**Mitigation Measures** Appendix A2

# **Appendix A2** Mitigation Measures

For ease of reference by the reader, the following tables are a compilation of all mitigation measures required of the proposed project, both from the Initial Study and Draft Environmental Impact Analysis analyses, respectively.

# **Mitigation Measures**

## **INITIAL STUDY**

## **Aesthetics**

MM AES-1 Expansive areas of highly reflective materials, such as mirrored glass, must not be permitted. Nonreflective building materials must be used to the maximum extent possible to reduce potential glare impacts.

MM AES-2 Exterior lighting must be designed to minimize off-site glare. This may include, but would not be limited to, the use of shielded or recessed lighting fixtures.

## Agriculture/Forestry Resources

N/A

## Air Quality

N/A

## **Biological Resources**

MM BIO-1 Construction of either Option of the proposed project must avoid the February 1 through August 31 bird nesting season to the extent feasible. If it is not feasible to avoid the nesting period, a survey for nesting birds must be conducted by a qualified wildlife biologist no earlier than 14 days before construction. The area surveyed must include all clearing/construction areas, as well as areas within 250 feet of the boundaries of these areas, or as otherwise determined by the biologist. If no active avian nests are identified on or within 250 feet of the limits of the proposed disturbance area, no further mitigation is necessary.

If active nests are found within 250 feet of the proposed disturbance area, clearing/construction activities must be postponed within 250 feet of the nest until a wildlife biologist has identified the nesting avian species. If the avian species is not protected under the MBTA or the California Fish and Game Code, no further action is required and construction activities may proceed.

If the avian species is protected under the MBTA or the California Fish and Game Code, no action other than avoidance of the active nest(s) may be taken without consultation with the California Department of Fish and Game (CDFG). In addition, a minimum 100-foot buffer zone surrounding the active nest(s) must be established until the young have fledged (left the nest), the nest is vacated, and there is no evidence of second nesting attempts, as determined by the wildlife biologist. The size of the buffer area may be reduced if the wildlife biologist determines, upon consultation and concurrence from the CDFG, that the size of the buffer area would not be likely to have adverse effects on the particular species.

#### **Cultural Resources**

MM CR-1 In the event that archaeological/paleontological resources are unearthed during project subsurface activities, all earth-disturbing work within a 100-meter radius must be temporarily suspended or redirected until a qualified archeologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel must be informed that unauthorized collection of cultural resources is prohibited.

If the resource is determined to be significant, the archaeologist or paleontologist, as appropriate, must prepare a research design for recovery of the resources in consultation with the state Office of Historic Preservation that satisfies the requirements of Public Resources Code §21083.2. The archaeologist or paleontologist must complete a report of the excavations and findings, and must submit the report for peer review by three County-certified archaeologists or paleontologists, as appropriate. Upon approval of the report, the County must submit this report to the Los Angeles Archeological Information Center and keep the report on file at the County of Los Angeles. After the find has been appropriately mitigated, work in the area may resume.

MM CR-2 If human remains are discovered during any demolition/construction activities, all ground-disturbing activity within 50 feet of the remains must be halted immediately, and the Los Angeles County coroner must be notified immediately, pursuant to Public Resources Code §5097.98 and Health and Safety Code §7050.5. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) must be notified within 24 hours, and the guidelines of the NAHC must be adhered to in the treatment and disposition of the remains. The project developer must also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the specific site and consult with the Most Likely Descendant, if any, identified by the NAHC. As necessary, the archaeologist may provide professional assistance to the Most Likely Descendant, including the excavation and removal of the human remains.

## Geology/Soils

MM GEO-1 A California-licensed Civil Engineer (Geotechnical) must prepare and submit to the City, a detailed soils and geotechnical analysis of the proposed project before the commencement of any construction activities. The geotechnical report will include recommendations that must be implemented in the design of the proposed project, including without limitation measures associated with site preparation, fill placement, temporary shoring and permanent dewatering, groundwater seismic design features, excavation stability, foundations, soil stabilization, establishment of deep foundations, concrete slabs and pavements, surface drainage, cement type and corrosion measures, erosion control, shoring and internal bracing, and plan review.

#### Greenhouse Gas Emissions

N/A

## Hazards/Hazardous Materials (NO DEIR SECTION)

MM HAZ-1 Before demolition and/or construction activities, the proposed project site must be tested for asbestos and lead by a licensed contractor. The contractor must follow all applicable local, state, and federal codes and regulations related to the treatment, handling, and disposal of asbestos and lead if the proposed project requires asbestos and/or lead abatement.

MM HAZ-2 In the event that previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction at the project site, construction activities in the immediate vicinity of the contamination must cease immediately. If contamination is encountered, a Risk Management Plan must be prepared and implemented that (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development and (2) describes measures to be taken to protect workers and the public from exposure to potential site hazards. Such measures could include a range of options, including, without limitation, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Depending on the nature of contamination, if any, regulatory agencies must be notified (e.g., El Segundo Fire Department). If needed, a Site Health and Safety Plan that meets Occupational Safety and Health Administration requirements must be prepared and in place before commencement of work in any contaminated area.

MM HAZ-3 Before project implementation, the developer must submit Form 7460-1 (Notice of Proposed Construction or Alternation) to the Federal Aviation Administration for project review and approval.

MM HAZ-4 To ensure adequate access for emergency vehicles when construction activities would result in temporary lane or roadway closures, the project developer must consult with the City of El Segundo Police and Fire Departments to disclose temporary lane or roadway closures and alternative travel routes. The project developer will be required to keep a minimum of one lane in each direction free from encumbrances at all times on perimeter streets accessing the project site. In the event any full road closure is required, the project developer's contractor must coordinate with the City of El Segundo Police and Fire Departments to designate proper detour routes and signage to appropriate proper access routes.

# Hydrology/Water Quality

N/A

## Land Use/Planning

N/A

## **Mineral Resources**

N/A

#### Noise

MM NOI-1 The developer's contractor must refrain from all construction-related activities, including the delivery of construction materials, the loading and unloading of construction equipment, starting the engine ignition, and the repair and servicing of construction equipment and vehicles between the hours of 6:00 P.M. and 7:00 A.M. Monday through Saturday, or at any time on Sunday or a federal holiday. Construction noise levels must not exceed the noise and vibration standard set in El Segundo Municipal Code §7-2-10D and §7-2-4C. If construction activities result in the generation of noise that exceeds the noise and vibration standards set forth by the City of El Segundo, a noise permit must be obtained from the City of El Segundo before the commencement of any construction activities.

Population/Housing

N/A

**Public Services** 

N/A

Recreation

N/A

Transportation/Traffic

N/A

**Utilities/Service Systems** 

N/A

## **DEIR**

**Aesthetics** 

N/A

# Agriculture/Forestry Resources

N/A

# Air Quality

MM4.1-1 The developer must require by contract specifications that all diesel-powered equipment used will be retrofitted with after-treatment products (e.g., engine catalysts and diesel particulate filters). The engine catalysts must achieve a minimum reduction of 15 percent for NO<sub>x</sub>. The diesel particulate filters must meet USEPA Tier 3 standards. Contract specifications must be included in project construction documents, which must be reviewed by the City of El Segundo before grading permits are issued.

MM4.1-2 The developer must require by contract specifications that all heavy-duty diesel-powered equipment operating and refueling at the project site use low-NO<sub>x</sub> diesel fuel to the extent that it is readily available and cost effective (up to 125 percent of the cost of California Air Resources Board diesel) in the South Coast Air Basin (this does not apply to diesel-powered trucks traveling to and from the project site). Contract specifications must be included in project construction documents, which must be reviewed by the City of El Segundo before grading permits are issued.

MM4.1-3 The developer must require by contract specification that all heavy-duty diesel-powered equipment operations at the project site utilize a phased-in emission control technology in advance of a regulatory requirement such that 30 percent of the fleet will meet USEPA Tier 4 engine standards for particulate matter control (or equivalent) starting in 2013 and for the duration of the project.

MM4.1-4 The developer must require by contract specifications that construction equipment engines be maintained in good condition and in proper tune per manufacturer's specification for the duration of construction. Contract specifications must be included in project construction documents, which must be reviewed by the City of El Segundo before grading permits are issued.

MM4.1-5 The developer must require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site rather than electrical generators powered by internal combustion engines. Contract specifications must be included in project construction documents, which must be reviewed by the City of El Segundo before grading permits are issued.

MM4.1-6 As required by South Coast Air Quality Management District Rule 403—Fugitive Dust, all construction activities that are capable of generating fugitive dust are required to implement dust control measures during each phase of project development to reduce the amount of particulate matter entrained in the ambient air. These measures include the following:

- Application of soil stabilizers to inactive construction areas
- Quick replacement of ground cover in disturbed areas
- Watering of exposed surfaces three times daily
- Watering of all unpaved haul roads three times daily
- Covering all stock piles with tarp
- Reduction of vehicle speed on unpaved roads
- Post signs on-site limiting traffic to 15 miles per hour or less
- Sweep streets adjacent to the project site at the end of the day if visible soil material is carried over to adjacent roads
- Cover or have water applied to the exposed surface of all trucks hauling dirt, sand, soil, or other loose materials before leaving the site
  to prevent dust from impacting the surrounding areas
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads to wash off trucks and any equipment leaving the site for each trip

MM4.1-7 The developer must require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, be turned off when not in use for more than 30 minutes. Diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds must be turned off when not in use for more than 5 minutes. Contract specifications must be included in the proposed project construction documents, which must be approved by the City of El Segundo before grading permits are issued.

MM4.1-8 The developer must require by contract specifications that construction parking be configured to minimize traffic interference during the construction period and, therefore, reduce idling of traffic. Contract specifications must be included in the proposed project construction documents, which must be approved by the City of El Segundo before grading permits are issued.

MM4.1-9 The developer must require by contract specifications that temporary traffic controls are provided, such as a flag person, during all phases of construction to facilitate smooth traffic flow. Contract specifications must be included in the proposed project construction documents, which must be approved by the City of El Segundo before grading permits are issued.

MM4.1-10 The developer must require by contract specifications that construction activities that would affect traffic flow on the arterial system be scheduled to off-peak hours (9:00 AM to 4:00 PM). Contract specifications must be included in the proposed project construction documents, which must be approved by the City of El Segundo before grading permits are issued.

MM4.1-11 The developer must require by contract specifications that dedicated on-site and off-site left-turn lanes on truck hauling routes be utilized for movement of construction trucks and equipment on site and off site to the extent feasible during construction activities. Contract specifications must be included in the proposed project construction documents, which must be approved by the City of El Segundo before grading permits are issued.

MM4.1-12 The developer must require by contract specifications that trackout roads will meet SCAQMD Table XI-C standards to achieve a 46% reduction in PM<sub>10</sub>. The construction contractor must install gravel bed trackout apron (3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) to reduce mud/dirt trackout from unpaved truck exit routes. Contract specifications must be included in the proposed project construction documents, which must be approved by the City of El Segundo before grading permits are issued.

MM4.1-13 When the City issues building or grading permits, whichever is issued earlier, the developer must notify, by mail, owners and occupants of all developed land uses within 1,000 feet of a project site within the Specific Plan providing a schedule for major construction activities that will occur through the duration of the construction period. In addition, the notification will include the identification and contact number for a community liaison and designated construction manager that would be available on site to monitor construction activities. The construction manager is responsible for complying with all project requirements related to PM<sub>10</sub> generation. The construction manager will be located at the on-site construction office during construction hours for the duration of all construction activities. Contract information for the community liaison and construction manager will be located at the construction office, City Hall, the police department, and a sign on-site.

MM4.1-14 The developer must require by contract specifications that the architectural coating (paint and primer) products used would have a VOC rating that reduces VOC content by 15 percent or more. Contract specifications must be included in the proposed project construction documents, which must be approved by the City of El Segundo before grading permits are issued.

MM4.1-15 The developer must require by contract specifications that materials that do not require painting be used during construction to the extent feasible. Contract specifications must be included in the proposed project construction documents, which must be approved by the City of El Segundo before grading permits are issued.

MM4.1-16 The developer must require by contract specifications that pre-painted construction materials be used to the extent feasible. Contract specifications must be included in the proposed project construction documents, which must be approved by the City of El Segundo before grading permits are issued.

# **Biological Resources**

N/A

# **Cultural Resources**

N/A

N/A

## Geology/Soils

N/A

#### **Greenhouse Gas Emissions**

MM4.2-1 Before the City issues a building permit, the developer must demonstrate that the design of the proposed buildings or structures meets or exceeds the most recent Title 24 Energy Efficiency Standards, subject to review by the Planning and Building Safety Department. Documentation of compliance with this measure must be provided to the Planning and Building Safety Department for review and approval before the City issues the permit. Installation of the identified design features or equipment will be confirmed by the Planning and Building Safety Department before it issues a certificate of occupancy. The following design features should be considered by the developer as a way to achieve Title 24 Energy Efficiency Standards compliance in excess of the minimum requirement:

- Increase in insulation such that heat transfer and thermal bridging is minimized
- Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption
- Incorporate dual-paned or other energy efficient windows
- Incorporate energy efficient space heating and cooling equipment
- Incorporate energy efficient light fixtures
- Incorporate energy efficient appliances
- Incorporate energy efficient domestic hot water systems
- Incorporate solar panels into the electrical system as feasible
- Incorporate cool roofs/light-colored roofing
- Or incorporate other measures that will increase the energy efficiency of building envelope in a manner that when combined with the other options listed above exceeds current Title 24 Energy Efficiency Standards by a minimum of 20 percent

MM4.2-2 Before the City issues a building permit, the developer must provide a landscape plan that includes shade trees around main buildings, particularly along southern elevations where practical, and will not interfere with constraints. Documentation of compliance with this measure must be provided to the Planning and Building Safety Department for review and approval.

MM4.2-3 All showerheads, lavatory faucets, and sink faucets within the residential units, and where feasible within non-residential developments, must comply with the California Energy Conservation flow rate standards.

MM4.2-4 Low-flush toilets must be installed within all Congregate Care units as specified in Health and Safety Code Section 17921.3.

MM4.2-5 The developer must ensure that landscaping of common areas for the proposed project uses drought-tolerant and smog-tolerant trees, shrubs, and groundcover to ensure long-term viability and to conserve water and energy.

MM4.2-6 The developer must ensure that the landscape plan for the proposed project includes drought-resistant trees, shrubs, and groundcover within the parking lot and perimeter.

MM4.2-7 The developer must ensure that designs for the proposed project include all illumination elements to have controls to allow selective use as an energy conservation measure.

MM4.2-8 Before the City issues any certificate of occupancy, the developer must demonstrate that the proposed projects' interior building lighting supports the use of compact fluorescent light bulbs or equivalently efficient lighting to the satisfaction of the Planning and Building Safety Department.

MM4.2-9 The developer must consider providing preferential parking spaces for ultra-low-emission vehicles and alternative fueled vehicles to encourage the use of alternative fuels and ultra-low-emission vehicles. Documentation of compliance with this measure must be provided to the Planning and Building Safety Department for review and approval.

MM4.2-10 Before the City issues a building permit, the developer must demonstrate that the proposed project is designed to incorporate exterior storage areas for recyclables and green waste and adequate recycling containers located in public/common areas. Installation of the identified design features or equipment will be reviewed and approved by the Planning and Building Safety Department before the City issues a certificate of occupancy.

MM4.2-11 All common-area irrigation areas for the proposed project must consider systems that are capable of being operated by a computerized irrigation system that includes an on-site weather station/ET gage capable of reading current weather data and making automatic adjustments to independent run times for each irrigation valve based on changes in temperature, solar radiation, relative humidity, rain, and wind. In addition, the computerized irrigation system must also consider the ability to be equipped with flow-sensing capabilities, thus automatically shutting down the irrigation system in the event of a mainline break or broken head. These features will assist in conserving water, eliminating the potential of slope failure due to mainline breaks, and eliminating over-watering and flooding due to pipe and/or head breaks. Documentation of compliance with this measure must be provided to the Planning and Building Safety Department for review and approval.

MM4.2-12 The developer must, where feasible, incorporate passive solar design features into the buildings, which may include roof overhangs or canopies that block summer shade, but that allow winter sun, from penetrating south facing windows.

#### Hazards/Hazardous Materials

MM HAZ-4 To ensure adequate access for emergency vehicles when construction activities would result in temporary lane or roadway closures, the project developer must consult with the City of El Segundo Police and Fire Departments to disclose temporary lane or roadway closures and alternative travel routes. The project developer will be required to keep a minimum of one lane in each direction free from encumbrances at all times on perimeter streets accessing the project site. In the event any full road closure is required, the project developer's contractor must coordinate with the City of El Segundo Police and Fire Departments to designate proper detour routes and signage to appropriate proper access routes.

## Hydrology/Water Quality

N/A

## Land Use/Planning

N/A

## **Mineral Resources**

N/A

## Noise

MM4.3-1 The developer's contractor must refrain from engaging in all construction-related activities, including the delivery of construction materials, the loading and unloading of construction equipment, starting the engine ignition, and the repair and servicing of construction equipment and vehicles between the hours of 6:00 PM and 7:00 AM Monday through Saturday, or at any time on Sunday or a federal holiday. Construction noise levels must not exceed the noise and vibration standard set in El Segundo Municipal Code Section 7-2-10(D) and Section 7-2-4(C). If construction activities result in the generation of noise that exceeds the noise and vibration standards set forth by the City of El Segundo, a noise permit must be obtained from the City of El Segundo before the commencement of any construction activities.

MM4.3-2 The developer's construction contracts must require implementation of the following construction best management practices (BMPs) by all construction contractors and subcontractors working in or around the project site to reduce construction noise levels:

- Not less than 10 days before the start of construction, the developer must mail a written notification to owners and occupants of all developed properties within 1,000 feet of the project site. The notification must provide a schedule of major construction activities that will occur throughout the duration of the construction period. In addition, the notification must include the identity and contact number of a designated community liaison and designated construction manager who will be available on site to monitor construction activities during regular working hours. The construction manager will be located at the on-site construction office during construction hours for the duration of all construction activities. Contact information for the community liaison and construction manager will be posted on the exterior of the construction office or trailer at the construction site, at City Hall, and at the City's Police Department. The notification must also include the permitted hours of operation and all relevant information regarding limitations on noise-generating activities.
- The developer and its contractors and subcontractors must ensure that construction equipment is properly muffled according to industry standards or as required by the Planning and Building Safety Department, whichever is the more stringent.
- The developer and its contractors and subcontractors must place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible, to the satisfaction of the Planning and Building Safety Department.
- The developer and its contractors and subcontractors must implement noise attenuation measures to the extent feasible, which may include, but are not limited to, noise barriers or noise blankets to the satisfaction of the Planning and Building Safety Department.

MM4.3-3 The developer's contracts with its construction contractors and subcontractors must include the requirement that construction staging areas, construction worker parking and the operation of earthmoving equipment within the project site, are located as far away from vibration- and noise-sensitive sites as possible. Contract provisions incorporating the above requirements must be included as part of the project's construction documents, which must be reviewed and approved by the Planning and Building Safety Department.

MM4.3-4 The developer must require by contract specifications that heavily loaded trucks used during construction must be routed away from residential streets to the extent possible. Contract specifications must be included in the proposed project construction documents, which must be reviewed by the City before grading permits are issued.

MM4.3-5 Residential units must be designed and constructed to ensure that interior noise levels from exterior transportation sources—including aircraft and vehicles on adjacent roadways—cannot exceed 45 dBA CNEL. In order to ensure that all dwelling units achieve an adequate noise reduction to achieve an interior noise level of 45 dBA CNEL, the following features must be included in the building design and construction of all dwelling units: (1) upgraded dual-glazed windows, (2) mechanical ventilation/air conditioning, (3) exterior wall/roof assemblies free of cut-outs or openings, and (4) ceiling insulation in the top floor of each building to reduce aircraft noise by at least 20 dBA. Before a building permit is issued, the developer must submit architectural plans and a detailed acoustical analysis study prepared by a qualified acoustical consultant demonstrating that interior noise levels in all residential units would be 45 dBA CNEL or less to the Planning and Building Safety Department for review and approval.

MM4.3-6 The ESUSD must make as a condition of sale of the proposed project site, that the future owner express acknowledgement and confirmation of the continuing applicability of the existing aviation easement for noise, vibrations, and fumes over the proposed project site property.

MM4.3-7 In accordance with the Business and Professions Code and Civil Code each prospective purchaser of residential property within the Project must be notified as follows:

NOTICE OF AIRPORT IN VICINITY—This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (e.g., noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

In addition, although not required by Civil Code Sections 1103, et seq., each prospective tenant of leased residential property within the Project must also be notified as described above.

Population/Housing		
N/A		
Public Services		
N/A		

## Recreation

N/A

# Transportation/Traffic

MM HAZ-4 To ensure adequate access for emergency vehicles when construction activities would result in temporary lane or roadway closures, the project developer must consult with the City of El Segundo Police, Fire, and Public Works Departments to disclose temporary lane or roadway closures and alternative travel routes. The project developer will be required to keep a minimum of one lane in each direction free from encumbrances at all times on perimeter streets accessing the project site. In the event any full road closure is required, the project developer's contractor must coordinate with the City of El Segundo Police, Fire, and Public Works Departments to designate proper detour routes and signage to appropriate proper access routes.

## **Utilities/Service Systems**

N/A