior with respect to the lighting system and submit a monitoring report to USFWS.</p> <p>Lastly, LAWA shall coordinate with the USFWS to create educational materials on the El Segundo blue butterfly for integration into LAWA's public outreach program.</p>				



LEGEND

- | | | | |
|--|--|--|-----------------|
| | Habitat Restoration Area Boundary | | Subsite 23 |
| | Remote Communications Site | | Mitigation site |
| | Very High Omni Range Navigation Beacon | | |
| | Trailer | | |



LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

	Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
Energy Supply					
E-1 Monitoring Agency: LAWA	Energy Conservation and Efficiency Program. LAWA will seek to continually improve the energy efficiency of building design and layouts during the implementation of the LAX Master Plan. Title 24, Part 6, Article 2 of the California Administrative Code establishes maximum energy consumption levels for heating and cooling of new buildings to assure that energy conservation is incorporated into the design of new buildings. LAWA will design new facilities to meet or exceed the prescriptive standards required under Title 24. Some of the energy conservation measures that LAWA may incorporate into the design of new buildings and airports facilities may include the use of energy-efficient building materials, energy-saving lighting systems, energy-efficient air-conditioning systems, energy-efficient water-heating systems, and designed-in access for alternative means of surface transportation, including the Green Line and the APM. These energy conservation measures may be further improved upon as energy-saving design approaches and technologies develop.	Avoid a substantial increase in energy consumption due to the development of new facilities	Prior to approval of building plans for each project involving new or substantially renovated buildings that consume electricity or natural gas	Once prior to approval of building plans	Approval of building plans by LADBS or LADPW, as appropriate
E-2 Monitoring Agency: LAWA	Coordination with Utility Providers. LAWA will implement Master Plan activities in coordination with local utility providers. Utility providers will provide input on the layout of utilities at LAX to assure that LAX and the surrounding region receive both safe and uninterrupted service. When service by existing utility lines could be affected by airport design features, LAWA will work with the utility to identify alternative means of providing equivalent or superior post-construction utility service.	Potential for incompatibility and/or inefficiency of new utilities	Plan for each project to be completed prior to issuance of demolition permit, grading permit, building plans or B-Permit, whichever occurs first, as applicable	Once prior to issuance of applicable permit	Submittal of utility compatibility plan to the satisfaction of affected utilities
PU-1	Develop a Utility Relocation Program. LAWA will develop and implement a utilities relocation program to minimize interference	Disturbance of existing utility lines/systems	Plan to be completed prior to issuance of	Once prior to issuance of applicable permit	Submittal of utility relocation plan to the

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
PU-1 Monitoring Agency: LAWA	(Cont'd) with existing utilities associated with LAX Master Plan facility construction. Prior to initiating construction of a Master Plan component, LAWA will prepare a construction evaluation to determine if the proposed construction will interfere with existing utility location or operation. LAWA will determine utility relocation needs and, for sites on LAX property, LAWA will develop a plan for relocating existing utilities as necessary before, during, and after construction of LAX Master Plan features. LAWA will implement the utility relocation program during construction of LAX Master Plan improvements.		demolition permit, grading permit, building permit or B-Permit, whichever occurs first, as applicable		satisfaction of affected utilities

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
Light Emissions					
LI-2 Monitoring Agency: LAWA	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.	Avoidance of adverse glare effects on aviation and other sensitive uses	Prior to issuance of a building permit for each Master Plan project (excluding airfield projects)	Twice: Once during plan review and once during project construction, on a project-by-project basis	Sign-off on plans by LAWA prior to issuance of building permit and completion of site inspection for materials during construction
LI-3 Monitoring Agency: LAWA	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 spillover. 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.	Avoidance of adverse light and glare effects on aviation activities and other sensitive uses	Prior to issuance of any MEP permits or B-permits which include lighting	Once, during review of lighting plans on a project-by-project basis	Approval of lighting plans by LAWA prior to issuance of MEP permits or B-permits involving lighting

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<i>Solid Waste</i>					
SW-1 Monitoring Agency: LAWA	Implement an Enhanced Recycling Program. LAWA will enhance their existing recycling program, based on successful programs at other airports and similar facilities. Features of the enhanced recycling program will include: expansion of the existing terminal recycling program to all terminals, including new terminals; development of a recycling program at LAX Northside/Westchester Southside; lease provisions requiring that tenants meet specified diversion goals; and preference for recycled materials during procurement, where practical and appropriate.	Generation of additional solid waste due to increased activity levels at LAX	Prior to issuance of certificate of occupancy for any use developed in LAX Northside, or approval of building permits for CTA improvements, whichever occurs first	Annually	Annual confirmation that LAX and LAX Northside are exceeding waste reductions requirements of AB 939
SW-2 Monitoring Agency: LAWA	Requirements for the Use of Recycled Materials during Construction. LAWA will require, where feasible, that contractors use a specified minimum percentage of recycled materials during construction of LAX Master Plan improvements. The percentage of recycled materials required will be specified in the construction bid documents. Recycled materials may include, but are not limited to, asphalt, drywall, steel, aluminum, ceramic tile, cellulose insulation, and composite engineered wood products. The use of recycled materials in LAX Master Plan construction will help to reduce the project's reliance upon virgin materials and support the recycled materials market, decreasing the quantity of solid waste requiring disposal.	Indirect impacts to solid waste management facilities/capacity (i.e., increased use of recycled materials would reduce the amount of waste materials that would otherwise need to be managed/disposed of)	Prior to issuance of RFP/RFB for each construction project.	Once, upon approval of construction contract for each project	Confirmation that general contractor's bid includes usage of specified minimum percentage of recycled materials.
SW-3 Monitoring Agency: LAWA	Requirements for the Recycling of Construction and Demolition Waste. LAWA will require that contractors recycle a specified minimum percentage of waste materials generated during demolition and construction. The percentage of waste materials required to be recycled will be specified in the construction bid documents. Waste materials to be recycled may include, but are not limited to, asphalt, concrete, drywall, steel, aluminum, ceramic tile, and architectural details.	Indirect impacts to solid waste management facilities/capacity (i.e., recycling of demolition/construction wastes would reduce the amount of waste materials that would otherwise need to be managed/disposed of)	Prior to issuance of RFP/RFB for each construction project	Once, upon approval of construction contract for each project	Confirmation that general contractor's bid includes specified minimum percentage of demolition/construction waste to be recycled

Area: Solid Waste

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-SW-1 Monitoring Agency: LAWA	Provide Landfill Capacity. Additional landfill capacity in the Los Angeles region should be provided through the siting of new landfills, the expansion of existing landfills, or the extension of permits for existing facilities. As an alternative, or to augment regional landfill capacity, landfill capacity outside the region could be accessed by developing the necessary rail haul infrastructure. The responsibility for implementing this mitigation measure lies with state, county, and local solid waste planning authorities. The costs for implementing this mitigation measure will be passed on to LAX and other solid waste generators through increase solid waste disposal costs.	Cumulative increases in solid waste generation that could reduce existing available landfill capacity	Preparation of first report on landfill capacity prior to issuance of certificate of occupancy for any use developed in LAX Northside, or approval of building permits for CTA improvements, whichever occurs first	Annually	Annual updates on solid waste disposal capabilities/capacity of City of Los Angeles

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
Construction Impacts					
C-1 Monitoring Agency: LAWA	<p>Establishment of a Ground Transportation/Construction Coordination Office. Establish this office for the life of the construction projects to coordinate deliveries, monitor traffic conditions, advise motorists and those making deliveries about detours and congested areas, and monitor and enforce delivery times and routes. LAWA will periodically analyze traffic conditions on designated routes during construction to see whether there is a need to improve conditions through signage and other means.</p> <p>This office may undertake a variety of duties, including but not limited to:</p> <ul style="list-style-type: none">◆ Inform motorists about detours and congestion by use of static signs, changeable message signs, media announcements, airport website, etc.;◆ Work with airport police and the Los Angeles Police Department to enforce delivery times and routes;◆ Establish staging areas;◆ Coordinate with police and fire personnel regarding maintenance of emergency access and response times;◆ Coordinate roadway projects of Caltrans, City of Los Angeles, and other jurisdictions with those of the airport construction projects;◆ Monitor and coordinate deliveries;◆ Establish detour routes;◆ Work with residential and commercial neighbors to address their concerns regarding construction activity; and◆ Analyze traffic conditions to determine the need for additional traffic controls, lane restriping, signal modifications, etc.	Traffic congestion and delays as they relate to the LAX Plan construction activities	Prior to issuance of any permits for first Master Plan project. Complete set of duties for this office will be established prior to issuance of any permit for a project that may significantly impact surface streets	Once, at establishment of LAWA's Construction Coordination Office	Establishment of Ground Transportation/Construction Coordination Office; Notification regarding duties, business hours, telephone numbers via the Internet and print media to the public

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
C-2 Monitoring Agency: LAWA	Construction Personnel Airport Orientation. All construction personnel will be required to attend an airport project-specific orientation (pre-construction meeting) that includes where to park, where staging areas are located, construction policies, etc.	Traffic congestion and delays as they relate to the LAX Plan construction activities	Prior to commencement of construction for each project	As required by arrival of new personnel	Contractor certification; signatures of orientation attendees

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<i>Design, Art, and Architecture Applications / Aesthetics</i>					
DA-1 Monitoring Agency: LAWA	Provide and Maintain Airport Buffer Areas. Along the northerly and southerly boundary areas of the airport, LAWA will provide and maintain landscaped buffer areas that will include setbacks, landscaping, screening or other appropriate view-sensitive improvements with the goals of avoiding land use conflicts, shielding lighting, enhancing privacy and better screening views of airport facilities from adjacent residential uses. Use of existing facilities in buffer areas may continue as required until LAWA can develop alternative facilities.	Avoidance of view degradation	Prior to approval of development plans for projects abutting residential and view sensitive uses along the northern & southern boundaries of airport by LAWA	Once, during plan review on a project-by-project basis	Provision of landscape buffer areas, to the extent feasible, in the development and landscape plans
DA-2 Monitoring Agency: LAWA	Update and Integrate Design Plans and Guidelines. The following plans and guidelines will be individually updated or integrated into a comprehensive set of design-related guidelines and plans; LAX Street Frontage and Landscape Development Plan (June 1994), LAX Air Cargo Facilities Development Guidelines (April 1998; updated August 2002), and LAX Northside Design Plan and Development Guidelines (1989), including conditions addressing heights, setbacks and landscaping. The update will serve as a basis for reviewing future public and private development projects at LAX. The update will incorporate key provisions in current plans with an equivalent or greater level of compatibility and visual quality supported between LAX and adjacent land uses.	Avoidance of view degradation/incompatible land use	Prior to issuance of any permits for first Master Plan project (excluding runways)	Once, upon approval of design-related guidelines and plans by the Board of Airport Commissioners	Board of Airport Commissioners approval of design-related guidelines and plans
DA-3 Monitoring Agency: LAWA	Undergrounding of Utility Lines. In conjunction with the extension of the Century Freeway and other roadway/right-of-way improvement projects, LAWA will pursue opportunities to place existing overhead utility lines underground wherever feasible and appropriate.	Avoidance of view degradation	During plan design phase for applicable roadway/right-of-way improvement projects	Once, during plan design phase of each roadway/right-of-way improvement project	Preparation of feasibility assessment prior to approval of roadway/right-of-way improvement plans
MM-DA-1	Construction Fencing. Construction fencing and pedestrian canopies shall be installed by LAWA to the degree feasible to	Avoidance of temporary view	Prior to issuance of grading or building	Once, prior to issuance of grading or building	Installation of construction fencing

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
MM-DA-1 Monitoring Agency: LAWA	(Cont'd) ensure maximum screening of areas under construction along major public approach and perimeter roadways, including Sepulveda Boulevard, Century Boulevard, Westchester Parkway, Pershing Drive, and Imperial Highway west of Sepulveda Boulevard. Along Century Boulevard, Sepulveda Boulevard, and in other areas where the quality of public views are a high priority, provisions shall be made by LAWA for treatment of the fencing to reduce temporary visual impacts.	degradation	permits for each project along a major public approach or perimeter roadway	permits for each project along a major public approach or perimeter roadway	and pedestrian canopies to the extent feasible

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<i>Hazardous Materials</i>					
HM-1 Monitoring Agency: LAWA	<p>Ensure Continued Implementation of Existing Remediation Efforts. Prior to initiating construction of a Master Plan component, LAWA will conduct a pre-construction evaluation to determine if the proposed construction will interfere with existing soil or groundwater remediation efforts. For sites currently on LAX property, LAWA will work with tenants to ensure that, to the extent possible, remediation is complete prior to the construction. If remediation must be interrupted to allow for Master Plan-related construction, LAWA will notify and obtain approval from the regulatory agency with jurisdiction, as required, and will evaluate whether new or increased monitoring will be necessary. If it is determined that contamination has migrated during construction, temporary measures will be taken to stop the migration. As soon as practicable following completion of construction in the area, remediation will be reinstated, if required by the Regional Water Quality Control Board (RWQCB) or another agency with jurisdiction. In such cases, LAWA will coordinate the design of the Master Plan component and the re-design of the remediation systems to ensure that they are compatible and to ensure that the proposed remediation system is comparable to the system currently in place. If it is determined during the pre-construction evaluation that construction will preclude reinstatement of the remediation effort, LAWA will obtain approval to initiate construction from the agency with jurisdiction.</p> <p>For properties to be acquired as part of the Master Plan, LAWA will evaluate the status of all existing soil and groundwater remediation efforts. As part of this evaluation, LAWA will assess the projected time required to complete the remediation activities and will coordinate with the land owner and the agency with jurisdiction to ensure that remediation is completed</p>	Potential for construction activities to interfere with existing soil or groundwater remediation efforts	Prior to initiation of construction of each Master Plan project	Once prior to construction of each Master Plan project	Preparation of Construction Compatibility Assessment/Plan. If remediation will be disrupted by construction, approval of the Construction Compatibility Assessment/Plan will require the necessary approvals from RWQCB, DTSC, and LAFD, as appropriate

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
HM-1	(Cont'd) prior to scheduled demolition and construction activities, if possible. In cases where remediation cannot be completed prior to demolition and construction activities, LAWA will undertake the same steps required above, namely, an evaluation of the need to conduct monitoring; implementation of temporary measures to stop migration, if required; and reinstatement of remediation following completion of construction, if required.				
HM-2 Monitoring Agency: LAWA	Handling of Contaminated Materials Encountered During Construction. Prior to the initiation of construction, LAWA will develop a program to coordinate all efforts associated with the handling of contaminated materials encountered during construction. The intent of this program will be to ensure that all contaminated soils and/or groundwater encountered during construction are handled in accordance with all applicable regulations. As part of this program, LAWA will identify the nature and extent of contamination in all areas where excavation, grading, and pile-driving activities are to be performed. LAWA will notify the appropriate regulatory agency when contamination has been identified. If warranted by the extent of the contamination, as determined by the regulatory agency with jurisdiction, LAWA will conduct remediation prior to initiation of construction. Otherwise, LAWA will incorporate provisions for the identification, segregation, handling and disposal of contaminated materials within the construction bid documents. In addition, LAWA will include a provision in all construction bid documents requiring all construction contractors to prepare site-specific Health and Safety Plans prior to the initiation of grading or excavation. Each Health and Safety Plan would include, at a minimum, identification/description of the following: site description and features; site map; site history; waste types encountered; waste characteristics; hazards of	Potential for encountering hazardous materials/waste during construction activities	Prior to initiation of construction of first Master Plan project	Once prior to construction of first Master Plan project	Preparation of Hazardous Materials/Wastes Management Plan

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
HM-2	<p>(Cont'd)</p> <p>concern; disposal methods and practices; hazardous material summary; hazard evaluation; required protective equipment; decontamination procedures; emergency contacts; hospital map and contingency plan.</p> <p>In the event that any threshold of significance listed in the Hazardous Materials section of the EIS/EIR for the LAX Master Plan is exceeded due to the discovery of soil or groundwater contaminated by hazardous materials or if previously unknown contaminants are discovered during construction or a spill occurs during construction, LAWA will notify the lead agency(ies) with jurisdiction and take immediate and effective measures to ensure the health and safety of the public and workers and to protect the environment, including, as necessary and appropriate, stopping work in the affected area until the appropriate agency has been notified.</p>				

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<i>Water Use</i>					
W-1 Monitoring Agency: LAWA	Maximize Use of Reclaimed Water. To the extent feasible, LAWA will maximize the use of reclaimed water in Master Plan-related facilities and landscaping. The intent of this commitment is to maximize the use of reclaimed water as an offset for potable water use and to minimize the potential for increased water use resulting from implementation of the LAX Master Plan. This commitment will also facilitate achievement of the City of Los Angeles' goal of increased beneficial use of its reclaimed water resources. This commitment will be implemented by various means, such as installation and use of reclaimed water distribution piping for landscape irrigation.	Reduce demands for, and use of, potable water	Prior to approval of building plans for each project involving new or substantially renovated buildings that use water, and prior to approval of landscaping plans	Once, prior to approval of plans for affected project	Approval of plans for affected project
W-2 Monitoring Agency: LAWA	Enhance Existing Water Conservation Program. LAWA will enhance the existing <i>Street Frontage and Landscape Plan for LAX</i> to ensure the ongoing use of water conservation practices at LAX facilities. The intent of this program, to minimize the potential for increased water use due to implementation of the LAX Master Plan program, is also in accordance with regional efforts to ensure adequate water supplies for the future. Features of the enhanced conservation program will include identification of current water conservation practices and an assessment of their effectiveness; identification of alternate future conservation practices; continuation of the practice of retrofitting and installing new low-flow toilets and other water-efficient fixtures in all LAX buildings, as remodeling takes place or new construction occurs; use of Best Management Practices for maintenance; use of water efficient vegetation for landscaping, where possible; and continuation of the use of fixed automatic irrigation for landscaping.	Avoid a substantial increase in water consumption due to the development of new facilities	Prior to approval of building plans or landscaping plans for first Master Plan project involving water use (i.e., CTA Landside Terminal or LAX Northside development, whichever occurs first)	Once, prior to approval of building plans or landscaping plans for first Master Plan project	Preparation of Water Conservation Program

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
Wastewater					
MM-WW-1 Monitoring Agency: LAWA	Provide Additional Wastewater Treatment Capacity to Accommodate Cumulative Flows. Additional wastewater capacity within the City of Los Angeles should be provided by the expansion/upgrade of the City's wastewater treatment systems via a combination of improvements to address the projected wastewater shortfall resulting from cumulative development. Such improvements could include increasing capacity at the Hyperion Treatment Plant (HTP), building new reclamation capacity upstream of HTP, conservation of potable water, and infiltration/inflow reduction. Implementation of this mitigation measure is the responsibility of the City of Los Angeles Department of Public Works, Bureau of Sanitation. Specific improvements will be identified in the City's IPWP and Wastewater Facilities Plan component of the City's Integrated Resources Plan. The cost for implementing this mitigation measure would be passed on to LAX and other wastewater generators through increased wastewater fees.	Cumulative increases in wastewater generation that could exceed currently planned capacity of the Hyperion Treatment Plant (HTP)	Prepare first wastewater capacity report prior to issuance of any building permits for any building within the LAX Plan area that generates wastewater	Annually. Upon approval of the IPWP improvements, which will provide for the additional capacity of HTP, the monitoring requirements would cease	Annual reports on existing wastewater treatment capabilities and plans/provisions for additional capabilities/capacity as provided for through the IPWP

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
Fire Protection					
FP-1 Monitoring Agency: LAWA	<p>LAFD Design Recommendations. During the design phase prior to initiating construction of a Master Plan component, LAWA will work with LAFD to prepare plans that contain the appropriate design features applicable to that component, such as those recommended by LAFD, and listed below:</p> <ul style="list-style-type: none"> ◆ <i>Emergency Access.</i> During Plot Plan development and the construction phase, LAWA will coordinate with LAFD to ensure that access points for off-airport LAFD personnel and apparatus are maintained and strategically located to support timely access. In addition, at least two different ingress/egress roads for each area, which will accommodate major fire apparatus and will provide for major evacuation during emergency situations, will be provided. ◆ <i>Fire Flow Requirements.</i> Proposed Master Plan development will include improvements, as needed, to ensure that adequate fire flow is provided to all new facilities. The fire flow requirements for individual Master Plan improvements will be determined in conjunction with LAFD and will meet, or exceed, fire flow requirements in effect at the time. ◆ <i>Fire Hydrants.</i> Adequate off-site public and on-site private fire hydrants may be required, based on determination by the LAFD upon review of proposed plot plans. ◆ <i>Street Dimensions.</i> New development will conform to the standard street dimensions shown on the applicable City of Los Angeles Department of Public Works Standard Plan. ◆ <i>Road Turns.</i> Standard cut-corners will be used on all proposed road turns. ◆ <i>Private Roadway Access.</i> Private roadways that will be used for general access and fire lanes shall have at least 20 feet of vertical access. Private roadways will be built to City of Los Angeles standards to the satisfaction of the City Engineer and the LAFD. 	Avoidance of compromised fire prevention and protection	Prior to issuance of building permits or B-permits	Once, upon sign-off of plans for each project	LAFD sign-off on plans prior to issuance of building permits or prior to issuance of B-permit for street improvements

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
FP-1	(Cont'd) <ul style="list-style-type: none"> ◆ <i>Dead-End Streets.</i> Where fire lanes or access roads are provided, dead-end streets will terminate in a cul-de-sac or other approved turning area. No fire lane shall be greater than 700 feet in length unless secondary access is provided. ◆ <i>Fire Lanes.</i> All new fire lanes will be at least 20 feet wide. Where a fire lane must accommodate a LAFD aerial ladder apparatus or where a fire hydrant is installed, the fire lane will be at least 28 feet wide. ◆ <i>Building Setbacks.</i> New buildings will be constructed no greater than 150 feet from the edge of the roadways of improved streets, access roads, or designated fire lanes. ◆ <i>Building Heights.</i> New buildings exceeding 28 feet in height may be required to provide additional LAFD access. ◆ <i>Construction/Demolition Access.</i> During demolition and construction activities, emergency access will remain unobstructed. ◆ <i>Aircraft Fire Protection Systems.</i> Effective fire protection systems will be provided to protect the areas beneath the wings and fuselage portions of large aircraft. This may be accomplished by incorporating foam-water deluge sprinkler systems with foam-producing and oscillating nozzle (per NFPA 409, aircraft hangars for design criteria). 				
PS-1	Fire and Police Facility Relocation Plan. Prior to any demolition, construction, or circulation changes that would	Avoidance of compromised fire	Prior to any Master Plan activities	Once, upon completion of Fire and	Completion of Fire and Police Facility

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
PS-1 Monitoring Agency: LAWA	(Cont'd) affect LAFD Fire Stations 51, 80, and 95, or on-airport police facilities, a Relocation Plan will be developed by LAWA through a cooperative process involving LAFD, LAWAPD, the LAPD LAX Detail, and other airport staff. The performance standards for the plan will ensure maintenance of required response times, response distances, fire flows, and a transition to new facilities such that fire and law enforcement services at LAX will not be significantly degraded. The plan will also address future facility needs, including details regarding space requirement, siting, and design.	prevention and protection	affecting on-airport fire and police facilities	Police Facility Relocation Plan; as necessary during relocation process	Relocation Plan
PS-2 Monitoring Agency: LAWA	Fire and Police Facility Space and Siting Requirements. During the early design phase for implementation of the Master Plan elements affecting on-airport fire and police facilities, LAWA and/or its contractors will consult with LAFD, LAWAPD, LAPD, and other agencies as appropriate, to evaluate and refine as necessary, program requirements for fire and police facilities. This coordination will ensure that final plans adequately support future facility needs, including space requirements, siting and design.	Avoidance of compromised fire prevention and protection	Prior to any Master Plan activities affecting on-airport police and fire facilities	On-going during early design phase	Approval of facility program requirements by involved agencies

LAX MASTER PLAN ALTERNATIVE D MITIGATION MONITORING & REPORTING PROGRAM

Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance
<i>Law Enforcement</i>					
LE-1 Monitoring Agency: LAWA	Routine Evaluation of Manpower and Equipment Needs. LAWA will ensure that LAWAPD and LAPD LAX Detail continue to routinely evaluate and provide additional officers, supporting administrative staff, and equipment, to keep pace with forecasted increases in activity and development at LAX in order to maintain a high level of law enforcement services. This will be achieved through LAWA notification to LAWAPD and LAPD regarding pending development and construction and through LAWA review of status reports on law enforcement services at LAX.	Avoidance of substantial deficiencies in law enforcement personnel & equipment	Ongoing	Weekly (via meetings with law enforcement agencies); deployment monitored daily	Operations Plan and Deployment Logs
LE-2 Monitoring Agency: LAWA	Plan Review. During the design phase of terminal and cargo facilities and other major airport development, the LAPD, LAWAPD, and other law enforcement agencies will be consulted to review plans so that, where possible, environmental contributors to criminal activity, such as poorly-lit areas, and unsafe design, are reduced.	unsafe facility/architectural design	Prior to issuance of building permits for each Master Plan project	Once, prior to issuance of building permits for each project	Plan sign-off by LAWAPD and LAX Detail

LAX Master Plan Alternative D

Transportation Improvements Phasing Plan

Phase	Master Plan Project	Traffic Mitigation Measure or Project Component	Associated Mitigation Measure
1A	West Employee Parking Structure	Complete off-site intersectional improvements at Grand Avenue and Vista del Mar	MM-ST-7
1A	West Employee Parking Structure	Complete off-site intersectional improvements at Highland Avenue/Vista del Mar and Rosecrans Boulevard	MM-ST-10
1A	West Employee Parking Structure	Complete off-site intersectional improvements at Imperial Highway and Main Street	MM-ST-6
1A	West Employee Parking Structure	Complete off-site intersectional improvements at Imperial Highway and Pershing Drive	MM-ST-6
1A	West Employee Parking Structure	Complete off-site intersectional improvements at Imperial Highway and Sepulveda Boulevard	MM-ST-10
1A	West Employee Parking Structure	Complete off-site intersectional improvements at Imperial Highway and Vista del Mar	MM-ST-10
1A	West Employee Parking Structure	Complete off-site intersectional improvements at Jefferson Boulevard and Lincoln Boulevard	MM-ST-7
1A	West Employee Parking Structure	Complete off-site intersectional improvements at Lincoln Boulevard and Manchester Avenue	MM-ST-6
1A	West Employee Parking Structure	Complete off-site intersectional improvements at Lincoln Boulevard and Teale Street	MM-ST-10
1A	West Employee Parking Structure	Complete off-site intersectional improvements at Rosecrans Avenue and Sepulveda Boulevard	MM-ST-8
1A	West Employee Parking Structure	Complete off-site intersectional improvements at 83rd Street and Lincoln Boulevard	MM-ST-6
1A	West Employee Parking Structure	Complete off-site intersectional improvements at 83rd Street and Lincoln Boulevard	MM-ST-10
1A	West Employee Parking Structure	Provide fair-share contribution to LA County's "Marina Expressway to Admiralty Way" project OR complete alternative off-site intersectional improvements at the following intersections: <ul style="list-style-type: none"> - Bali Way and Lincoln Boulevard - Fiji Way and Lincoln Boulevard - Lincoln Boulevard and Marina Expressway - Lincoln Boulevard and Maxella Avenue - Lincoln Boulevard and Mindanao Way - Lincoln Boulevard and Washington Boulevard 	MM-ST-16

Transportation Improvements Phasing Plan

Phase	Master Plan Project	Traffic Mitigation Measure or Project Component	Associated Mitigation Measure
1A	West Employee Parking Structure	Provide a “fair-share” contribution toward the LAC-MTA's Metro Rapid Bus Line Expansion Program (possible concepts include but are not limited to paying for larger or additional buses from those planned by the LAC-MTA or paying the cost of retrofitting some buses to better accommodate airline passengers and their baggage to and from LAX) OR other enhancements to benefit transit to and from LAX (possible concepts include but are not limited to traffic signal priority improvements for bus flow, transit marketing, airport employee and/or air passenger fare subsidies) to mitigate the following intersections: <ul style="list-style-type: none"> - Imperial Highway and Sepulveda Boulevard - Jefferson Boulevard and Lincoln Boulevard - Lincoln Boulevard and Manchester Boulevard - Lincoln Boulevard and Marina Expressway - Lincoln Boulevard and Teale Street - Lincoln Boulevard and Washington Boulevard 	MM-ST-15
1B	Intermodal Transportation Center (ITC)	Complete pedestrian connection between ITC and Green Line light rail station south of Imperial Highway	
1B	Intermodal Transportation Center (ITC)	Complete the project-component widening of Aviation Boulevard between Century Boulevard and Imperial Highway. This includes the mitigation of adding a second southbound left-turn lane at 111th Street.	MM-ST-6
1B	Intermodal Transportation Center (ITC)	Complete the project-component roadway improvements (discontinuous widening) along 111th Street between Aviation Boulevard and La Cienega Boulevard. This work includes the mitigation of adding a second westbound right-turn lane at Aviation Boulevard.	MM-ST-6
1B	Intermodal Transportation Center (ITC)	Widen northbound I-405 off-ramp at Imperial Highway	MM-ST-6
1B	Intermodal Transportation Center (ITC)	Complete off-site intersectional improvements at northbound I-405 off-ramp at Imperial Highway.	MM-ST-8

Transportation Improvements Phasing Plan

Phase	Master Plan Project	Traffic Mitigation Measure or Project Component	Associated Mitigation Measure
1B	Intermodal Transportation Center (ITC)	Provide a “fair-share” contribution toward the LAC-MTA's Metro Rapid Bus Line Expansion Program (possible concepts include but are not limited to paying for larger or additional buses from those planned by the LAC-MTA or paying the cost of retrofitting some buses to better accommodate airline passengers and their baggage to and from LAX) OR other enhancements to benefit transit to and from LAX (possible concepts include but are not limited to traffic signal priority improvements for bus flow, transit marketing, airport employee and/or air passenger fare subsidies) to mitigate the following intersections: <ul style="list-style-type: none"> - Centinela Avenue and Sepulveda Boulevard - Howard Hughes Parkway and Sepulveda Boulevard - Manchester Avenue and Sepulveda Boulevard - Mariposa Avenue and Sepulveda Boulevard - 76th St/77th St and Sepulveda Boulevard - 79th St/ 80th St and Sepulveda Boulevard - 83rd Street and Sepulveda Boulevard - I-105 Freeway westbound off-ramp at Sepulveda Boulevard 	MM-ST-15
1B	Intermodal Transportation Center (ITC)	Complete off-site intersectional improvements at I-105 Freeway ramps/Continental City Drive & Imperial Highway (at-grade intersectional improvement only)	MM-ST-6
1B	Intermodal Transportation Center (ITC)	Complete off-site intersectional improvements at Aviation Boulevard and El Segundo Boulevard	MM-ST-7
1B	Intermodal Transportation Center (ITC)	Complete off-site intersectional improvements at Aviation Boulevard and El Segundo Boulevard	MM-ST-8
1B	Intermodal Transportation Center (ITC)	Complete off-site intersectional improvements at Aviation Boulevard and Imperial Highway	MM-ST-7
1B	Intermodal Transportation Center (ITC)	Complete off-site intersectional improvements at Aviation Boulevard and Rosecrans Boulevard	MM-ST-10
1B	Intermodal Transportation Center (ITC)	Complete off-site intersectional improvements at Douglas Street and Imperial Highway	MM-ST-10
1B	Intermodal Transportation Center (ITC)	Complete off-site intersectional improvements at El Segundo Boulevard and La Cienega Boulevard	MM-ST-8
1B	Intermodal Transportation Center (ITC)	Complete off-site intersectional improvements at La Cienega Boulevard and 111th Street	MM-ST-10
1B	Intermodal Transportation Center (ITC)	Complete off-site intersectional improvements at Manchester Avenue and Sepulveda Boulevard	MM-ST-7

Transportation Improvements Phasing Plan

Phase	Master Plan Project	Traffic Mitigation Measure or Project Component	Associated Mitigation Measure
1B	Intermodal Transportation Center (ITC)	Complete off-site intersectional improvements at Manchester Avenue and Sepulveda Boulevard	MM-ST-10
1B	Intermodal Transportation Center (ITC)	Complete off-site intersectional improvements at Mariposa Avenue and Sepulveda Boulevard	MM-ST-8
1B	Intermodal Transportation Center (ITC)	Complete off-site intersectional improvements at 79th St/80th St and Sepulveda Boulevard	MM-ST-6
1C	Southeast Surface Parking	Complete construction of the project-component internal north-south airport roadway that bisects the surface parking lot and terminates at 111th Street.	
1D	Consolidated Rental Car Facility	Complete off-site intersectional improvements at Airport Boulevard and Arbor Vitae Street	MM-ST-7
1D	Consolidated Rental Car Facility	Complete off-site intersectional improvements at Airport Boulevard and Manchester Avenue	MM-ST-7
1D	Consolidated Rental Car Facility	Complete off-site intersectional improvements at Centinela Avenue and Jefferson Boulevard	MM-ST-10
1D	Consolidated Rental Car Facility	Complete off-site intersectional improvements at Centinela Avenue and Sepulveda Boulevard	MM-ST-6
1D	Consolidated Rental Car Facility	Complete off-site intersectional improvements at Century Boulevard and Sepulveda Boulevard	MM-ST-7
1D	Consolidated Rental Car Facility	Complete off-site intersectional improvements at La Tijera Boulevard and Manchester Avenue	MM-ST-7
1D	Consolidated Rental Car Facility	Complete off-site intersectional improvements at I-105 Freeway westbound off-ramp and Sepulveda Boulevard	MM-ST-8
1D	Consolidated Rental Car Facility	Complete off-site intersectional improvements at La Tijera Boulevard and Sepulveda Boulevard	MM-ST-7
1E	CTA Landside Terminals	None	
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete project-component GTC/ITC Roadways and Century Bridge	
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete project-component realignment of 104th Street east of the internal airport roadways to connect to 102nd Street	
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete project-component widening of Arbor Vitae Street between Aviation Boulevard and La Cienega Boulevard. This work includes the mitigation of adding a second westbound left-turn lane at Aviation Boulevard and an eastbound right-turn lane at La Cienega Boulevard.	MM-ST-6

Transportation Improvements Phasing Plan

Phase	Master Plan Project	Traffic Mitigation Measure or Project Component	Associated Mitigation Measure
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete project-component widening of Aviation Boulevard between Arbor Vitae Street and Century Boulevard	
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete project-component roadway improvements on La Cienega Boulevard between Arbor Vitae Street and Imperial Highway. This work includes the mitigation of installing an additional through lane for northbound traffic at Arbor Vitae Street.	MM-ST-6
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete project-component roadway improvements on Century Boulevard between Aviation Boulevard and Glasgow Place	
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Widen the off-ramp from southbound I-405 Freeway north of Century Boulevard at La Cienega Boulevard	MM-ST-6
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Arbor Vitae Street and Inglewood Avenue	MM-ST-7
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Arbor Vitae Street and La Brea Avenue	MM-ST-8
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Aviation Boulevard and Manchester Boulevard	MM-ST-7
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Aviation Boulevard and Manchester Boulevard	MM-ST-8
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Centinela Avenue and Culver Boulevard	MM-ST-7
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Centinela Avenue and La Cienega Boulevard	MM-ST-6
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Century Boulevard and Hawthorne Blvd/La Brea Avenue	MM-ST-6
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Century Boulevard and Inglewood Avenue	MM-ST-8
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Century Boulevard and La Cienega Boulevard	MM-ST-7
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at El Segundo Boulevard and Sepulveda Boulevard	MM-ST-8

Transportation Improvements Phasing Plan

Phase	Master Plan Project	Traffic Mitigation Measure or Project Component	Associated Mitigation Measure
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at El Segundo Boulevard and Sepulveda Boulevard	MM-ST-10
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Florence Avenue and La Cienega Boulevard	MM-ST-7
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Florence Avenue and La Cienega Boulevard	MM-ST-8
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Florence Avenue and La Cienega Boulevard	MM-ST-10
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Hawthorne Boulevard and Imperial Highway	MM-ST-7
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Hawthorne Boulevard and Imperial Highway	MM-ST-8
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Imperial Highway and Inglewood Avenue	MM-ST-7
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at Imperial Highway and Inglewood Avenue	MM-ST-8
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at La Cienega Boulevard and Manchester Boulevard	MM-ST-7
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Complete off-site intersectional improvements at La Cienega Boulevard and Manchester Boulevard	MM-ST-10
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Begin construction of direct connection between I-105 Freeway ramps and internal airport roadways east of ITC (See Note 7)	MM-ST-12
1F	Ground Transportation Center (including Commercial Vehicle Holding Area)	Begin construction of I-405 Interchange at Lennox Boulevard (See Note 7)	MM-ST-13

Transportation Improvements Phasing Plan

Phase	Master Plan Project	Traffic Mitigation Measure or Project Component	Associated Mitigation Measure
	Note 1	For a detailed description of intersectional improvements, see Tables F4.3.2-28 and F4.3.2-29 of the Final EIS/EIR	
	Note 2	LADOT may recommend that temporary Certificates of Occupancy be granted in the event of any delay: 1) by Caltrans on encroachment permits, or 2) in obtaining required approvals from other City departments, government agencies or jurisdictions through no fault of Los Angeles World Airports, provided that LAWA has demonstrated reasonable efforts and due diligence to the satisfaction of LADOT.	
	Note 3	In all cases, except as noted in (2) above, the required Traffic Mitigation or Project Component of each sub-phase for the corresponding land use sub-phase shall be guaranteed to the satisfaction of LADOT and City of Los Angeles Public Works prior to the issuance of any Building Permit and completed prior to the issuance of any Certificate of Occupancy permit.	
	Note 4	Where appropriate, as determined by LADOT, revisions may be made to this Phasing Plan.	
	Note 5	Appropriate transit improvements to the LAC-MTA bus system to and from LAX and “fair-share” contributions to the LA County’s “Marina Expressway to Admiralty Way” project must be agreed upon by LAWA, LADOT, FAA, and the respective outside agency. Depending on the outcome of the negotiations to determine LAWA’s appropriate level and types of transit improvement or “fair-share” contribution, this phasing plan may be altered at the discretion of LADOT. FAA approval may still be required for substitute mitigations. Mitigation measures are applicable only to the extent that airport revenue to fund such measures is permissible under federal law and policies.	
	Note 6	In the event the applicant is unable to obtain necessary construction permits from the concerned agencies in a timely fashion, a temporary Certificate of Occupancy may be granted by the City provided the applicant has demonstrated reasonable efforts to complete the necessary designs and improvements to the satisfaction of LADOT. Should any improvement not receive required approval, the City may substitute an alternative measure of an equivalent effectiveness.	

Transportation Improvements Phasing Plan

Phase	Master Plan Project	Traffic Mitigation Measure or Project Component	Associated Mitigation Measure
	Note 7	LAWA will strive for completion of both the direct freeway connections from the I-405 Freeway at Lennox Boulevard and from the I-105 Freeway onto the airport roadways east of the ITC. If these freeway improvements are not completed in time for the opening of the Ground Transportation Center (GTC), LAWA will implement substitute mitigation improvements prior to opening the GTC, including, but not limited to Changeable Message Signs to direct traffic and/or Closed Circuit Television Cameras to monitor its flow, to the satisfaction of LADOT.	
	Note 8	For proposed LAX Master Plan facilities not listed, such as the CTA Landside Terminals, South CTA Concourse Rework, Satellite Concourse, Tom Bradley International Terminal Rework, North CTA Concourse, or LAX Northside, there are no traffic mitigations or project components to be specifically phased with the construction of those components.	
	Note 9	Prior to the issuance of any final certificate of occupancy in the final phase of the Off-Airport Traffic Improvements Phasing Plan, all required improvements in the entire phasing plan shall be funded, completed, or resolved to the satisfaction of LADOT.	