

Initial Study

**Elysian Reservoir
Water Quality Improvement Project**



Los Angeles Department of Water and Power
Environmental Services
111 North Hope Street, Room 1044
Los Angeles, California 90012

June 20, 2008

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SECTION 1

PROJECT DESCRIPTION

1.1 Overview of the Project

To help ensure the quality, reliability, and stability of the City of Los Angeles drinking water supply, and to ensure compliance with updated United States Environmental Protection Agency (EPA) water quality standards, the Los Angeles Department of Water and Power (LADWP) proposes to replace the uncovered Elysian Reservoir with two concrete tanks, which would be sited within the existing reservoir and buried (proposed project). These tanks would provide an equal amount of potable water storage (55 million gallons [MG]) as is available in the existing reservoir. The area atop the tanks would be developed for recreational uses. A shallow wildlife pond of not less than 0.5-acres would also be created at the northern end of the project site, but not atop the tanks. After completion of project construction, the site would be open to the public as part of Elysian Park. Other than facilities related to water storage and transmission, the site would be maintained and operated by the Los Angeles Department of Recreation and Parks (LADRP).

1.2 California Environmental Quality Act

The California Environmental Quality Act (CEQA) applies to proposed projects initiated by, funded by, or requiring discretionary approvals from state or local government agencies. The proposed changes at Elysian Reservoir constitute a project as defined by CEQA (California Public Resources Code §§21000 et seq.). LADWP is the lead agency responsible for compliance with CEQA because pursuant to *CEQA Guidelines* §15367, “Lead Agency’ means the public agency which has the principal responsibility for carrying out or approving a project.”

As the lead agency for this project, LADWP must complete an environmental review to determine if the proposed project would create significant adverse environmental impacts. To fulfill the purpose of CEQA, this Initial Study has been prepared to assist in making that determination. Based on the nature and scope of the proposed project, the evaluations contained in the Initial Study environmental checklist (included herein), and the comments received from agencies and members of the public during review of the Notice of Preparation (NOP) of an Environmental Impact Report (EIR), factors that have potential to involve significant adverse environmental impacts will be determined. Such factors will become the focus of more detailed analysis in an EIR to determine the nature and extent of any potential environmental impacts and establish appropriate mitigations for those impacts determined to be significant. Based on the Initial Study analysis and NOP review, factors for which no significant adverse environmental impacts are expected to occur will be eliminated from further evaluation in the EIR. A preliminary evaluation of the potentially affected factors is included in the Initial Study checklist in Section 2.

1.3 Project Location

Elysian Reservoir is located approximately 1.5 miles north of downtown Los Angeles. The Elysian Reservoir property is owned by the City of Los Angeles and operated by LADWP, but it is essentially surrounded by Elysian Park, which is also owned by the City of Los Angeles and

operated by LADRP. It is the oldest and second largest park in the City of Los Angeles. The reservoir itself lies northwest of and immediately adjacent to the Pasadena Freeway (State Route [SR] 110), between Dodger Stadium to the southwest and the Golden State Freeway (Interstate [I] 5) to the northeast. Elysian Reservoir is accessed off of Grand View Drive, which is a road located in the interior of Elysian Park. Figure 1 shows Elysian Reservoir in relation to the region, and Figure 2 shows the vicinity of the reservoir.

1.4 Historical Perspective and Current Operations of Elysian Reservoir

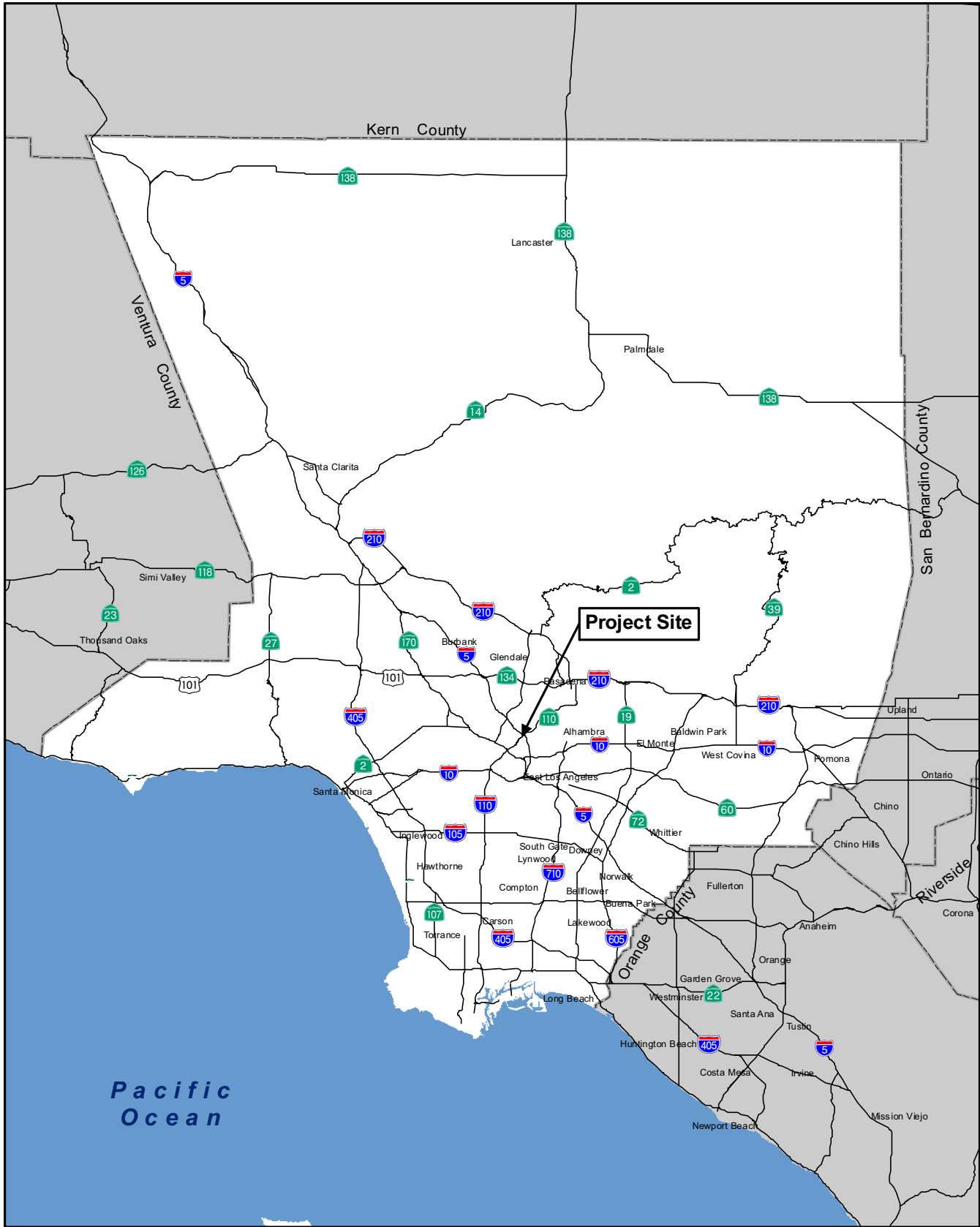
Dating back to the late nineteenth century, property that is located near or within the boundaries of what is now Elysian Park has played a role in the water supply of the City of Los Angeles. In 1869, the privately owned Los Angeles City Water Works Company constructed a reservoir to draw and store water from the adjacent Los Angeles River in Buena Vista Meadows, southeast of the present-day Pasadena Freeway. In 1873, the company built a one-MG reservoir on a hill west of the original reservoir, above present-day Dodger Stadium, at the site of the existing Solano Reservoir. In 1903, shortly after the City of Los Angeles acquired the Water Works Company, the original Elysian Reservoir was constructed at its current location. In 1908, a timber roof was added to the reservoir, and in 1914 the roof was replaced with a structure supported by concrete columns. Although the original reservoir, at 10.5 MG, was considered enormous for its day, by 1940 demand for water in the surrounding area had exceeded the reservoir's capacity. The reservoir was enlarged to a capacity of 55 MG and the downstream slope of the reservoir dam was incorporated into the SR 110 embankment. The high water elevation of the reservoir was raised from 443 feet to 462 feet, providing improved water pressure to the reservoir service area. In June 1943, the present-day Elysian Reservoir was put in service as an uncovered treated water storage facility.

Treated drinking water has been supplied to Elysian Reservoir primarily by pipelines originating at the Los Angeles Aqueduct Filtration Plant (LAAFP) located in Granada Hills and groundwater wells located near the North Hollywood area. In an action unrelated to the proposed project, Elysian Reservoir was recently drained because higher than normal levels of bromate were detected in reservoir water during routine testing. The bromate, a chemical compound that has been linked, when present at elevated levels in laboratory tests, to increased risks of certain types of cancer, is believed to have formed in the open reservoir when bromide contained in the source groundwater interacted with chlorine in the presence sunlight. This is the first time an occurrence like this has been observed. The wells that supplied the groundwater have been removed from service and the reservoir has been cleaned.

Elysian Reservoir serves approximately 285,000 people in the greater Los Angeles area. The service area is approximately 23.8 square miles, including Chinatown, a large portion of Downtown, Echo Park, Boyle Heights, Lincoln Heights, and Mount Washington. The reservoir provides crucial storage capacity that allows for the operational flexibility necessary to meet daily peaks in demand that could not be satisfied long-term through the use of water distribution pipelines alone.

1.5 Existing Facility and Site Description

Elysian Reservoir continues to operate with a storage capacity of 55 MG. It has a maximum depth of 50 feet, a high water elevation of 462 feet, and a surface area of approximately 6 acres at the high water elevation. The reservoir is approximately 900 feet long and approximately 400 feet wide at the maximum width near the dam at the southeastern end, tapering to approximately



Source: California Geospatial Information Library (2003-5)

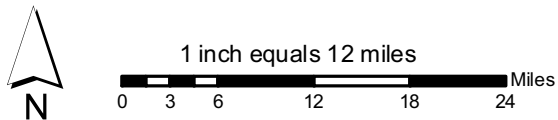


Figure 1
Regional Location Map

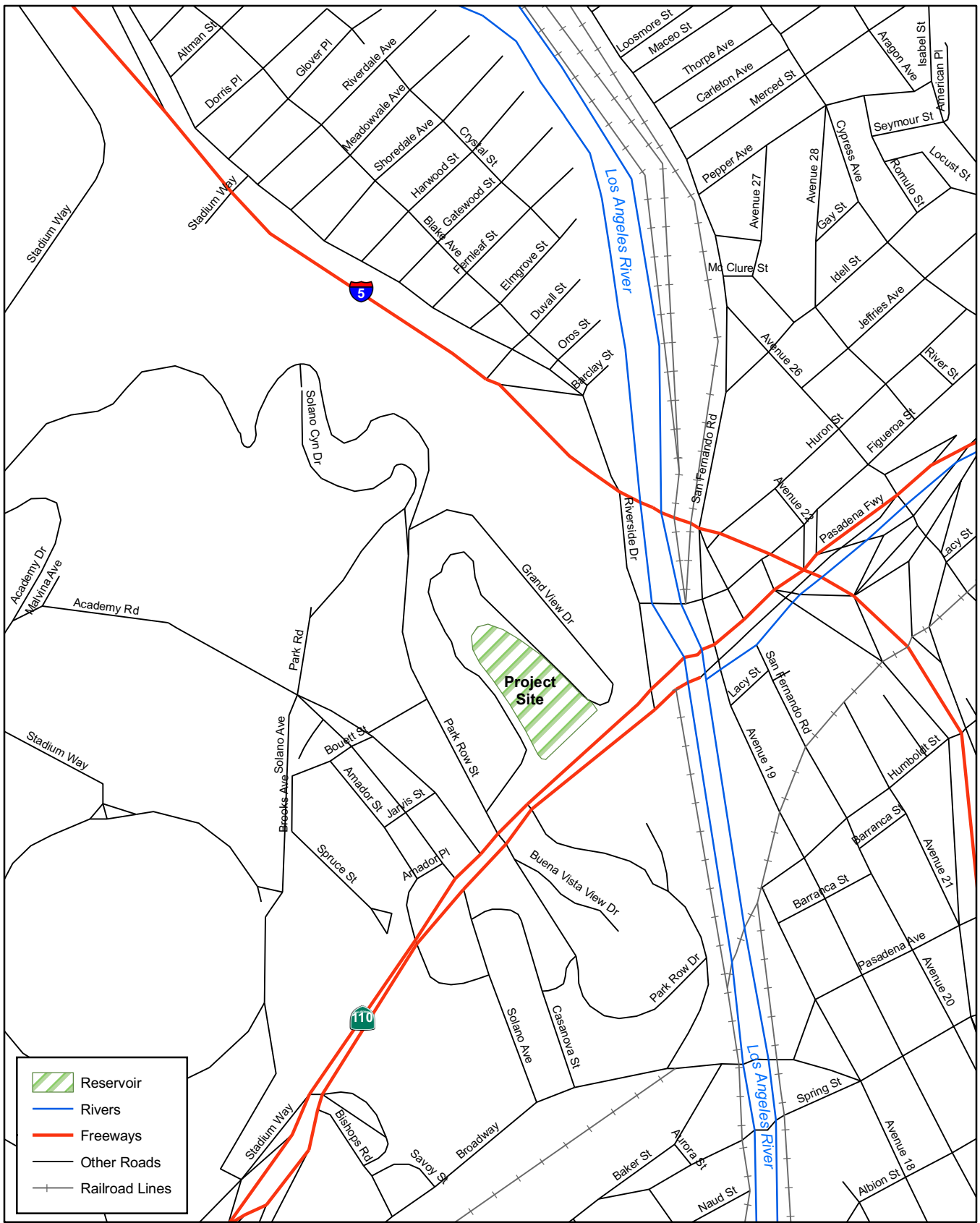


Figure 2
Project Vicinity

170 feet wide near the inlet at the northwestern end. The bottom and sides of the reservoir are paved with asphaltic concrete. A concrete parapet wall approximately 1.5 to 3.0 feet in height is located several feet outside the upper edge of the reservoir side walls. The parapet wall is topped with a 7-foot tall chain link fence that encloses the entire reservoir. An approximately 12- to 16-foot wide paved road is located around the perimeter of the reservoir. The remainder of the 14-acre reservoir property is vegetated. The property is currently segregated from Elysian Park by a chain link fence. Figure 3 shows the Elysian Reservoir site. Along with the surrounding parkland, the Elysian Reservoir land use designation is Open Space. Land uses in the vicinity of the Elysian Park are primarily devoted to single- and multi-family residential uses, with some small-scale commercial uses. Dodger Stadium, also an Open Space land use designation, is located southwest of and adjacent to Elysian Park.

1.6 Project Description

The primary goal of the proposed project is to help improve the quality of the City of Los Angeles drinking water, including compliance with updated EPA water quality standards contained in the Stage 2 Disinfectants and Disinfection Byproducts Rule and the Long Term 2 Enhanced Surface Water Treatment Rule, while at the same time maintaining the water supply system reliability and stability provided by Elysian Reservoir. To accomplish this goal, two buried prestressed concrete storage tanks would be constructed in place of the existing uncovered reservoir to protect the stored water from exposure to microbial pathogens and reduce the application of certain types of disinfectants used to treat the water. The tanks would provide total storage (55 MG) and basic operational capabilities equivalent to the existing Elysian Reservoir. Figure 4 is a conceptual site plan of the proposed project.

Elysian Reservoir would initially be drained by normal consumption through the drinking water distribution system until the water level reached an elevation of 440 feet, which is the lower limit of the normal operating range of the reservoir. Below this elevation, the reservoir water would need to be drained into the storm water system and/or used for irrigation. To maintain the stability of the reservoir dam, the rate at which the water level would be lowered would be carefully controlled. At the controlled rate, the existing storm water structures and system are adequately sized to accommodate the reservoir draining.

An approximately 0.3-acre area adjacent to the north end of the reservoir would be used as a lay down area. Additional lay down areas would be required for construction staging and have yet to be identified. The lay down areas would be required for the duration of project construction. To accommodate construction vehicles and equipment and to ensure public safety, Grand View Drive from Park Row Drive (to the west of the reservoir) to Point Grand View (to the east of the reservoir) would be closed to public access. This road segment essentially surrounds the reservoir. It is located outside the reservoir property but entirely within the boundaries of Elysian Park. Permission from LADRP would be necessary to temporarily close this segment of Grand View Drive.

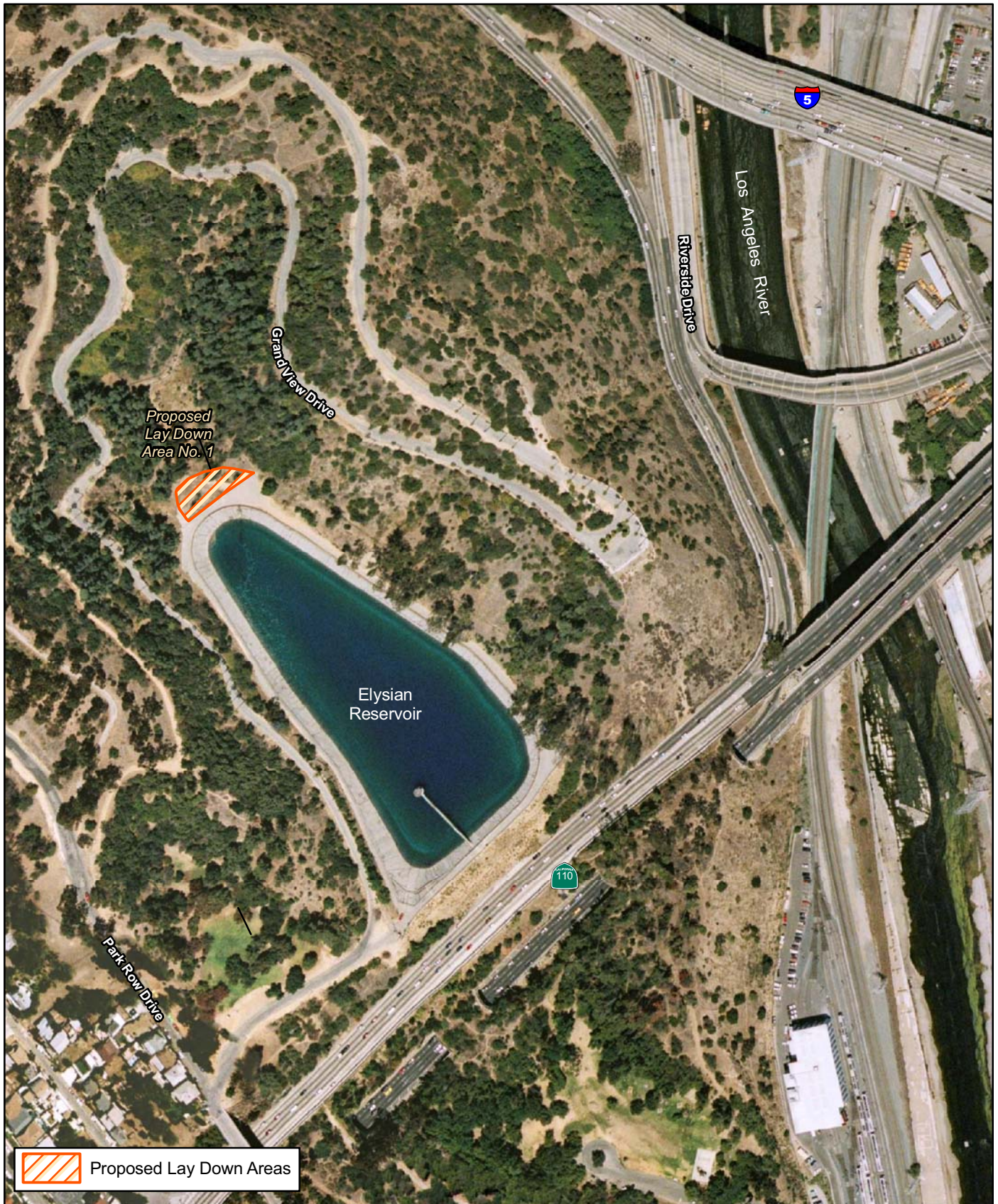
The existing reservoir, including the intake and outlet towers, reservoir sides and bottom, bypass pipeline, portions of the dam, walls, and roads, would then be demolished. The site of the reservoir would be excavated to accommodate the proposed underground tanks, and a new bypass line would be constructed and tied into the existing distribution system. The prestressed concrete tanks would be poured in place, and supply lines, including tank inlet and outlet structures, would be installed. The tanks would be buried, with a maximum of 3 feet of cover over the highest point of the top of the tanks.

In addition to the buried tanks and appurtenant facilities, an existing 36-inch water supply conduit that interconnects the reservoir and the Riverside Trunk Line would be replaced with a 54- to 66-inch line. This new conduit would provide improved distribution system capacity, which would otherwise be limited based on the diameter of the existing line. The new conduit would connect to the Riverside Trunk Line south of the I-5 bridge crossing of the Los Angeles River, approximately 0.25 miles northeast of the reservoir. This work would be located primarily within the boundaries of Elysian Park, but largely outside the Elysian Reservoir property boundaries. It would entail primarily subterranean tunneling and construction, but some areas of surface disturbance would be required to facilitate construction operations, including in the area of Riverside Drive. This conduit upgrade will eventually be required, and it would be undertaken as a component of the proposed project to minimize additional future disruptions of service and to avoid potential damage to the newly constructed underground storage tank inlet structures.

A shallow, not less than 0.5-acre wildlife pond would be constructed at the north end of the Elysian Reservoir property, north of the existing reservoir. The area above the buried tanks would be developed according to a program established by LADRP to meet community recreation needs. This program is yet to be defined, but may include passive or active recreation uses. Active recreation may include several soccer and/or baseball/softball fields and other active recreation facilities including a concession stand and athletic equipment storage building and a playground area. Passive recreation may include trails and outdoor fitness areas. For active or passive recreation, a picnic area, restrooms, roads, and a parking lot, a small maintenance yard, and trash enclosures would be included. The site would be appropriately landscaped, including necessary irrigation systems. For the purposes of the EIR analysis, the development of an active recreation facility will be considered because such a facility would, in relative terms, possess the greatest potential to create environmental impacts.

After the above construction is complete, the existing perimeter fence surrounding the Elysian Reservoir property would be removed, providing public access to the site. The Elysian Reservoir property would remain under the ownership of LADWP, but the recreation function and the property maintenance (other than the water supply and distribution facilities) would be the responsibility of LADRP. Recreation functions would be conducted during daylight hours only, and no night lighting other than minimal parking lot security lighting would be provided.

The total duration of construction would be approximately four to five years. Because of the limited area available within the Elysian Reservoir property, the material excavated from the reservoir to accommodate the tanks would need to be hauled off site and stockpiled until required to bury the tanks. A stockpile area has not yet been identified, but it is anticipated that the cut and fill quantities for the proposed project would ultimately be balanced (i.e., the amount removed during excavation would be used to bury the tanks). Based on the trips related to hauling the excavated material, the delivery of concrete for the tanks, and the delivery of other materials and supplies necessary for construction of the tanks and the recreation area, it is anticipated that the proposed project may involve a total of approximately 30,000 truck trips to the site. In addition, there would be daily worker commute trips to the site. After completion of construction, operation of the water storage facilities on site would not generate additional traffic. However, significant additional traffic may be generated in association with the public recreation use of the site, depending on the actual program established for the recreation area (i.e., passive or active).



Source: Globexplorer 2007

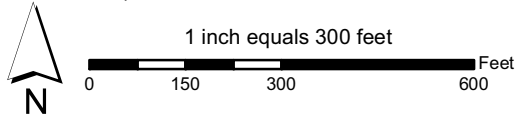


Figure 3
Elysian Reservoir Site

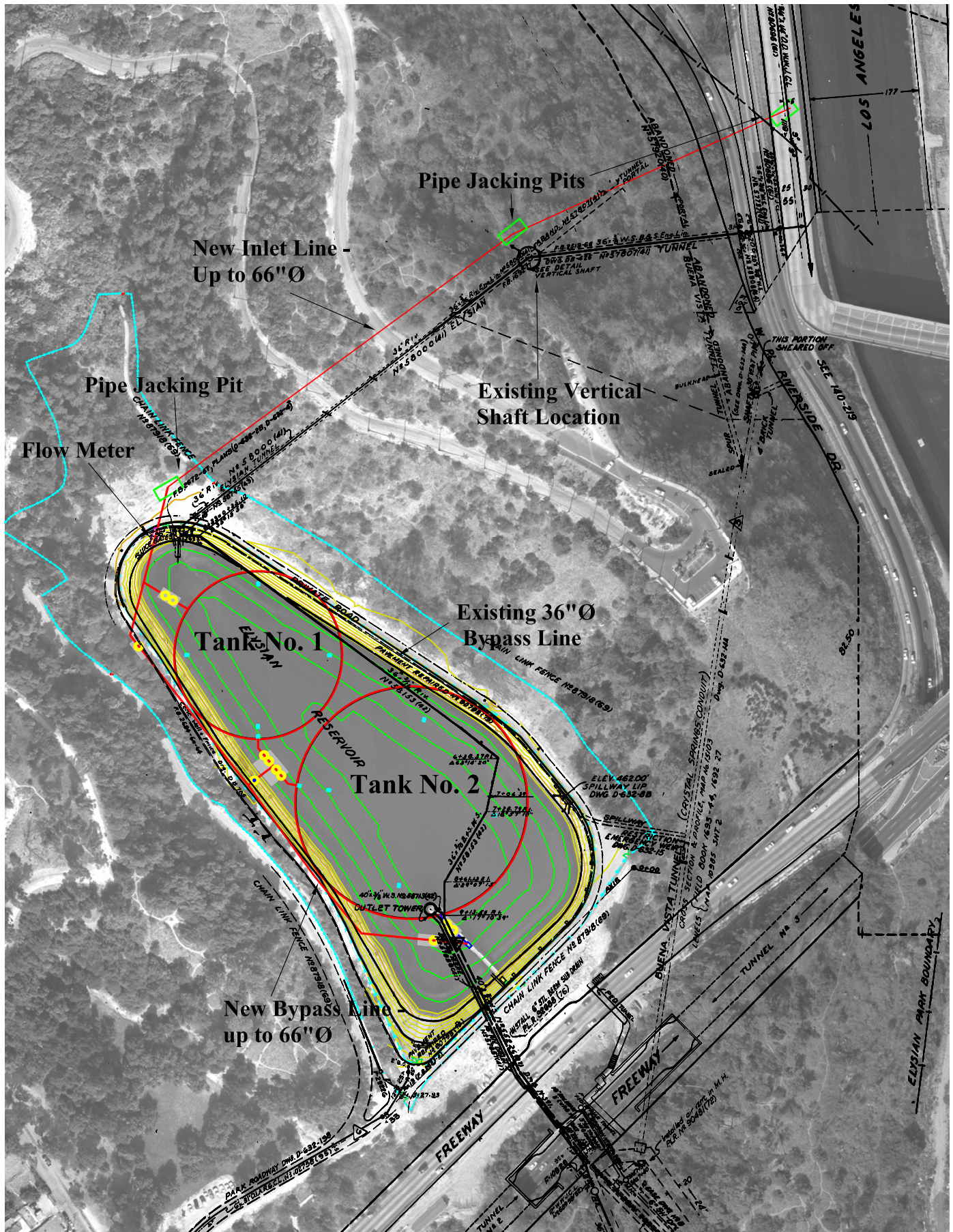


Figure 4
Proposed Project Conceptual Plan

1.7 Land Use Consistency

City of Los Angeles Municipal Code Section 12.04.05 states that the purpose of the Open Space (OS) zone is to provide regulation for publicly owned land in order to implement the City's adopted General Plan. No building, structure, or land shall be used and no building or structure shall be erected, moved onto the site, enlarged or maintained, except as specified. The primary purpose of this zone is to protect and preserve natural resources and natural features of the environment; to provide outdoor recreation opportunities and advance the public health and welfare; to enhance environmental quality; to encourage the management of public lands in a manner which protects environmental characteristics; and to encourage the maintenance of open space uses on all publicly owned park and recreation land, and open space public land which is essentially unimproved. Uncovered public water supply reservoirs and accessory uses that are incidental to the operation and continued maintenance of such reservoirs are permitted within the OS zone. The proposed project would remove the existing open reservoir and replace it with buried tanks and provide a new recreational area as part of Elysian Park. Operation of the recreation area may require construction of accessory structures, such as restroom facilities, concession stand, and equipment storage building. These facilities are conditionally permitted accessory structures within the OS zone, under the provisions of a Conditional Use Permit (CUP). The proposed project would therefore be consistent with the OS zone.

1.8 Required Permits and Approvals

Numerous approvals and/or permits would be required to implement the Elysian Reservoir Water Quality Improvement project. The environmental documentation for the proposed project would be used to facilitate compliance with federal and state laws and the granting of permits by various state and local agencies having jurisdiction over one or more aspects of the proposed project. These approvals and permits may include the following.

City of Los Angeles Department of Water and Power

- Certification by the Board of Commissioners that the EIR was prepared in accordance with CEQA and other applicable codes and guidelines
- Approval by the Board of Commissioners of the proposed project

City of Los Angeles Department of Recreation and Parks

- Approval by the Board of Commissioners of an agreement between LADWP and LADRP for the lease, operations, maintenance, and security for the recreation aspects of the reservoir property.
- Approval to temporarily close and use a segment of Grand View Drive in Elysian Park during project construction.

City of Los Angeles Department of Public Works, Bureau of Engineering

- Excavation Permits

City of Los Angeles Department of Transportation

- Approval to close a portion of Riverside Drive

City of Los Angeles Department of Building and Safety

- Grading Permit
- Haul Route Permits
- Building Permit

City of Los Angeles Department of City Planning

- Conditional Use Permit

City of Los Angeles Department of Public Works, Flood Control

- Discharge Permit for construction dewatering and hydrostatic test water discharge in storm system and channel

State of California Department of Water Resources, Division of Safety of Dams

- Application for approval of plans and specifications for the removal of a dam and reservoir

State of California Department of Transportation (Caltrans)

- Encroachment Permit for work in the vicinity of I-5 and SR 110

State of California Department of Industrial Relations, Division of Occupational Safety and Health, Mining and Tunneling Unit

- Underground Classification Permit for tunneling and jacking locations

State of California Los Angeles Regional Water Quality Control Board

- National Pollution Discharge Elimination System (NPDES) Permit for Construction Dewatering
- NPDES Permit for Hydrostatic Test Water Discharge

SECTION 2 INITIAL STUDY CHECKLIST

The following discussion of potential environmental effects was completed in accordance with §15063(d)(3) of the *CEQA Guidelines* (2008) to determine if the proposed project may have a significant effect on the environment.

A brief explanation is provided for all determinations in Section 3, *Environmental Impact Assessment*, of this document. A "No Impact" or "Less than Significant Impact" determination is made when the proposed project would not have any impact or would not have a significant effect on the environment for that issue area based on a project-specific analysis.

Project Title:

Elysian Reservoir Water Quality Improvement Project

Lead Agency Name and Address:

Los Angeles Department of Water and Power
Environmental Services
111 North Hope Street, Room 1044
Los Angeles, CA 90012

Contact Person and Phone Number:

Sarah Easley Perez
Environmental Specialist
Los Angeles Department of Water and Power
(213) 367-1276

Project Sponsor's Name and Address:

Los Angeles Department of Water and Power
Water Engineering and Technical Services
111 North Hope Street
Los Angeles, CA 90012

Project Location:

Elysian Reservoir is located off of Grand View Drive in Elysian Park, north of downtown Los Angeles.

Council District:

District 1

Neighborhood Council Districts:

Greater Echo Park Elysian
Historic Cultural

General Plan Designation:

The proposed project site is designated as Open Space in the City of Los Angeles General Plan. The proposed project site is located within the Silver Lake-Echo Park-Elysian Valley Community Plan area.

Zoning:

[Q]OS-1XL (Open Space)

Description of Project:

To help ensure the quality, reliability, and stability of the City of Los Angeles drinking water supply, LADWP proposes to replace the uncovered Elysian Reservoir with two concrete tanks, which would be sited within the existing reservoir and buried (proposed project). These tanks would provide an equal amount of potable water storage (55 MG) as is available in the existing reservoir. The area atop the tanks would be developed as a recreation area by covering the tanks with soil and providing landscaping and irrigation, as appropriate. A shallow wildlife pond of not less than 0.5-acres would be created at the northern end of the project site, but not atop the tanks. After completion of project construction, the site would be open to the public as part of Elysian Park. The recreation area would be operated and maintained by LADRP.

Surrounding Land Uses and Setting:

The approximately 14-acre Elysian Reservoir property is located within Elysian Park. Along with the surrounding parkland, the reservoir land use designation is Open Space. Land uses in the vicinity of the Elysian Park are primarily devoted to single- and multi-family residential uses, with some small-scale commercial uses. Dodger Stadium, also an Open Space land use designation, is located southwest of and adjacent to Elysian Park. The reservoir property is located northwest of and immediately adjacent to the SR 110, and the downstream slope of the reservoir dam is incorporated into the freeway embankment. The reservoir itself has a surface area of approximately 6 acres at the high water elevation. The reservoir is surrounded by a paved road and vegetation. The reservoir property is segregated from Elysian Park by a chain link fence.

Agencies That May Have an Interest in the Proposed Project:

CEQA Lead Agency

- Los Angeles Department of Water and Power

Responsible/Trustee Agencies

- Los Angeles Department of Recreation and Parks
- California Department of Water Resources, Division of Safety of Dams
- California Division of Occupational Safety and Health, Mining and Tunneling Unit

- Los Angeles Regional Water Quality Control Board

Reviewing Agencies

- California Department of Transportation
- California Department of Public Health
- City of Los Angeles Department of City Planning
- City of Los Angeles Department of Public Works, Bureau of Engineering
- City of Los Angeles Department of Public Works, Flood Control
- City of Los Angeles Fire Department
- City of Los Angeles Police Department
- City of Los Angeles Department of Transportation
- City of Los Angeles Department of Building and Safety

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the Environmental Impacts discussion in Section 3.

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Hazards &
Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use Planning |
| <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Public Services | <input checked="" type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance | |

DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an environmental impact report is required.
- I find that the proposed project may have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Charles C. Holloway
Signature
Charles Holloway
Manager of Environmental Assessment
Los Angeles Department of Water and Power

6/17/08
Date

	Potentially Significant Impact	Less than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	X			
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	X			
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?			X	
e. Create a new source of substantial shade or shadow that would adversely affect daytime views in the area?				X
II. AGRICULTURE RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b. Conflict with existing zoning for agricultural use, or a Williamson act contract?				X
c. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?				X
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	X			
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	X			
d. Expose sensitive receptors to substantial pollutant concentrations?	X			
e. Create objectionable odors affecting a substantial number of people?			X	

	Potentially Significant Impact	Less than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	X			
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	X			
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	X			
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	X			
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	X			
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
V. CULTURAL RESOURCES. Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	X			
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	X			
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	X			
d. Disturb any human remains, including those interred outside of formal cemeteries?			X	
VI. GEOLOGY AND SOILS. Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	

	Potentially Significant Impact	Less than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?			X	
b. Result in substantial soil erosion, loss of topsoil, or changes in topography or unstable soil conditions from excavation, grading, or fill?			X	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
VII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

	Potentially Significant Impact	Less than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste discharge requirements?			X	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?			X	
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?				X
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f. Otherwise substantially degrade water quality?			X	
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?				X
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j. Inundation by seiche, tsunami, or mudflow?				X
IX. LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?			X	
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

	Potentially Significant Impact	Less than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
X. MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
XI. NOISE. Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	X			
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	X			
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	X			
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
XII. POPULATION AND HOUSING. Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
XIII. PUBLIC SERVICES.				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?				X

	Potentially Significant Impact	Less than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Police protection?				X
iii) Schools?				X
iv) Parks?				X
v) Other public facilities?				X
XIV. RECREATION.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	X			
XV. TRANSPORTATION/TRAFFIC. Would the project:				
a. Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	X			
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	X			
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e. Result in inadequate emergency access?			X	
f. Result in inadequate parking capacity?	X			
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
XVI. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X

	Potentially Significant Impact	Less than Significant Impact After Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g. Comply with federal, state, and local statutes and regulations related to solid waste?				X
XVII. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X			
b. Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.	X			
c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	X			

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SECTION 3 ENVIRONMENTAL IMPACT ASSESSMENT

INTRODUCTION

The following discussion addresses impacts to various environmental resources, per the Initial Study checklist questions contained in Appendix G of the *CEQA Guidelines*, as summarized above in Section 2.0, *Initial Study Checklist*. It was prepared in accordance with §15070 and §15071 of the *CEQA Guidelines* (2008).

I. AESTHETICS

Would the project:

a) Have a substantial adverse effect on a scenic vista?

Potentially Significant Impact. The proposed project site is located on the eastern edge of Elysian Park and is segregated from the park by a chain link fence. There are no residential or other uses with views of the reservoir. Minimal views are provided from the southwest corner of the reservoir property at the security gate as seen through a chain link fence. Due to the lower relative elevation of the freeway, no views of the reservoir are offered from the SR 110. Public views of a portion of the reservoir are available from Grand View Point, a scenic overlook within the park boundaries that provides views of downtown Los Angeles. The current view is of the open reservoir in the middle ground and the buildings of downtown Los Angeles in the background. Partial views of the reservoir are also offered along Grand View Drive. The proposed water quality improvement project involves replacing the reservoir with underground tanks. Following construction of the buried concrete tanks, the project site would be developed for recreational use. The proposed project would alter the views from the scenic overlook above the site by removing the open reservoir from the visual environment. As such, the proposed project could create potentially significant impacts to a scenic vista. This issue will be examined further in the EIR.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. Roadways that provide scenic views within and around the City of Los Angeles are classified by the County of Los Angeles and State of California Department of Transportation (Caltrans) as officially designated scenic highways or corridors. The closest officially designated scenic highway to the proposed project is SR 110, the Arroyo Seco Parkway, which is located approximately 0.5 miles northeast of the project site to the east of I-5. The reservoir is not visible from the Arroyo Seco Parkway because terrain, intervening development, and distance. There are no locally designated scenic roads within the project vicinity. Thus, no impact would occur, and no further study of this issue is required.

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

Potentially Significant Impact. The proposed project would involve replacing the reservoir with two underground tanks and developing the site for recreational use. The surface of the reservoir is visible from the Grand View Point overlook, located within Elysian Park, above the reservoir and along Grand View Drive. Removing the reservoir would eliminate views of open water. As such, the proposed project could potentially degrade the existing visual character or quality of the site and its surroundings. This issue will be examined further in the EIR.

d) Create new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The proposed project would involve replacing the existing reservoir with underground tanks. The site would be developed for recreational use. During the construction phase, all activities would occur during daylight hours; no lighting would be used. During operation of the proposed project, only minimal lighting for parking lot security at the recreation area would be provided. This lighting would be consistent with other parking lot lighting located in Elysian Park. All lighting would be focused onto the site and downward so as not to shed light on adjacent areas. No residential uses are located immediately adjacent to the proposed parking area. As such, lighting levels at the closest residences would remain unchanged. There would be no significant sources of light or glare that would adversely affect day or nighttime views in the area. The impact would be less than significant, and no further study of this issue is required.

e) Create new source of substantial shade and shadow that would adversely affect daytime views in the area?

No Impact. The proposed project would involve replacing the existing reservoir with underground tanks and developing the site for recreational use. The only aboveground structures, depending on the nature of the recreation development, would be restroom facilities, a concession stand, and equipment storage building. As such, there is no potential to create significant shade and shadow. No impact would occur, and no further study of this issue is required.

II. AGRICULTURE RESOURCES

Would the project:

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

No Impact. See discussion in item c, below.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. See discussion in item c, below.

c) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use?

No Impact. There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) on or in the vicinity of the proposed project site. Therefore, there would be no potential for construction or operation of the proposed project to convert farmland, either directly or indirectly, to non-agricultural use. Elysian Reservoir is located within Elysian Park in central Los Angeles in an area that is zoned [Q]OS-1XL (Open Space). The proposed project is located at an existing urban area on a site owned by the City of Los Angeles and operated by LADWP and used for drinking water storage. The project site not zoned for agricultural purposes and is not used for agricultural purposes. No Williamson Act contract applies to the site. Thus, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract. Replacing the reservoir with underground tanks would not result in the conversion of farmland to non-agricultural use. No impact would occur, and no further study of this issue is required.

III. AIR QUALITY

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan (e.g., the SCAQMD Plan or Congestion Management Plan)?

No Impact. The project site is located within the South Coast Air Basin (Basin), which is bounded by the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the Pacific Ocean to the south and west. The air quality in the Basin is managed by the South Coast Air Quality Management District (SCAQMD). The Basin has a history of recorded air quality violations and is an area where both state and federal ambient air quality standards are exceeded. Because of the violations of the California Ambient Air Quality Standards (CAAQS), the California Clean Air Act requires triennial preparation of an Air Quality Management Plan (AQMP). The AQMP analyzes air quality on a regional level and identifies region-wide attenuation methods to achieve the air quality standards, including: regulations for stationary-source polluters; facilitation of new transportation technologies, such as low-emission vehicles; and capital improvements, such as park-and-ride facilities and public transit improvements. The most recently adopted plan is the 2007 AQMP, adopted on June 11, 2007. This plan is the SCAQMD's portion of the State Implementation Plan (SIP).

The SCAQMD accepts that southern California is growing. As such, the AQMP accommodates population growth and transportation projections based on the forecasts made by the Southern California Association of Governments (SCAG). Projects that are consistent with employment and population forecasts are considered by the SCAQMD to be consistent with the AQMP. The proposed project involves replacing a reservoir with underground tanks and developing the site for recreational use. Covering or burying the reservoir is required by the EPA to meet water quality regulations. The storage capacity of the reservoir and the service area would not change. The proposed project would not involve new residential or other uses that could generate population growth. No population growth would be generated as a result of the proposed project. Therefore, the project is consistent

with the growth expectations for the region, and it would not conflict with the AQMP. No impact would occur, and no further study of this issue is required.

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

Potentially Significant Impact. Demolition of the existing reservoir and construction of the underground tanks would generate short-term construction emissions. Emissions would be generated from demolition, site grading, tank construction, and worker vehicle exhaust. Construction activities would be short-term in nature and would not add to long-term air quality degradation. However, these emissions may exceed the SCAQMD daily emissions thresholds. Temporary construction emissions would, therefore, be considered potentially significant and will be analyzed further in the EIR.

Following construction of the underground tanks, no additional vehicle trips to and from the project site would be generated in relation to the water storage function, and the operation of the buried tanks would not require the use of pollutant-generating equipment. However, depending on the type of recreation developed at the site, additional vehicle trips beyond those currently generated by Elysian Park may occur. As such, operational air quality impacts would be considered potentially significant and will be analyzed further in the EIR.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Potentially Significant Impact. The project site is located in the Basin, which is a non-attainment area for ozone (O₃), fine particulate matter (PM_{2.5}), and respirable particulate matter (PM₁₀). Construction activities for the proposed project would contribute to an increase in air quality emissions for which the region is non-attainment. As such, air quality impacts from construction of the underground tanks will be evaluated using the thresholds of significance established by the SCAQMD. Construction activities associated with implementation of the proposed project could result in increases in air pollutant emissions, which individually or cumulatively, would exceed established thresholds for these criteria pollutants. The impact is potentially significant and will be analyzed in the EIR.

Following construction of the underground tanks, no additional vehicle trips to and from the project site beyond what currently occurs for the existing reservoir would be generated, and the operation of the buried tanks would not require the use of pollutant-generating equipment. However, depending on the type of recreation (i.e., passive or active) developed at the site, additional vehicle trips beyond those currently generated by Elysian Park may occur. This activity could result in increases in air pollutant emissions, which individually or cumulatively, would exceed established thresholds for the identified criteria pollutants. The impact is potentially significant and will be analyzed in the EIR.

Currently there are no adopted thresholds of significance or specific methodologies established for determining impacts in CEQA documents in relation to a project's potential contribution to global climate change. As such, the proposed project's

contribution to global climate change will be addressed within the context of cumulative impacts until further guidelines, methodologies, and thresholds of significance are established. Therefore, this issue will be analyzed as a potentially significant cumulative impact in the EIR.

d) Expose sensitive receptors to substantial pollutant concentrations?

Potentially Significant Impact. The proposed project would be bordered by sensitive receptors, namely park users and nearby residences. Since daily construction emissions could exceed the SCAQMD significance thresholds, the impact is potentially significant and will be analyzed in the EIR.

Following construction of the underground tanks, no additional vehicle trips to and from the project site beyond what currently occurs for the existing reservoir would be generated, and the operation of the buried tanks would not require the use of pollutant-generating equipment. However, depending on the type of recreation (i.e., passive or active) developed at the site, additional vehicle trips beyond those currently generated by Elysian Park may occur. This activity could result in increases in air pollutant emissions, which could expose sensitive receptors to substantial pollutant concentrations. The impact is potentially significant and will be analyzed in the EIR.

e) Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. Any odors (e.g., odors from construction vehicle emissions) would be controlled in accordance with SCAQMD Rule 402 (Nuisance Emissions). Other than construction vehicle operation, no activities are anticipated to occur that would have the potential to cause odor impacts during the construction of the proposed project. Because use of construction vehicles would be temporary and no objectionable odors would remain after project construction, impacts would be less than significant. During project operation, there would be no odor-generating equipment or other activities. The impact would be less than significant, and no further analysis of this issue is required.

IV. BIOLOGICAL RESOURCES

Would the project:

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

Potentially Significant Impact. See discussion in item *d*, below.

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

Potentially Significant Impact. See discussion in item *d*, below.

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

Potentially Significant Impact. See discussion in item *d*, below.

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

Potentially Significant Impact. Based on a review of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants and the California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDDB), there is a the potential for some sensitive wildlife and plant species to be located on or use portions of the project site. Several biological reconnaissance surveys were conducted at the project site between 2005 and 2008 for the purpose of describing the vegetation types and evaluating the potential of habitats on the project site to support special status plant and wildlife species. No state- or federally-listed threatened or endangered wildlife species were observed during the reconnaissance surveys. In addition, no wildlife species of special concern were observed. No sensitive natural community, including riparian habitat, was observed within the project site. No federally protected or other wetland habitat (including, but not limited to, marsh, vernal pool, coastal, etc.) has been identified or is known to exist on or in the vicinity of the proposed project site. The proposed project site is currently fenced, which would impede the migration of large terrestrial species, but the proposed project contains habitat that could be used by migratory bird species. While these surveys did not indicate the potential for significant impacts to biological resources, due to the relative age of the previous surveys and because some areas related to project construction (e.g., lay down areas) have yet to be defined, additional surveys and a detailed technical report will be undertaken for the project to fully characterize the existing biological conditions and evaluate the potential impacts of the proposed project. The technical report will be included as an appendix to the EIR, and the results of the biological resource surveys will be summarized and incorporated into the EIR.

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

Potentially Significant Impact. There are no known sensitive biological resources on the project site. However, several areas that may contain mature trees would be disturbed during project construction. The impacts to mature trees may represent a potentially significant impact. This issue will be analyzed further in the EIR.

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

No Impact. The proposed project site is not part of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur, and no further study of this issue is required.

V. CULTURAL RESOURCES

Would the project:

- a) **Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 15064.5?**

Potentially Significant Impact. Elysian Reservoir was constructed in the early 1940s and is more than 45 years of age. Due to the age of the reservoir and its role in the development of Los Angeles, it could potentially be eligible for listing as a historic resource. This issue will be analyzed in detail in the EIR.

- b) **Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations Section 15064.5?**

Potentially Significant Impact. A cultural resource records search for the project was completed on November 16, 2004. According to the records search, there are no known archeological resources within the project site. However, there are areas with native topsoil located adjacent to the reservoir, and there are a range of recorded historic resources in the vicinity. As such, there is the potential to uncover buried archaeological resources during project construction. This issue will be analyzed further in the EIR.

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

Potentially Significant Impact. A paleontological resources records search and literature review was completed November 18, 2004, by a qualified paleontologist in the Vertebrate Paleontology Division of the Natural History Museum of Los Angeles County. Bedrock in the project site and surrounding area is represented by the Monterey Formation, a marine-oriented fossiliferous rock unit of the Late Miocene age (roughly 10 to 15 million years). Fossil locality LACM 4967, previously recorded in Elysian Park, may be located within the boundaries of the project site. This locality is important because it produced holotype fossil specimens (name-bearing specimen of a species previously unknown to science) of extinct fish and whale species from the Monterey Formation. The area is, therefore, highly sensitive for important fossil resources. This issue will be analyzed further in the EIR.

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

Less than Significant Impact. The proposed project would not impact known cemeteries, and no evidence of burials exists in the proposed project site or in surrounding areas. Should any remains be discovered during project construction, LADWP would be required to stop excavation or disturbance of the affected site until satisfying the steps outlined in CEQA §15064.5(e). Compliance with existing regulations would ensure a less than significant impact, and no further study of this issue is required.

VI. GEOLOGY AND SOILS

Would the project:

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

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

Less than Significant Impact. See discussion in item *ii*, below.

- ii) **Strong seismic ground shaking?**

Less than Significant Impact. Active faults do not cross through the proposed project site, and active faults are not located in the immediate vicinity of the proposed project site. The proposed project site is not located within an Alquist-Priolo Earthquake Fault Zone or within a Fault Rupture Study Area, as mapped by the City of Los Angeles and the California Geological Survey. The closest known fault to the proposed project site, the Elysian Park Fault, is located approximately 1,500 feet to the east. Therefore, as with all of Los Angeles County, the project area is susceptible to high-intensity ground shaking that affects all structures in the City. Thus, the underground tanks and recreation support structures, such as restrooms, would be constructed in accordance with seismic requirements of the California Building Code and the standards of the California Department of Water Resources, Division of Safety of Dams for seismic safety. Compliance with established standards would reduce risks of structural failure or collapse to a less than significant level, and no further study of this issue is required.

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

No Impact. Liquefaction, essentially the transformation of the soil into a liquid state, results in lateral spreading, ground settlement, sand boils, and soil falls. Liquefaction typically occurs in areas with a high groundwater table. According to the City of Los Angeles Safety Element, the project site is not located in a liquefaction zone. As such, no impact would occur, and no further study of this issue is required.

- iv) **Landslides?**

Less than Significant Impact. According to the City of Los Angeles Safety Element, the project site is located in area that is subject to landslides. Any work in hillside areas would comply with the City Hillside Grading Ordinance, and the slopes would be stabilized as necessary to prevent landslides. Compliance with established standards would reduce risks associated with landslides to a less than significant level, and no further study of this issue is required.

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

Less than Significant Impact. The proposed project would not result in substantial soil erosion or the loss of topsoil. Construction of the proposed project would result in

ground surface disturbance during excavation and grading that could create the potential for erosion to occur. However, most ground disturbing activities would be limited to the existing reservoir. Since the proposed project site is greater than one acre, LADWP's construction contractor must prepare and comply with a Storm Water Pollution Prevention Plan (SWPPP), which would include erosion control measures. In addition, LADWP's construction contractor must comply with the Storm Water Construction Activities General Permit and obtain a National Pollution Discharge Elimination System (NPDES) Permit. Compliance with existing regulations would reduce impacts due to soil erosion to a less than significant level. After construction of the buried tanks, the project site would be stabilized and landscaped to provide a recreation area, and no significant soil erosion or loss of topsoil is expected to occur. No further study of this issue is required.

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

Less than Significant Impact. As discussed above, the proposed project is located in an area identified as having the potential for landslides. The proposed site is not located within an area identified as having a potential for liquefaction. Lateral spreading generally occurs where soils are susceptible to soil liquefaction. As stated above, the underground tanks and recreation support structures, such as restrooms, would be constructed in accordance with the requirements of the California Building Code. Any work in hillside areas would comply with the City Hillside Grading Ordinance, and the slopes would be stabilized as necessary to prevent landslides. Compliance with established standards would reduce risks associated with landslides to a less than significant level, and no further study of this issue is required.

- d) **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

No Impact. Expansive soil is defined as soil that expands to a significant degree upon wetting and shrinks upon drying. Generally, expansive soils contain a high percentage of clay particles. The proposed project is not located on soils that are expansive, as described in Table 18-1B of the Uniform Building Code. No impact would occur, and no further study of this issue is required.

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

No Impact. The proposed project would include restroom facilities in relation to the recreation function. However, these facilities would not use a septic system or similar systems. No impact would occur, and no further study of this issue is required.

VII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

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

Less Than Significant Impact. See discussion under item *b*, below.

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

Less Than Significant Impact. Although construction may involve the transport, storage, use, or disposal of some hazardous materials, such as onsite fueling/servicing of construction equipment, construction activities would be short-term. Such transport, use, storage, and disposal would not be expected to create a significant hazard to workers or the community. In addition, all construction activities involving hazardous materials would be subject to federal, state, and local health and safety requirements involving the transport, use, storage, and disposal.

As under current conditions, the underground tanks would be used for the storage of treated water. Under unusual circumstances, if additional disinfection is required, chemicals would be added to the tanks. Similarly, chemicals would be applied to the tanks when they are cleaned. These water treatment operations would be subject to federal, state, and local health and safety requirements. Operation of the proposed recreation area may involve the use of pesticides, herbicides, and fertilizers, which would be subject to federal, state, and local health and safety requirements as currently occurs throughout Elysian Park. No reasonably foreseeable upset or accident conditions that could involve the release of hazardous materials into the environment are anticipated during construction or operation of the proposed project. The impact would be less than significant, and no further study of this issue is required.

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

No Impact. Solana Avenue Elementary School is located approximately 0.2 miles to the southwest of the Elysian Reservoir property. Although project construction may involve activities such as onsite fueling and servicing of construction equipment, construction activities would not create a significant hazard or involve hazardous emissions. Based on site history, excavation activities are not expected to encounter contaminated soils or soils that would be considered hazardous. Operation of the proposed project would not involve hazardous emissions or materials. As under current conditions, the underground tanks would be used for the storage of treated water. Under unusual circumstances, if additional disinfection is required, chemicals would be added to the tanks. Similarly, chemicals would be applied to the tanks when they are cleaned. These water treatment operations would be subject to federal, state, and local health and safety requirements. Operation of the proposed recreation area may involve the use of pesticides, herbicides, and fertilizers, which would be subject to federal, state, and local health and safety requirements as

currently occurs throughout Elysian Park. No impact would occur, and no further study of this issue is required.

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

No Impact. The proposed project is not contained on lists compiled pursuant to Section 65962.5 of the Government Code. The proposed project, which is the replacement of Elysian Reservoir with underground tanks for drinking water storage and development of the site for recreational use, would not create a significant hazard to the public or the environment relative to hazardous materials. No impact would occur, and no further study of this issue is required.

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

No Impact. See discussion under item *f*, below.

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

No Impact. The closest public airport to the project site is Bob Hope Airport located approximately 11 miles to the northwest in Burbank. The closest general aviation field to the proposed project site is El Monte Airport, located approximately 11 miles to the west. As such, the proposed project is not located within an airport land use plan or within 2 miles of a public airport or a private airstrip such that it would pose a safety hazard for people residing or working in the project area. No impact would occur, and no further study of this issue is required.

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

Less Than Significant Impact. The proposed project would not impair or physically interfere with an adopted emergency response plan or a local, state, or federal agencies emergency evacuation plan. The proposed project is the replacement of Elysian Reservoir with underground tanks and the development of the site for recreational use. During project construction, a portion of Grand View Drive surrounding the project site would be closed to public traffic. Because this segment of Grand View Drive is located entirely within Elysian Park and alternate routes within the park would remain available, this temporary closure is not anticipated to interfere with an adopted emergency response plan. During project operation, Grand View Drive would again be open to access. However, construction activities related to the installation of the new water supply conduit connecting the Riverside Trunk Line to the Elysian buried tanks may significantly interfere with traffic on Riverside Drive, to the northwest of the reservoir. Construction of the conduit, including the exact alignment of the tunnel, would be closely coordinated with the realignment of Riverside Drive at the Los Angeles River crossing, currently proposed by the City of Los Angeles Department of Public Works, Bureau of Engineering. This tunneling activity at Riverside Drive may interfere with an adopted emergency response plan or emergency evacuation plan. As such, LADWP would coordinate with the City of Los

Angeles Department of Public Works, Bureau of Engineering, Police Department, and Fire Department to create alternative routes for emergency response and emergency evacuation. The impact would be less than significant, and no further study of this issue is required.

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

Less than Significant Impact. According to the City of Los Angeles General Plan Safety Element, no Fire Hazard Districts or Fire Buffer Zones occur within the project site. As such, construction and operation of the proposed project would not expose any people or structures to a significant risk of loss, injury or death involving wildland fires. The undeveloped portion of the project site contains vegetation that could catch fire. In accordance with the Los Angeles Public Safety Code, fire prevention procedures during project construction would include such measures as fire safety training of all construction workers, onsite water truck for rapid response, equipping construction equipment with spark arresters, and stopping construction during red flag alert conditions at the site. Following completion of the underground tanks, the project site would be developed for recreational use. The project site would continue to be maintained to comply with and the Los Angeles Public Safety Code to minimize the risk of fire. Compliance with existing regulations would ensure a less than significant impact, and no further study of this issue is required.

VIII. HYDROLOGY AND WATER QUALITY

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact. Construction and operation of the proposed project would not generate significant amounts of wastewater or significantly increase urban runoff entering existing storm drains. The objective of the proposed project is to improve drinking water quality in accordance with updated EPA rules regarding surface water treatment and water disinfection and disinfection byproducts. To convert the reservoir to buried tanks, the reservoir would be drained of all water, which has been treated with chlorine. To achieve this, the reservoir water level would first be drawn down by normal consumption through the drinking water distribution system. Once the water level in the reservoir reaches an elevation of 440 feet (from a maximum operating level of 462 feet), the remaining water would be diverted to the storm water system located in Figueroa Street. Prior to draining the reservoir into the storm water system, any chlorine residual in the water would be allowed to dissipate, and the discharge would be conducted pursuant to NPDES requirements or exemptions.

In the event that dewatering of the site is required during project construction, all dewatering discharges would be carried out in accordance with applicable requirements of the Regional Water Quality Control Board, including compliance with the NPDES permit regulations.

During project operation, rain that currently falls on the reservoir surface and enters the drinking water distribution system would fall on the ground surface above the

buried tanks. Much of the rain water, along with any irrigation water applied to the proposed recreation site, would percolate into the soil. Any runoff would discharge into the existing storm water system, which collects in the Buena Vista Tunnel near the southeast corner of the reservoir property. The Buena Vista Tunnel in turn discharges into the Los Angeles River. The proposed project would be required to maintain water quality from storm water runoff in accordance with NPDES requirements. As such, construction and operation of the proposed project would not violate water quality standards or waste discharge requirements. Compliance with existing regulations would ensure a less than significant impact to water quality, and no further analysis of this issue is required.

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

No Impact. The proposed project is the construction and operation of underground tanks in place of Elysian Reservoir and development and operation of the site for recreational use. During construction, the reservoir would be drained for a period of approximately four to five years. However, the existing reservoir is paved with asphaltic concrete, which does not allow percolation to the groundwater supply. Thus, draining the reservoir would not substantially deplete groundwater supplies or interfere with groundwater recharge. Completion of the project would create more permeable surface area than is currently located at the project site because the asphaltic concrete reservoir would be removed and the site would be landscaped for recreation uses.

Construction of the underground tanks would not increase the amount of water storage located at Elysian. It would convert it from aboveground storage in the reservoir to underground storage in concrete tanks. Thus, the proposed project would not indirectly deplete groundwater supplies. No impact to groundwater recharge or groundwater supply would occur, and no further study of this issue is required.

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

Less Than Significant Impact. The proposed project involves the conversion of Elysian Reservoir from an open reservoir to underground storage tanks and developing the site for recreational use. It would not substantially alter the existing drainage pattern of the project site or the area. Rain that currently falls on the reservoir surface and enters the drinking water distribution system would fall on the ground surface above the buried tanks. Much of the rain water, along with any irrigation water applied to the proposed recreation site, would percolate into the soil. Any runoff would discharge into the existing storm water system. To maintain water quality during project operation, the proposed project must comply with NPDES requirements related to storm water runoff.

As discussed above, all construction activities would comply with applicable requirements of the Regional Water Quality Control Board, including compliance with

NPDES permit regulations. Best Management Practices (BMPs) would be employed during project construction to control any potential erosion or siltation impacts related to construction activities. LADWP and LADRP would also comply with BMPs during project operation to prevent erosion and siltation. Compliance with NPDES requirements would ensure a less than significant impact, and no further study is required.

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

No Impact. The proposed project would not substantially alter the existing drainage pattern of the project site or the area. As discussed above, the proposed project would continue to discharge storm water runoff into the existing storm drainage system. The amount of storm water runoff during construction or operation of the proposed project would not be expected to exceed the capacity of the existing storm water system. To maintain the stability of the reservoir dam, the rate at which the water would be drained would be limited to approximately 5.75 MG per day. This water would be drained into an existing 16-inch line that connects to the storm drainage system in Figueroa Street. The volume and rate of flow would be carefully controlled to remain within the capacity of the Figueroa Street storm drainage system. During project operation, rain that currently falls on the reservoir surface and enters the drinking water distribution system would fall on the ground surface above the buried tanks. Much of the rain water, along with any irrigation water applied to the proposed park site, would percolate into the soil. Any runoff would discharge into the existing storm water system, which collects in the Buena Vista Tunnel near the southeast corner of the reservoir property. Based on the surface area of the proposed recreation site relative to the area of the current surface drainage tributary to the Buena Vista Tunnel, any additional runoff would not exceed the capacity of the tunnel, which can accommodate a flow of 152 cubic feet per second (cfs) and a volume of approximately 98.25 MG per day. No flooding would result on or off site. No impact would occur, and no further study of this issue is required.

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

Less Than Significant Impact. The proposed project involves replacing Elysian Reservoir with underground tanks and developing the site for recreational use. To convert the reservoir to buried tanks, it would be drained of all water, which has been treated with chlorine. To achieve this, the reservoir water level would first be drawn down by normal consumption through the drinking water distribution system. Once the water level in the reservoir reaches an elevation of 440 feet (from a maximum operating level of 462 feet), the remaining water would be diverted to the storm drainage channel in Figueroa Street via a drain at the base of the reservoir outlet tower. Prior to draining the reservoir into the storm water system, any chlorine residual in the water would be allowed to dissipate and the discharge would be conducted pursuant to NPDES requirements or exemptions.

To maintain the stability of the reservoir dam, the rate at which the water would be drained would be limited to approximately 5.75 MG per day. This volume and rate of

flow would be carefully controlled to remain within the capacity of the Figueroa Street storm drainage channel.

During project operation, rain that currently falls on the reservoir surface and enters the drinking water distribution system would fall on the ground surface above the buried tanks. Much of the rain water, along with any irrigation water applied to the proposed park site, would percolate into the soil. Any runoff would discharge into the existing storm water system, which collects in the Buena Vista Tunnel near the southeast corner of the reservoir property. To maintain water quality during project operation, the proposed project must comply with NPDES requirements for storm water runoff. Based on the surface area of the proposed recreation site relative to the area of the current surface drainage tributary to the Buena Vista Tunnel, any additional runoff would not exceed the capacity of the tunnel, which can accommodate a flow of 152 cfs and a volume of approximately 98.25 MG per day.

Therefore, construction and operation of the proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. The impact would be less than significant, and no further study of this issue is required.

f) Otherwise substantially degrade water quality?

Less than Significant Impact. Potential short-term erosion effects could occur during construction activities that could affect water quality with runoff. However, as discussed above, all construction activities would comply with applicable requirements of the Regional Water Quality Control Board, including compliance with NPDES permit regulations. BMPs would be employed during project construction to control any potential erosion or siltation impacts related to construction activities. After construction, storm water runoff would be collected and discharged into the existing storm water channel. LADWP and LADRP would also comply with BMPs during project operation to prevent erosion and siltation. Compliance with NPDES requirements would ensure a less than significant impact, and no further study of this issue is required.

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

No Impact. See discussion in item *h*, below.

h) Place within a 100-year flood area structures to impede or redirect flood flows?

No Impact. The proposed project site is not located within a 100-year flood hazard area as mapped on the federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. No impact would occur, and no further study of this issue is required.

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

No Impact. The proposed project site is not located in an area susceptible to inundation from failure of upstream dams as none are located in the project vicinity. The proposed project would remove an open reservoir, replace it with underground tanks, and remove the existing dam from service, thereby reducing the potential for inundation of downstream areas. As such, the construction and operation of the proposed project would not increase the risk from flood or inundation. No impact would occur, and no further study of this issue is required.

- j) **Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?**

No Impact. The proposed project is not subject to tsunami-related inundation as it is not located within the range of a tsunami hazard zone. The project site is subject to seiche from the reservoir. However, replacement of the open reservoir with underground tanks would reduce the risk of seiche at the proposed project site. The project does not involve alteration of the hillsides surrounding the reservoir basin and as such would not increase the risk of hazard associated with mudflows. Therefore, no impacts from inundation by seiche, tsunami, or mudflow would occur. No further study of this issue is required.

IX. LAND USE AND PLANNING

Would the project:

- a) **Physically divide an established community?**

Less Than Significant Impact. The proposed project site is located on the southeast edge of Elysian Park. The site is currently used and has historically been used as a reservoir. Removal of the existing reservoir to replace it with underground storage tanks and developing the site for recreational use would not divide an established community. The proposed project would not create a physical barrier. Project implementation would increase the amount of recreation area at Elysian Park.

Construction of the proposed project would require the temporary closure of a portion of Grand View Drive surrounding the project site to public traffic. Because this segment of Grand View Drive is located entirely within Elysian Park and alternate routes within the park would remain available, the temporary closure would not divide an established community. During project operation, Grand View Drive would again be open to access. Similarly, construction activities related to the installation of the new water supply conduit connecting the Riverside Trunk Line to the Elysian buried tanks may require the temporary closure of a portion or all of Riverside Drive, to the northwest of the reservoir. The closure would be temporary and alternative routes would be provided during construction activity to allow access to and within the adjacent community. Construction of the conduit, including the exact alignment of the tunnel, would be closely coordinated with the realignment of Riverside Drive at the Los Angeles River crossing, currently proposed by the City of Los Angeles Department of Public Works, Bureau of Engineering. During operation, Riverside Drive would return to normal operation. Thus, temporary road closures would not

physically divide an established community. The impact would be less than significant, and no further study of this issue is required.

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

Less Than Significant Impact. The proposed project site is designated as Open Space in the City of Los Angeles General Plan. The proposed project site is located within the Silver Lake-Echo Park-Elysian Valley Community Plan area. The zoning designation for the Elysian Reservoir is [Q]OS-1XL (Open Space). The City of Los Angeles Municipal Code Section 12.04.05 states that the purpose of the Open Space (OS) zone is to provide regulation for publicly owned land in order to implement the City's adopted General Plan. No building, structure, or land shall be used and no building or structure shall be erected, moved onto the site, enlarged or maintained, except as specified. The primary purpose of this zone is to protect and preserve natural resources and natural features of the environment; to provide outdoor recreation opportunities and advance the public health and welfare; to enhance environmental quality; to encourage the management of public lands in a manner which protects environmental characteristics; and to encourage the maintenance of open space uses on all publicly owned park and recreation land, and open space public land which is essentially unimproved. Uncovered public water supply reservoirs and accessory uses which are incidental to the operation and continued maintenance of such reservoirs are permitted within the OS zone. The proposed project would bury the existing open reservoir and provide new recreational space as part of Elysian Park. Operation of the proposed project site as a recreation area may require construction of accessory structures, such as restroom facilities, a concession stand, and equipment storage building. Such facilities are conditionally permitted accessory structures within the OS zone, under the provisions of a Conditional Use Permit (CUP). Thus, the proposed project would not conflict with an applicable land use plan upon obtaining a CUP. The impact would be less than significant, and no further study of this issue is required.

Construction of the proposed project may require removal of mature trees that are protected under the City of Los Angeles Tree Protection Ordinance. This impact is described in Section IV(e) and will be analyzed further as part of the EIR.

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

No Impact. The proposed project would not conflict with any habitat conservation plan. The site is not within a habitat conservation community or a natural community conservation area. No impact would occur, and no further study of this issue is required.

X. MINERAL RESOURCES

Would the project:

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

No Impact. See discussion in item *b*, below.

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

No Impact. The proposed project would not result in the loss of a locally important mineral resource. The project site is not located on significant mineral or energy deposits. The proposed project site is located in an area where urban development has already occurred and the surrounding recreation and residential uses would likely preclude mining in the area. Locally important mineral resources are not located on or near the site. No impact would occur, and no further study of this issue is required.

XI. NOISE

Would the project result in:

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

Potentially Significant Impact. Noise from construction activities would include noise from heavy equipment, pavement removal, excavation and grading, tunneling, and tank installation. Construction of the proposed project is expected to last approximately four to five years. Construction activities would generally occur within delineated work areas Monday through Friday between 7:00 a.m. and 6:00 p.m. and Saturday between 8:00 a.m. and 6:00 p.m. However, project construction could potentially expose nearby sensitive receptors (including Elysian Park and residential uses) to noise levels above established standards. Further analysis of construction noise impacts will be included in the EIR.

During project operation, there would be no additional noise-generating pieces of equipment or personnel at the project site in relation to the water storage functions. The proposed recreation uses would be generally compatible with the setting within Elysian Park. As such, no impacts would occur, and no further study of operational noise would be required.

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

Potentially Significant Impact. The proposed project may result in excessive exposure of persons to or generation of groundborne vibration or noise levels. Excavation and grading activities could result in minor amounts of groundborne vibration for limited durations. Typical construction equipment, such as bulldozers, loaded trucks, and jackhammers would generate certain levels of groundborne vibration. Thus, nearby sensitive receptors may be subjected to vibration attributable

to construction activities in excess of applicable standards. This impact is potentially significant and will be analyzed in the EIR.

During project operation, there would be no additional heavy equipment, truck traffic, or other activities at the project site that could create vibration impacts. No impact would occur during project operation, and no further study of this issue is required.

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

Less Than Significant Impact. As described above, noise from construction activities would include noise from heavy equipment, pavement removal, excavation, and grading. Construction activities could generate substantial increases in ambient noise levels in the project vicinity through the duration of construction, but these will be temporary in nature and occur only during the construction period.

During project operation, there would be no additional noise-generating pieces of equipment or personnel at the project site in relation to the water storage functions. Depending on the actual program established for the recreation area, recreation activities may create an increase in ambient noise levels in the project vicinity above levels existing without the project. However, these recreation uses would be generally compatible with the setting within Elysian Park. As such, no impacts would occur, and no further study of operational noise is required.

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

Potentially Significant Impact. As discussed above, noise impacts associated with project construction could potentially result in temporary or periodic increases in daytime noise levels. This issue is potentially significant and will be analyzed in the EIR.

During project operation, there would be no additional noise-generating pieces of equipment or personnel at the project site in relation to the water storage functions. As discussed above, depending on the actual program established for the recreation area, recreation activities may create an increase in ambient noise levels in the project vicinity above levels existing without the project. However, these recreation uses would be generally compatible with the setting within Elysian Park. As such, no impacts would occur, and no further study of operational noise would be required.

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

No Impact. See discussion in item *f*, below.

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

No Impact. The proposed project is not located within an airport land use plan or within 2 miles of an airport. The closest public airport to the project site is Bob Hope Airport located approximately 11 miles to the northwest in Burbank. The closest

general aviation field to the proposed project site is the El Monte Airport, located approximately 11 miles to the west. As such, the proposed project would not expose people residing or working the project area to excessive noise levels associated with airport uses. No impact would occur, and no further study of this issue is required.

XII. POPULATION AND HOUSING

Would the project:

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

No Impact. The proposed project involves the replacement of Elysian Reservoir with underground tanks in order to meet water quality standards. The proposed project is intended to ensure the reliability and safety of the existing water supply. The project does not involve increasing the amount of water that can be stored on site such that additional water supply would be available. As such, the project would not induce substantial population growth in the area, either directly or indirectly. No impact would occur, and no further study of this issue is required.

- b) **Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

No Impact. See discussion in item c, below.

- c) **Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

No Impact. Construction and operation of the proposed project would occur within and adjacent to the LADWP Elysian Reservoir property. There is no existing housing within the reservoir property or on adjacent areas within Elysian Park, and the project does not require the removal of housing. Therefore, construction and operation of the proposed project would not impact the number or availability of existing housing in the area and would not necessitate the construction of replacement housing elsewhere. No impact would occur, and no further study of this issue is required.

XIII. PUBLIC SERVICES

- a) **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

- i) **Fire protection?**

No Impact. See discussion in item *ii*, below.

- ii) **Police protection?**

No Impact. The proposed project is the replacement of Elysian Reservoir with underground tanks and development of the site for recreational use. Fire service to the project site is provided by the City of Los Angeles Fire Department. Police

protection services are provided by the City of Los Angeles Police Department. In addition, LADWP currently has security staff stationed on site at all times. Operation of the proposed project would not require additional fire or police protection. As such, no new or expansion of existing fire or police protection facilities would be required, the construction of which could cause significant environmental impacts. No further study of this issue is required.

iii) Schools?

No Impact. See discussion in item v, below.

iv) Parks?

No Impact. See discussion in item v, below.

v) Other public facilities?

No Impact. The primary objective of the proposed project is to ensure the safety and reliability of the drinking water supply in accordance with updated EPA rules regarding surface water treatment and water disinfection and disinfection byproducts. No population increase in the project area would result from construction and operation of underground tanks. No new housing or businesses would be constructed as part of the project to induce population growth. The proposed project would have the beneficial impact of increasing the amount of recreation space available in Elysian Park. No substantial adverse physical impact to local schools, parks, or other public facilities would occur, and no further study of this issue is required.

XIV. RECREATION

Would the project:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The proposed project is the replacement of Elysian Reservoir with underground tanks and development of the site for recreational use. The proposed project would have the beneficial impact of increasing the amount of recreation space available in Elysian Park. It would not increase the use of existing park areas or other recreation facilities such that substantial physical deterioration of Elysian Park or other nearby parks would occur or be accelerated. No impact would occur, and no further study of this issue is required

b) Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Potentially Significant Impact. The proposed project is the replacement of Elysian Reservoir with underground tanks and development of the site for recreational use. Construction and operation of the recreation area could result in impacts to aesthetics, air quality, biological resources, cultural resources, noise, and traffic, which are addressed in their respective sections of this document and will be further analyzed in the Draft EIR.

XV. TRANSPORTATION/TRAFFIC

Would the project:

- a) **Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?**

Potentially Significant Impact. See discussion in item *b*, below.

- b) **Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?**

Potentially Significant Impact. Based on the trips generated by construction activities, including the delivery of materials and supplies to the reservoir site, hauling of excavated material to and from the site, and worker commutes, the proposed project could result in increased traffic that could be substantial in relation to existing traffic load and street capacity and could, individually or cumulatively, exceed established level of service standards for roads in the vicinity. Construction is anticipated to take four to five years to complete. In addition, construction activities related to the installation of the new water supply conduit connecting the Riverside Trunk Line to the Elysian buried tanks may significantly interfere with traffic on Riverside Drive, to the northwest of the reservoir. Construction of the conduit, including the exact alignment of the tunnel, would be closely coordinated with the realignment of Riverside Drive at the Los Angeles River crossing, currently proposed by the City of Los Angeles Department of Public Works, Bureau of Engineering. Impacts to traffic from project construction are potentially significant and will be analyzed in the EIR.

Following construction of the buried tanks, no additional vehicle trips to and from the project site in relation to the water storage function would be generated beyond what currently occurs for the existing reservoir. Depending on the actual program established for the recreation area (i.e., passive or active), significant additional traffic may be generated in association with the public recreation use of the site. Impacts to traffic from project operation are potentially significant and will be analyzed in the EIR.

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

No Impact. Construction and operation of the proposed project would not generate air traffic. The project would not include any high-rise structures that could act as a hazard to aircraft navigation. No impact would occur, and no further study of this issue is required.

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

No Impact. Because no new roads or changes to existing roads would result from the proposed project, no design features (i.e., sharp curves or dangerous

intersections) or incompatible uses would occur. No impact would occur, and no further study of this issue is required.

e) Result in inadequate emergency access?

Less Than Significant Impact. The proposed project is the replacement of Elysian Reservoir with underground tanks and the development of the site for recreational use. During project construction, a portion of Grand View Drive surrounding the project site would be closed to public traffic. Because this segment of Grand View Drive is located entirely within Elysian Park and alternate routes within the park would remain available, this temporary closure is not anticipated to result in inadequate emergency access. During project operations, Grand View Drive would again be open to access. Similarly, construction activities related to the installation of the new water supply conduit connecting the Riverside Trunk Line to the Elysian buried tanks may significantly interfere with traffic on Riverside Drive, to the northwest of the reservoir. Construction of the conduit, including the exact alignment of the tunnel, would be closely coordinated with the realignment of Riverside Drive at the Los Angeles River crossing, currently proposed by the City of Los Angeles Department of Public Works, Bureau of Engineering. This tunneling activity at Riverside Drive may temporarily interfere with emergency access. As such, LADWP would coordinate with the City of Los Angeles Department of Public Works, Bureau of Engineering, Police Department, and Fire Department to create alternative routes for emergency response vehicles. When construction is complete and the site is opened for public use, adequate emergency access would be provided in accordance with Fire Department requirements. The impact would be less than significant, and no further study of this issue is required.

f) Result in inadequate parking capacity?

Potentially Significant Impact. All construction equipment and worker vehicle parking would be located within either the Elysian Reservoir property proper or in an area within Elysian Park along Grand View Drive (to the west of the reservoir) that would be temporarily used for staging during project construction. No construction related parking would occur on public streets. The proposed closure of Grand View Drive during construction would eliminate access to approximately 10 public parking spaces. There are no active recreation facilities in the vicinity of this unpaved parking area, but it provides parking for an adjacent informal picnic/open recreation area and hiking trail access. However, in the context of the total number of parking spaces available within Elysian Park, the temporarily removal of approximately 10 parking spaces would not result in a significant short-term impact. The construction impact would be less than significant.

Recreational parking within the reservoir property boundaries would be designed to accommodate the expected number of recreational users. However, a parking supply analysis will be conducted as part of the traffic study that will be prepared for the proposed project. This issue will be analyzed further in the EIR.

g) Would the project conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

No Impact. The proposed project would not conflict with adopted policies supporting alternative transportation. Construction activity and staging would occur primarily

within the Elysian Reservoir property or portions of Elysian Park temporarily closed to public access during project construction. Construction activities related to the installation of the new water supply conduit connecting the Riverside Trunk Line to the Elysian buried tanks would occur on a small segment of Riverside Drive, to the northwest of the reservoir. None of these construction activities would require the removal or relocation of alternative transportation facilities (i.e., bus stops and bike lanes). Post-construction operations of the water storage facilities and the recreation area within the Elysian Reservoir property boundaries would not impact alternative transportation facilities. No further study of this issue is required.

XVI. UTILITIES AND SERVICE SYSTEMS

Would the project:

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

No Impact. The proposed project would not result in changes to facilities or operations at existing wastewater treatment facilities. The primary objective of the proposed project is to ensure the safety and reliability of the drinking water supply in accordance with updated EPA rules regarding surface water treatment and water disinfection and disinfection byproducts. Consequently, no modification to a wastewater treatment facility's current wastewater discharges would occur. No impact to wastewater treatment requirements of the applicable Regional Water Quality Control Board would occur, and no further study of this issue is required.

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

Less Than Significant Impact. Construction and operation of the proposed project would generate only minor amounts of wastewater. The proposed project involves replacing Elysian Reservoir with underground tanks and developing the site for recreational use. Restroom facilities would be constructed at the site. However, the relatively small volume of wastewater generated at these facilities would not require the construction of new water or wastewater treatment facilities or expansion of existing facilities. The impact would be less than significant, and no further study of this issue is required.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The proposed project involves replacing Elysian Reservoir with underground tanks and developing the site for recreational use. To convert the reservoir to buried tanks, it would be drained of all water. To achieve this, the reservoir water level would first be drawn down by normal consumption through the drinking water distribution system. Once the water level in the reservoir reaches an elevation of 440 feet (from a maximum operating level of 462 feet), the remaining water would be diverted to the storm water channel in Figueroa Street via a drain at the base of the reservoir outlet tower. To maintain the stability of the reservoir dam, the rate at which the water would be drained would be limited to approximately 5.75

MG per day. This volume and rate of flow would be carefully controlled to remain within the capacity of the storm drainage system.

During project operation, rain that currently falls on the reservoir surface and enters the drinking water distribution system would fall on the ground surface above the buried tanks. Much of the rain water, along with any irrigation water applied to the proposed park site, would percolate into the soil. Any runoff would discharge into the existing storm water system, which collects in the Buena Vista Tunnel near the southeast corner of the reservoir property. Based on the surface area of the proposed recreation site relative to the area of the current surface drainage tributary to the Buena Vista Tunnel, any additional runoff would not exceed the capacity of the tunnel, which can accommodate a flow of 152 cfs and a volume of approximately 98.25 MG per day. As such, construction and operation of the project would not require the construction of new storm drainage facilities. No impact would occur, and no further analysis of this issue is required.

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

Less than Significant Impact. The proposed project includes the replacement of Elysian Reservoir with underground tanks and the development of the site for recreational use. The underground tanks would have the same storage capacity as the existing reservoir. During project construction, the reservoir would be out of service for approximately four to five years. Potable water would be supplied to the Elysian Reservoir service area through a bypass line. LADWP would supplement its water supply with additional purchased water during the construction period to ensure that there would be adequate supply to meet peak demand. No shortage of water supply would be expected.

During operation, the proposed project would require increased water supply for the wildlife pond, irrigation of the recreation area, and operation of the restroom facilities. This water would be supplied from a 6-inch main Park Row Street. According to LADWP, the increase in water demand would be minimal in relation to the total available supply. The impact would be less than significant, and no further study of this issue is required.

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

No Impact. Construction and operation of the proposed project would generate only minor amounts of wastewater. The proposed project involves replacing Elysian Reservoir with underground tanks and developing the site for recreational use. Restroom facilities would be constructed at the site. However, the relatively small volume of wastewater generated at these facilities would not result in a determination by the wastewater treatment provider that it lacked adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. No impact would occur, and no further study of this issue is required.

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

Less Than Significant Impact. Construction debris would be recycled or transported to a landfill site and disposed appropriately. In accordance with AB 939, LADWP's construction contractor would work to ensure that source reduction techniques and recycling measures are incorporated into project construction and operation. The amount of debris generated during project construction is not expected to significantly impact landfill capacities. Operation of the proposed project would not result in an increase in personnel at the project site in relation to the water storage functions. The site would be used for recreation, which would generate relatively small additional quantities of waste that would not significantly impact landfill capacities. The impact would be less than significant, and no further analysis of this issue is required.

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

No Impact. During construction and operation of the proposed project, LADWP would comply with all City and state solid waste diversion, reduction, and recycling mandates, including compliance with the County-wide Integrated Waste Management Plan (IWMP) and the City of Los Angeles Municipal Code. No impact would occur, and no further study of this issue is required.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

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

Potentially Significant Impact. The analysis conducted in this Initial Study results in a determination that the proposed project could potentially degrade the quality of the environment by reducing the habitat of wildlife species, or eliminating a plant or animal community or important examples of a major period of California history, as discussed in Sections IV and V, above. The impact is potentially significant, and further analysis of this issue will be included in the EIR.

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

Potentially Significant Impact. As discussed Section II (b, c, and d), the proposed project could contribute to cumulative air quality impacts with a region that is non-attainment for O₃, PM₁₀, and PM_{2.5}. Cumulative noise and traffic impacts could also occur during project construction. The impact is potentially significant. These issues will be discussed further in the EIR.

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

Potentially Significant Impact. As discussed in the respective issue areas, project construction could have adverse effects on human beings related to aesthetics, air quality, biological resources, cultural resources, noise, and traffic. These issues will be discussed further in the EIR.

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SECTION 4 LIST OF PREPARERS, ACRONYMS, AND REFERENCES

LEAD AGENCY

Los Angeles Department of Water & Power
Environmental Services
111 N. Hope Street, Room 1044
Los Angeles, CA 90012

PREPARED BY

Los Angeles Department of Water & Power
Environmental Services
111 N. Hope Street, Room 1044
Los Angeles, CA 90012

Linh Phan, Project Manager
Sarah Easley Perez, Environmental Specialist

TECHNICAL ASSISTANCE PROVIDED BY

Thom Ryan, Project Director (EDAW)
Melissa Hatcher, Project Manager (EDAW)
Jeff Fenner, Senior Planner (Fenner Associates)
Jeanette Duffels, Botanist (EDAW)
Kathalyn Tung, Analyst (EDAW)
Jen Martinez, Graphic Artist (EDAW)
Dave Kelly, Senior Biologist (Garcia and Associates)
Jason Brooks, Botanist (Garcia and Associates)

ACRONYMS

AQMP	Air Quality Management Plan
Basin	South Coast Air Basin
BMPs	Best Management Practices
CAAQS	California Ambient Air Quality Standards
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CUP	Conditional Use Permit
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency
GHG	greenhouse gases
I-5	Interstate 5, Golden State Freeway
IWMP	Integrated Waste Management Plan
LAAFP	Los Angeles Aqueduct Filtration Plant
LADRP	Los Angeles Department of Recreation and Parks
LADWP	Los Angeles Department of Water and Power
MBTA	Migratory Bird Treaty Act
MG	million gallon
MWD	Metropolitan Water District
NOP	Notice of Preparation
NPDES	National Pollution Discharge Elimination System
O ₃	ozone
PM ₁₀	respirable particulate matter
PM _{2.5}	fine particulate matter
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SIP	State Implementation Plan
SR 110	State Route 110, Pasadena Freeway
SWPPP	Storm Water Pollution Prevention Plan

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