

Leland Reservoir Replacement Project Final Environmental Impact Report

Volume III – Responses to Comments SCH #2016082082



Prepared By:



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November 2018

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East Bay Municipal Utility District

Leland Reservoir Replacement Project

Final Environmental Impact Report Responses to Comment Volume III

November 2018

Prepared for: East Bay Municipal Utility District Water Distribution Planning Division 375 11th Street Oakland, CA 94607

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Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
AF	acre-feet
AFY	acre-feet per year
ASF	Age Sensitivity Factor
ATCM	Airborne Toxics Control Measure
AWSC	all-way stop-controlled intersection
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
Basin Plan	San Francisco Bay Basin (Region 2) Water Quality Control Plan
BMPs	Best Management Practices
CAA	Clean Air Act
CAFÉ	Corporate average fuel economy
Cal/OSHA	California Department of Occupational Safety and Health Administration
CalEEMod®	California Emission Estimator Model
CalEPA	California Environmental Protection Agency
CALFIRE	California Department of Forestry and Fire Protection
CalVeg	Classification and Assessment with Landsat of Visible Ecological Groupings
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act
CCCSD	Central Contra Costa Sanitary District
CCCTA	Central Contra Costa Transit Authority
CCCWP	Contra Costa Clean Water Program
CCR	California Code of Regulations
CCTA	Contra Costa Transportation Authority
CCWD	Calaveras County Water District
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGS	California Geological Survey

CH ₄	methane
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
СО	Carbon monoxide
CO_2	Carbon dioxide
CO ₂ e	Carbon Dioxide Equivalent
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CWA	Clean Water Act (Federal)
CWP	County Watershed Program
CY	cubic yards
dB	decibel
dBA	A-weighted decibel
dbh	diameter at breast height
DOT	U.S. Department of Transportation
DPM	Diesel Particulate Matter
DSOD	Division of Safety of Dams
DTSC	Department of Toxic Substances and Control
DWR	Department of Water Resources
EB	eastbound
EBMUD	East Bay Municipal Utility District
EIR	Environmental Impact Report
EMFAC2014	Emissions Estimator Model (2014 version)
EO	Executive Order
EPCRA	Emergency Planning and Community Right-to-Know Act
EPP	Existing Plus Project
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	greenhouse gas
GWh	gigawatt hours
HI	Hazard Index
I-680	Interstate 680
IPaC	Information for Planning and Conservation

IS	Initial Study
L_{10}	Noise level exceeded 10 percent of the specified time period
L_{50}	Noise level exceeded 50 percent of the specified time period
L ₉₀	Noise level exceeded 90 percent of the specified time period
L _{dn}	day-night average noise level
L _{eq}	energy-equivalent noise level
L _{eq} 24	Steady-state acoustical energy level measured over a 24-hour period
L _{max}	maximum noise level
LOS	Level of Service
LSBTA	Lamorinda School Bus Transportation Agency
MBTA	Migratory Bird Treaty Act
MCE	Marin Clean Energy
MEI	Maximally Exposed Individual
MG	million gallons
mg/kg	Milligrams per kilogram; same unit of measurement as ppm
MMRP	Mitigation Monitoring and Reporting Program
MSDS	Material Safety Data Sheet
MT	Metric Tons
MTC	Metropolitan Transportation Commission
NAAQS	National Ambient Air Quality Standard
NAHC	Native American Heritage Commission
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NOC	Notice of Completion
NOP	Notice of Preparation
NO	Nitrogen Oxide
N_2O	Nitrous Oxide
NO_2	Nitrogen Dioxide
NO _X	Nitrogen Oxides (NO + NO ₂)
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
OEHHA	Office of Environmental Health Hazard Assessment
OSHA	Federal Occupational Safety and Health Administration
PCBs	Polychlorinated biphenyls
PG&E	Pacific Gas & Electric
PM	Particulate Matter
PM_{10}	Particulate Matter Less Than 10 Micrometers in Aerodynamic Diameter
PM _{2.5}	Particulate Matter Less Than 2.5 Micrometers in Aerodynamic Diameter

ppm	parts per million
PPV	Peak particle velocity
PRC	Public Resources Code (California)
RCRA	Resource Conservation and Recovery Act
RMC	RMC Water and Environment
ROG	Reactive Organic Gas
ROW	right-of-way
RSL's	Regional Screening Levels
RWQCB	Regional Water Quality Control Board
SAAQS	State Ambient Air Quality Standards (California)
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SFBAAB	San Francisco Bay Area Air Basin
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
SHM	Seismic Hazard Mapping
SO ₂	Sulfur dioxide
SR 24	State Route 24
SSSC	side street stop-controlled intersection
STLC	Soluble Threshold Limit Concentration
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	Toxic Air Contaminants
TCLP	Toxicity Characteristic Leaching Procedure
TIS	Transportation Impact Study
TM	Technical Memorandum
TMDL	Total Maximum Daily Load
TTLC	Total Threshold Limit Concentration
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
V/C	Volume/Capacity
VDEC	Verified Diesel Emission Control Strategy
VOCs	Volatile Organic Compounds
WET	Whole Effluent Toxicity
WTP	Water Treatment Plant
WTTIP	Water Treatment and Transmission Improvement Program
$\mu g/m^3$	Microgram per Cubic Meter

Chapter 8 Introduction to Final EIR

8.1 Project Background

The East Bay Municipal Utility District (EBMUD), as CEQA Lead Agency, prepared a Draft Environmental Impact Report (Draft EIR) for the Leland Reservoir Replacement Project (Project). The Draft EIR was developed to provide the public and responsible and trustee agencies reviewing the Project with an analysis of the potential effects on the local and regional environment associated with construction and operation of the Project. The Project includes replacement of the existing 18-milliongallon (MG) open-cut Leland Reservoir with two new 8-MG prestressed concrete tanks within the existing reservoir basin and replacing approximately 1,700 linear feet of existing 30-inch and 36-inch transmission pipeline that currently runs beneath the reservoir with approximately 2,700 linear feet of 36inch pipeline to be constructed in Windsor Drive, Condit Road and a short section of Leland Drive between Condit Road and Meek Pace, and about 950 feet of pipeline within the Leland Reservoir site.

8.2 Draft EIR Public Review Process

On January 25, 2018, EBMUD, as the CEQA Lead Agency, released the Draft EIR for the Project for public review and filed a Notice of Completion (NOC) with the Governor's Office of Planning and Research to begin a 45-day public review period (Public Resources Code Section 21161). Concurrent with issuance of the NOC, the Draft EIR was made available to responsible and trustee agencies, other affected agencies, and interested parties, as well as all parties requesting a copy of the EIR in accordance with Public Resources Code Section 21092(b)(3). During the public review period the Draft EIR was available for review at the following locations:

East Bay Municipal Utility District 375 Eleventh Street Oakland, CA 94607 Lafayette Public Library 3491 Mt. Diablo Boulevard Lafayette, CA 94549

A public meeting was held on February 8, 2018, at The Meher Schools in Lafayette to receive comments on the Draft EIR. The 45-day public review period ended on March 12, 2018.

8.3 Purpose of the Final EIR

This Response to Comments document has been prepared to accompany the Draft EIR and is being issued by EBMUD as part of the Final EIR for the Project. CEQA requires lead agencies that have completed a Draft EIR to consult with and request comments on the environmental document from responsible, trustee, and other agencies with jurisdiction over the resources that could be affected by the Project. The public must also be afforded the opportunity to comment on the Draft EIR. This Final EIR has been prepared to respond to comments on the Draft EIR made by agencies and members of the public.

The Final EIR for the Project consists of the Draft EIR and appendices (Volumes I and II) and this document containing Comment Letters and Responses to Comments, including the updated Mitigation Monitoring and Reporting Program (Volume III). The EBMUD Board of Directors will consider the Final EIR before deciding whether to approve the Project.

8.4 CEQA Requirements

EBMUD has prepared this document pursuant to Section 15132 of the CEQA Guidelines, which specifies that "*The Final EIR shall consist of:*"

- a) The Draft EIR or a revision of the draft.
- b) Comments and recommendations received on the Draft EIR either verbatim or in summary.
- c) A list of persons, organizations, and public agencies commenting on the Draft EIR.
- *d)* The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- e) Any other information added by the Lead Agency."

8.5 Consideration of Recirculation

If significant new information is added to an EIR after public review, the lead agency is required to recirculate the revised document (CEQA Guidelines Section 15088.5). Significant new information includes, for example, a new significant environmental impact or a substantial increase in the severity of an impact. New information is not considered significant unless the document is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the Project or comment on feasible mitigation that the proponent has declined to implement. No new impacts or substantial increases in the severity of impacts have been identified as a result of information presented in the comments. Recirculation of the Draft EIR was thus not deemed to be necessary.

8.6 Future Steps in Project Approval

The Draft EIR was circulated for review, and opportunities for public and agency review and comments were made available in accordance with CEQA. The Final EIR is being made available to commenters for a minimum 10-day period before its consideration for certification.

EBMUD Board of Directors will consider Final EIR certification and Project approval at the regularly scheduled Board Meeting on **December 11, 2018**, at the EBMUD Office at 375 Eleventh Street, Oakland, CA 94607.

8.7 Organization of this Document

The Final EIR consists of the Draft EIR and appendices (Volumes I and II) and Comment Letters and Responses to Comments along with the updated Mitigation Monitoring and Reporting Program (Volume III).

This document is Volume III of the EIR for the proposed Project which contains four chapters: Chapter 8 is the introduction to the Final EIR, Chapter 9 presents the responses to comments on the Draft EIR, Chapter 10 contains the complete comments, and Chapter 11 contains the Final Mitigation Monitoring and Reporting Program.

Each comment received is listed in **Table 8-1** and identified by number, comment author, and date. Submittals include letters, emails and materials provided at the February 8, 2018 public meeting on the Draft EIR and at a subsequent EBMUD Board meeting on March 27, 2018. The full text of all written comments is included in Chapter 10, following the response to comments. Each submittal is identified by a number (as shown in **Table 8-1**) and each comment is identified by a comment number in the margin; responses use the same numbering system. For example, Comment 1 in Letter 1 is designated Comment 1-1 and is addressed in Response to Comment 1-1. In addition, there were several comments and questions about the visual impacts of the Project and about noise impacts associated with the proposed

construction hours for the Project, so Master Responses have been prepared to provide additional information about visual impacts and noise impacts.

In addition to the written comments received by EBMUD, staff noted questions and comments at the February 8, 2018 public meeting for the Project, and responses are provided in Section 9.15.

Table 8-1: List of Commenters

Letter #	Comment Author	Date
1	State of California Governor's Office of Planning and Research State Clearinghouse and Planning Unit	March 13, 2018
2	City of Lafayette	March 16, 2018
3	Francine Lyall	February 6, 2018
4	Ronald J. Rusay and Suzanne H. Rusay	February 9, 2018
5	Suzanne and Ron Rusay	February 22, 2018
6	Tim Watchers	February 27, 2018
7	Mark Redmond	February 27, 2018
8	Leland Drive Residents: Richard Alexander and Katherine Alexander Jeff and Alison Fingerut Tim Watchers Hyunil Jo and Sung Jung Hong John and Deborah Kwan Paul and Andreina Ng Robert Schick and Eun Hee Chang Ron and Sue Rusay Jim and Cam Olufson Meadine Mah Harng Shen and Jean Kuo Bill and Ana Lau Octavio and Mayra Lacayo Bob and Celia Lewis Scott Yokoi and Suzanne Ishii	March 1, 2018
9	Bill and Ana Lau	March 1, 2018
10	Bill and Ana Lau	March 2, 2018
11	Bill Mamarbachi	March 3, 2018
12	Cho Tang and Fong Ting Au Yeung Tang	March 5, 2018
13	Erin Beaver and Ruth Grossman	March 12, 2018
14	Paul Mason	March 12, 2018
15	Public Meeting Comments	February 8, 2018
16	Bill Lau, Comments at EBMUD Board meeting	March 27, 2018
17	Bill Lau, Email to John Coleman, EBMUD Board member	March 27, 2018
18	Deborah and John Kwan, Email to John Coleman, EBMUD Board member	March 27, 2018

Chapter 9 Responses to Comments

9.0 Master Responses

9.0.1 Master Response 1 – Visual Impacts

Many comments expressed concern about visual impacts of the new tanks, particularly from views along Leland Drive. This Master Response provides additional information about visual impacts of the Project and provides information to address the following comments: 2-1 through 2-5, 6-1, 7-1, 8-1 through 8-4, 8-6 through 8-9, 8-11, 8-13 through 8-15, 8-18, 11-1, 12-1, 15-5 through 15-8, 16-1, 16-6, 6-9 and 16-10.

Revisions to Landscaping Plan

Comments suggested planting of additional trees and shrubs to provide additional screening, expressed concern about whether the selected viewpoints provided an accurate representation of the visibility of the tanks from Leland Drive and requested simulations depicting conditions immediately following construction. Photo-realistic visual simulations of the Project were presented in Figures 3.1-2 and 3.1-3 on pages 3.1-9 and 3.1-10 of the Draft EIR. At the request of the City of Lafayette and local residents, these simulations have been updated to show additional viewpoints and to document the appearance of the Project site immediately following construction. Updated visual simulations are presented at the end of this Master Response starting on page 9-9. These updated visual simulations confirm the Draft EIR's conclusion that the aesthetic impacts would be less than significant. Nonetheless, to address community concerns, EBMUD used visual simulations of conditions immediately after construction to refine the proposed Project design and landscaping plan as follows:

- Plant 50 additional trees to provide additional screening for a total of 125 trees, which would replace all of the trees removed for construction.
- Plant fast-growing shrubs along ridge lines to provide additional screening.
- Move the black vinyl security fence surrounding the tanks closer to the tanks to reduce visibility of the fence.
- Replace the existing barbed wire perimeter fence along the property line with a wire mesh fence.

Revisions to the grading plan were considered, but site constraints do not permit substantial regrading of the site, and the proposed landscaping changes listed above provide substantial screening for the new tanks. Figures 9-1 and 9-2 show the reservoir conceptual plan presented in the Draft EIR, and the plan as revised to provide additional visual screening (see next page of this Master Response).

To reflect the increased plantings the Project Description is revised to reflect planting of 125 trees instead of 75 trees. The text on pages 2-11 and 2-20 is revised to reflect 125 trees.

Updated Visual Simulations

Comments from neighbors included some specific requests for viewpoints along Leland Drive. Visual simulations showing the revised landscape plan are provided for all three of the viewpoints depicted on pages 3.1-9 through 3.1-11 in the Draft EIR for 1040 Leland Drive, 1050 Leland Drive, and 24 Ruth Court. The Draft EIR included photographic simulations from public viewpoints at 1040 Leland Drive and 1050 Leland Drive and a computer rendering of the simulated view from the private backyard of 24 Ruth Court. The revised simulation for 24 Ruth Court now includes a photographic simulation because the resident provided access to the backyard, enabling a more accurate representation of the view from the site than was provided in the computer simulated view. The reservoir and location for the proposed tanks is not visible from most of the backyard at 24 Ruth Court, so the viewpoint is from a portion of the yard that is not typically used for outdoor gatherings. Photographic simulations of two additional viewpoints have also been included: 1401 Sunset Loop and 1048 Leland Drive. The view from 1048 Leland Drive looks directly west at the point where the entrance road would enter the tanks as requested in comments

Figure 9-1: Draft EIR Reservoir Conceptual Plan



Source: RHAA Landscape Architecture + Planning, 2017

Figure 9-2: Revised Conceptual Design



Source: RHAA Landscape Architecture + Planning, 2018

from Leland Drive residents. To address concerns about how the reservoir site would look immediately after construction, additional visual simulations are included to show the Project appearance immediately post construction, five years after construction, and fifteen years after construction.

The following new and updated visual simulations are included in the Final EIR at the end of this Master Response:

- 1040 Leland Drive (updated from Figure 3.1-2 in Draft EIR) post construction, 5-year projection, 15-year projection
- 1048 Leland Drive (new view directly west to entrance road) post construction, 5-year projection, 15-year projection
- 1050 Leland Drive (updated from Figure 3.1-3 in Draft EIR) post construction, 5-year projection, 15-year projection
- 24 Ruth Court (updated from Figure 3.1-4 in Draft EIR) post construction, 5-year projection, 15-year projection
- 1401 Sunset Loop (new view from backyard of adjacent residence) post construction, 5-year projection, 15-year projection

Detailed responses to comments about the visual impacts of the Project are provided in this Master Response. The responses address the size of the tanks, visibility of the tanks from Leland Drive and other neighborhood streets, the accuracy of the depiction of visual impacts in the Draft EIR, consistency with the City of Lafayette General Plan, the evaluation of public and private views, and the need for tree removal. The graphics at the end of this Master Response starting on page 9-9 include the updated conceptual design plan, new and updated visual simulations, and sight-line diagrams that illustrate how topography and new landscaping would screen the new tanks from view.

Size of Proposed Tanks

Some comments suggested that the Draft EIR did not clearly explain the size of the proposed tanks. As documented on page 3.1-11 of the Draft EIR and in Appendix C (Conceptual Architecture and Landscape Design Report) of the Draft EIR, the top of the tanks would be higher than the top of the roof of the existing reservoir. The size and height of the tanks is determined by the required capacity, hydraulic requirements, and site constraints. Two 8-million-gallon (MG) tanks are needed to provide sufficient capacity to serve the Leland Pressure Zone. Two approximately 225-foot-diameter tanks would be constructed to fit inside the existing reservoir basin. As shown in Figure 2-7 of the Draft EIR, the ground elevation around the tanks would range in elevation from approximately 330 feet to approximately 360 feet. The bottom elevation of the new tanks would be slightly lower than the ground elevation of the existing reservoir (330 feet), the outside wall of the tanks would be approximately 37 feet high (367-foot elevation) with a roof that would be approximately 26 feet, and the ground elevation on the east side of the existing reservoir is about 360 feet.

Height requirements are determined by the amount of water that must be stored, the required thickness of the roof to ensure that seismic safety requirements are met, and the need for freeboard (freeboard is the space between the top of the water surface and the bottom of the tank roof), which is necessary for safety and protection of water quality. Capacity and freeboard requirements control the height of the outside wall and the roof must be sloped to prevent ponding on the surface. The tanks have been designed to meet modern freeboard requirements and would thus have larger freeboard than the existing reservoir.

The bottom of the existing reservoir is at an elevation of 331 feet and the tanks would be constructed with an internal bottom elevation of approximately 329 feet, so the bottom of the tank would be slightly lower than the bottom of the existing reservoir. Construction the tanks at a deeper elevation is not feasible

because a lower elevation would not be suitable to serve the Leland Pressure Zone; the maximum water surface elevation needs to be at approximately 360 feet to meet system hydraulic needs. To achieve the required water surface elevation and provide increased freeboard to meet modern design standards, the tanks need to be approximately 6 feet taller than the top of the existing reservoir roof.

To provide clarification regarding the size of the tanks and the configuration of the embankment, the first paragraph on page 2-11 of the Draft EIR is revised as follows:

The new tanks would be constructed with new valve pits to house electrical and mechanical equipment for the facility. The floor of the tanks would be approximately two feet below the existing bottom of the reservoir basin, and the tanks would be approximately 37 feet tall at the outside wall (elevation of 367 feet) and approximately 39 feet tall at the peak of the roof (elevation of 369 feet), as measured from the ground elevation within the existing reservoir basin (330 feet). The new tanks would have a roof elevation approximately 4 to 6 feet higher than the existing reservoir roof elevation (363 feet). Soil would be replaced around the tanks, partially backfilling the reservoir basin, and the embankment would be reconstructed with a road through the embankment. Access into the bottom of the basin thus would be retained. The site would be restored and trees and other vegetation would be planted on the site. To maintain security, the tanks would be enclosed with EBMUD standard 8-foot black vinyl coated security chain link fencing with barbed wire at the top (**Figure 2-5**).

Visibility of Tanks from Leland Drive

Several comments expressed concerns that the tanks would be highly visible from Leland Drive and suggested that the embankment on the east side of the reservoir should remain in place or be totally reconstructed after the tanks are built. However, it would be necessary to breach the existing reservoir embankment to allow access to the reservoir basin for construction of the new tanks. As noted on page 2-10 of the Draft EIR, "Approximately 102,000 cubic yards (CY) of soil would be excavated.... Approximately 42,000 CY of material would be temporarily stockpiled on site and then subsequently used as backfill materials around the new concrete tanks after they are constructed". Once construction is complete, the eastern embankment would be substantially replaced and graded so as to provide as much screening as possible. The embankment cannot be completely restored to its previous configuration because an access road into the bottom of the reservoir basin is necessary for operation and maintenance of the new tanks. The embankment cut has already been designed to be the minimum necessary for access. The extent of the cut is based on the necessary width of the access road, which is less than 20 feet wide (as shown in Figure 2-7 on page 2-13 of the Draft EIR), and the need to maintain stable slopes on either side of the road. The new access road into the bottom of the reservoir basin would be curved so that the slopes on either side of the road would screen views of the basin from Leland Drive. The curve in the access road would allow the higher points in the embankments on either side of the road to overlap so as to screen the tanks from views from Leland Drive.

Comments have suggested that there would be a 280-foot wide valley in the middle of the existing embankment that would be visible from Leland Drive; however, no such view would exist. The access gate into the basin would not be visible from Leland Drive, and because the reservoir basin would be screened by topography, and plantings of new shrubs and trees, the new tanks are not expected to be highly visible from Leland Drive. Please refer to the end of this Master Response starting on page 9-9 for visual simulations that show the reservoir from several viewpoints, including three different angles from homes on Leland Drive to the east of the site. The visual simulations presented in this Master Response include Project conditions from immediately after construction to fifteen years after construction, and fully document the projected visual impacts of the new tanks and demonstrate that the entire height of the tanks would not be visible from Leland Drive.

Because the tanks must be 4 feet to 6 feet taller than the roof of the existing reservoir, they would be somewhat more visible than the existing facility until the vegetation planted on the site is sufficiently

mature to afford screening similar to that provided by the existing trees. Additional visual simulations have been prepared to address requests for views from additional locations and to show size of trees immediately following and five years after construction, and these simulations confirm the fact that the tanks would be substantially screened from views from Leland Drive. Because landscaping would screen the tanks from view within a few years following the completion of construction, the change in the height of the roof would not substantially alter the existing visual character of the site.

In addition to the updated visual simulations, sight-line diagrams have been prepared for each of the three Leland Drive viewpoints listed above (three viewpoints on Leland Drive) and is included at the end of this Master Response starting on page 9-41. The sight-line diagrams illustrate a "slice" from each viewpoint through the Leland Reservoir site and demonstrate how topography and landscaping would screen the tanks. The location of each slice is shown on a site plan; note that the locations were selected to depict low-points in the topography where the tank would be most visible from nearby viewpoints. Because the slices do not go through the center of the tank, the full diameter of the tank is not shown.

A summary of the visual simulations is as follows:

- From 1040 Leland Drive looking northwest toward the site, a portion of the southern tank's roof safety railing and several feet of the tank wall would be visible immediately following construction (page 9-14). Within five years of construction the safety railing and tank wall are expected to be fully screened by vegetation (page 9-15).
- From 1048 Leland Drive looking west toward the access road into the reservoir basin (the viewpoint specifically requested by Leland Drive residents), the safety railing and top of southern tank would initially be more visible than the view simulation from 1040 Leland Drive, but only the fencing on top of the northern tank can be seen (page 9-20). The security fencing at the northeast corner of the reservoir embankment is also visible. Additional trees and shrubs would be planted to screen both tanks, and within five years only a portion of the top of the southern tank can be seen; at fifteen years after construction, both tanks are barely visible and most of the security fence is screened by trees.
- From 1050 Leland Drive looking southwest toward the reservoir site, the security fence around the tanks and the safety railing top of the southern tank is also visible immediately following construction (page 9-26). However, both topography and vegetation would provide screening, which would almost entirely hide the fence and tanks from this viewpoint within five years after construction. Screening would be even greater at fifteen years after construction.

At no time after construction would there be views from Leland Drive into the interior of the reservoir basin; the tanks would always be substantially screened from public viewpoints by topography. Sight-line diagrams presented at the end of this Master Response (pages 9-41 through 9-58) also demonstrate how topography of the post-construction embankment would substantially screen the tanks from view. Only the top of the tanks would be visible immediately following construction and the tanks would be screened by vegetation, which would almost totally hide the tanks within five years following construction.

Visibility of Tanks from Adjoining Neighborhood Streets

Some comment suggested that visual simulations from viewpoints above Leland Drive should be provided. However, there are no neighborhood streets other than Leland Drive from which the tanks would be visible from public viewpoints. Views from other nearby locations are entirely from private backyards. Visual simulations at the end of this Master Response on pages 9-29 through 9-40 show views from the backyards of 24 Ruth Court and 1401 Sunset Loop, both of which are located east of Leland Drive and at a higher elevation than homes on Leland Drive. The backyard of the residence at 24 Ruth Court is about 60 feet higher than Leland Drive, and the backyard of the residence at 1401 Sunset Loop is about 20 feet higher than Leland Drive. Because the property is situated at a higher elevation, the residence at 24 Ruth Court currently has a filtered view of the roof of the existing reservoir, which is not

visible from any of the frequently used gathering places in the backyard. Immediately after construction, a portion of the two tanks would be visible from an infrequently used area of the backyard of 24 Ruth Court, with the southern tank being more visible than the northern tank. Within the first five years, the tanks would be substantially screened by trees, and the trees would almost entirely screen the tanks after fifteen years. Views of the reservoir site from the backyard of 1401 Sunset Loop are interrupted by vegetation within their property and neighboring properties on Leland Drive. Immediately after construction, small portions of the top of the southern tank would be visible from the backyard of 1401 Sunset Loop. Within five years the tanks would be almost entirely screened, and within fifteen years the tanks would be essentially invisible from 1401 Sunset Loop.

Consistency of Conceptual Design in Appendix C with Text of the Draft EIR

Commenters expressed confusion about the description of the Project conceptual design in Appendix C of the Draft EIR, as compared to information presented in Chapter 2, Project Description and Section 3.1, Aesthetics. It appears that the computer-generated bird's-eye model presented in Figure 18.0 of Appendix C has been misinterpreted as showing a proposed design that is not consistent with information in other portions of the Draft EIR. The computer-generated view in Figure 18.0, which shows a "bird's-eye" vantage point about 1,000 feet above street level, does not demonstrate that the new tanks would be exposed to view from Leland Drive. As shown in Figure 2.7 on page 2-13 of the Draft EIR and updated visual simulations presented at the end of this Master Response starting on page 9-9, topographic features between Leland Drive and the entrance to the reservoir basin would substantially screen the new tanks from view and proposed landscaping would, over time, provide additional screening that would restore the visual character of the site to be similar to the existing visual character. The conceptual design presented in Appendix C of the Draft EIR was the basis of the Project Description and for the evaluation of visual impacts presented in Section 3.1 of the Draft EIR.

Consistency with City of Lafayette General Plan

Some comments expressed the opinion that the analysis of Project consistency with the Lafayette General Plan in the Draft EIR was not accurate and that the Project is inconsistent with those policies.

Lafayette General Plan policies are described on page 3.1-3 of the Draft EIR, where the policy regarding preservation of views is cited:

"Policy LU-2.3: Preservation of Views: Structures in the hillside overlay area shall be sited and designed to be substantially concealed when viewed from below from publicly owned property. The hillsides and ridgelines should appear essentially undeveloped, to the maximum extent feasible."

Consistency with the General Plan policy is discussed on page 3.1-7 of the Draft EIR. The text in the second sentence in the second full paragraph, has been revised as follows for clarification:

The new tanks at the reservoir site would be screened from view by the reservoir embankment, <u>most of</u> which would be remain in place after Project construction. Design of the tanks is thus consistent with Lafayette General Plan policies regarding hillside overlay areas, which state that structures should be designed to be substantially concealed from view when viewed from below from publicly owned property.

The analysis in the Draft EIR (pages 3.1-6 to 3.11-11), along with the additional visual simulations provided at the end of this Master Response starting on page 9-9, support the statement that the new tanks would be <u>substantially concealed</u> from view from Leland Drive, which is the nearest publicly owned property. The General Plan policies do not specify total concealment. Additionally, EBMUD has revised the landscaping plan to address comments from the City of Lafayette and local residences, adding additional trees and shrubs to improve screening of the tanks. The landscaping is designed to screen the

tanks and to preserve the natural character of the ridgeline to the maximum extent feasible. The visual simulations document that the tanks would not significantly degrade the aesthetics of the reservoir site.

Public vs Private Views

Some comments request information about views from private properties along Leland Drive. As noted above, the City of Lafayette General Plan policies focus on views from publicly owned property. The General Plan policies have been considered in determining the significance of impacts. In keeping with the City's policies, the comment letter from the City of Lafayette (Letter 2, Comment 2) requested additional visual simulations from Leland Drive and other neighborhood streets (i.e. public viewpoints).

Consistent with the requirements of CEQA and the Lafayette General Plan's emphasis on protection of views from public property, the EIR's analysis emphasizes potential visual impacts from public streets in the vicinity of the Project. In addition, EBMUD also considered impacts on representative private views in the Draft EIR (page 3.1-8 and Figure 3.1-4 on page 3.11-11) and has provided additional visual simulations from both public and private viewpoints in this Master Response. Representative views from various elevations have also been presented, with street level views from Leland Drive and views from higher elevations on Ruth Court and Sunset Loop providing views from a number of vantage points.

Need for Tree Removal

Concerns have also been expressed about the number of trees that have to be removed from the site. Restoration of the embankment would require stockpiling of soil on the reservoir site, which would be used to regrade the site after completion of construction. Because areas for storage of soil on site are limited, some mature trees would need to be removed for the soil stockpile areas, which are shown in Figure 2-9 on page 2-19 of the Draft EIR. As shown on Figure 2-9 and on Figure 2-7 (page 2-13 of the Draft EIR), EBMUD would retain as many mature trees as possible on the eastern side of the reservoir site (**Figure 9-1** on page 9-2 of this Master Response shows the same landscaping plan that was portrayed in Figure 2-7 of the Draft EIR, and **Figure 9-2** on page 9-3 of this Master Response shows the revised plan with additional trees and shrubs for screening). Existing trees, including some mature oaks, would be retained in the northeastern portion of the site, immediately adjacent to Leland Drive, and adjacent to Patty Way. **Figure 9-3** (below) shows trees that would have to be removed for construction, and trees that are being removed for safety or fire prevention as part of EBMUD's ongoing maintenance program.



Figure 9-3: Tree Removal

Visual Simulations



LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT LANDSCAPE PLAN - FINAL EIR JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1040 LELAND DRIVE | POST-CONSTRUCTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1040 LELAND DRIVE | EXISTING CONDITIONS JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1040 LELAND DRIVE | POST-CONSTRUCTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1040 LELAND DRIVE | POST-CONSTRUCTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1040 LELAND DRIVE | 5 YEAR PROJECTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1040 LELAND DRIVE | 15 YEAR PROJECTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1048 LELAND DRIVE | POST-CONSTRUCTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1048 LELAND DRIVE | EXISTING CONDITIONS JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT
1048 LELAND DRIVE | POST CONSTRUCTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT
1048 LELAND DRIVE | POST CONSTRUCTION JUNE 2018



LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1048 LELAND DRIVE | 5 YEAR PROJECTON JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1048 LELAND DRIVE | 15 YEAR PROJECTION JUNE 2018




LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1050 LELAND DRIVE | POST-CONSTRUCTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1050 LELAND DRIVE | EXISTING CONDITIONS JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT
1050 LELAND DRIVE | POST CONSTRUCTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT
1050 LELAND DRIVE | POST CONSTRUCTION JUNE 2018



LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1050 LELAND DRIVE | 5 YEAR PROJECTION JUNE 2018







LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT **1050 LELAND DRIVE | 15 YEAR PROJECTION** JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 24 RUTH COURT | POST-CONSTRUCTION JUNE 2018

Burks Toma Architects



LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT
24 RUTH COURT | EXISTING CONDITIONS JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 24 RUTH COURT | POST-CONSTRUCTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT
24 RUTH COURT | POST-CONSTRUCTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT
24 RUTH COURT | 5 YEAR PROJECTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT
24 RUTH COURT | 15 YEAR PROJECTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1401 SUNSET LOOP | POST-CONSTRUCTION **JUNE 2018**





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1401 SUNSET LOOP | EXISTING CONDITIONS JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT
1401 SUNSET LOOP | POST-CONSTRUCTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT
1401 SUNSET LOOP | POST-CONSTRUCTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1401 SUNSET LOOP | 5 YEAR PROJECTION JUNE 2018





LELAND RESERVOIR - FINAL EIR EAST BAY MUNICIPAL UTILITY DISTRICT 1401 SUNSET LOOP | 15 YEAR PROJECTION JUNE 2018



ADMINISTRATIVE FINAL

Site-Line Diagrams



LELAND RESERVOIR | SIGHT LINE DIAGRAMS EAST BAY MUNICIPAL UTILITY DISTRICT EXISTING CONDITIONS - SITE PLAN JULY 2018







LELAND RESERVOIR | SIGHT LINE DIAGRAMS EAST BAY MUNICIPAL UTILITY DISTRICT

FINAL EIR - SITE PLAN JULY 2018









LELAND RESERVOIR | SIGHT LINE DIAGRAMS EAST BAY MUNICIPAL UTILITY DISTRICT

1040 LELAND DRIVE | EXISTING CONDITIONS JULY 2018







1040 LELAND DRIVE | FINAL EIR - POST CONSTRUCTION JULY 2018







1040 LELAND DRIVE | FINAL EIR - 15 YEAR PROJECTION JULY 2018

LELAND RESERVOIR | SIGHT LINE DIAGRAMS EAST BAY MUNICIPAL UTILITY DISTRICT







1048 LELAND DRIVE | EXISTING CONDITIONS JULY 2018

EAST BAY MUNICIPAL UTILITY DISTRICT





EAST BAY MUNICIPAL UTILITY DISTRICT 1048 LELAND DRIVE | FINAL EIR - POST CONSTRUCTION JULY 2018

LELAND RESERVOIR | SIGHT LINE DIAGRAMS









EAST BAY MUNICIPAL UTILITY DISTRICT 1048 LELAND DRIVE | FINAL EIR - 15 YEAR PROJECTION JULY 2018









1050 LELAND DRIVE | EXISTING CONDITIONS JULY 2018

EAST BAY MUNICIPAL UTILITY DISTRICT



Burkstoma Architects





1050 LELAND DRIVE | FINAL EIR - POST CONSTRUCTION JULY 2018

LELAND RESERVOIR | SIGHT LINE DIAGRAMS EAST BAY MUNICIPAL UTILITY DISTRICT











1050 LELAND DRIVE | FINAL EIR - 15 YEAR PROJECTION JULY 2018

LELAND RESERVOIR | SIGHT LINE DIAGRAMS EAST BAY MUNICIPAL UTILITY DISTRICT











EAST BAY MUNICIPAL UTILITY DISTRICT 24 RUTH COURT | EXISTING CONDITIONS JULY 2018

LELAND RESERVOIR | SIGHT LINE DIAGRAMS







EAST BAY MUNICIPAL UTILITY DISTRICT 24 RUTH COURT | FINAL EIR - POST CONSTRUCTION JULY 2018

LELAND RESERVOIR | SIGHT LINE DIAGRAMS







EAST BAY MUNICIPAL UTILITY DISTRICT 24 RUTH COURT | FINAL EIR - 15 YEAR PROJECTION JULY 2018

LELAND RESERVOIR | SIGHT LINE DIAGRAMS







EAST BAY MUNICIPAL UTILITY DISTRICT 1401 SUNSET LOOP | EXISTING CONDITIONS JULY 2018

LELAND RESERVOIR | SIGHT LINE DIAGRAMS









LELAND RESERVOIR | SIGHT LINE DIAGRAMS EAST BAY MUNICIPAL UTILITY DISTRICT

1401 SUNSET LOOP | FINAL EIR - POST CONSTRUCTION JULY 2018





EAST BAY MUNICIPAL UTILITY DISTRICT 1401 SUNSET LOOP | FINAL EIR - 15 YEAR PROJECTION JULY 2018

LELAND RESERVOIR | SIGHT LINE DIAGRAMS








9.0.2 Master Response 2 – Construction Hours and Noise Impacts

Residents attending the public meeting on February 8, 2018 expressed concern that EBMUD was proposing construction hours that do not match the hours specified in the City of Lafayette's Noise Ordinance. The City of Lafayette also requested that EBMUD consider alternative construction scenarios. This Master Response provides additional information about construction hours and noise impacts to address comments 2-4 and 15-2.

The proposed construction hours for the Project are described on page 2-20 of the Draft EIR, outlining typical construction hours of 7:00 a.m. to 7:00 p.m. The City's Noise Ordinance (Lafayette Municipal Code Chapter 5-2) specifies construction hours of 8:00 a.m. to 8:00 p.m.

After detailed evaluation of construction logistics, EBMUD has determined that the majority of construction work can be accomplished in compliance with the hours specified in the City's Noise Ordinance. Most construction work would therefore be conducted between 8:00 a.m. and 8:00 p.m. and the Draft EIR has been revised accordingly. As originally proposed in the Draft EIR, construction equipment such as graders and backhoes, which generate noise less than 90 dBA, would have been allowed to operate before 7:00 a.m. With the revised hours, workers and delivery trucks would be arriving on site before 8:00 a.m., but operation of construction equipment would not begin until 8:00 a.m., except on days when concrete is being poured or pipeline tie-ins are being constructed. As explained on page 2-20 of the Draft EIR, concrete pour work, which would occur over a total of approximately 16 days, would still need to start at approximately 6:00 a.m., and nighttime work would still be needed for pipeline tie-ins.

The first paragraph under Section 2.5.4, Construction Schedule, on page 2-20 of the Draft EIR is therefore revised as follows:

Construction is planned to start in the fall 2022, beginning with pipeline construction in the public ROW. Pipeline construction would occur first and would take approximately six months to complete. The reservoir construction may begin in early 2023 after the pipeline construction is complete. Reservoir construction is expected to be completed by the end of 2025. Construction would typically occur between 7:00 a.m. and 7:00 p.m. 8:00 a.m. and 8:00 p.m., Monday through Friday, with afterhours or weekend construction activity limited to unplanned/unexpected occurrences or critical shutdowns and emergencies. Construction trucks and personnel could report to the site at 7:00 a.m. for minor tasks and meetings, but as required by EBMUD Standard Specification 01 14 00 (subsection 1.8A, Construction Noise) specified by Section 5-207 of the Lafayette Code of Ordinances, no construction equipment would be operated work that generates noise over 90 dBA would occur until 8:00 a.m., except for concrete pours and pipeline tie-ins at Old Tunnel Road/Windsor Drive and Leland Drive/Meek Place. A 6:00 a.m. start time is needed during reservoir foundation and roof slab concrete pour work, which is estimated to occur over a total of about 16 days for both tanks (8 days per tank). To minimize interruptions on the pipeline construction in front of The Meher Schools, pipeline construction in front of the school would be scheduled during periods when school is not in session.

In the Draft EIR, in Section 3.11, Noise, Impact NOI-1 was determined to be significant and unavoidable because Project construction activities would occur outside the Noise Ordinance time limits and construction-related noise levels would exceed ordinance noise limits. The proposed change in construction hours to 8:00 a.m. to 8:00 p.m. would reduce identified noise impacts during the early morning hours (7:00 a.m. to 8:00 a.m.) on most days. However, there would still be two construction activities that would occur outside the 8:00 a.m. to 8:00 p.m. ordinance time limits: (1) construction would start at approximately 6:00 a.m. during concrete pours for the reservoir foundation and roof slab for approximately 16 days, and (2) pipeline tie-in work would occur over one night at each of the two tie-in locations, Old Tunnel Road/Windsor Drive and Leland Drive/Meek Place. In the Draft EIR, this impact was determined to be significant and unavoidable because these activities would extend beyond ordinance

time limits and also construction-related noise levels would exceed the ordinance noise limits (53 dBA (Leq) between 10:00 p.m. and 7:00 a.m. and 58 dBA (Leq) between 7:00 a.m. and 8:00 a.m. as well as 8:00 p.m. and 10:00 p.m.). Since these two activities would still exceed ordinance time and noise limits, Mitigation Measures NOI-1b and NOI-1c on pages 3.11-22 and 3.11-23 of the Draft EIR would still apply, and this impact would be reduced but would still be significant and unavoidable.

Impact NOI-1 also determined that Project-related construction noise generated during the ordinance time limits of 8:00 a.m. to 8:00 p.m. could exceed the ordinance's noise limits of 83 dBA (Lmax) at 50 feet or 80 dBA (Leq) at the closest property line. As explained on page 3.11-13 of the Draft EIR, exceedance of only one of the two noise limits would be a less-than-significant noise impact, but exceedance of both noise limits would be a significant noise impact. The proposed change in construction hours would not alter this significance determination of significant and unavoidable, and Mitigation Measure NOI-1a on page 3.11-22 of the Draft EIR would still apply. Additionally, the significance of Impacts NOI-2 and NOI-3 identified on pages 3.11-28 and 3.11-30, respectively in the Draft EIR would remain unchanged with this proposed change in construction hours.

To reflect the proposed change in construction hours for most activities to occur from 8:00 a.m. to 8:00 p.m., the following text changes are required in Section 3.11, Noise, under Impact NOI-1, *Construction Activities Occurring Outside 8:00 a.m. to 8:00 p.m. Timeframe*, starting at the second paragraph on page 3.11-19, of the Draft EIR:

Construction Activities Occurring Outside 8:00 a.m. to 8:00 p.m. Timeframe

The Project's construction hours <u>for most activities</u> would be 7:00 a.m. to 7:00 p.m. <u>8:00 a.m. to</u> <u>8:00 p.m.</u>, Monday through Friday, and construction-related vehicles could travel on neighborhood streets prior to 7:00 <u>8:00</u> a.m. in order to reach the site by 7:00 <u>8:00</u> a.m. On a typical day, construction trucks and personnel would report to the site at 7:00 a.m. for minor tasks and meetings, and there would be morning construction related activities between 7:00 a.m. and <u>8:00 a.m. but as specified by Section 5-207 of the Lafayette Code of Ordinances, no construction equipment would be operated until 8:00 a.m., except for concrete pours and pipeline tie-ins at Old <u>Tunnel Road/Windsor Drive and Leland Drive/Meek Place</u>. A 6:00 a.m. start time is needed during reservoir foundation and roof slab concrete pour work, which is estimated to occur over a total of approximately 16 days for both tanks (approximately 8 days per tank).</u>

Because of the Project's proximity to residential areas, <u>any</u> construction noise occurring outside of the 8:00 a.m. to 8:00 p.m. timeframe is expected to exceed the ordinance's more stringent noise limits. <u>Construction work before 8:00 a.m. would only be allowed during concrete pours</u>, which are expected to occur for a total of about 16 days and for pipeline tie-ins, which would occur over two nights (one night at each tie-in locations at Old Tunnel Road/Windsor Drive and <u>Leland Drive/Meek Place</u>). The ordinance requires noise occurring between 10:00 p.m. and 7:00 a.m. to remain below 53 dBA (Leq), and noise occurring between 7:00 a.m. and 8:00 a.m. to remain below 58 dBA (Leq). As explained above, the Project would include work on a daily basis beginning at 7:00 a.m., as well as limited amounts of overnight and early morning work, all of which could exceed these limits.

Table 3.11-4 presents estimated Project-related construction equipment noise levels generated during typical work on the Project, including work likely concrete pours to be conducted completed prior to 8:00 starting as early as 6:00 a.m. As the table indicates, construction noise could exceed the Lafayette Noise Ordinance's applicable limits of 58 dBA (Leq) between 7:00 a.m. and 8:00 a.m. and 8:00 p.m. and 10:00 p.m., and 53 dBA (Leq) between 10:00 p.m. and 7:00 a.m., a significant noise impact. EBMUD has considered the practicability of prohibiting construction work before 8:00 a.m. and after 8:00 p.m. during all construction phases in order to meet the ordinance time limit and has determined that this is not feasible during concrete pours

for the reservoir foundation and roof slab as well as for pipeline tie-ins at Old Tunnel Road/Windsor Drive and Leland Drive/Meek Place because:

- Construction work must start as early in the morning as possible to allow workers, deliveries, and equipment movement to avoid the heaviest rush hour traffic on highways and roads. Deliveries may arrive early in the morning before 7:00 a.m. due to either lighter traffic or permits that prohibit travel during certain hours.
- Earlier start times also allow the work to avoid the heat of the day in summer and the darkness when the daylight hours are shorter. During summertime heatwaves, contractors will sometimes request earlier start times to avoid working throughout the heat of the day.
- Starting early in the morning also allows for a larger time buffer in the afternoon, when adhering to an 8 hour work day. The buffer can provide extra daylight hours in case the project schedule slips or a construction issue comes up during the day that must be corrected.
- Concrete work requires a 6:00 a.m. start time due to the need for setup in the morning to mobilize a pump truck prior to the first delivery of concrete. Pump trucks will typically arrive at 6:00 a.m., ahead of the rest of the concrete crew. Disruptions in the concrete pour can affect the quality of the concrete work and service life of the structure; therefore, it is extremely important that concrete trucks arrive at regular intervals, particularly later in the concrete pour. If concrete truck movement is inhibited by heavy traffic later during afternoon commute hours, the concrete pour operation could be disrupted. In addition, concrete work is affected by temperature. Early start times ensure longer periods of time when temperatures are lower and concrete sets slower and is easier to work with.
- For concrete work that involves flat work, such as the tank floor, the concrete finishers typically stay later to finish the concrete after the remainder of the crew has gone home. Starting concrete work early allows concrete finishers to complete their work during daylight hours, or at least minimize the amount of work being performed after dark under floodlights. Finishing concrete after dark can negatively affect the quality of the concrete finish.
- Pipeline tie-ins to the existing EBMUD water transmission system at Old Tunnel Road/Windsor Drive and Leland Drive/Meek Place require a continuous 71- to 76-hour period because the tie-in necessitates shutting down and draining a portion of the transmission system. Once the system is shut down the tee connection must be inserted and welded in place in an uninterrupted process, so night work would be necessary at the two locations where tie-ins must be constructed.

The proposed change in construction hours would also require the following text changes on Page 3.11-22, first paragraph:

In summary, Project construction hours would extend one hour earlier than <u>comply with</u> ordinance time limits (7:00 a.m. versus 8:00 a.m.) on most days (as specified by Section 5-207 of the Lafayette Code of Ordinances, no construction equipment would be operated until 8:00 a.m., except for concrete pours and pipeline tie-ins) and would start two hours earlier than ordinance time limits (6:00 a.m. versus 8:00 a.m. on reservoir foundation and roof slab concrete pour days) for 16 days during the 3+ year construction duration. Additionally, Project construction activities would extend overnight for two days (8:00 p.m. to 8:00 a.m. 7:00 p.m. to 7:00 a.m.) for the two tie-in locations (one night per tie-in) and construction noise levels during this work would exceed the applicable noise level limits set forth in Lafayette's Noise Ordinance. These conflicts with the ordinance for overnight and early morning work are considered to be a significant and unavoidable noise impact.

The proposed change in construction hours would also require the following text changes on Page 3.11-23, second paragraph:

Significance Determination after Mitigation

The impacts of Project construction occurring outside of the noise ordinance's 8:00 a.m. to 8:00 p.m. timeframe for relaxed construction noise standards would be significant and unavoidable because construction noise prior to 7 <u>8</u>:00 a.m. could exceed the Lafayette Noise Ordinance's applicable limits of 58 dBA (Leq) between 7:00 a.m. and 8:00 a.m. <u>as well as between 8:00 p.m.</u> and 10:00 p.m. and 53 dBA between 10:00 p.m. and 7:00 a.m. (See **Table 3.11-5**). EBMUD has considered the practicability of prohibiting construction work before 8:00 a.m. in order to meet the ordinance time limit and has determined that this is not feasible <u>during concrete pours for the reservoir foundation and roof slab as well as for pipeline tie-ins at Old Tunnel Road/Windsor Drive and Leland Drive/Meek Place, as detailed above.</u>

The proposed change in construction hours would require the following text changes on Page 3.11-27, footnote at the bottom of Table 3.11-6 where the following text is deleted from the second sentence:

based on proposed construction hours of 7:00 a.m. to 7:00 p.m.

The proposed change in construction hours would also require text changes in Section 13, Transportation, and in Chapter 4, Alternatives and in Chapter 5, Other CEQA Considerations.

In Section 13, Transportation, references to construction hours are revised from 7:00 a.m. to 7:00 p.m. to 8:00 p.m. on Pages 3.13-10, 3.13-16, 3.13-17 and 3.13-18.

In Chapter 4 the discussion of the No Project Alternative is revised. The last sentence in the last paragraph in Section 4.5.3, Impact Discussion, on Page 4-6 is revised as follows:

<u>Although EBMUD would comply with the City of Lafayette Noise Ordinance to the extent</u> <u>possible, and would adjust use standard construction hours to be 8:00 a.m. to 8:00 pm (instead of</u> 7:00 a.m. to 7:00 p.m. <u>as identified in Standard Construction Specifications</u>) <u>some work for the</u> roof replacement <u>would still need to occur before 8:00 a.m.</u>, so significant noise impacts during construction would still be expected to occur.

In Chapter 4 the description of the New Leland Pressure Zone Reservoir Alternative is revised. The first paragraph in Section 4.6 on Page 4-8 is revised as follows:

Section 15126.6 of the CEQA Guidelines states that "Evaluation is to focus on those alternatives capable of either avoiding or substantially lessening any significant environmental effects of the project". For the Leland Reservoir Replacement, the only significant unavoidable impacts are construction noise. Standard construction hours are 7:00 a.m. to 7:00 p.m., and per EBMUD's Standard Construction Specification 01 14 00, Work Restrictions, but EBMUD would adjust schedules so that most work would occur between 8:00 a.m. and 8:00 p.m. and any construction work that generates noise levels above 90 dBA would not be allowed to occur before 8:00 a.m. or after 4:00 p.m. The Lafayette Noise Ordinance limits construction hours to 8:00 a.m. to 8:00 p.m., so but even though EBMUD would limits the types of activities that can occur between 7:00 a.m. and 8:00 a.m., some work would have to occur before 8:00 a.m. Starting construction before 8:00 a.m. is not consistent with the ordinance, and is thus considered to be a significant impact. Limited nighttime construction is also proposed for pipeline tie-ins, but due to the nature of the tie-in process, this activity is unavoidable. In addition to the conflict with the noise ordinance, noise levels for truck traffic during reservoir construction and nighttime construction of pipeline connections would constitute a significant impact. EBMUD has thus considered alternatives to reduce construction noise at the Leland Reservoir site.

In Chapter 4 the impact discussion of the New Leland Pressure Zone Reservoir Alternative is revised. The first sentence in the first paragraph in Section 4.6.2, Impact Discussion on Page 4-8 is revised as follows:

EBMUD would use standard still have to complete some construction hours (7:00 a.m. to 7:00 p.m.) before 8:00 a.m. for construction of a single tank at the Leland Reservoir Site, so there would still be significant construction noise impacts in the City of Lafayette because construction would conflict with the City of Lafayette Noise Ordinance.

The first paragraph under Figure 4-1 on Page 4-9 is revised as follows:

The Rudgear Road reservoir site is located within 60 feet of residences so construction at this site would also result in potentially significant noise impacts associated with both construction activities and noise from haul trucks. EBMUD construction hours <u>for some activities</u> for the New Leland Pressure Zone Reservoir would be in conflict with the City of Walnut Creek Municipal Code (City of Walnut Creek 2017), which only allows construction from 7:00 a.m. to 6:00 p.m. Nighttime construction would also be required at the Rudgear Road site for tie-in of the new pipeline connecting the tank to the existing EBMUD transmission system. The New Leland Pressure Zone Reservoir Alternative would thus reduce noise impacts at the Leland Reservoir site, though not to a less-than-significant level, but would result in significant and unavoidable noise impacts at the Rudgear Road site in Walnut Creek due to construction activity at that site, which is assumed to occur at the same hours as those proposed for the Project: <u>concrete pours</u> would have to start at 6:00 a.m. and limited nighttime work would be required. 7:00 am to 7:00 pm.

The proposed change in construction hours would also require the following text changes in Chapter 5. The second paragraph in Section 5.1, Significant Unavoidable Impacts, on Page 5-1 is revised as follows:

Impact NOI-1: the Project would result in 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. It would not be feasible for all Project construction to comply with the City of Lafayette Noise Ordinance, which limits construction activities to 8:00 a.m. to 8:00 p.m. Monday through Saturday and 10:00 a.m. to 6:00 p.m. on Sundays and legal holidays. EBMUD has considered the practicability of prohibiting construction work before 8:00 a.m. in order to meet the ordinance time limit and has determined that most activities can occur between 8:00 a.m. and 8:00 p.m., but for some activities this is not feasible. To safely accomplish required tasks at the reservoir site, c Construction hours for most activities would need to be 7:00 a.m. to 7:00 p.m. be 8:00 a.m. to 8:00 p.m. Monday through Friday. During concrete foundation and roof slab pour tasks a 6:00 a.m. start time would be required to minimize interruptions of the concrete pour activities. Pipeline construction tie-ins would also require nighttime work and noise generating activities would occur primarily during one 24-hour time period for each tie-in. Noise levels during the tie-in process would exceed the 53-dBA Nighttime Ordinance Noise Limit at the nearest sensitive receptors. Per Mitigation Measure NOI-1c, EBMUD will maintain ongoing communication with residents and will address noise issues during construction, and Mitigation Measure NOI-1b, Nighttime Construction Measure, would provide alternative lodging for affected residents, but the impact would still be considered significant because residents may choose not to move to alternative lodging for one night and would be subject to nighttime noise. As a result, the impacts of Project construction outside of the noise ordinance's 8 a.m. to 8 p.m. timeframe would be significant and unavoidable because construction noise prior to 7 a.m. could exceed the Lafayette Noise Ordinance's applicable limits of 58 dBA (Leq) between 7 a.m. and 8 a.m. and 53 dBA between 10 p.m. and 7 a.m. for nighttime work.

9.1 State of California Governor's Office of Planning and Research State Clearinghouse and Planning Unit

9.1.1 Response to Comment 1-1

EBMUD is pleased to receive confirmation that no comment letters were sent by state agencies and appreciates the assistance of the Clearinghouse in complying with the review requirements for draft environmental documents.

9.2 City of Lafayette

9.2.1 Response to Comment 2-1

Please refer to Master Response 1 for a discussion of visual impacts and additional visual simulations, and for a discussion of consistency with the policies of the Lafayette General Plan. As noted in Master Response 1, information in Appendix C of the Draft EIR is the basis of the analysis of visual impacts in the Aesthetics section of the Draft EIR and does not indicate that the tanks would be visible from Leland Drive.

9.2.2 Response to Comment 2-2

Master Response 1 includes visual simulations showing the view directly west toward the point where the access road enters the reservoir basin.

9.2.3 Response to Comment 2-3

Information on tank sizing is included in Master Response 1.

9.2.4 Response to Comment 2-4

As noted in Master Response 1, the height of the tanks is necessary to meet hydraulic requirements.

9.2.5 Response to Comment 2-5

Refer to Master Response 1 which shows revised landscaping plans to provide additional screening. The tanks are proposed to be painted a medium green color, which has been selected to blend in with the trees that would be planted to screen the tanks from views from Leland Drive.

9.2.6 Response to Comment 2-6

The details regarding night work are communicated in the Project Description on pages 2-17 through 2-18 of the Draft EIR. To clarify the language describing the duration and location of the night work, the following edits are made to the text of the Draft EIR:

The last sentence in the last paragraph on page 2-17 (Project Description) is revised as follows:

Construction of the connections is estimated to require a 71- to 76-hour period <u>for each</u> <u>connection.</u>, and night work <u>To limit the duration of the shutdown of the critical transmission</u> <u>pipeline, continuous work would be necessary, resulting in one night of work would be necessary</u> for <u>each of</u> the tie-ins at Old Tunnel Road/Windsor Drive and Leland Drive/Meek Place. <u>Continuous work would not be necessary for the tie-in at Leland Drive and the Leland Reservoir</u> <u>site, therefore night work would not be needed at this connection location.</u>

The first full paragraph after the bullet on page 3.11-20 (Noise) is revised as follows:

In addition to early morning activities, construction activities would need to extend later than the 8:00 p.m. ordinance time limits for pipeline tie-ins at Old Tunnel Road at Windsor Drive and Leland Drive at Meek Place. The entire tie-in process could require continuous work for approximately 71 to 76 hours for each connection, although the noisiest activity would occur over a 24-hour period. The tie-in process would be short-term, intermittent in nature, and would cease

upon completion of the tie-in process. <u>At two tie-in locations (Old Tunnel Road/Windsor Drive</u> and Leland Drive/Meek Place). <u>The the process would entail some limited construction activities</u> during nighttime (7:00 p.m. to 7:00 a.m.) weekday hours. <u>Night work would not be needed at the tie-in at Leland Drive and the Leland Reservoir site.</u> ...

9.2.7 Response to Comment 2-7

EBMUD has considered requests by the City of Lafayette and local residents and has developed a revised construction schedule that allows most construction activities to be conducted between 8:00 a.m. and 8:00 p.m. Please refer to Master Response 2 for additional information.

9.2.8 Response to Comment 2-8

Following the standard process, EBMUD would obtain an encroachment permit from the City of Lafayette for any work within the public right of way. Formal approval from the Lafayette City Council to conduct nighttime work to connect the new water pipelines to the existing water distribution system is not required, but EBMUD would comply with the conditions of the encroachment permit. EBMUD would keep the City of Lafayette and local residents informed of the status and schedule of expected overnight tie-in work during construction.

9.2.9 Response to Comment 2-9

Please refer to the pages 3.1-6 through 3.1-11 of the Draft EIR and to Master Response 1 for an evaluation of impacts on visual character. While there would be visual impacts during construction, the changes in visual character would not be significant and would be minimized by the proposed landscaping plan, which has been adjusted to provide additional screening. As noted in Master Response 1, EBMUD now proposes to plant 125 trees on the reservoir site as part of the landscaping plan.

The Project would require removal of about 90 trees, not 125 trees. EBMUD has already worked to minimize tree removal to the extent feasible, and the proposed Project reflects removal of the minimum possible number of trees. Further reductions in tree removal are not possible, given site constraints, including the requirement for access into the bottom of the existing reservoir basin and the need to stockpile soil. As described on page 3 of Appendix C of the Draft EIR, objectives of conceptual design included:

- "Protect healthy native trees outside of construction zone
- Limit tree removal within construction zone"

At the initial community meeting held in August 2016, EBMUD had identified about 115 trees that would have been removed for construction access and for soil stockpiling. Based on community input, the soil stockpile locations were adjusted specifically to preserve about 25 trees on the southern end of the reservoir site near Patty Way, along Leland Drive and on the northeastern portion of the site. Figure 2-9 on page 2-19 of the Draft EIR shows the soil stockpile areas, which can be seen to curve around existing trees that would be preserved on site. The Project now includes removal of about 90 trees.

The landscaping plan was also refined during Project scoping, with the original plan including planting of 45 trees. In response to initial public input, the conceptual plan was revised to include 30 additional trees. The landscaping plan presented in Appendix C of the Draft EIR includes 75 trees. The design process, which included community meetings in August and September 2016, is described on pages 10 through 15 of Appendix C in the Draft EIR. The design presented in Appendix C was based on community input on design concepts and was responsive to the concerns that were expressed at community meetings.

Based on additional input received during the public comment period on the Draft EIR, additional changes to the landscape plan have been implemented, and a total of 125 trees are now proposed to be planted in addition to shrubbery. Please refer to Master Response 1 for additional details.

9.2.10 Response to Comment 2-10

EBMUD has revised the landscaping plan (see **Figure 9-2 on page 9-3**) to address concerns about visual impacts of the Project immediately following construction, when trees are immature, and has included additional planting of trees. The revised landscaping plan includes planting approximately 125 native trees, including additional plantings of trees and shrubs near the tanks. About 90 trees would be removed for construction of the Project and about 30 trees would be removed for maintenance purposes, so EBMUD is now proposing to plant more trees than would be removed. The updated visual simulations show that the landscaping plan would effectively screen the tanks, resulting in restoration of the site to its original condition to the extent feasible.

9.2.11 Response to Comment 2-11

To address different noticing criteria during different stages of the Project EBMUD agrees to change the noticing requirements for this Project as requested by the City of Lafayette and will also ensure that the City of Lafayette is included on the Project's mailing list. The noticing changes are summarized in **Table 9-1**, which shows the revisions to the Draft EIR.

Mitigation Measure NOI-1c 9 (Construction Liaison) addresses the commenter's request that contact information for the job superintendent be included on Project notices. As stated on Page 3.11-2 of the Draft EIR, "An EBMUD contact person will be designated to respond to construction-related issues, including noise. The phone number of the liaison will be conspicuously posted at construction areas, on all advanced notifications, and on the EBMUD Project website."

Description	Revisions to the Draft EIR
NOI-1c: Construction Liaison	The City of Lafayette, schools, businesses, recreational facilities, and residents located within a 1,000-foot radius of the construction site shall be notified at least 30 days Residents located within 500 feet of project construction and with a direct line-of-sight to the construction area will be notified at least seven (7) days in advance of noisy activities and about the estimated duration of the activity; a second notice will also be sent no later than 14 days prior. EBMUD will also send emails to individuals on the Project's mailing list to update them prior to noisy phases.
TRA-2: Maintain Emergency Access	Emergency responders (i.e., local police, fire, and ambulance services) shall be notified at least seven days in advance of any activities requiring full or partial roadway closures. Emergency access detour routes shall be determined in consultation with emergency responders as part of the notification process. The City of Lafayette, sSchools, businesses, recreational facilities, and residents located within a 1,000-foot radius of the construction site 300 feet of construction zone shall be notified at least seven30 days in advance of activities requiring roadway closures, outlining the Project schedule and the duration of construction activities; a second notice will also be sent no later than 14 days prior to the planned activity. EBMUD will send notices to the individuals and organizations on the Project's mailing list to update them prior to any roadway closures.

Table 9-1: Noticing Criteria for the Project

9.2.12 Response to Comment 2-12

The Project would comply with the intent of Provision C.3 of the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, Order No. R2-2015-0049, NPDES Permit No. CAS612008, by reducing the amount of impermeable area by approximately 10 percent. The existing Leland Reservoir site has approximately 187,000 sf (4.29 acres) of impervious surface area. After the Project is completed, the total impervious surface area would be approximately 168,000 sf (3.86 acres), a reduction of approximately 19,000 sf. (0.44 acres). Reducing impermeable surface area would ensure that the Project would not increase runoff from the site.

9.2.13 Response to Comment 2-13

The City's storm drain details are documented in the City of Lafayette 2007 Pavement Management Project drawings, sheets 31-35, a copy of which is located in the Hydrology Technical Report in Volume 2 of the Draft EIR. The drainage from the regraded site would be captured by the City of Lafayette's existing storm drain system, similar to how the site is currently drained. North of the reservoir access road, parallel to Leland Drive and the Project site, are two curb inlet catch basins that connect to the City's 18-inch High Density Poly Ethylene (HDPE) storm drain, which subsequently connects to an existing 15-inch Corrugated Metal Pipe (CMP) storm drain under the existing access road. The 15-inch CMP storm drain then connects to an existing concrete V-Ditch, on the south side of the access road, that parallels the Project site and connects to a catch basin at the intersection of Leland Drive and Patty Way that directs water flows to a 21-inch Reinforced Concrete Pipe (RCP) that crosses Leland Drive and connects to a sol-inch storm drain that travels south along the east side of Leland Drive.

As stated on Page 3.9-10 of the Hydrology and Water Quality section of the Draft EIR, the Project would be designed to "ensure that runoff from the site would not exceed capacity of the existing storm drains." Also, as stated on Page 3.9-14, "because there would be no change in existing drainage patterns, the Project would not increase surface runoff in a manner that would result in flooding on or off site and would not result in off-site flooding or runoff from the site that would exceed the capacity of the City's storm drain system." As detailed in Response to Comment 2-12, the Project would decrease the amount of impermeable area by approximately 19,000 sf. Therefore, drainage flows to the City's storm drain system would also be reduced, and no hydraulic calculations are necessary to support that the existing drainage system at the storm drain tie-in and downstream of the Project site are adequate.

9.2.14 Response to Comment 2-14

As stated on page 2-15 of the Draft EIR, "the pavement would be replaced to one foot beyond the edge of pipeline trench. If the edge of trench is within two feet of a gutter, pavement between trench cut and gutter lip would be replaced." The planned installation location of the new water mains in the street right of way would not be determined until the detail design phase of the Project. During the construction phase of the Project EBMUD can discuss with the City repaving options in addition to EBMUD's standard pavement replacement practice after the final main installation locations are finalized taking into account final field verification details.

9.2.15 Response to Comment 2-15

The comment is correct that the analysis of traffic impacts presented in the Draft EIR presumes that material and equipment delivery trucks would use the most direct access route to the Project site, but this does not preclude use of other access routes. However, the access route suggested by the City, via the El Curtola Boulevard bridge and Camino Diablo, would require vehicles from the east of the Project area to travel a fairly complex route through downtown Walnut Creek with increased vehicle miles traveled. Access routes would vary depending on whether vehicles were coming from southbound Interstate 680 (I-680), from northbound I-680, or eastbound State Route 24 (SR 24). The potential alternative access routes are described below:

- From southbound I-680, vehicles would have to drive past the SR 24 exit to the Olympic Boulevard exit in downtown Walnut Creek, make a left turn on Olympic Boulevard, then make a left turn on Alpine Road, another left turn on Mt. Diablo Boulevard and then a right turn onto Camino Diablo.
- From northbound I-680, vehicles would exit I-680 in downtown Walnut Creek, make a right turn on Olympic Boulevard, make a left turn on Alpine Road, another left turn on Mt. Diablo Boulevard and then a right turn onto Camino Diablo.
- From eastbound SR 24, vehicles have to travel past the Pleasant Hill Road exit closest to the Project site, exit SR 24 on Mount Diablo Boulevard in Walnut Creek, and make a sharp left turn onto Camino Diablo.

The comment suggests investigating truck routes with less impact to residential areas, but routes from I-680 through downtown Walnut Creek would also affect residential areas or sensitive land uses such as a preschool (i.e., the Kids Speaking Spanish Preschool located at 2780 Camino Diablo, Walnut Creek). The curb-to-curb width of Alpine Road has several multi-family residential complexes on both side of the street, so truck traffic from I-680 would still affect residential areas. Alpine Road is somewhat wider than Old Tunnel Road, but because of extensive on- and off-street parking serving both residential and commercial uses on both sides of the street, the effective width of the travel way is actually narrower than Old Tunnel Road. Because of the constraints and increased potential for conflicts associated with traveling through downtown Walnut Creek, EBMUD is not proposing to require that trucks travel this less direct route.

9.2.16 Response to Comment 2-16

Less off haul of soil would result in fewer truck trips, and more off haul of soil would generate more truck trips. Preliminary estimates of soil quantities were developed during preparation of the Facilities Plan for the Leland Reservoir Replacement Project (EBMUD 2014). It was estimated that about 80,000 cubic yards (CY) of soil would need to be hauled off site during construction of the "Off Haul Most" Alternative. As described on page 2-10 of the Draft EIR, the Project, as currently designed, would require off haul of 66,000 cubic yards of soil. Hauling the additional 14,000 CY of soil off site would require 1,750 additional truck trips. Each truck can haul approximately 16 CY of soil, and each load of soil generates two trips: one trip to the reservoir site and one trip from the reservoir site to the disposal site.

9.2.17 Response to Comment 2-17

The distance from the State Route (SR) 24 on and off ramps at Pleasant Hill Road to the Project site varies depending on the direction of travel. The distance from the freeway exit to the Project site is approximately 1.1 miles for eastbound traffic and approximately 1.4 miles for westbound traffic. Vehicles going from the reservoir site to SR 24 travel approximately 1.0 mile from the Project site to the freeway going east and approximately 1.3 miles from the Project site to the freeway going west. If traffic were to use alternative exits at the SR 24/Interstate 680 interchange, the distances for vehicles heading to the Project site would be approximately 1.8 miles for eastbound traffic exiting at the SR 24/Mt. Diablo Boulevard off ramp in Walnut Creek and 1.9 miles for westbound traffic exiting Interstate 680 at Olympic Boulevard in Walnut Creek. For vehicles traveling from the reservoir, the distance to the freeway is 2.3 miles to enter Interstate 680 heading east at Olympic Boulevard and 1.5 miles to enter SR 24 heading west from the Mt. Diablo Boulevard on-ramp in Walnut Creek. The traffic analysis thus assumed that vehicles would use the Pleasant Hill Road off ramp, which is the shortest, most direct route to the site.

9.2.18 Response to Comment 2-18

Intersections were selected to represent the primary intersections expected to be used by construction traffic traveling the most direct route from SR 24 to the Project site. The most direct route from SR 24 to the Project site would be from Pleasant Hill Road to Old Tunnel Road to Leland Drive, so the Pleasant

Hill Road/Mt. Diablo Boulevard, Pleasant Hill Road/Old Tunnel Road, Old Tunnel Road/Windsor Drive and Old Tunnel Road/Leland Drive intersections were analyzed. During pipeline construction, trucks would likely access the pipeline construction zone either from Old Tunnel Road or from Condit Drive, so the Condit Road/Windsor Drive intersection was evaluated. The intersection of Old Tunnel Road/El Curtola Boulevard was also evaluated as it is located on an alternate access route for haul trucks. The list of intersections proposed to be included in the traffic study was provided to Tony Coe, who was the City Engineer at that time, in an email dated May 23, 2016, and the proposed dates for traffic counts were provided in the same email message. EBMUD met with City of Lafayette staff on June 1, 2016 and reviewed the proposed plan for the traffic study.

9.2.19 Response to Comment 2-19

As noted on page 3.13-3 of the Draft EIR, "*intersection turning movement counts were collected on Thursday, June 2, 2016 during the AM (7:00 a.m. to 9:00 a.m.) and PM (4:00 p.m. to 6:00 p.m.) peak periods.*" The weather during the AM peak period was fair, with a temperature of about 60°F at the end of the AM peak period. Weather during the PM peak period.¹

9.2.20 Response to Comment 2-20

The 2000 Highway Capacity Manual was used for evaluation of study intersections because the signal phasing for the intersection of Pleasant Hill Road and Old Tunnel Road is not compliant with the standards of the National Electrical Manufacturers Association (NEMA), which establishes standards for phasing of traffic signals. The 2010 Highway Capacity Manual does not support non-NEMA phasing, and it was thus necessary to use the 2000 Highway Capacity Manual.

9.2.21 Response to Comment 2-21

The intersection delay (60.6 seconds per vehicle) and level of Service (LOS) (E) presented for Intersection #1 in Table 3.13-1 of the Draft EIR presents the overall intersection delay and LOS; they do not represent data for a single movement. As noted in the footnote to Table 3.13-1, "EB" is presented in the table to inform which poorly operating approach is causing this intersection to operate at an unsatisfactory level.

9.2.22 Response to Comment 2-22

EBMUD does not agree that new traffic counts are needed. As noted on page 3.13-3 of the Draft EIR, "intersection turning movement counts were collected on Thursday, June 2, 2016 during the AM (7:00 a.m. to 9:00 a.m.) and PM (4:00 p.m. to 6:00 p.m.) peak periods." Only these counts were used for the intersection analyses. Additionally, roadway counts were collected on residential streets to assess the level of traffic and daily variations, as stated on page 3.13-5 of the Draft EIR "*120-hour traffic counts were collected from Thursday, June 9, 2016 through Monday June 13, 2016*". Both the Lafayette School District and Acalanes Union High School District were open through June 10, 2016, and The Meher Schools, which are the closest school to the Leland Reservoir site, were in full session for an additional week, through June 17, 2017. Although the comment is correct that the last day of school typically is a "minimum day", school traffic only affects the AM peak period because all local schools are dismissed before the start of the afternoon peak hour. In 2016, the Acalanes Union School District school day ended at 3:05 p.m., and schools within the Lafayette School District (middle school and elementary schools) had

¹Historical weather data obtained on August 8, 2018 for Concord, California from https://www.wunderground.com/history/daily/us/ca/concord/KCCR/date/2016-6-2.

dismissal times before 3:00 p.m. School traffic thus does not affect traffic data for the 4:00 p.m. to 6:00 p.m. PM peak period.

9.2.23 Response to Comment 2-23

The second full paragraph on page 3.13-18 of the Draft EIR is revised as follows to clarify the operational schedule for The Meher Schools.

The parking lot for The Meher Schools is located on the west side of Leland Drive adjacent to the construction zone, and access to the parking lot may be affected during construction. The Meher Schools are generally open between the hours of 7:00 a.m. and 6:30 p.m., with peak drop-off and pick-up activities occurring from 8:00 a.m. to 9:00 a.m. and from 1:45 p.m. to 2:45 p.m., respectively. The school year typically starts after Labor Day and runs to mid-June, but because summer programs are offered, the school operates almost year-round. The campus is closed for only about one week in late June and another week in late August. School staff have indicated that the months of July and August would be the least disruptive for construction near the school (The Meher Schools 2016).

9.2.24 Response to Comment 2-24

During summer swim meets, the occupancy ratio for on-street parking in the vicinity of the Sun Valley Swimming Pool is 100 percent. All on-street parking within about a quarter of a mile of the pool is typically occupied during swim meets, which would meet the City's definition of "high parking demand".

9.2.25 Response to Comment 2-25

Page 3.13-8 of the Draft EIR is revised as follows to clarify provisions of the City of Lafayette Municipal Code.

"Lafayette Municipal Code, Ordinance No. 646

Sections 8-702, 8-703 and 8-704 of the City of Lafayette Municipal Code were amended on March 28, 2016 to address the allowable weight of vehicles traveling along streets within the City. The Ordinance specifies that vehicles weighing more than 10,000 pounds shall not travel on any street within the City other than designated truck routes except for commercial vehicles needed for the construction, installation or repair of a public utility. Designated truck routes in the City of Lafayette are Pleasant Hill Road, Deer Hill Road, First Street, Oak Hill Road, Mt. Diablo Boulevard, Olympic Boulevard, and Moraga Road. Section 8-705 of the Municipal Code lists exceptions to the prohibitions of trucks with gross vehicle weight ratings over 10,000 pounds; item (c) states that prohibitions do not apply to 'A commercial vehicle necessarily in use in the construction, installation, or repair of a public utility as described in Vehicle Code Section 35704.' Because Project construction would involve construction of a public utility, Project-generated truck trips are exempt from this ordinance."

9.3 Francine Lyall

9.3.1 Response to Comment 3-1

Comment noted. The commenter's description of the history of traffic on Old Tunnel Road is acknowledged.

9.3.2 Response to Comment 3-2

The Draft EIR evaluates the effect of construction traffic on Old Tunnel Road, and as stated on page 3.13-15: "Although the increases in volumes may be noticeable to local residents, the additional construction related vehicles would not cause traffic volumes on local streets to exceed or approach the carrying capacity of the roadways or cause queuing issues along Leland Drive." EBMUD Standard Construction Specification 01 55 26, Traffic Regulation, requires that the contractor develop a traffic control plan that ensures safety of vehicles, bicycles and pedestrians in the Project area.

The Draft EIR also evaluates other impacts related to construction traffic, including traffic noise impacts, which are addressed starting on page 3.11-25 of the Draft EIR, under the heading "*Truck Traffic Increases on Local Roadways*". As noted on page 3.11-28, "*During most of the three-year reservoir construction duration, truck and worker traffic increases would result in barely perceptible noise increases of up to 3dBA (Leq and Ldn) on Old Tunnel Road.*" However, during two periods of construction traffic noise increases on Tunnel Road would be higher: "(1) during reservoir demolition, open cut excavation and soil hauling would result in traffic noise increases of 5 dBA (Leq and Ldn) on Old Tunnel Road ... and (2) during the concrete pours for both tank foundations, noticeable noise increases of 6 to 7 dBA ... would occur on Old Tunnel Road". Despite these readily noticeable traffic noise increases the overall noise environment would still be "conditionally acceptable" as defined in the City of Lafayette's Land Use and Noise Compatibility Standards.

The Draft EIR thus acknowledges that the Project would affect residents on Old Tunnel Road during the construction period. However, truck traffic associated with the Project would cease upon completion of Project construction and normal traffic patterns would be restored.

9.3.3 Response to Comment 3-3

Please refer to Response to Comment 2-15 for discussion of alternate routes using Camino Diablo and El Curtola Boulevard. The comment also suggests alternate routes through Walnut Creek. The route from SR 24 via Mt. Diablo Boulevard in Walnut Creek using Boulevard Way, Saranap Avenue and Old Tunnel Road, would travel through several residential areas. While it is correct that Boulevard Way has a mix of commercial and residential uses, Saranap Avenue and Old Tunnel Road are entirely residential. The suggested route from I-680 using Olympic Boulevard, Pleasant Hill Road and Condit Road traverses residential areas in both Walnut Creek and Lafayette. The routes using Olympic Boulevard, Saranap Avenue, Old Tunnel Road, and Condit Road all transfer impacts from one residential area to another. Additionally, the suggested routes use off ramps that require a greater distance of travel from freeway off-ramps through local streets. Please refer to Response to Comment 2-17 for a comparison of the distance from the SR-24/Pleasant Hill off-ramps to the off-ramp at SR-24/I-680. The distance from the Olympic Boulevard off-ramp at I-680 via Pleasant Hill Road and Condit Road is even greater, at 2.7 miles.

9.4 Ronald J. Rusay and Suzanne H. Rusay

9.4.1 Response to Comment 4-1

EBMUD appreciates the support that the commenter expresses for the Project.

9.4.2 Response to Comment 4-2

As discussed in Master Response 1, the landscape design has been revised to address comments on the Draft EIR. The comment is correct that the existing barbed wire fence was still shown in both the "existing conditions" and "proposed conditions" visual simulations prepared for the Project and included as Figures 3.1-2 and 3.1-3 of the Draft EIR. The Facilities Plan for the Project specifies that "*The property line is fenced with existing three-strand barbed wire fencing. The fencing should be inspected and replaced with three-strand barbed wire where necessary.*" Other fencing options had thus not been explored but based on input received during review of the Draft EIR and the fact that portions of the fence will be disrupted due to construction activities, the fence along the property line is now proposed to be replaced with a wire mesh fence. Visual simulations presented in Master Response 1 now show the revised fencing design.

9.4.3 Response to Comment 4-3

EBMUD has considered the request to remove the existing barbed wire fencing and has determined that this request can be accommodated. EBMUD would replace the existing fencing with wire mesh fence, which does not have any barbs. The visual simulations provided in Master Response 1, starting on page 9-13 show the proposed wire mesh fencing for the perimeter of the site.

9.5 Suzanne and Ron Rusay

9.5.1 Response to Comment 5-1

In the context of the section that the comment references, construction access refers to access for construction of the Project and for construction stockpiles. The contractor cannot demolish the existing reservoir and construct tanks within the existing reservoir basin without breaching the existing embankment so that construction equipment can access the bottom of the basin. Additionally, once construction of the tanks is complete, an access road into the bottom of the basin would be needed so that operations and maintenance staff can access valves at the bottom of the reservoir basin.

9.5.2 Response to Comment 5-2

EBMUD would only remove those trees that must be removed to allow for construction access and stockpiling of soil. As noted in Response to Comment 5-1, it is not possible to construct the tanks without breaching the reservoir embankment. Most of the trees to be removed are on the existing embankment and it is not possible to accomplish the Project's construction without removing those trees. Some trees would be removed so that soil from the embankment can be stored on site. The 42,000 cubic yards (CY) of soil that would be stored on site would be used to partially backfill the new tanks and reconstruct a portion of the embankment so that the new tanks would still be largely screened by topography. If soil was not stored on site, approximately 6,063 additional daily one-way truck trips would be needed to haul the soil off site. Approximately 5,181 daily one-way truck trips would be required to haul soil back to site at the completion of tank construction so that the new tanks could be partially backfilled, and a portion of the embankment reconstructed on either side of the access road. Logistics of construction thus make it infeasible to avoid the proposed tree removal at the reservoir site. Please refer to the visual simulations presented in Master Response 1, which show refinements of the proposed landscaping plan to provide additional screening immediately after the completion of construction. EBMUD has added native shrubs to the planting plan to provide screening of the tanks until trees have grown. The simulations show that topography, trees and shrubs would screen the majority of the tanks immediately after construction. Within five years the new trees are expected to be sufficiently tall to provide substantial screening, and the character of the site would be similar to the existing visual environment.

9.6 Tim Watchers

9.6.1 Response to Comment 6-1

Please refer to Master Response 1 for a discussion of the restoration of the eastern embankment and for additional visual simulations, which show how the final topography of the site would screen most of the new tanks from view. As noted in Master Response 1, EBMUD is retaining as many mature trees on site as possible and is planting 125 new trees to screen the proposed tanks.

To ensure protection of the new tanks, a security fence is required to prevent unauthorized access that could jeopardize the safety of the water supply. The security fence would not enclose the entire site but would only enclose the area immediately around the new tanks. The revised landscaping plan includes some adjustments to the location of the security fence, which has been moved closer to the tanks to reduce its visibility from Leland Drive. The fence is shown in the updated visual simulations in Master Response 1, which confirm that the Project would not substantially alter aesthetics of the surrounding area.

9.7 Mark Redmond

9.7.1 Response to Comment 7-1

As described in Response to Comment 6-1, the new tanks would be screened both by topography and the by new vegetation that would be planted at the completion of construction. Although it is correct that the tanks would not initially be as well screened as the existing reservoir, the existing visual character of the site would not be substantially degraded, and the impact is considered less than significant. It would take some time for the newly planted landscaping to provide screening similar to the existing vegetation on the site, but the tanks would be substantially screened from views along Leland Drive within five years after completion of construction. Please refer to Master Response 1 for additional information regarding visual impacts. Updated visual simulations provided in Master Response 1 show projected conditions immediately after construction and at five years and fifteen years after construction. Visual simulations are provided for three locations along Leland Drive and from the back yards of residences on Sunset Loop and Ruth Court.

9.8 Leland Drive Residents

Comment was submitted by 28 residents of Leland Drive, who are listed below:

Richard Alexander and Katherine Alexander Jeff and Alison Fingerut Tim Watchers Hyunil Jo and Sung Jung Hong John and Deborah Kwan Paul and Andreina Ng Robert Schick and Eun Hee Chang Ron and Sue Rusay Jim and Cam Olufson Meadine Mah Harng Shen and Jean Kuo Bill and Ana Lau Octavio and Mayra Lacayo Bob and Celia Lewis Scott Yokoi and Suzanne Ishii

9.8.1 Response to Comment 8-1

Please refer to Master Response 1, which provides additional information to describe visual impacts. The Draft EIR's description of impacts is accurate but EBMUD made modifications to the Project to address neighborhood concerns.

9.8.2 Response to Comment 8-2

The comment is correct that the top of the tanks would be higher than the existing structure, but would only be approximately 4 to 6 feet higher than the existing tank roof. Please refer to Master Response 1 for additional information on the sizing of the tanks.

9.8.3 Response to Comment 8-3

It is correct that it would be necessary to breach the reservoir embankment to allow access to the tanks. Please refer to Master Response 1, which provides information on how the access road has been designed to minimize views into the reservoir basin so that the tanks would be substantially screened from view. The visual simulations included in Master Response 1 show that the tanks would not be very visible from Leland Drive.

9.8.4 Response to Comment 8-4

It is important to note that "the point of entry of the access road to the reservoir basin" would not be visible from Leland Drive. Please refer to Master Response 1, which includes additional visual simulations and sight-line diagrams that illustrate how the tanks would be screened both by topography and by proposed landscaping. As demonstrated in the visual simulations, which show multiple viewpoints from Leland Drive, only the tops of the tanks would be visible immediately after construction and within five years, the tops of the tanks would be substantially screened from view. The existing Leland Reservoir is not a buried tank; it is an open-cut reservoir formed by earthen embankments, covered by a roof.

9.8.5 Response to Comment 8-5

EBMUD is not aware of existing drainage problems on the hillside, and because the Project would decrease the area of impervious surface at the reservoir site, the potential for run-off from the site would actually be reduced (see Response to Comment 2-12). As stated on page 2-1 of the Draft EIR, "A new 30-inch storm drain pipeline would also be installed on site and connect to the City of Lafayette's existing storm drain system at the intersection of Leland Drive and Patty Way." The location of the storm drain is shown in Figure 2-7 on page 2-13 of the Draft EIR. This storm drain would be able to convey any water that would fall within the existing reservoir basin to the existing storm drain along Leland Drive without creating drainage problems on the hillside. Drainage impacts are addressed on pages 3.9-13 and 3.9-14 of the Draft EIR, and the analysis concludes that "the Project would not increase surface runoff in a manner that would result in flooding on or off site, and would not result in off-site flooding or runoff from the site that would exceed the capacity of the City's storm drain system."

9.8.6 Response to Comment 8-6

Please refer to Master Response 1. As shown in Figures 3.1-2 and 3.1-3 on pages 3.1-9 and 3.1-10 of the Draft EIR and the additional visual simulations provided at the end of Master Response 1, the reservoir site is not expected to be unsightly.

9.8.7 Response to Comment 8-7

Please refer to Master Response 1, which support the statement that the new tanks would be substantially concealed from view from Leland Drive, which is the nearest publicly owned property. The General Plan policies do not specify total concealment. EBMUD believes that the statements in the EIR are correct and are supported by the additional visual simulations prepared for the Final EIR and presented in Master Response 1.

9.8.8 Response to Comment 8-8

The Draft EIR relies primarily on graphics to depict the visual impact of the tanks because this is typically the most useful way to provide information about aesthetics. Information provided at the February 8, 2018 public meeting is consistent with the information provided during early meetings about the Project, which are available on the Leland Reservoir website: https://www.ebmud.com/about-us/construction-my-neighborhood/leland-reservoir-and-pipeline-replacement/. As noted in the August 3, 2016 Public Meeting Q&A document, *"the top of the new tanks will be approximately five feet higher than the existing reservoir"*. The total height of the tanks would be about 37 feet at the wall, and 39 feet at the center of the roof, relative to the lowest ground elevation at the base of the tanks, but the base of the tanks would be within the existing reservoir basin and would not be visible from Leland Drive. Information provided at the February 8, 2018 meeting was intended to convey the height of the tanks above the surrounding topography, not the total height of the tanks. Information to provide clarification to the Project Description has been added in Master Response 1.

9.8.9 Response to Comment 8-9

Please refer to Master Response 1 regarding the need for a road through the embankment and clarification on the size of the embankment cut. Viewpoints of visual simulations were selected to provide representative views and are not misleading. As requested by commenters, an additional simulation pointed directly west from Leland Drive toward the access gate into the reservoir basin has been prepared and is included in Master Response 1 (see pages 9-14 through 9-22). The tanks would not be substantially more visible from other viewpoints and there is no public viewpoint from which a 280-foot wide valley through the existing embankment would be visible. The visual simulation presented in Figure 3.1-3 of the Draft EIR show expected conditions 15 years after completion of construction (not 20 years), and the placement of the trees in the simulation reflects the original proposed landscaping plan, which was designed to screen the tanks from views from Leland Drive. The viewpoints were not selected to be misleading but rather were selected to show the most representative views of the site. Simulations showing vegetation immediately after and five years after construction are shown in Master Response 1.

9.8.10 Response to Comment 8-10

A permanent access road into the existing reservoir basin is required so that EBMUD can perform maintenance on the tanks and associated valves that would be located inside the reservoir basin. It is thus not feasible to completely restore the embankment to its previous condition. The comment is correct that limitations on stockpile area on site did factor into the design of the Project. As discussed in the Alternatives Chapter of the Draft EIR, other design options were considered (see page 4-5 of the Draft EIR). However, EBMUD did not pursue importing material to completely bury the tanks, because of the considerable number of truck trips that would be required, and the resultant traffic, air quality, and noise impacts. Completely burying the tanks would require approximately 35,000 cubic yards of additional imported material which would generate approximately 4,375 additional daily one-way truck trips through the neighborhood and extend the duration of construction by at least three months. Because the embankment can be reconstructed and landscaped to substantially screen the new tanks, hauling additional material to completely backfill the new tanks was determined to have greater impacts than the proposed partial reconstruction of the embankment. Creation of berms at the top of slopes to provide additional screening was considered but rejected because berms would result in slopes that would be too steep to allow planting of trees. To allow tree plantings, slopes should be no steeper than 3:1 (i.e., elevation dropping 1 foot for every 3 horizontal feet). Tree plantings on steeper slopes often fail because water runs off the slope before it can saturate the root zone and because of erosion or slope instability. Slopes steeper than 3:1 also create maintenance difficulties because grasses on the slopes cannot be safely mowed.

9.8.11 Response to Comment 8-11

Master Response 1 explains that the embankment cut has been made as small as is feasible. Please refer to Response to Comment 8-10 for a discussion of the additional environmental impacts that would result from importing soil to completely backfill the tanks. Please refer Master Response 1 and to Response to Comment 8-7, which discusses compliance with the Lafayette General Plan policies regarding hillside overlay areas.

9.8.12 Response to Comment 8-12

The tanks are proposed to be painted a muted green color, which has been selected to blend in with the trees that would be planted to screen the tanks from views from Leland Drive. Grass on the hillside varies from golden brown to green, depending on the time of year, so no one color would blend in with the grass color. Based on experience with constructing water tanks throughout their service area, EBMUD believes this color is best suited to blending in with the environment.

9.8.13 Response to Comment 8-13

Please refer to Master Response 1, which presents a revised landscaping concept. The updated plan includes shrubs near the top of the embankment, as suggested in the comment. However, the landscape architect has recommended planting a native shrub, holly-leafed cherry (*Prunus ilicifolia*), instead of oleander or *Photinia fraseri*, both of which are introduced Asian plants. Oleander is poisonous and subject to bacterial disease and *Photinia fraseri* is highly susceptible to fungal blight.

9.8.14 Response to Comment 8-14

Please refer to Master Response 1, which provides additional visual simulations discusses EBMUD's consideration of visual impacts from public and private viewpoints.

9.8.15 Response to Comment 8-15

Please refer to Master Response 1, which provides additional information about Project visual impacts. The tanks would be somewhat visible immediately after construction, but there would not be a large valley floor visible from Leland Drive. There is no viewpoint from which the base of the tanks or the floor of the existing reservoir would be visible. Within five years the tanks would be substantially screened by vegetation. EBMUD regrets that there has been such a drastic misunderstanding of the information presented in the Draft EIR. Cost has not been a factor in deciding on mitigation. EBMUD has considered the additional environmental impacts and feasibility of importing large quantities of additional backfill and has determined that there are no substantial benefits and an unacceptable level of additional impacts (4,375 additional truck trips and at least six additional months of construction).

9.8.16 Response to Comment 8-16

Significance criteria for evaluation of transportation impacts, which are based in Appendix G of the CEQA Guidelines, are presented on page 3.13-12 of the Draft EIR, and the discussion of impacts starts on page 3.13-3 of the Draft EIR. Each criterion and impact are discussed below. Although pipeline construction would take six months, no one road would experience lane closures for the full duration of the construction period and the actual time for lane closures would only be about two months. As noted on page 2-17 of the Draft EIR "Installation of the 36-inch pipeline only within public roadways (Windsor Drive, Condit Road and Leland Drive) would take approximately two months. The entire pipeline construction process from start to finish could take approximately six months, which would include active construction and downtime (e.g. mobilization, potholing, submittal review, material procurement, fabrication inspection and approval, pipeline installation, chlorination testing, downtime, final paving, and demobilization)."

Impact TRA-1 (page 3.13-13 of the Draft EIR) considers whether the Project would "Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit". Using level of service (LOS) as the measure of effectiveness, the LOS at local intersections was calculated and it was determined that "Although the increases in volumes may be noticeable to local residents, the additional construction related vehicles would not cause traffic volumes along local streets to exceed or approach the carrying capacity of the roadways or cause queuing issues along Leland Drive. Therefore, potential Project impacts related to intersection level of service would be considered less than significant." (see page 3.13-15 of the Draft EIR)

Impact TRA-2 (page 3.13-15 of the Draft EIR) evaluates whether the Project would "Substantially increase hazards due to a design feature or incompatible uses". The Project would include preparation of a Traffic Control Plan which includes specific measures to ensure safety of motorists, and the Draft EIR concludes that "Implementation of Mitigation Measure TRA-1 would ensure that appropriate measures are included in the Traffic Control Plan to ensure maintenance of safe access to homes, schools and

recreational facilities in the Project area, and to avoid potential conflict between construction trucks and school traffic. These measures would reduce impacts associated with traffic hazards to less than significant." (see page 3.13-19 of the Draft EIR)

Impact TRA-3 (page 3.13-20 of the Draft EIR) evaluates whether the Project would "*Result in inadequate emergency access*". Measures to maintain emergency access are included in both EBMUD Standard Construction Specification 01 55 26 and in Mitigation Measure TRA-2 – Maintain Emergency Access. The Draft EIR thus concludes that "*Implementation of Mitigation Measure TRA-2 would ensure that emergency responders can access the project area, and would reduce impacts to emergency access to less than significant.*" (see page 3.13-20 of the Draft EIR).

Impact TRA-4 (page 3.13-20 of the Draft EIR evaluates whether the Project would "Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities". Measures to accommodate public transit, bicycle and pedestrian access are included in both EBMUD Standard Construction Specification 01 55 26 and Mitigation Measure TRA-1 – Traffic Control Measures for Windsor Drive, Condit Road and Leland Drive. The Draft EIR thus concludes that "Implementation of EBMUD Standard Specification 01 55 26 and Mitigation Measure TRA-1 would ensure safe access for transit, pedestrians and bicycles in the project area and would reduce impacts to less than significant." (see page 3.13-21 of the Draft EIR).

The Draft EIR thus acknowledges that Project construction would entail some inconvenience to motorists in the Project area but determined that impacts related to traffic would not be significant.

9.8.17 Response to Comment 8-17

The Traffic Control Plan would be developed by the contractor at the beginning of construction. EBMUD would notify neighbors in advance of any road closures or detours required by the plan as described on page 3.13-20 of the Draft EIR.

9.8.18 Response to Comment 8-18

Please refer to Master Response 1, which describes modifications to the conceptual landscaping plan to address concerns about screening of the new tanks and to Response to Comment 8-11 through Response to Comment 8-14, which address each of the recommendations provided by the commenter. The footnoted information regarding the excavation of the embankment is addressed in Master Response 1.

9.9 Bill and Ana Lau

9.9.1 Response to Comment 9-1

Appendix C of the Draft EIR does identify the fact that "*At the conclusion of the meeting, the community preferred Alternative 1*". It is true, that despite extensive community outreach efforts and mailings to over 140 residents in the Project area, including every residence on Leland Drive, the first meeting was only attended by six local residents. The meeting notice stated that "*The reservoir will be demolished and replaced with two smaller and more seismically resilient concrete tanks*" and made clear that "*The existing access road would be rebuilt and realigned*." Attendees included two residents of Leland Drive who have views of the reservoir site and who were signatories of the letter from Leland Drive Residents (Letter Number 8). Appendix C of the Draft EIR summarizes information that was available based on the community meetings that were held in 2016.

Conceptual plans showing the extent of the embankment cut have been presented at every public meeting and are included in the Draft EIR in Figure 2-7 on page 2-13. There was no attempt by EBMUD to obfuscate the impacts of the Project. EBMUD is committed to working with the community and has considered community input at several stages of the environmental review process. Comments from the February 8, 2018 meeting regarding the Draft EIR have resulted in adjustments in the conceptual design for the Project. Please refer to Master Response 1.

Comments provided in the referenced attachment are addressed above in Master Response 1 and in Response to Comment 8-1 through Response to Comment 8-18.

9.9.2 Response to Comment 9-2

EBMUD reaffirms the accuracy of the information provided in the Draft EIR. The City of Lafayette provided comments, which are addressed in Response to Comment 2-1 through Response to Comment 2-25. Please refer to Master Response 1 and Response to Comment 8-7, which support the Draft EIR's conclusion that the Project is consistent with Lafayette General Plan policies.

9.9.3 Response to Comment 9-3

EBMUD appreciates the contact information for other residents who signed the Leland Drive Residents letter (Letter Number 8) but does not require separate confirmation of concurrence with the letter.

9.10 Bill and Ana Lau

9.10.1 Response to Comment 10-1

Minutes of the City Council Meeting on November 28, 2016 (page 5) state that EBMUD:

"would build an access road going into the basin which would allow them to construct the two concrete tanks within it. They would place excavated soil around the tanks to minimize off-haul and following this, RHA would landscape the site with a theme of Oak Savanah and restore it to its original condition. She described the proposed plant list of oaks, native grasses and wildflower mixes, and said they would replace the existing security fence with an 8-foot-high modern security fencing around the perimeter. She then displayed simulations of existing conditions from 1040 Leland Drive and a simulated photo following construction and showing planting 15 years after construction."

Page 6 of the minutes also clearly reflect the fact that Council members asked questions about the visual impacts of the Project, which were addressed by EBMUD staff:

"Mayor Mitchell asked Ms. McGregor to discuss the visual impacts for the two tanks given the side slopes are steep. He asked if this would obscure the view of the structures. He noted the north end of Leland Drive is at a much higher elevation than as depicted on the rendering. Ms. McGregor displayed the visual and said this again will be analyzed during the EIR period. Councilmember Tatzin asked and confirmed that the large grey line is the tank and it will be visible whereas the current reservoir is not from the street."

EBMUD thus believes that the Project was fully and accurately described to the Lafayette City Council. As demonstrated above, the Council members were informed that an access road into the basin was necessary and were aware that the tanks would be somewhat more visible than the existing reservoir.

9.11 Bill Mamarbachi

9.11.1 Response to Comment 11-1

Please refer to Master Response 1, which provides additional information regarding visual impacts as viewed from Leland Drive, and to Response to Comment 8-1 through Response to Comment 8-18, which address each specific comment from the residents of Leland Drive.

9.12 Cho Tang and Fong Ting Au Yeung Tang

9.12.1 Response to Comment 12-1

The letter is identical to the comment letter submitted by a group of Leland Drive Residents (Letter Number 8). Please refer to Master Response 1, which provides additional information regarding visual

impacts as viewed from Leland Drive, and to Response to Comment 8-1 through Response to Comment 8-18, which address each specific comment from the residents of Leland Drive.

9.13 Erin Beaver and Ruth Grossman

9.13.1 Response to Comment 13-1

This comment describes the same alternative routes suggested in Comment 3-3. Please refer to Response to Comment 3-3, which addresses suggestions for alternative truck routes.

9.13.2 Response to Comment 13-2

Please refer to Response to Comment 2-10, which addresses additional tree planting. EBMUD has revised the landscaping plan and is now planting more trees than would be removed. As noted on page 3.1-7 of the Draft EIR:

"the optimal size for replacement trees is 24-inch box size. Smaller trees, while often better able to respond to transplant stress due to smaller, less constrained root systems, take time to provide the needed vegetative screening. Larger trees, while providing a more immediate visual impact, typically have a slower growth rate and are more commonly affected by transplant stress, root damage, and general structural damage."

For these reasons, 24-inch box trees would provide better results over the long term.

9.13.3 Response to Comment 13-3

Please refer to Response to Comment 2-14, which address the request for restoration of the roadway after construction.

9.13.4 Response to Comment 13-4

The Draft EIR addresses the school bus lines and includes mitigation to address potential conflicts with school bus routes. School bus routes are described on page 3.13-16 of the Draft EIR, as shown below:

"The Lamorinda School Bus Transportation Agency (LSBTA) operates the Lamorinda School Bus Program in the City of Lafayette. In the vicinity of the Project site, Route 21 for Stanley Middle School and Route 25 for Burton Valley Elementary operate along Pleasant Hill Road, Old Tunnel Road, Windsor Drive and Leland Drive; and Route 28 for Burton Valley Elementary operates along Mt. Diablo Boulevard, Pleasant Hill Road, and Old Tunnel Road. Service is provided once each morning (between 7:00 a.m. and 8:00 a.m.) and afternoon (between 3:00 p.m. and 4:00 p.m.) for each route."

Mitigation Measure TRA-1, on page 3.13-19 of the Draft EIR specifies the following to ensure that school bus routes are accommodated during construction:

• "Construction contractor shall notify LSBTA of roadway closures along Leland Drive or Windsor Drive and facilitate school bus access as much as possible or provide detour routes during the construction period. Additionally, the contractor shall provide flaggers at active school bus stops in the vicinity of construction area to ensure safe student pick-up and drop-off activities where safe to do so."

9.13.5 Response to Comment 13-5

The Draft EIR explains that the pool is used all week long, and not just on weekends. As stated on page 3.12-2 of the Draft EIR:

"The Sun Valley Swimming Pool is a non-profit club open to the public by membership. The pool offers recreational and lap swimming and social activities and supports a recreational swim team for young swimmers. The facility is approximately 800 feet south of the Project site, located at

1000 Leland Drive. The pool is open from April to October from 6:00 am to 9:00 pm, and during these months, members often park along Leland Drive to access the pool, because off-street parking is limited. The pool generates especially large levels of parking demand during summer swim meets, which occur from mid-June to the end of July on Wednesday evenings at 6:00 pm and Saturday mornings from 9:00 a.m. to 12:00 p.m."

Although allowable construction hours are now proposed to be from 8:00 am to 8:00 p.m., typical work days are 8 hours long and would thus not typically interfere with summer swim meets, though construction would take place during hours for lap swimming, recreational swimming, and swim practices. As stated on page 2-20 of the Draft EIR, pipeline construction on Leland Drive in front of The Meher Schools would be scheduled during periods when school is not in session, however the pipeline construction zone extends from Condit Drive to Meek Place, about 170 feet south of the Sun Valley Swimming Pool. No construction would occur directly in front of the pool and on-street parking would be available on Leland Drive north of the pool.

9.13.6 Response to Comment 13-6

EBMUD recognizes that large construction projects are an inconvenience to nearby residents and has proposed extensive measures to minimize Project impacts. Additional accommodations have been made to the extent feasible. EBMUD intends to continue working with the City of Lafayette and the local community throughout Project implementation.

9.14 Paul Mason

9.14.1 Response to Comment 14-1

Appendix G of the Draft EIR includes an inventory of all of the trees on the reservoir site, each of which was evaluated by a professional arborist. The arborist worked with EBMUD maintenance staff to develop a list of trees that should be removed so as to minimize fire risk and other hazards on the site. As part of ongoing maintenance of the reservoir site, EBMUD will remove about 30 trees, the majority of which are non-native trees. Please refer to Figure 9-3 (page 9-8), which shows the hazard trees that will be removed as part of ongoing maintenance; hazard trees are circled in green. As shown in Figure 9-3, there are very few trees at the northeast corner of the reservoir and none are proposed for removal. A number of trees along the west side of the reservoir will be removed. However, non-native hazard trees that are being removed as part of maintenance will not be replaced in the same location. Trees to be removed present various hazards, including risks to maintenance workers (branches or whole trees at risk of toppling) and fire hazards (dead or dying trees) and in some cases the trees are crowding other more desirable trees either within the reservoir site or on adjoining properties. The high density of trees results in a high fuel load and increased fire risk. Tree removal will reduce the fuel load on the west side of the reservoir. which would reduce fire risk. Replacement of those trees is thus not consistent with maintenance needs or with the goal of reducing fire risk in overgrown areas, though additional trees would be planted on the east side of the reservoir for visual screening (refer to Master Response 1).

The existing water transmission line, which runs from the northwest corner of the reservoir to Old Tunnel Road, is within an easement, which is outside the property boundary of the reservoir site. Any removal or replacement of trees outside the reservoir site would be the responsibility of the owner of the property.

9.14.2 Response to Comment 14-2

The fence along the property line between 3135 Maryola Court and reservoir site would not be removed as part of the Project. The existing fence would be retained. The 8-foot security fence would only be installed around the perimeter road that surrounds the two tanks, and would be similar to the existing security fence, which is shown in **Figure 9-4**. The height of the security fence is necessary to ensure protection of the new tanks; a shorter fence would not be sufficient to prevent unauthorized access that could jeopardize the safety of the water supply.



Figure 9-4: View from Property Line with 3134 Maryola Court

9.14.3 Response to Comment 14-3

EBMUD would require the contractor for the Project to comply with all of the Standard Construction Specifications included in Appendix N of the Draft EIR. Chapter 7 of the Draft EIR includes a Mitigation Monitoring and Reporting Program, which delineates the procedures that EBMUD would use to ensure compliance with the measures that are included in the Project to address impacts during construction, including noise.

9.14.4 Response to Comment 14-4

As described in Appendix N of the Draft EIR, and quoted in the comment, the referenced specification *"requires that the contractor submit a plan detailing the means and methods for controlling and monitoring noise*". EBMUD has not started detailed design of the Project and cannot retain a construction contractor before completion of the EIR for the Project. It is therefore not possible to include the Noise Control and Monitoring Plan in the Draft EIR. During the construction phase, the contractor would develop the plan, which would be reviewed and approved by EBMUD. As noted on page 3.11-10 of the

Draft EIR, EBMUD would "Notify neighbors/occupants within 300 feet of Project construction at least thirty days in advance of extreme noise generating activities about the estimated duration of the activity." As part of that notification, EBMUD would provide information about the measures that would be implemented for noise control.

9.14.5 Response to Comment 14-5

As noted in the section of the specification quoted in the comment "*It is the Contractor's responsibility to implement any mitigation necessary to meet applicable noise requirements.*" As noted in Response to Comment 14-4, EBMUD has not retained a contractor and thus cannot identify the specific measures that the contractor may employ. Standard Specification 01 35 44, which is quoted in the comment and included in Appendix G of the Draft EIR lists several measures that can be employed to reduce noise impacts including use of hydraulically or electric-powered equipment, mufflers, and external jackets. The contractor would have discretion to choose appropriate measures based on the specific equipment being used for different tasks. It is thus not possible at this point to describe exactly what methods the contractor would use. The contractor would be required to submit the noise control plan to EBMUD for review and approval before the start of construction. EBMUD would only approve the noise control plan if it is determined to be consistent with the requirements of Standard Specification 01 35 44. The noise control plan would specify the means and methods to be used to control and monitor noise during construction.

9.14.6 Response to Comment 14-6

Please refer to Mitigation Measure NOI-1a: Noise Control Measures for Hoe Ram and Concrete Crusher, on page 3.11-22 of the Draft EIR, which requires that "a temporary noise barrier will be erected as necessary to ensure that the noise from the hoe ram does not exceed the 80-dBA (L_{eq}) ordinance limit at the western property line". During construction EBMUD would ensure that the noise barrier is constructed, and that the contractor complies with specified noise limits.

9.14.7 Response to Comment 14-7

Please refer to Response to Comment 2-11, which addresses requested changes to EBMUD notifications for the Project and identifies changes to text of the Draft EIR.

9.14.8 Response to Comment 14-8

The purpose of hotel accommodations is to provide alternative lodging for residents affected by nighttime construction, because nighttime work could cause sleep disruption. Please refer to the discussion on page 3.11-20 of the Draft EIR. Nighttime construction is only required for the two locations where pipeline tieins would be constructed, at the intersections of Windsor Drive and Old Tunnel Road and Leland Drive and Meek Place, where one night of construction would be necessary. Hotel accommodation is not required for daytime construction work because daytime work is not expected to cause sleep disruption.

Table 3.11-4 on pages 3.11-14 through 3.11-17 of the Draft EIR provides daytime construction noise levels for each element of the Project. Because pipeline construction would occur in close proximity to homes on Windsor Drive, Condit Road and Leland Drive, noise levels at the property line of those residences would be high, but exposure would be short-term because pipeline construction in front of any particular home would be of short duration (less than 10 work days). As noted on page 3.11-13 of the Draft EIR, the noisiest activities would be very limited:

"However, it is noted that operation of these equipment types would be very limited in duration. Pavement saws are typically used in lieu of jackhammers and therefore not operated at the same time as jackhammers. Pavement saws typically maintain speeds between 8 to 10 feet per minute (fpm) to cut pavement. The saw cutting equipment would pass by each residential property twice to cut the pavement for each side of the pipeline trench, which would take approximately 10 to 15 minutes for each side of the trench. Therefore, pavement cutting noise is expected to only last for a total of 20 to

30 minutes in front of each residential property. Operation of the grader and tractor is expected to be limited to 6 to 8 hours per day in front of each residential property for approximately two days."

Noise levels from reservoir construction at the property lines of homes adjacent homes are also provided in Table 3.11-4. Although those construction activities would last substantially longer than pipeline construction, residences are substantially farther away, and the resultant noise levels are quite a bit lower than would be experienced by homes along the pipeline route. Page 3.11-22 of the Draft EIR includes mitigation for the two noisiest pieces of equipment used in reservoir construction, the hoe ram and concrete crusher, which would reduce noise impacts to an acceptable level at nearby property lines:

"Mitigation Measure NOI-1a: Noise Control Measures for Hoe Ram and Concrete Crusher

During reservoir construction, EBMUD shall locate the concrete crusher within the reservoir basin (east of the access road) and at least 110 feet away from the closest property line to the west. During periods when the hoe ram needs to be operated within 70 feet of the closest property line to the west, a temporary noise barrier will be erected as necessary to ensure that the noise from the hoe ram does not exceed the 80-dBA (Leq) ordinance limit at the western property line."

Given the short duration of noisy activities associated with pipeline construction and the effectiveness of mitigation for reservoir construction noise, hotel accommodations for daytime construction activities are considered unnecessary.

9.14.9 Response to Comment 14-9

As described in Appendix N of the Draft EIR, and quoted in the comment, the referenced specification "*requires that the contractor submit a plan detailing the means and methods for controlling and monitoring surface vibration*". EBMUD has not started detailed design of the Project and cannot retain a construction contractor before completion of the EIR for the Project. It is therefore not possible to include the Vibration Control and Monitoring Plan in the Draft EIR. As noted on page 3.11-29 of the Draft EIR, all homes near the reservoir site are far enough away from construction activities that vibration levels would not exceed the 0.5 in/sec PPV threshold level above which there is a potential for damage.

9.14.10 Response to Comment 14-10

This comment requested that EBMUD conduct preconstruction surveys on homes within 100 feet of continuous-vibration generating activities, rather than within 15 feet, as specified in EBMUD's Standard Construction Specification 01 35 44, Environmental Requirements. As detailed in Impact NOI-3, the Project would not result in exposure of structures to excessive groundborne vibration, however EBMUD agrees to conduct preconstruction surveys upon homeowner request and with homeowner permission for all properties that share a property line with the Leland Reservoir property or are located on the proposed pipeline route in Old Tunnel Road, Windsor Drive, Condit Road, and Leland Drive, which would include any homes within 100 feet of continuous-vibration generating activities as requested by the commenter. The following text is added to the second paragraph under Impact NOI-3 on Page 3.11-29 of the Draft EIR:

If groundborne vibration generated by Project-related demolition and construction activities were to exceed 0.5 in/sec PPV, vibration could cause damage to nearby structures, including adjacent buildings. As detailed in the Project Description, a number of EBMUD standard practices and procedures, applicable to all EBMUD projects, have been incorporated into the Project, including Standard Construction Specification 01 35 44, Environmental Requirements. Section 3.5 of EBMUD Standard Construction Specification 01 35 44 establishes a threshold vibration limit of 0.5 in/sec PPV to minimize the potential for structural damage from vibration. The EBMUD Practices and Procedures Monitoring and Reporting Plan (**Table 7-2** in Chapter 7) lists the applicable standards specifications language. In addition to providing preconstruction surveys of homes, sensitive structures and other areas of concern within 15 feet of continuous vibration-

generating activity, EBMUD will also conduct preconstruction surveys of homes, sensitive structures, and other areas of concern on properties that share a property boundary with the Leland Reservoir site or are located on the pipeline route in Old Tunnel Road, Windsor Drive, Condit Road, and Leland Drive. The preconstruction surveys would be completed only upon homeowner request and with homeowner permission.

9.15 Comments from Public Meeting

In addition to the written comments that were submitted, comments that were made at the public meeting were recorded and responses to each comment are provided below.

9.15.1 Response to Comment 15-1

The comment asks how EBMUD enforces construction routes, but EBMUD does not limit construction routes for projects because the contractor may use alternative routes. The construction route analyzed for the Project is the most direct route to the Project site and, therefore, the most likely route to be used for construction traffic.

9.15.2 Response to Comment 15-2

Government Code Section 53091 exempts EBMUD from zoning and building ordinances of a City or County, such as local Noise Ordinances and construction hour limitations, for the location or construction of facilities for the production, generation, storage, treatment or transmission of water. Modifying the Project construction hours from 7:00a.m. to 7:00 p.m. to 8:00 a.m. to 8:00 p.m. would not measurably increase the overall duration of the Project and EBMUD has agreed to modify the Project construction hours to 8:00 p.m. to 8:00 p.m.

9.15.3 Response to Comment 15-3

Please refer to Response to Comment 13-4 regarding school bus lines, which were addressed in the Draft EIR.

9.15.4 Response to Comment 15-4

Residents surrounding the Leland Reservoir site are not directly connected to the pipelines affected by the Project or served by the Leland Reservoir. The Leland Reservoir serves customers in the Leland Pressure Zone, which provides water service to customers in the 50-foot to 250-foot elevation band. Residents near the Leland Reservoir are served from the Colorados Pressure Zone, which serves customers in the elevation range of 250 feet to 450 feet. There are five reservoirs (Pleasant Hill, Withers, Colorados, Larkey, and Tice) that provide water to customers in the Colorados Pressure Zone. None of the water distribution facilities in the Colorados Pressure Zone would be directly impacted by the new pipeline or reservoir replacement work and residents near the Project site would not experience any water service impacts.

9.15.5 Response to Comment 15-5

Please refer to Master Response 1, which provides additional visual simulations showing conditions immediately after construction.

9.15.6 Response to Comment 15-6

Please refer to Master Response 1 in regard to modifications to the landscaping plan to provide additional screening. EBMUD has added shrubs and additional trees to the landscaping plan. However, landscaping cannot be installed on the site until after construction is completed (see Response to Comment 15-5).

9.15.7 Response to Comment 15-7

Because of the ongoing construction activity and the need to stockpile soil on the site during construction it is not feasible to install landscaping for screening during construction. As noted in Master Response 1,

EBMUD has added additional shrubs and trees to the landscaping plan. All of the plantings would be done after the completion of construction.

9.15.8 Response to Comment 15-8

Please refer to Master Response 1 in regard to modifications to the landscaping plan to provide additional screening. EBMUD has included additional trees and shrubs near the reservoir.

9.15.9 Response to Comment 15-9

As noted on page 3.1-7 of the Draft EIR:

"the optimal size for replacement trees is 24-inch box size. Smaller trees, while often better able to respond to transplant stress due to smaller, less constrained root systems, take time to provide the needed vegetative screening. Larger trees, while providing a more immediate visual impact, typically have a slower growth rate and are more commonly affected by transplant stress, root damage, and general structural damage."

Planting trees larger than 24-inch box size can result in smaller trees five years after planting. Larger trees have become accustomed to growing in boxes and can experience severe shock upon transplanting that results in very slow growth in the first few years. A smaller tree that is properly cared for would typically surpass the growth of larger trees within a few years because it adapts to the site more quickly and grows more rapidly. While survival rates for trees larger than 24-inch box size may be acceptable with adequate care, larger trees would likely provide less screening than smaller trees within just a few years. For this reason, the landscape architect who developed the landscape plan recommended 24-inch box trees as the optimal size.

Additionally, the City of Lafayette Tree Ordinance actually specifies planting of 15-gallon trees for replacement of protected trees, though it allows substitution of one 24-inch box tree for two 15-gallon trees.

9.15.10 Response to Comment 15-10

All protected trees that are proposed for removal would be replaced. Project construction would require the removal of 16 trees that are defined as protected under the City of Lafayette Tree Ordinance (i.e., oak trees with a diameter at breast height of 12 inches or more). Page 2-10 of the Draft EIR identifies the fact that about 30 hazard trees would be removed as part of the ongoing maintenance program for the site, only one of which would be considered a protected tree: a valley oak with a 12-inch-diameter trunk. The City of Lafayette Tree Ordinance specifies replacement ratios based on the size of the tree to be removed. Using the recommended replacement ratios in the ordinance, the 16 Project-related tree removals plus one hazard tree removal would be adequately replaced by planting 63 trees in 24-inch boxes. The Project originally included planting of 75 oak trees, which exceeds the replacement ratios specified by the ordinance, and additional trees are now proposed to provide more screening; please refer to Master Response 1. The other hazard trees to be removed are primarily pines and eucalyptus and would not be replaced. Trees to be removed present various hazards, including risks to maintenance workers (branches or whole trees at risk of toppling) and fire hazards (dead or dying trees) and in some cases are crowding other more desirable trees either within the reservoir site or on adjoining properties. Please also see Response to Comment 2-10.

9.15.11 Response to Comment 15-11

Page 3.1-1 of the Draft EIR notes that the homes at the end of Maryola Court "*have backyards that are immediately adjacent to the west side of the reservoir site, but are also screened from the reservoir itself by the intervening embankment*". It is correct that views of the reservoir from the homes are screened, but because the property line of 3135 Maryola Court is closer to the top of the embankment than the house, there are portions of the property from which the reservoir site is more visible than from the home itself. EBMUD has provided a visual simulation to the resident of 3135 Maryola Court that depicts the view

from a gazebo located close to the property line next to the reservoir. This visual simulation was prepared for a viewpoint selected by the property owner and shows that although the tanks would not be visible from the house, they would be visible from higher elevations within the property.

EBMUD also developed a visual simulation from the shared property between EBMUD and 3134 Maryola Court looking east at the Leland Reservoir site. This visual simulation is shown **Figure 9-4** in the Response to Comment 14-2.

The visual simulation from the backyard of 3135 Maryola Court is presented below in **Figure 9-5**. The simulation reflects removal of trees that would be taken out for maintenance/safety reasons not associated with the Project.

9.15.12 Response to Comment 15-12

Mitigation measures were identified in the Draft EIR based on the need to address potentially significant impacts. Although the proposed landscape plan that is presented in Appendix C of the Draft EIR includes a cost estimate for landscaping, cost was not a driving factor in arriving at an appropriate number of trees to plant on the site at the completion of construction. Factors that were considered were the ultimate topography of the site (slopes steeper than 3:1 are not suitable for tree planting), replacing trees that provide visual screening, need for ongoing maintenance of the site, and input from the community regarding the desirable density of trees on the site.

9.15.13 Response to Comment 15-13

It is not planned that Leland Drive and Windsor Drive would both be closed at the same time. The reservoir replacement Project would be completed in two separate sequential phases as described in the Draft EIR Project Description. The first phase includes the replacement and relocation of a transmission main that goes under the existing Leland Open Cut Reservoir with a new 36-inch pipeline in Windsor Drive, Condit Road, and a short section in Leland Drive from Condit Road to Meek Place. Typically, construction contractors install pipelines in a single direction heading, which requires either partial or full road closures. As sections of pipelines are installed, roadways that are closed during the day would be reopened at the end of the day; this process continues until the pipeline installation is completed in a specific street, such as Windsor Drive. The contractor would then move on to the next street, for example Condit Road, at which point Windsor Drive would remain open as the Contractor continues installing pipeline in Condit Road and subsequently in a short section of Leland Drive.

The second phase of the Project includes the replacement of the existing Leland Reservoir with dual concrete tanks and the on-site installation of a new storm drain system that would connect to the City of Lafayette's storm drain system at the intersection of Leland Drive and Patty Way. During this second phase, no work or road closures are planned in Windsor Drive.

9.15.14 Response to Comment 15-14

Please refer to Response to Comment 2-14 regarding restoration of the road after construction.

9.15.15 Response to Comment 15-15

Constructing a sidewalk along Leland Drive is not part of the Project scope.

Figure 9-5: View from Backyard of 3135 Maryola Court





Source: RHAA 2017

9.15.16 Response to Comment 15-16

EBMUD would not be able to address any drainage issues on Leland Drive that are caused by storm water flows originating from properties other than the Leland Reservoir site. However, as noted on page 3.9-14 of the Draft EIR:

"to ensure adequate drainage within the reservoir site, a new 30-inch storm drain pipeline would be installed on site and connected to the City of Lafayette's existing storm drain system at the intersection of Leland Drive and Patty Way. ... Because there would be no change in existing drainage patterns, the Project would not increase surface runoff in a manner that would result in flooding on or off site and would not result in off-site flooding or runoff from the site that would exceed the capacity of the City's storm drain system."

The Project would thus not adversely affect storm drainage on Leland Drive. Please also refer to Response to Comment 2-12, documenting that fact that the Project would reduce impervious surface area at the reservoir site, which would be expected to reduce the amount of runoff coming from the site.

9.15.17 Response to Comment 15-17

EBMUD standard procedures call for protection of trees during construction. As described on pages 3.3-27 of the Draft EIR, which describes EBMUD Standard Specification 01 35 44, Section 3.7, Protection of Native and Non-Native Protected Trees, "*Pruning and trimming shall be completed by the contractor and approved by the Engineer*", and "Any tree injured during construction shall be evaluated as soon as possible by a certified arborist provided by the District".

9.15.18 Response to Comment 15-18

As described under Impact NOI-3 of the Draft EIR, the Project would not result in exposure of structures to excessive groundborne vibration, thus damage from the proposed construction activities to individual homes is not anticipated. However, a pre-construction survey can be requested by contacting the EBMUD Construction Liaison that would be assigned to the construction Project. The EBMUD contact person would respond to all construction related issues. The phone number of the liaison would be posted at the construction site, on all advance notifications, and on the EBMUD Project website. Please refer to Response to Comment 14-10 for a description of properties where a preconstruction survey can be requested.

9.15.19 Response to Comment 15-19

Please refer to Response to Comment 13-5, which documents the fact that the hours for the pool were fully described in the Draft EIR and addresses potential construction conflicts with pool hours.

9.15.20 Response to Comment 15-20

The Draft EIR does not consider the Project's potential effect on property value, which is not an environmental impact.

9.15.21 Response to Comment 15-21

The Leland Reservoir Project is expected to be under construction from 2022 to 2025 and is thus not expected to overlap with construction of the Saranap Village Project, which has already been approved by Contra Costa County. The Saranap Village Project has been approved and will be constructed at the intersection of Boulevard Way and Saranap Avenue and includes new commercial and residential development. The Saranap Village Project will also reduce Boulevard Way from four lanes to two lanes to allow creation of diagonal parking for the commercial area along Boulevard Way and will create a roundabout at the intersection of Boulevard Way and Saranap Way. Although conflicts are not expected EBMUD will continue coordination with the developer, who has requested water service from EBMUD. The two projects would affect entirely different roadways so streamlining and coordination of shared road work is not planned.

If construction schedules were to change and the construction of the Leland Reservoir Replacement Project were to overlap with construction of the Saranap Village Project, the only area of potential cumulative impact would be traffic and transportation, and the Draft EIR for the Saranap Village Project did not identify any construction traffic impacts that would affect intersections or roadways that would affected by construction traffic from the Leland Reservoir Replacement Project. The Draft EIR for the Saranap Village Project also concluded that there would be minimal operational traffic impacts on intersections and roadways near the Leland Reservoir; Level of Service at the Old Tunnel Road/El Curtola Boulevard intersection and at the Pleasant Hill Road/Old Tunnel Road intersection would not change as a result of the Saranap Village Project (Contra Costa County. 2014. Draft EIR for Saranap Village Project²). The Leland Reservoir site is about ½ mile from the Saranap Village site and thus construction period air quality and noise impacts would not affect the same sensitive receptors. The two project sites are not visible from the same locations and thus there would be no cumulative visual impacts. Other environmental impacts are site specific, so the two projects would not be expected to contribute to cumulative impacts to other environmental resources.

9.15.22 Response to Comment 15-22

EBMUD appreciates support for the Project and is committed to ensuring safety of all reservoirs within the water supply system. Although EBMUD does not expect that the existing Leland Reservoir is at risk of failure, state law requires that EBMUD prepare inundation maps showing the area that would be inundated by flooding from an uncontrolled release of a dam's reservoir or portion of the reservoir impounded by a critical appurtenant structure (as defined in Section 6002.5 of the California Water Code). Homes between the west side of the reservoir and Reliez Creek and on the east side of the reservoir along Leland Drive south to Las Trampas Creek are in the defined inundation zone for the reservoir. Construction of the new tanks within the existing reservoir basin would eliminate the mapped reservoir inundation zone.

9.15.23 Response to Comment 15-23

Please refer to Response to Comment 2-25, which clarifies how EBMUD is exempt from the City of Lafayette vehicle weight restriction ordinance (Lafayette Municipal Code, Ordinance No. 646).

9.15.24 Response to Comment 15-24

Please refer to Master Response 1 for additional information regarding the proposed tanks.

9.15.25 Response to Comment 15-25

As noted in Appendix N of the Draft EIR: "The maximum queue length on either end of the construction zone on Windsor (Drive) when alternating one-way traffic would be approximately 28 feet (two car lengths) with no more than 28 seconds of delays and would not cause any substantial delays."

9.15.26 Response to Comment 15-26

The 36-inch-diameter transmission main is a critical pipeline that supplies water from EBMUD's Lafayette Water Treatment Plant (WTP) to Leland Reservoir, which serves the cities of Lafayette, Walnut Creek, and Pleasant Hill. The existing 36-inch-diameter pipeline is over 60 years old and is not currently accessible for maintenance or repair due to its location underneath the existing Leland Reservoir and portions of the reservoir's 40-foot-tall embankments. The pipeline must be moved now so that it is not at risk of damage during construction of the new tanks.

² The Draft EIR for the Saranap Village Project was published in September 2014, but changes were made to the project and a Recirculated Draft EIR was published in May 2016, and the project was not approved by Contra Costa County until August 2017.

Placement of the new 36-inch pipeline in the existing alignment (through the reservoir site) would put the existing critical 36-inch pipeline, which must remain in service until a new pipeline is installed, at high risk of damage during construction activities. Construction over the existing 36-inch pipeline during demolition of the existing reservoir, installation of the new 36-inch pipeline, and construction of the new concrete tanks would be extremely difficult and was, therefore, not selected despite being less costly than the proposed alignment in Windsor Drive and Condit Road.

Alternative alignments, including construction of the new pipeline in Old Tunnel Road and Leland Drive, and through the existing reservoir site, were also evaluated. Alignments in Old Tunnel Road or through the site are not feasible using standard cut-and-cover construction techniques, as the elevation of Old Tunnel Road is located above the top of the existing reservoir and would require tunneling resulting in deeply-buried pipelines (approximately 20 to 40 feet deep), thus creating future operations and maintenance challenges. Due to the tunneling and/or jack-and-bore construction in Old Tunnel Road or through the Leland Reservoir site, these alternative pipeline alignments are more costly than the proposed longer pipeline constructed using standard cut-and-cover methods in Windsor Drive and Condit Road.

9.15.27 Response to Comment 15-27

EBMUD has provided responses to all of the comments that were made during the public meetings for the Project, which were held in August and September of 2016. All of the questions and answers from those meetings are posted on the EBMUD web page for the Leland Reservoir Project:

https://www.ebmud.com/about-us/construction-my-neighborhood/leland-reservoir-and-pipeline-replacement/

EBMUD is addressing all additional comments that have been provided on the Draft EIR in this Response to Comments document. In response to those comments EBMUD has made changes to the proposed landscaping plan to provide additional screening (see Master Response 1) and has revised construction hours for most activities (see Master Response 2). EBMUD has revised mitigation measures to accommodate requests for more extensive notifications about Project construction activities (see Response to Comment 2-11). EBMUD has also agreed to conduct additional preconstruction surveys of homes if requested by homeowners (see Response to Comment 14-10).

9.15.28 Response to Comment 15-28

California Government Code Section 53090 et seq. exempts public agencies such as EBMUD from the zoning and building laws of other cities and counties for construction of facilities for production, generation, storage, treatment or transmission of water. Thus, local regulations are not applicable to the Project, and EBMUD does not require approval from the City to construct the Project. Although the Project is exempt from local planning and zoning ordinances, EBMUD does strive to maintain Project consistency with these ordinances to the extent possible, and local ordinances were used in the Draft EIR in developing significance thresholds for the evaluation of impacts. The City of Lafayette has reviewed the Draft EIR and has provided comments, which are presented in Letter 2. Those comments are addressed in Response to Comment 2-1 through Response to Comment 2-25.

9.15.29 Response to Comment 15-29

Please refer to Section 2.5.3, beginning on page 2-11 of the Draft EIR for a detailed description of how the Project would be constructed. Table 2-3 on page 2-14 of the Draft EIR lists each construction activity and the estimated duration of each step in construction. As shown in Table 2-3, the primary steps in construction, which would occur sequentially, are: 1) construction of the pipeline in Windsor Drive, Condit Road and Leland Drive, 2) demolition of the existing reservoir, 3) construction of the new tanks, and 4) site restoration. As noted in the Project Description, all pipeline construction work would be completed before the existing reservoir is demolished.

9.15.30 Response to Comment 15-30

The Draft EIR acknowledges the fact that the construction period is lengthy and that people who live near the reservoir site would be affected by construction. Impacts of construction are addressed in each resource section, and the Draft EIR evaluates impacts on aesthetics, air quality, noise, and traffic during the construction period. Impacts would be reduced through implementation of EBMUD standard practices and procedures, and additional mitigation measures are proposed to address impacts on aesthetics, biological resources, noise and traffic. Even with implementation of mitigation, EBMUD acknowledges that construction noise would be a significant and unavoidable impact. Replacement of the reservoir is needed because it is a critical facility that has reached the end of its useful life.

9.16 Bill Lau, Comments at EBMUD Board Meeting

9.16.1 Response to Comment 16-1

Please refer to Master Response 1 for information on screening of the tanks from view from Leland Drive and other streets in the immediate vicinity. As noted there, a large portion of the embankment would be replaced, but because an access road into the reservoir basin is needed it is not possible to completely restore the embankment to its existing configuration. The visual simulations in Master Response 1 demonstrate that with the proposed landscaping, the tanks would not be highly visible from Leland Drive.

9.16.2 Response to Comment 16-2

Please refer to Master Response 1, which explains why the tanks would not be fully visible from Leland Drive. The details of the tanks design are primarily shown in figures in the Draft EIR, such as Figure 2-7 in the Draft EIR, which depicts the proposed conceptual design, but additional information about tank dimensions has been provided in Master Response 1.

9.16.3 Response to Comment 16-3

Please refer to Master Response 1 regarding visual impacts. The Draft EIR does not consider the Project's potential effect on property value, which is not an environmental impact.

9.16.4 Response to Comment 16-4

EBMUD reaffirms the accuracy of the information provided in the Draft EIR, which did not state that the entire embankment would be replaced in its existing configuration. The Draft EIR describes this on page 2-11: "Soil would be replaced around the tanks, partially backfilling the reservoir basin, and the embankment would be reconstructed. Access into the bottom of the basin would be retained. ... Figure 2-7 depicts the proposed site plan, which would include two new tanks within the existing reservoir footprint, valve pits at the base of each tank, and a new access road extending from the existing access road through the embankment into the bottom of the existing reservoir where the tanks would be sited." However, the text above has been revised for clarification as noted in Master Response 1.

Please refer to Response to Comment 10-1, which provides a more complete and accurate quotation of the Lafayette City Council minutes for November 28, 2016. EBMUD did not state that the embankment can be totally restored to its original condition. Rather, landscaping on the Project site would be restored to Oak Savannah. The City Council minutes demonstrate that the council was made aware that the new tanks would be more visible than the existing reservoir.

Please refer to Master Response 1 and Response to Comment 8-7, which support the Draft EIR's conclusion that the Project is consistent with Lafayette General Plan policies. The conceptual design presented in Appendix C is the basis of both the Project Description in Chapter 2 of the Draft EIR and the assessment of aesthetic impacts in Section 3.1 of the Draft EIR.

9.16.5 Response to Comment 16-5

As demonstrated in the additional visual simulations provided in Master Response 1, the tanks would not be completely exposed to Leland Drive and homes to the east. Much of the embankment would be restored, but because an access road into the reservoir basin would be needed, it would not be possible to entirely reconstruct the embankment. Please also refer to Response to Comment 2-1, which addresses this comment from the City of Lafayette.

9.16.6 Response to Comment 16-6

Please refer to Master Response 1 which presents additional visual simulations and addresses recommendations provided in the March 1, 2018 letter from Leland Drive Residents (Letter 8).

9.16.7 Response to Comment 16-7

This attachment to Mr. Lau's presentation is a copy of an email submitted by Bill and Ana Lau on March 2, 2018, which is included in the Final EIR as Letter 10. Please refer to Response to Comment 10-1.

9.16.8 Response to Comment 16-8

This attachment to Mr. Lau's presentation is a copy of an email submitted by Bill and Ana Lau on March 1, 2018, which is included in the Final EIR as Letter 9. Please refer to Response to Comment 9-1 through Response to Comment 9-3.

9.16.9 Response to Comment 16-9

This attachment to Mr. Lau's presentation is a copy of the comment letter submitted by a group of Leland Drive Residents, which is included in the Final EIR as Letter 8. Please refer to Response to Comment 8-1 through Response to Comment 8-18.

9.16.10 Response to Comment 16-10

This attachment to Mr. Lau's presentation is a copy of the comment letter submitted by the City of Lafayette, which is included in the Final EIR as Letter 2. Please refer to Response to Comment 2-1 through Response to Comment 2-25.

9.17 Bill Lau, Email to John Coleman, EBMUD Board member

9.17.1 Response to Comment 17-1

Please refer to Master Response 1, which explains that the embankment cut is already designed to be the minimum width necessary. The comment misquotes Appendix C, which states that "*The construction stockpile limitations did not allow for enough material to be stored on site to completely backfill around the tanks as proposed in Alternative 2.*" The statement in Appendix C refers to the large quantities of dirt that would be required to completely refill the existing reservoir basin up to the roofs of the new tanks.

The new access road would not be 100 feet wide. Please refer to Figure 2-7 on page 2-13 of the Draft EIR, which shows that the access road is less than 20 feet wide. Additional visual simulations are included in Master Response 1, which document that the access road and tanks would be substantially screened by topography and proposed trees. EBMUD has considered the suggestion to construct retaining walls but does not believe retaining walls are warranted because the access road and tanks would be largely screened by topography and vegetation.

9.17.2 Response to Comment 17-2

Please refer to Master Response 1, which provides additional visual simulations documenting that the there is no direct view of the tanks. EBMUD does not believe that additional backfill is needed because the access road and tanks would be largely screened by topography and vegetation.

9.17.3 Response to Comment 17-3

Please refer to Master Response 1. The curvature of the access road as designed already blocks most of the view of the tanks. EBMUD does not believe that it is necessary to increase the curvature of the road because the access road and tanks would be largely screened by topography and vegetation.

9.17.4 Response to Comment 17-4

The proposed design of the Project already includes berms on the east side of the tanks on each side of the access road. Please refer to Master Response 1, which shows that the topography blocks views into the reservoir basin, and proposed landscaping would almost entirely block the tanks from view within five years.

9.17.5 Response to Comment 17-5

Please refer to Response to Comment 8-10 for a discussion of the impacts of hauling dirt back to the site and consideration of the feasibility of constructing additional berms to screen the tanks.

9.17.6 Response to Comment 17-6

Please refer to Response to Comment 8-12 regarding the color of the tanks.

9.17.7 Response to Comment 17-7

Please refer to Master Response 1 regarding additional plantings, which include shrubs and additional trees on the berm.

9.18 Deborah and John Kwan, Email to John Coleman, EBMUD Board member

9.18.1 Response to Comment 18-1

Please refer to Master Response 1 regarding visual impacts. The Draft EIR does not consider the Project's potential effect on property value, which is not an environmental impact.

9.18.2 Response to Comment 18-2

Please refer to Master Response 1, which document that the tanks would be substantially screened from street level.

9.18.3 Response to Comment 18-3

The Final EIR will be provided to all individuals who submitted comments on the Draft EIR.

9.18.4 Response to Comment 18-4

The Draft EIR is consistent with the information presented in Appendix C. Please refer to Master Response 1.

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Chapter 10 Comment Letters

The comment letters and other submittals received regarding the Draft EIR are included in this chapter.

FINAL

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Letter 1



STATE OF CALIFORNIA GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH STATE CLEARINGHOUSE AND PLANNING UNIT



EDMUND G. BROWN JR. Governor

March 13, 2018

Oscar Herrara East Bay Municipal Utility District 375 Eleventh Street Oakland, CA 94623-4240

Subject: LeLand Reservoir Replacement Project SCH#: 2016082082

Dear Oscar Herrara:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on March 12, 2018, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Mygan Scott Morgan

Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044 1-916-445-0613 FAX 1-916-558-3164 www.opr.ca.gov

Document Details Report State Clearinghouse Data Base

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B(2)

	SCH# Project Title Lead Agency	2016082082 LeLand Reservoir Replacement Project East Bay Municipal Utility District	
	Туре	EIR Draft EIR	
	Description	Replace existing 18-million-gallon (MG) open-cut Leland Reservoir with two new 8-MG prestressed concrete tanks within the existing reservoir basin. The project also includes replacing approx. 1,700 linear feet of existing 36-inch transmission pipeline that currently runs beneath the reservoir with approx. 2,700 linear feet of pipeline to be constructed in Windsor Drive, Condit Road and a short section of Leland Drive between Condit Road and Meek Place, and approx. 950 feet of 36-in pipeline within the Leland Reservoir site. A new 30-in storm drain pipeline would also be installed on site and connected to the city of Lafayette's existing storm drain system at the intersection of Leland Dr and Patty Way.	
	Lead Agence	cy Contact	
	Name	Oscar Herrara	
	Agency	East Bay Municipal Utility District	
	Phone	510-287-1005 Fax	
	email	975 Eleventh Street	
	Address City	375 Eleventh Street Oakland State CA Zip 94623-4240	
	Project Loc	ation	
	County	Contra Costa	
1-1	City	Lafayette	
cont'd	Region	×	
	Lat / Long	37° 53' 42" N / 122° 05' 18" W	
	Cross Streets	Leland Drive, Condit Road, Windsor Drive, Old Tunnel Road, Meek Place	
	Parcel No.	185-052-001-4	
	Township	1N Range 2W Section 33 Base MD	
	Proximity to):	
	Highways	24	
	Airports		
	Railways	BART Balian Creak I An Trampan Creak	
	Waterways Schoois	Reliez Creek, LAs Trampas Creek Meher Schools	
	Land Use	Zoning: R10, Single Family Residential District-10; Rep Land use designation: Civic Use	
	Project Issues	Air Quality; Archaeologic-Historic; Biological Resources; Geologic/Seismic; Noise; Recreation/Parks; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Landuse; Cumulative Effects	
	Reviewing Agencies	Resources Agency; Department of Fish and Wildlife, Region 3; Office of Historic Preservation; Department of Parks and Recreation; San Francisco Bay Conservation and Development Commission; Department of Water Resources; California Highway Patrol; Caltrans, District 4; Office of Emergency Services, California; State Water Resources Control Board, Division of Drinking Water, District 4; State Water Resources Control Board, Divison of Financial Assistance; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Board, Region 2; Native American Heritage Commission; Public Utilities Commission	
	Date Received	01/26/2018 Start of Review 01/26/2018 End of Review 03/12/2018	



City Council

Don Tatzin, Mayor Cameron Burks, Vice Mayor Mike Anderson, Council Member Mark Mitchell, Council Member Ivor Samson, Council Member

March 16, 2018

Oscar Herrera, Associate Civil Engineer M/S # 701, 375 Eleventh Street, Oakland, CA 94607-4240

Subject: City of Lafayette Comments on Draft Environmental Impact Report (SCH#2016082082) prepared for Leland Reservoir Replacement Project

Dear Mr. Herrera,

Thank you for including the City of Lafayette in the environmental review process for the above referenced project. City staff has reviewed the Draft Environmental Impact Report (DEIR) prepared for replacement of the existing 18-million-gallon (MG), open-cut Leland Reservoir with two new 8 MG prestressed concrete tanks within the existing reservoir basin, and supportive improvements including but not limited to replacement of approximately 1,700 linear feet of existing 36-inch transmission pipeline that currently runs beneath the reservoir with approximately 2,700 linear feet of 36-inch pipeline to be constructed in Windsor Drive, Condit Road, and a short section of Leland Drive between Condit Road and Meek Place, and approximately 950 feet of 36-inch pipeline within the Leland Reservoir Site. The project also proposes to remove existing trees on the site including sixteen protected trees.

On March 12, the City Council reviewed the City's response letter and provided additional comments on 2-1 the DEIR. The City's comments are listed below.

1. Visual Impacts. During the November 2018 presentation of the proposed project to City Council, it was indicated that in order to minimize off-haul, the project would place excavated soil around the tanks and landscape it to restore it to its original condition. This is consistent with paragraph 3 of page 3.1-7 of the DEIR which states "The new tanks at the reservoir would be screened from view by the reservoir embankment, which would [be] remain in place." However, the DEIR also suggests that while the reservoir embankment will remain, its configuration particularly because of the installation of access roads, staging, etc. will change such that rather than providing complete screening as suggested in the document, there might be a potential of exposing the tanks to view from the adjoining residential streets and Leland Drive. In Figure 18.0 of Appendix C, for example, it appears that a substantial portion of the embankment would not be replaced, leaving the tanks exposed to view from Leland Drive and homes to the east. This is unacceptable and inconsistent with the policies of the Lafayette General Plan.

In an effort to better explain the visual impacts of the proposal, the City recommends:

- a. providing visual simulations/line-of-site diagrams at eye/pedestrian level from Leland Drive and adjoining neighborhood
- 2-2

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- streets to the area of the project site
 where the service road meets the
 proposed tanks (shown in the diagram),
 b. providing an explanation as to the
 proposed height of the tanks. We could
- 2-3
 find no explanation in the DEIR for the increased height of the tanks, as opposed to the alternatives of setting them deeper into the ground and/or increasing their diameters. While this is an engineering decision, it should at least be explained to show that all practical alternatives to mitigating the significantly negative aesthetic impact of the exposed tanks have been explored.



- 2-4 c. reducing the proposed height so as to reduce the visual impacts further, and
 d. providing additional solutions to further mitigate the visual impact of the proposal including, but
 2-5 not limited to, camouflaging the tanks with color treatment and installation of landscaping (trees and shrubs).
 - 2. **Construction at Night.** The Project Description and Noise chapters discuss the violation of the City of Lafayette's Noise Ordinance due to the need of the project to make new pipeline connections to existing pipelines each at Old Tunnel Road/Windsor Drive, Leland Drive/Meek Place, and southern edge of the reservoir site requiring construction estimated for 71 to 76 hours and night work for tie-ins which would take up to 24 hours of continuous work. Following drying of the mortar joints, the
- 2-6 pipelines will need to be flushed, chlorinated and returned to service which is an activity that takes approximately 7 to 9 hours requiring pumps and is anticipated to occur during nighttime hours.

It is our understanding that the night time work activities will be limited to only twice during the project construction. The City recommends that clarifying language be added to the Final EIR outlining number of times night time work expected to occur. While the document recognizes that certain functions of the project implementation will violate the City of Lafayette's Noise Ordinance, the City recommends that EBMUD team discuss in the Final EIR alternative construction scenarios that would lend to compliance of the City's Noise Ordinance and explain in detail why those scenarios do not meet project objectives or are otherwise not appropriate. Moreover, the City recommends that as part of the encroachment permit process, EBMUD seek formal approval from

- 2-8 the City Council to perform overnight work.
- 3. Tree Removal. The Draft EIR anticipates removal of 125 trees out of which 16 trees were identified as "protected trees" per the City of Lafayette Tree Ordinance and proposes to plant 75 coast live oak and valley oak trees on the reservoir site. While, the project is not subject to the City's Tree
 2-9 Ordinance, given that the proposed tanks will be taller than the current reservoir which will impact and alter the visual character to of the site, the City recommends that the project investigate and
 - and alter the visual character to of the site, the City recommends that the project investigate and describe in detail the analysis and outcome in the Final EIR, and an alternative that reduces the proposed tree removal to the minimum absolutely necessary.

The City also recommends that the project description be amended to include 1:1 replacement of the trees on site with a combination of native tree species. The project plans should also be amended to include native landscaping (trees and shrubs) in close vicinity of the proposed tanks so as to further mitigate the visual changes associated with the project. The goal should be to restore the site to as nearly the present condition as possible.

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- 4. **Noticing.** The document establishes different noticing criteria during different stages of the project; however, the City recommends that the noticing criteria to be as follows:
 - an initial notice to the neighbors at 30 days prior to activity occurring, and
 - a follow up notice no later than 14 days prior to the activity occurring.

Please provide notices to all neighbors within 1000-feet radius of the project site, rather than 500feet as outlined in the Draft EIR. We also ask that notices include contact information for the job superintendent such that complaints can be addressed efficiently. Lastly, the City would like to be part of the notification list.

- Stormwater Requirements. The Draft EIR notes that construction activities will comply with C.3 stormwater requirements, although details of how this will be achieved are not discussed. Please make a concerted effort to reduce the amount of impermeable area. Please also provide the existing square footage of impermeable area site-wide versus the square footage of impermeable area planned at project completion.
- Storm Drain. Please confirm the size and type of storm drain into which the drainage from the regraded site will be directed and provide hydraulic calculations to support that storm drain system at tie-in and downstream is adequate as part of the Final EIR.
- 7. **Road Restoration**. The City recommends providing a slurry seal and fresh striping in addition to patch paving to restore roadway following the installation of new water main.
- 8. **Haul Routes.** On Page 3.13-11, it is assumed 50% of material and equipment delivery trips will originate west of the project and 50% will originate east of the project. It is further presumed that said material and equipment delivery trips will choose the most direct access route from State Route 24 to Pleasant Hill Road, Old Tunnel Road, and Leland Drive, irrespective of their origin. These assumptions preclude alternative, proximate access routes.

The majority of parcels abutting Old Tunnel Road are zoned single-family residential. Portions of Old Tunnel Road are very narrow for heavy truck traffic, and, there is little shoulder room for pedestrian and bicycle traffic. It is also a school bus route. The City recommends establishing the preferred project access route as being to and from freeways via the El Curtola Boulevard bridge and Camino Diablo. This route is preferred because it features more generous travel lane widths and predominantly commercial and office land uses sited more sparsely than comparative development along the currently-presumed Project access route. Additionally, we recommend that the DEIR investigate and study other possible haul routes that are less impactful to residential areas.

Chapter 4.3 and 4.4 discusses Project Design Alternatives and Alternatives Rejected from Further Consideration, including an "Off Haul Most" Alternative. The City interprets this latter alternative as being technically feasible, although it is noted that this could result in construction closer to residences west of the site. Based on this interpretation, the City considers it reasonable that less off

- 2-16 cont'd haul could result in fewer truck trips associated with the project. On that premise, the City recommends also documenting the amounts of cubic yards of soil and truck trips for the "Off Haul Most" Alternative.
- 9. Highway 24. The Transportation chapter indicates the SR 24 on- and off-ramps at Pleasant Hill Road are closer to the project site than the nearest alternative on- and off-ramps at the SR 24/I-680 interchange that is one mile east. The City recommends for accurate comparison, the document specify the distance of the former from project site.
- 10. Methodology. It is noted a total of six intersections were analyzed for the project. However, it is
 unclear how and why these particular intersections were selected. The City recommends providing an explanation of the methodology for selecting these particular intersections.
- 11. Weather. The City recommends weather information accompanies description of intersection turning movement counts, to clarify the elements in which data was collected.
- 12. HCM Methodology. The document notes study intersections were evaluated using the 2000 Highway Capacity Manual (HCM). However, that version of HCM has been superseded by Highway Capacity Manual 2010 (HCM2010). (It is further noted that an HCM 6th Edition was released in late 2016, after turning movement counts occurred). The City recommends the Final EIR explain the rationale for using HCM rather than HCM2010.
- 13. Level of Service. Table 3.13-1 apparently pertains to Intersection Level of Service (LOS), however the PM Peak Hour LOS for Intersection #1 is described in terms of a single movement ("EB"). This is interpreted as data skew based on a single intersection movement. The City recommends absent a statement clarifying the purpose of calling out the delay and LOS for this single turn movement, the document clarify the intersection-wide PM Peak Hour LOS for Intersection #1 consistent with all other listed intersection delay and LOS values.
- 14. Traffic Counts. The document indicates existing traffic conditions were assessed using 120-hour traffic counts between Thursday, June 9, 2016 and Monday, June 13, 2016. The City believes it is inaccurate to express the data as "average" given its timing; all but one sampled date occurred when school was either out of session or local school instruction time curtailed (i.e., last day of school on Friday, June 10, 2016). The City recommends conducting new traffic volume counts Tuesday through Thursday in spring or fall, on dates devoid of Federal, State and local school holidays and/or curtailed instruction days and revising the document to state the noted caveats pertaining to the current data, as presented.
- 15. Meher School. As it relates to transportation impacts, the City recommends clarifying that the
 2-23 Meher School is either wholly or partially operational during summer months. This would provide more accurate context with respect to traffic and parking data integrity.
- 16. Swim Meets. Page 3.13-7 references "high parking demand" in the Project vicinity due to summertime swim meets. This condition description should be associated with a discrete quantitative threshold. The City recommends a threshold of 85% or higher as defining "high parking demand". Absent that level of demand, the City recommends restating this observed parking condition accordingly.

17. **Truck route.** The City concurs with inferences that the project is exempt from City truck route restrictions. However, for clarity, the City recommends citing the specific relevant City Municipal Code Section 8-705. Per this policy, it should be further clarified in the document that the subject policy pertains to "gross vehicle weight rating (GVWR) of 10,000 pounds".

Please revise the Draft EIR per the comments provided above. We appreciate you keeping the City of Lafayette involved in the review of the Final Environmental Impact Report and other steps associated with the execution of the Leland Reservoir Replacement Project. Should you have any questions regarding the issues outlined in this letter, please do not hesitate to reach out to Payal Bhagat, Senior Planner at <u>PBhagat@lovelafayette.org</u> or 925-299-3219.

Regards,

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Niroop K. Srivatsa, Planning & Building Services Director

From: Francine Lyall [mailto:flyall@sbcglobal.net] Sent: Tuesday, February 6, 2018 11:45 AM To: Falk, Steven Cc: Ruth Grossman; Erin Lynn Beaver

Subject: Leland Reservoir construction

I have resided on Old Tunnel Road since 1972. Many things have changed over the years with reference to traffic on our street which has increased exponentially due to population growth and apps such as waze. One thing has not changed, pedestrians, adults as well as children. Previously to help mitigate vehicle speed and provide some sense of safety for pedestrians, our neighborhood successfully petitioned the City to install stop signs at Old Tunnel Road and Windsor Drive which resulted in slowing traffic on Old Tunnel. Prior to the stop sign installation it was not uncommon for vehicles traveling in either direction to go off the road due to excessive speed and the narrowness of the lanes. This often resulted in damaged mail boxes, parked cars, or cars stuck in a culvert. The City was supportive and made changes.

Old Tunnel Road was once the daily route for PG&E and EBMUD trucks to depart and return to the yards at the end of the day. The noise was unpleasant and the size of the trucks presented a safety hazard on the narrow residential roadway. The weight of these vehicles over time resulted in damage to the road and to the trees along the roadside. After appeals from our neighborhood association, the weight limit signs were installed. We had local enforcement and once again City support.

With reference to the current Leland Reservoir project, per page 80 of the draft EIR, that has been prepared regarding the construction, it states that the route the workers, trucks, equipment etc. will use is the "most direct route" to the construction site e.g., stated as Highway 24 to Pleasant Hill Road to Old Tunnel to Leland, and that the EBMUD trucks are exempt from weight restrictions. This increased traffic and oversized vehicles will negatively impact the safety and quality of life of the residents of Old Tunnel Road the neighboring courts and streets. I would suggest alternate routes:

West to East

1. Highway 24 exit 680 Mt. Diablo Blvd. Walnut Creek then turn right on Boulevard Way, a commercial district with a wider roadway, next right onto Saranap, then left to Leland. This route is half commercial with a wider road and fewer residences.

2. Highway 24 exit 680 Mt. Diablo Blvd. Walnut Creek then turn left, travel up Camino Diablo to the overpass, turn left across the overpass, turn right on Old Tunnel Road to Leland. This route would result in minimal residential impact as there are no residences on that part of Camino Diablo. It is a frontage road with commercial businesses, office space, and wider lanes. That route would create a sense of good will and appreciation towards EBMUD by local residents for their consideration during this project.

North to South

1. Exit 680 Olympic Blvd. turn right onto Olympic and proceed to Pleasant Hill Road and turn right, next turn right onto Condit, then turn left onto Leland. Olympic is a four lane predominantly commercial street. Pleasant Hill Road is predominantly four lanes with a center divide, and Condit albeit only two lanes, is wider than Old Tunnel and has bike lanes.

2. There is a meeting at the Meher School on February 8 at 6:30 PM. It would be appreciated if the City of Lafayette would have representation at this meeting. We once again ask the City for their support of our neighborhood.

Thank you, Francine Lyall 925/963-2339

3-3

3-2

From:	Ron Rusay
To:	Leland Reservoir Replacement EIR
Subject:	Fwd: COMMENTS: Leland Reservoir Replacement Project - Draft Environmental Impact Report
Date:	Thursday, February 22, 2018 2:57:40 PM

I am resending this comment message to make sure it is directed to the proper channels. Thank you.

Begin forwarded message:

From: Ron Rusay <<u>rrusay@gmail.com</u>> Subject: COMMENTS: Leland Reservoir Replacement Project - Draft Environmental Impact Report Date: February 9, 2018 at 9:20:07 PM PST To: oscar.herrera@ebmud.com, jeni.mcgregor@ebmud.com, david.rehnstrom@ebmud.com, reyna.yagi@ebmud.com, john.coleman@ebmud.com

Pardon my abruptness last night. The meeting was not at all what I had expected.

I have followed the Leland Reservoir Replacement project from its outset, but was unable to attend the public meetings until last night. As I had explained to David Rehnstrom, EBMUD Water Division Planning Manager, before the meeting, I am in complete support of the project and appreciate EBMUD's proactive, significant \$35m investment in the future water needs of the Bay Area. I believe to understand the project very well from the documents that you have made publically available on-line, in particular, Section 3.1 of the Draft Environmental Impact Report (Aesthetics).

4-1

I had not planned to attend yesterday, trusting in the professionals involved with the project's planning, development and management, until discovering that the Landscape Plan in the draft EIR did not include any upgrading of the aesthetics of the entire project's landscape fencing, but only addressed mitigation of landscaping issues and items related to the destruction and removal of the existing 17 m gallon reservoir and installation of the 2 new 8m gallon tanks. The draft EIR, and Q&A of the previous 2 public planning meetings, established that landscaping and aesthetics are very important to the project. Therefore, it was astonishing to learn that the professional architecture firm engaged to produce the landscape design had neglected the removal of the 1955 vintage barbed wire lower fencing along Leland Drive and the access road, which the drawings and narrative affirm are being retained, and that although the EIR is a draft, the Landscaping Plan is the final plan. My thought in coming to the meeting was to correct this omission by clearly documenting the issues and citing the relevant information from the draft EIR since removing the barbed wire fencing would be relatively simple, and a very small, low cost item in the overall \$35m budget that should logically have been included but was not.. To this end, I prepared a 12 slide Powerpoint deck and printed a 1 page handout, which you were provided with. The presentation's pdf file is attached and can be accessed at:

http://chemconnections.org/Leland%20Reservoir/Leland%20Reservoir%20Feb.2 018.pdf

I have lived at 1030 Leland Dr. since 1976 after returning from Vietnam. The Leland Reservoir's 1955 barbed wire fence has been a daily grim reminder for me and many others of a very unfortunate part of our nation's history. I have learned to cope with that history and its contradictions. Many of my brethren have not been so fortunate. I looked forward to this project removing a stain of one of those contradictions. I do not understand how modern landscape architects and professionals can callously ignore barbed wire's affront to aesthetics, its history and include it in their "contemporary neighbor-friendly" design.

I do not and cannot accept the plan as it is, which seriously damages EBMUD's goodwill, and request that it be mitigated by removal of the 1955 vintage barbed wire lower fencing along Leland Drive and the access road.

I am still uncertain what "comments" mean in the context of yesterday's meeting, but gather that they must be in the form of questions, which were work-shopped at the end of the meeting.

Please add my questions to that list:

4-3

Why are the existing barbed wire fences along the access road and Leland Dr. being retained and included in the final Landscape Plan of the Leland Reservoir Replacement project?

What are the reasons for not removing the lower barbed wire fences?

Also, please include this correspondence in the formal comments of record in opposition to acceptance and approval of the draft EIR, which are due March 25th.

Thank you.

Ronald J. Rusay, Ph.D. (Teacher & Veteran)

1030 Leland Dr.

Lafayette, CA 94549

In agreement:

Suzanne H. Rusay (Retired Teacher)

1030 Leland Dr.

Lafayette, CA 94549

Leland EIR comments 2-9-18.pdf

EBMUD Leland Reservoir Replacement Project

Public Meeting to Review Draft EIR February 8, 2018, 6:30 - 8:30 PM, The Meher School, 999 Leland Dr, Room 12, Lafayette, CA 94549

Landscaping- Aesthetics: Fencing-Barbed Wire EIR Questions, Issues, & Requests

http://chemconnections.org/Leland%20Reservoir/Leland%20Reservoir%20Feb.2018.pdf

Ron & Sue Rusay rrusay@gmail.com 1030 Leland Dr. Lafayette, CA

Leland Reservoir

- 14.5-acres opposite 1050 Leland Drive
- Constructed 1955, 18-million gallon open-cut reservoir
- Serves Lafayette, Walnut Creek, Pleasant Hill



Project Team

EBMUD

Consultants

- David Rehnstrom, PE, Water Distribution Planning Division Manager
- Jeni McGregor, PE, Senior Engineer
- Oscar Herrera, PE, Project Manager
- Kathryn Horn, Community Affairs

Fencing & aesthetics in landscape plans?

ЕВМИЛ

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- Robin Cort, Ph.D., RMC Water & Environment
- Barbara Lundburg & Chelsea Andersson, RHAA Landscape Architects
- Karen Burks, Burks-Toma Architects





California Environmental Impact Reports

Section 3.1: Aesthetics

The visual quality impacts that are associated with construction of the proposed project.

Consisting of a description of existing visual conditions in the project area and an evaluation of potential affects on visual public views both in the natural and human-built landscape.

The overall visual character of a given area resulting from the combination of natural landscape features as well as built features such as roads, fences, and other constructed additions.

Leland EIR Jan. 2018 Draft Report: Appendix C/ aesthetics: pp. 65-Meetings #1 and #2: Pg. 79, pg. 81, & pg. 91 do not include lower fencing consideration except as mentioned in possible additional costs Appendix D/ aesthetics does not include lower fencing

EIR: Jan. 2018 Draft, fig 3.1-3 view 2



Source: RHAA 2017





1914-1918 http://online.wsj.com/ww1/barbed-wire







2. Insure 8' chain link security fencing with barbed wire strands along upper perimeter road is not noticeable from Leland Dr.



8-fact fugs, 1 (sub black very) unalled much with traction airer



Summary of Requests Relating to Section 3.1: Aesthetics

1) Barbed wire fencing installed in 1955 is no longer a useful security measure, but an architectural eyesore, an unwanted reminder of oppression & war, and should be removed or replaced with fencing suitable to the neighborhood.

- 2) Insure that 8' security fencing is placed to minimize sight from Leland Dr.
- 3) Replace lower gate with a new gate that is suitable to the neighborhood.

Please post as public comment to the Leland Reservoir Project

Questions from: Suzanne & Ron Rusay 1030 Leland Drive Lafayette

Quotes taken from noted pages from the Draft EIR:

P. 3.1-2

"The area surrounding Leland Reservoir hosts a native Oak Savannah landscape. The most common tree species on the site are Coast Live Oak and Valley Oak, and other trees include various pine and eucalyptus species. The site's understory is comprised of native grasses. The site's vegetation and elevation above most of the surrounding area are valuable for site screening, and the height and shape of the hills help to visually obscure the reservoir and inhibit public entry. Maintaining these defenses is key in developing both a visual and physical separation between the site and adjacent neighbors. However, steep slopes at the site limit the area available for construction storage, staging and stockpiling of materials, and existing trees constrain construction access and availability of soil stockpiling locations."

<u>Question 1</u>: If "maintaining these defenses is key in developing both a visual and physical separation between the site and adjacent neighbors," why do they submit to the requirements of a contractor for "construction access" to stockpiling locations?

P. 3.1-7

"However, due to physical changes to the vegetation at the reservoir site resulting from the Project, there would initially be a major alteration in the appearance of the site at completion of construction. The Project's effect on the visual character and quality of the Project site and its surroundings would be attributable primarily to changes caused by the proposed removal of approximately 90 trees from the site.¹ Views toward the site would be significantly altered due to removal of the many mature trees that currently provide screening and are assets in terms of the area's visual quality."

"Visual changes associated with the Project would be most noticeable in the early years after Project implementation, given that replacement trees would not have grown sufficiently to provide a level of screening and aesthetic value that is similar to current site conditions. Trees would initially be fairly small (approximately 6 to 12 feet in height)"

<u>Question 2</u>: "Admitting above that the proposed tree removal will "be a major alteration in the appearance of the site at completion" attributed to "the removal of approximately 90 trees" which "currently provide screening and are assets in terms of the area's visual quality", and also admitting that "replacement trees would not have grown sufficiently to provide a level of

screening and aesthetic value that is similar to current site conditions", WHY REMOVE HEALTHY TREES that presently conceal the reservoir and would also conceal the new one?

6-1

From:twatchersTo:Leland Reservoir Replacement EIRSubject:Leland ReservoirDate:Tuesday, February 27, 2018 1:53:19 PM

Mr. Oscar Herrera Project Manager EBMUD 375 Eleventh Street, MS701 Oakland, CA 94607

Dear Mr. Oscar Herrera:

Quite the undertaking and regret learning the reservoir is at the end of usage. A couple comments on the Leland Reservoir Replacement Project.

I grew up on Leland, went to the former public school there, swim club, church, baseball and football on the upper field with friends during junior and high school years. Climbed the oak trees, played on the grassy fields and watched the horses directly across the former dead end Leland Drive grow old.

Please replace the dirt minimizing visible tanks exposure, leave some all ready mature trees well below the proposed tank pad in place, and don't put a black vinyl fence around the structures. The multi-million dollar single family homes along the east side of Leland Drive, along with the church, swim club, and school don't need two ~ four-story structures overlooking them for next ~ hundred years.

The proposed and currently unmodified project will ruin quaint old neighborhood aesthetics, the history, and the passive neighborhood.

Sincerely,

1028 Leland Drive Lafayette, CA 94549

Tim Watchers 181 Brandon Road, Pleasant Hill, CA 94523 925 680 7353 twatchers@wavecable.com From:Mark RedmondTo:Leland Reservoir Replacement EIRSubject:Visual ImpactDate:Tuesday, February 27, 2018 8:50:25 PM

The new tanks appear to very visible and will only be hidden by trees in 15 to 20 years! I strongly oppose this visual impact in our neighborhood, the new tanks should be concealed at least as well as the existing tank. 7-1

--Mark Redmond 1222 Sunset Loop Lafayette

Letter 8

March 1, 2018

Mr. Oscar Herrera Project Manager East Bay Municipal Utilities District 375 Eleventh Street, MS 701 Oakland, CA 94607-4240

Subject: Response to Draft Environmental Impact Report ("DEIR") on Leland Reservoir Replacement Project (the "Project")

Dear Mr. Herrera:

Replacement of the Leland Reservoir is an important and necessary infrastructure project, and we appreciate and support EBMUD's proactive efforts in this matter. Nevertheless, the current design plan will have a significant negative aesthetic impact on our neighborhood, and we strongly request that the plan be amended to mitigate this problem, as described below. Furthermore, the DEIR and public presentations on the Project have been very misleading on this topic; they should be revised to fully and explicitly disclose the visual impact of the completed reservoir on the immediately surrounding neighborhood.

The current Leland Reservoir is almost completely buried on top of a hill that is at an elevation of approximately 360 feet. The ceiling of the reservoir, itself, is about two feet above ground but it is set back from the edge of the hilltop, and surrounded by mature trees, so that it is barely visible from Leland Drive and most of the immediately surrounding streets. Visitors to the area, and even some of the residents, are not even aware of the reservoir's existence – an ideal situation for an unsightly structure in the middle of a residential neighborhood.

The two new reservoir tanks, on the other hand, will have ceilings that are 5 to 7 feet higher than the existing structure. (We could find no explanation of the reason for this increased height.) Furthermore, a substantial amount of the dirt embankment on the eastern (Leland Drive) side will be removed to provide access to the reservoir basin, and not replaced, thereby making the tanks very visible from Leland Drive.

According to discussions with EBMUD staff, upon Project completion, the embankment cut would be approximately 280 feet wide at the top of the hill (at an elevation of 360 feet), and would slope down from both the north and south edges at an approximately 3:1 slope to an elevation of 330 feet at the bottom of the reservoir basin. At the point of entry of the access road to the reservoir basin, the entire 37-foot height of the tanks will be visible, unlike the current tanks which are almost completely buried. This excavated basin would cause rainwater to collect around the tanks, thereby increasing drainage problems on the hillside. 8-5

It is difficult to ascertain exactly how much of the tanks will be visible from Leland Drive since they will be set back from the edge of the hilltop, and the access road will be curvilinear. Only a computerized simulation at the appropriate elevation angle and direction can show this. It is safe to assume, though, that the new tanks will be much more visible than the existing reservoir. Combined with the removal of many mature trees surrounding the reservoir, the net result will be extremely unsightly, and give our neighborhood the appearance of a couple other nearby towns with large gasoline storage tanks on surrounding hills.

The statements on page 3.1-7 of the DEIR, then, are materially false. Paragraph 3 states "The new tanks at the reservoir site would be screened from view by the reservoir embankment, 8-7

8-2

which would [be] remain in place after Project construction. Design of the tanks is thus consistent with Lafayette General Plan policies regarding hillside overlay areas, which state that structures should be designed to be substantially concealed from view when viewed from below from publicly owned property." And paragraph 4 states "The Project's impact would be less cont'd than significant because replacement vegetation would become established and the site would be restored to be visually comparable to its existing condition." Contrary to those statements, the current design plan clearly violates the city's policies on hillside overlay areas, and the site's aesthetics would be significantly degraded.

8-7

We could not find a detailed description of the visual impact of the exposed tanks anywhere in the DEIR or in the background materials provided at the public presentations. (The preceding measurement details of the excavation were only obtained after several discussions 8-8 with EBMUD staff.) At the latest public meeting on Feb. 8, in response to a direct question as to how high above ground the new tanks would be, you said "5 feet", which was obviously incorrect. The computerized simulation of the view of the completed reservoir (page 26 of the Feb. 8 presentation and Fig. 3.1-3 of the DEIR) was also very misleading – it pointed in a southwesterly direction, and not directly west at the tanks at the bottom of the excavation valley, so only part of the tanks was visible in the upper right-hand corner of the photo. And, 8-9 conveniently, several computer-generated ~20-year old trees were inserted to partially block the tanks. There was no computerized simulation of the view pointing directly west from Leland Drive towards the 280 feet wide valley, with the two tanks in the middle.

The only justification provided for this dramatic departure from the current design appears to be in the notes on Fig. 6.0 and Fig. 7.0 on the Visual Impact Assessment presented at Community Meeting #1. The notes state, in general terms, that the excavation of the embankments around the reservoir basin will be necessary to allow access for the demolition of the old reservoir and construction of the new tanks, but that construction stockpile limitations 8-10 would not allow enough material to be stored onsite to completely backfill around the new tanks. This is a poor justification. Other project sponsors are not allowed to avoid refilling excavations to appropriate levels merely because there is insufficient space to temporarily store backfill. They are required to haul back sufficient fill to complete the job, particularly if failure to do so would have a significant negative impact on the aesthetics, and property values, of the neighborhood.

Our recommended mitigation measures are, as follows:

8-11	1. Narrow the embankment cut to the minimum necessary for construction vehicles to enter and exit the reservoir basin. Restore the ground surrounding the reservoir to its pre-construction level (with the possible exception of a narrow cut for the service road) in order to comply with Lafayette General Plan policies regarding hillside overlay areas. Store as much backfill on site as possible and, if necessary, haul back landfill to make up the shortfall.	
8-12	2. The new tanks should be colored such that they will blend in better with the hillside.	
	3. Since the new trees will take many years to grow, fast-growing, drought-resistant	
	shrubs or hedges (oleander or photinia fraseri, for example) should be planted close to	
8-13	the top of the embankment to break up the profile of the tanks. We recognize that	
	planting trees close to the tanks is not advisable due to future root problems, but	
	shrubs or hedges should not create the same issues.	
	4. The DEIR and related presentations to the public should be amended to explicitly	
8-14	describe (with detailed measurements of the permanent excavation) the aesthetics of	

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the Project design addressed in this letter. Additionally, computer simulations should be made of the views of the Project from the actual properties, which are elevated from the street, directly to the east (1040 through 1056 Leland Drive) and pointed directly west at the tanks. The simulations should also be for one year after Project completion, and not just fifteen years (in 2040!)

We recognize that Item #1 would add to the cost of the Project, but it will be insignificant compared to the permanent deterioration of the aesthetics, and consequent decline in property values, that the current design plan would create. Quite frankly, we cannot understand how the current design could have even been conceived of by EBMUD management and staff.

In another matter, we would like to make one observation on the traffic impact of the Project. An infrastructure project that will last for three years and require partial road closures for six months (or more) should not have a finding of "Less than Significant with Mitigation" impact on traffic. (Page 30 of Feb. 8, 2018 presentation.) A more appropriate finding should be "Significant and Unavoidable." Having said that, the Transportation Impact Study of December 2017 includes a detailed list of mitigation actions which will be updated as the Project progresses. We request that all of the neighbors be kept informed of the traffic plan as it is being finalized. 8-17

We hope that you will incorporate our suggestions into the revised Project plan. Please feel free to contact our coordinator (Bill Lau) if you need further clarification.

* Our calculation of the post-Project excavation cut – Looking directly west at the tanks, the maximum width of the cut at the top of the hill will be 280 feet. From there, the embankment will slope downward from each side at a 3:1 slope, dropping in elevation 30 feet (from 360 feet to 330 feet). This will take 90 feet of horizontal distance, from each side, to accomplish. Therefore, the width of the "valley floor" would be approximately 100 feet (280 minus (2X90)), exposing a substantial portion of the tanks to view from Leland Drive.

Signed (by Email):

/s/ Richard Alexander /s/ Katherine Alexander 1004 Leland Drive	/s/ Paul & Andreina Ng 1008 Leland Drive	/s/ Harng shen & Jean Kuo 1012 Leland Drive
/s/ Jeff & Alison Fingerut 1016 Leland Drive	/s/ Robert Schick /s/ Eun Hee Chang 1020 Leland Drive	/s/ Bill & Ana Lau 1024 Leland Drive
/s/ Tim Watchers 1028 Leland Drive	/s/ Ron & Sue Rusay 1030 Leland Drive	/s/ Octavio & Mayra Lacayo 1040 Leland Drive
/s/ Hyunil Jo & Sung Jung Hong 1042 Leland Drive	/s/ Jim & Cam Olufson 1044 Leland Drive	/s/ Bob & Celia Lewis 1046 Leland Drive
/s/ John & Deborah Kwan 1048 Leland Drive	/s/ Meadine Mah 1050 Leland Drive	/s/ Scott Yokoi & Suzanne Ishii

1078 Leland Drive

From:	Bill Lau
To:	Leland Reservoir Replacement EIR
Cc:	kalexander0317@hotmail.com; rjalexander@msn.com; paulng1008@yahoo.com; hskuo1012@comcast.net; alisondr@aol.com; robertschick@gmail.com; wmylau@yahoo.com; twatchers@wavecable.com; rrusay@gmail.com; octavio.lacayo@gmail.com; johyunil1@gmail.com; jimolufson@comcast.net; camolufson@comcast.net; dkidsot@gmail.com; m3cookie@gmail.com; cho@excelgraphicsprinting.com; syokoi@comcast.net
Subject:	Comments on Draft Environmental Impact Report ("DEIR") on Leland Reservoir Program
Date:	Thursday, March 01, 2018 6:57:29 PM
Attachments:	Final Comments on DEIR.docx

Mr. Oscar Herrera

Project Manager of Leland Reservoir Replacement Project (the "Project") East Bay Municipal Utilities District

Subject: Comments on Draft Environmental Impact Report ("DEIR") on the Project

Attached is our response to the DEIR from ourselves and twenty-six other residents of Leland Drive. In Appendix C (pages 13 and 14) of the DEIR, there are several comments to the effect that two design options were presented at the first public meeting on Aug. 3, 2016, and that "the community" preferred the option with only a partial, and not a full, restoration of the embankment. This assertion is <u>very misleading</u> in that, as you well know, the meeting was not well-attended by Leland Drive residents. Unfortunately, we had no idea that such a dramatic change in design was even being contemplated – the notice of that meeting did not have that level of detail. Furthermore, as pointed out in our attached letter, the DEIR and related materials, and the presentation on Feb. 8, did not provide specific details on the extent of the embankment cut and, in fact, obfuscated the issue. We felt it necessary, therefore, to draft a joint letter and circulate it among our neighbors to provide you with a more representative view of "the community's" opinions. Several of our neighbors indicated that they wanted to send in their own letters, so you may hear from them separately.

We would also like to notify you that we will be forwarding a copy of our comments on the DEIR to the Lafayette Planning Department. As stated in our attached letter, we believe that the statements on page 3.1-7 of the DEIR are materially false in that they claim that (1) the tanks would be screened from view by the reservoir embankment which would remain in place, and (2) the Project's impact would be less than significant because "the site would be restored to be visually comparable to its existing condition." Contrary to the claim in paragraph 3 of that page, we do not feel that the design is consistent with Lafayette General Plan policies regarding hillside overlay areas.

You will note that the signatories of the letter have been cc'd on this Email. If you need direct confirmation from them of their concurrence with it, then hit "Reply to All" and make that request. Please feel free to contact the undersigned if you have any questions.

Bill and Ana Lau 1024 Leland Drive Lafayette, CA 94549 wmylau@yahoo.com (925) 256-4428 9-1

9-2

From:	<u>Bill Lau</u>
To:	Leland Reservoir Replacement EIR; McGregor, Jennifer
Subject:	Comments on Draft Environmental Impact Report "DEIR") on Leland Reservoir Replacement Project (the "Project")
Date:	Friday, March 02, 2018 12:25:38 PM

Further to our Email of March 1, we would like to point out one additional matter. The minutes of the Lafayette City Council Meeting on November 28, 2016, where EBMUD presented its status report on the Project, state (on page 5) that EBMUD "would place excavated soil around the tanks to minimize off-haul and, following this, RHA would landscape the site with a theme of Oak Savannah and **restore it to its original condition**." (Our bold print) The minutes do not indicate that the extent of the exposed tanks was disclosed, and it appears that the same photos shown at the Feb. 8, 2018 public meeting were shown to the Council. While we were not at the City Council meeting, the minutes suggest that the Council was not explicitly told that a substantial portion of the embankment would not be replaced. We pointed this out in an Email today to the Lafayette Planning Department.

Regards,

Bill and Ana Lau 1024 Leland Drive Lafayette, CA 94549 wmylau@yahoo.com (925) 256-4428 We concur with the letter dated March 1, 2018 from residents of Leland Drive. 11-1

The Mamarbachi

1034 Leland Drive in Lafayette

March 5, 2018

Mr. Oscar Herrera Project Manager East Bay Municipal Utilities District 375 Eleventh Street, MS 701 Oakland, CA 94607-4240

Subject: Response to Draft Environmental Impact Report ("DEIR") on Leland Reservoir Replacement Project (the "Project")

Dear Mr. Herrera:

Replacement of the Leland Reservoir is an important and necessary infrastructure project, and we appreciate and support EBMUD's proactive efforts in this matter. Nevertheless, the current design plan will have a significant negative aesthetic impact on our neighborhood, and we strongly request that the plan be amended to mitigate this problem, as described below. Furthermore, the DEIR and public presentations on the Project have been very misleading on this topic; they should be revised to fully and explicitly disclose the visual impact of the completed reservoir on the immediately surrounding neighborhood.

The current Leland Reservoir is almost completely buried on top of a hill that is at an elevation of approximately 360 feet. The ceiling of the reservoir, itself, is about two feet above ground but it is set back from the edge of the hilltop, and surrounded by mature trees, so that it is barely visible from Leland Drive and most of the immediately surrounding streets. Visitors to the area, and even some of the residents, are not even aware of the reservoir's existence – an ideal situation for an unsightly structure in the middle of a residential neighborhood.

The two new reservoir tanks, on the other hand, will have ceilings that are 5 to 7 feet higher than the existing structure. (We could find no explanation of the reason for this increased height.) Furthermore, a substantial amount of the dirt embankment on the eastern (Leland Drive) side will be removed to provide access to the reservoir basin, and not replaced, thereby making the tanks very visible from Leland Drive.

According to discussions with EBMUD staff, upon Project completion, the embankment cut would be approximately 280 feet wide at the top of the hill (at an elevation of 360 feet), and would slope down from both the north and south edges at an approximately 3:1 slope to an elevation of 330 feet at the bottom of the reservoir basin. At the point of entry of the access road to the reservoir basin, the entire 37-foot height of the tanks will be visible, unlike the current tanks which are almost completely buried. This excavated basin would cause rainwater to collect around the tanks, thereby increasing drainage problems on the hillside.

It is difficult to ascertain exactly how much of the tanks will be visible from Leland Drive since they will be set back from the edge of the hilltop, and the access road will be curvilinear. Only a computerized simulation at the appropriate elevation angle and direction can show this. It is safe to assume, though, that the new tanks will be much more visible than the existing reservoir. Combined with the removal of many mature trees surrounding the reservoir, the net result will be extremely unsightly, and give our neighborhood the appearance of a couple other nearby towns with large gasoline storage tanks on surrounding hills.

The statements on page 3.1-7 of the DEIR, then, are materially false. Paragraph 3 states "The new tanks at the reservoir site would be screened from view by the reservoir embankment, which would [be] remain in place after Project construction. Design of the tanks is thus consistent with Lafayette General Plan policies regarding hillside overlay areas, which state that structures should be designed to be substantially concealed from view when viewed from below from publicly owned property." And paragraph 4 states "The Project's impact would be less than significant because replacement vegetation would become established and the site would be restored to be visually comparable to its existing condition." Contrary to those statements, the current design plan clearly violates the city's policies on hillside overlay areas, and the site's aesthetics would be significantly degraded.

We could not find a detailed description of the visual impact of the exposed tanks anywhere in the DEIR or in the background materials provided at the public presentations. (The preceding measurement details of the excavation were only obtained after several discussions with EBMUD staff.) At the latest public meeting on Feb. 8, in response to a direct question as to how high above ground the new tanks would be, you said "5 feet", which was obviously incorrect. The computerized simulation of the view of the completed reservoir (page 26 of the Feb. 8 presentation and Fig. 3.1-3 of the DEIR) was also very misleading – it pointed in a southwesterly direction, and not directly west at the tanks at the bottom of the excavation valley, so

only part of the tanks was visible in the upper right-hand corner of the photo. And, conveniently, several computer-generated ~20-year old trees were inserted to partially block the tanks. There was no computerized simulation of the view pointing directly west from Leland Drive towards the 280 feet wide valley, with the two tanks in the middle.

The only justification provided for this dramatic departure from the current design appears to be in the notes on Fig. 6.0 and Fig. 7.0 on the Visual Impact Assessment presented at Community Meeting #1. The notes state, in general terms, that the excavation of the embankments around the reservoir basin will be necessary to allow access for the demolition of the old reservoir and construction of the new tanks, but that construction stockpile limitations would not allow enough material to be stored onsite to completely backfill around the new tanks. This is a poor justification. Other project sponsors are not allowed to avoid refilling excavations to appropriate levels merely because there is insufficient space to temporarily store backfill. They are required to haul back sufficient fill to complete the job, particularly if failure to do so would have a significant negative impact on the aesthetics, and property values, of the neighborhood.

Our recommended mitigation measures are, as follows:

- Narrow the embankment cut to the minimum necessary for construction vehicles to enter and exit the reservoir basin. Restore the ground surrounding the reservoir to its pre-construction level (with the possible exception of a narrow cut for the service road) in order to comply with Lafayette General Plan policies regarding hillside overlay areas. Store as much backfill on site as possible and, if necessary, haul back landfill to make up the shortfall.
- 2. The new tanks should be colored such that they will blend in better with the hillside.
- 3. Since the new trees will take many years to grow, fast-growing, drought-resistant shrubs or hedges (oleander or photinia fraseri, for example) should be planted close to the top of the embankment to break up the profile of the tanks. We recognize that planting trees close to the tanks is not advisable due to future root problems, but shrubs or hedges should not create the same issues.
- 4. The DEIR and related presentations to the public should be amended to explicitly describe (with detailed measurements of the permanent excavation) the aesthetics of the Project design addressed in this letter. Additionally, computer simulations should be made of the views of the Project from the actual properties, which are elevated from the street, directly to the east (1040 through 1056 Leland Drive) and pointed directly west at the tanks. The simulations should also be for one year after Project completion, and not just fifteen years (in 2040!)

We recognize that Item #1 would add to the cost of the Project, but it will be insignificant compared to the permanent deterioration of the aesthetics, and consequent decline in property values, that the current design plan would create. Quite frankly, we cannot understand how the current design could have even been conceived of by EBMUD management and staff.

In another matter, we would like to make one observation on the traffic impact of the Project. An infrastructure project that will last for three years and require partial road closures for six months (or more) should not have a finding of "Less than Significant with Mitigation" impact on traffic. (Page 30 of Feb. 8, 2018 presentation.) A more appropriate finding should be "Significant and Unavoidable." Having said that, the Transportation Impact Study of December 2017 includes a detailed list of mitigation actions which will be updated as the Project progresses. We request that all of the neighbors be kept informed of the traffic plan as it is being finalized.

We hope that you will incorporate our suggestions into the revised Project plan. Please feel free to contact our coordinator (Bill Lau) if you need further clarification.

* Our calculation of the post-Project excavation cut – Looking directly west at the tanks, the maximum width of the cut at the top of the hill will be 280 feet. From there, the embankment will slope downward from each side at a 3:1 slope, dropping in elevation 30 feet (from 360 feet to 330 feet). This will take 90 feet of horizontal distance, from each side, to accomplish. Therefore, the width of the "valley floor" would be approximately 100 feet (280 minus (2X90)), exposing a substantial portion of the tanks to view from Leland Drive.

Signed (by Email):

/s/ Cho Tang /s/ Fong Ting Au Yeung Tang 1052 Leland Drive

12-1 cont'd

13-1

Old Tunnel Road/Windsor Drive Neighborhood Watch

March 12, 2018

Oscar Herrera, Associate Civil Engineer EBMUD 375 Eleventh Street, M/S 701 Oakland, CA 94607

Dear Sir:

The Old Tunnel Road/Windsor Drive Neighborhood Watch is a group of approximately 75 homes located in Lafayette, CA. Our neighborhood group includes homes near the intersection of Old Tunnel Road and Windsor Drive plus the following streets off of Windsor Drive: Maryola Court, Mars Court, Windsor Court, and Buckeye Court. We were formed several years ago as a response to a series of home break-ins, but we work as a group on any matter that affects the safety and security of our neighborhood.

To that end, the following are our comments regarding the draft EIR for the "Leland Reservoir and Pipeline Replacement" project currently under consideration.

1. The issue of increased traffic in the neighborhood due to construction at both the reservoir site and on neighborhood streets continues to concern us, and the draft EIR virtually ignores this matter. We continue to object to the impact of construction traffic to/from our neighborhood approaching from Pleasant Hill Road to Leland Drive via Old Tunnel Road. We have suggested 3 alternative routes that we want EBMUD to require their contractors to take:

West to East

- Highway 24 exit 680 Mt. Diablo Blvd. Walnut Creek then turn right on Boulevard Way, a commercial district with a wider roadway, next right onto Saranap, then left to Leland. This route is half commercial with a wider road and fewer residences.
- Highway 24 exit 680 Mt. Diablo Blvd. Walnut Creek then turn left, travel up Camino Diablo to the overpass, turn left across the overpass, turn right on Old Tunnel Road to Leland. This route would result in minimal residential impact as there are no residences on that part of Camino Diablo. It is a frontage road with commercial businesses, office space, and wider lanes. That route would create a sense of good will and appreciation towards EBMUD by local residents for their consideration during this project.

North to South

13-1 cont'd	Exit 680 Olympic Blvd. turn right onto Olympic and proceed to Pleasant Hill Road and turn right, next turn right onto Condit, then turn left onto Leland. Olympic is a four lane predominantly commercial street. Pleasant Hill Road is predominantly four lanes with a center divide, and Condit, albeit only two lanes, is wider than Old Tunnel Road and has bike lanes.
13-2	2. Our Neighborhood Watch group concurs with the City of Lafayette in their recommendation that EBMUD undertake a 1:1 tree replacement at the reservoir site and that EBMUD plant smaller trees and shrubs in close vicinity to the tanks to mitigate the visual impact of the tanks on adjacent homes (inasmuch as EBMUD plans to remove approximately 30 additional trees for fire, disease and/or safety concerns). We also urge EBMUD to plant larger, more mature trees on the site.
13-3	3. The proposed T-cut paving on Old Tunnel Road and Windsor Drive is anathema to the homeowners, as we believe it will markedly affect the desirability of our neighborhood and our homes' values. We concur with the City of Lafayette recommendation that EBMUD provide a slurry seal and fresh striping to restore the roadways following installation of the new water main.
 13-4	4. Three school bus lines use Windsor Drive, yet our Neighborhood Watch group is not aware that EBMUD has addressed this issue in the draft EIR.
- 13-5	5. The Sun Valley Swim Club pool hours, particularly during the summer, were not accurately addressed in the draft EIR. There is increased traffic to that entity both on weekends and during the week due to swim practices and swim meets, yet EBMUD has not, to our knowledge, addressed this issue with respect to construction and construction traffic at the reservoir site.
13-6	Finally, it is our contention that the replacement of the reservoir and the pipelines to it is no doubt a necessary public expenditure; however, it will over the course of three years play havoc on the daily lives of the residents impacted by the construction. As a neighborhood, we will not benefit one iota from the construction, yet we are to undertake all the inconvenience attached to it. If EBMUD were to honor the items noted above, it would go a long way to ameliorate the matter for us. It's the least EBMUD should be prepared to do.
	Sincerely yours,
	Erin Beaver, 3169 Old Tunnel Road - Lafayette

Ruth Grossman, 3167 Old Tunnel Road - Lafayette Co-Coordinators, Old Tunnel Road/Windsor Drive Neighborhood Watch

Letter 14

March 12, 2018

delivered via email: lelandreservoir@ebmud.com

Oscar Herrera, Associate Civil Engineer EBMUD 375 Eleventh Street, M/S 701 Oakland, CA 94607

Dear Sir:

As the homeowner for 3134 Maryola Court, Lafayette, CA 94594, I'm writing to address my concerns regarding the draft EIR for the "Leland Reservoir and Pipeline Replacement" project currently under consideration.

1. Table 2-2: Tree Removal for Reservoir Replacement.

After the fires in the North Bay and Southern California this past year, I am requesting the EIR address the need for more of the non-native trees (pine & eucalyptus) to be removed due to fire danger, specifically on the northeast side of the reservoir and along the soon to be abandoned water transmission line and replaced with native trees (valley oak and coastal live oak).

Figure 2-5: Security Fence
 As the reservoir is habitat for numerous turkeys, deer, coyotes and foxes, an 8-foot security fence would severally impact their movement. Additionally, an 8-foot fence would severally impact the view and aesthetics from our backyard. I am requesting a shorter fence that is more pleasing to the eye be installed, similar to the one currently in place, at least along our property that abuts the reservoir.

3. <u>3.11 Noise</u>

As I am the homeowner closest to the reservoir,

"...the residence on the northern side of the cul-de-sac at the end of Maryola Court (3134 Maryola Court) is located approximately 80 feet from the reservoir and approximately 30 feet from the site boundary, and approximately 10 to 13 feet lower in elevation than the existing reservoir's upper perimeter road."

Noise is of great concern to me and my family. As outlined in the EIR, "Work Restrictions. EBMUD Standard Construction Specification 01 14 00, Section 1.8(A) requires that noise generating activities greater than 90 dBA (impact construction such as concrete breaking, concrete crushing, tree grinding, etc.) shall be limited to the hours of 8:00 a.m. to 4:00 p.m., Monday through

Friday.

Please note it on the record as part of the EIR, I will hold EBMUD to this standard.

14-3

Additionally,

"Noise Control and Monitoring Plan. EBMUD Standard Construction Specification 01 35 44, Section 1.3(G) requires that the contractor submit a plan detailing the means and methods for controlling and monitoring noise generated by construction activities, including demolition, alteration, repair or remodeling of or to existing structures and construction of new structures, as well as by items of machinery, equipment or devices used during construction activities on the site for the Engineer's acceptance prior to any work at the jobsite. The plan shall detail the equipment and methods used to monitor compliance with the plan." I am asking that you please include / provide a copy of the plan and said plan is reviewed and approved as part of the EIR.

Furthermore,

Noise Control. EBMUD Standard Construction Specification 01 35 44, Section 3.6 requires noise controls on site activities and describe measures that shall be implemented to reduce the potential for noise disturbance at adjacent or nearby residences.

If impact equipment (e.g., jack hammers, pavement breakers, and rock drills) is used, Contractor is responsible for taking appropriate measures, including but not limited to the following:

- Hydraulically or electric-powered equipment shall be used wherever feasible to avoid the noise associated with compressed- air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed-air exhaust shall be used (a muffler can lower noise levels from the exhaust by up to about 10 dB). External jackets on the tools themselves shall be used, where feasible, which could achieve a reduction of 5 dB. Quieter procedures, such as drilling rather than impact equipment, will be used whenever feasible. It is the Contractor's responsibility to implement any mitigations necessary to meet applicable noise requirements. Impact construction including jackhammers, hydraulic backhoe, concrete crushing/recycling activities, vibratory pile drivers will be limited to between 8:00 a.m. and 4:00 p.m., Monday through Friday within residential communities, and will be limited in duration to the maximum extent feasible.

Please provide the specific noise control measures that will be implemented to ensure the contractor is in compliance, and make this part of the EIR review and approval process.

In addition to the above,

- Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example.

14-5

14-4

Please provide the evaluation to be used for the item noted above to ensure the contractor is in compliance, and make this part of the EIR review and approval process.	14-6 cont'd
 Also, Notify neighbors/occupants within 300 feet of project construction at least thirty days in advance of extreme noise generating activities about the estimated duration of the activity. As part of the EIR, am asking that in addition to thirty days' notice, that an additional 14-day notice be issued as well. Also ask that hotel accommodations be 	14-7
made available for residents within 300 feet of project construction be provided during activities of extreme noise generation.	14-8
 In addition to noise, there is the concern of vibration. Vibration Control and Monitoring Plan. EBMUD Standard Construction Specification 01 35 44, Section 1.3(H) requires that the contractor submit a plan detailing the means and methods for controlling and monitoring surface vibration generated by demolition and other work on the site for the Engineer's acceptance prior to any work at the jobsite. The plan shall detail the equipment and methods used to monitor compliance with the plan. Please provide the specific plan for the item noted above, and make this part of the EIR review and approval process. 	14-9
Finally, Upon homeowner request, and with homeowner permission, the District will conduct preconstruction surveys of homes, sensitive structures and other areas of concern within 15 feet of continuous vibration-generating activities (i.e. vibratory compaction). Any new cracks or other changes in structures will be compared to preconstruction conditions and a determination made as to whether the project	14-10

could have caused such damage. In the event that the project is demonstrated to have caused the damage, the District will have the damage repaired to the

I am requesting in the EIR for the area noted above to be increased from 15' to

Paul Mason Homeowner 3134 Maryola Court, Lafayette, CA 94549

preexisting condition.

_

100'.

Regards,

Leland Reservoir DEIR Public Meeting February 8th, 2018 Official Recorded Comments & Questions

- 15-1 How does EBMUD enforce construction routes?
- 15-2 Why is EBMUD exempt from City of Lafayette's (City) Noise Ordinance, specifically in regard to construction hours? How much longer would the project take if EBMUD followed the construction hours specified in the City Ordinance (i.e., 8 a.m. to 8 p.m. Monday through Saturday)?
- 15-3 Are the three school bus lines addressed in the Draft EIR?
- 15-4 Where is the water supply serving residents near Leland Reservoir coming from? Would water service be impacted?
- 15-5 The simulations presented in the Draft EIR are not representative of what the Leland Reservoir site will look like immediately after construction since they only represent the site 15 years after construction. How visible would the tanks be following construction?
- 15-6 Can EBMUD add vegetation or some sort of screening during construction?
- 15-7 What would be the additional cost for vegetation planted in the short-term during construction to provide additional coverage at the site?
- **15-8** Can EBMUD plant more small trees and/or shrubs closer to the top of reservoir to screen the tanks from viewpoints along Leland Drive?
- 15-9 Can EBMUD provide more information on the survival rate of replacement trees that are larger than the 24-inch box size replacement trees that are proposed? Can more mature, larger trees be planted?
- **15-10** Are any replacement trees planned or required for the approximately 30 trees that would be removed for maintenance (i.e., fire, disease and/or safety concerns)?
- 15-11 The description of viewpoints on page 3.1-1 of the Draft EIR from homes at the end of Maryola Court (specifically 3135 Maryola Court) is not accurate. A more complete description of alternative viewpoints at 3135 Maryola Court should be included in the EIR.
- 15-12 Are there cost thresholds associated with the chosen mitigations? More specifically, how does EBMUD balance its own assessment of project costs with the decided EIR mitigations?

Would construction work in Windsor Drive and Leland Drive occur at the same time? Would Windsor Drive and Leland Drive be closed to through traffic at the same time?	15-13
With the proposed T-cut paving, Windsor Drive will be a patchwork of different pavement and will look very bad after pipeline construction. Can EBMUD leave the area in better condition (e.g., full street width repaving) than the existing conditions? Would EBMUD consider a slurry seal over the entire roadway with re-painted road lines so the road looks better following pipeline construction?	15-14
Can EBMUD construct a sidewalk along Leland Drive?	15-15
Would the project improve drainage on Leland Drive?	15-16
Would trees potentially be damaged by construction traffic?	15-17
How can residents request a pre- and post-construction survey for individual homes to assess damage caused by project construction?	15-18
The Sun Valley Pool hours are not accurately described in the Draft EIR; the pool is very busy during the summer weekdays (i.e., during planned construction hours). Please clarify how EBMUD would work with pool summer hours and construction conflicts?	15-19
Has EBMUD assessed impacts to property values from project construction?	15-20
Would there be any issues or conflicts with the planned Saranap Village Project? EBMUD should consider any opportunities to streamline and coordinate shared road work construction.	15-21
The project would help reduce any flood risk to properties from the existing reservoir; supportive of the Project.	15-22
The Old Tunnel Road weight restrictions in the City ordinance were put in place because of EBMUD and PG&E trucks were damaging the road and the trees along the road. How can EBMUD be exempt from this ordinance?	15-23
How tall are the new tanks from the existing ground?	15-24
What will be the anticipated traffic delay to residents (i.e., both leaving their houses and returning to their houses) who live on Windsor Drive and the streets coming off of Windsor Drive?	15-25
The pipeline has been buried deeply beneath the reservoir and embankment for over 50 years, so why is it necessary to move it now? Can the new pipeline be buried deeply in Old Tunnel Road? Is the Windsor Road alignment more expensive since there would be more pipeline to install?	15-26

- 15-27 Providing comments on the Draft EIR is meaningless; EBMUD didn't address our comments from the scoping meetings.
- **15-28** Does the City of Lafayette have any authority or say in the project and project construction?
- 15-29 The project construction process and order is unclear.
- 15-30 EBMUD is asking the community to give up a lot for the project; the impact of the project is significant for three years of work.
Letter 16

PRESENTATION TO EBMUD BOARD RECEIVE MARCH 27, 2018 MAR 2 7 2018

My name is Bill Lau and I live at 1024 Leland Drive in Lafayette. I would like to make some brief comments on the draft EIR for the Leland Reservoir Replacement project. On Mar. 1, twenty-eight residents of Leland Drive submitted a joint letter to your staff with our detailed comments. My purpose today is to highlight certain facts you may not be aware of and, hopefully, persuade you to direct staff to seriously consider the recommendations in our letter, and not waste time just wordsmithing the EIR, or tweaking a fundamentally flawed plan.

We recognize the necessity and importance of this project, but we have serious concerns over its proposed design. The existing reservoir is buried in the top of a hill and not visible from Leland Drive or the other surrounding streets. Under the current plan, however, a substantial portion of the hillside on the east will be excavated to allow for demolition and construction, and not be replaced. The new reservoir tanks, therefore, will be exposed and very visible from our street and other streets to the east. After project completion, the excavation will be 280 feet wide at the top, slope down in elevation 30 feet to a valley floor that is 100 feet wide. At the 16-2 bottom of the valley, the entire 37 feet height of the tanks will be fully exposed – that's the equivalent of two 3-story buildings which will be only 150 yards away from our street. (By the way, these details are not disclosed in the draft EIR, but are based on discussions with your staff.) We believe that this will have a significant negative impact on the aesthetics of our 16-3 neighborhood, and on our property values.

Your staff presented the reservoir plan to the Lafayette City Council on November 28, 16-4 2016. Minutes of that meeting state that EBMUD would place excavated soil around the tanks

16-1

to minimize off-haul and landscape it **to restore it to its original condition**. This assertion is not true, but it is repeated in the current draft EIR. Page 3.1-7 of that document states: **(QUOTE)** The new tanks at the reservoir site would be screened from view by the reservoir embankment which **16-4** cont'd would remain in place after Project completion. Design of the tanks is thus consistent with Lafayette General Plan policies regarding hillside overlay areas, which state that structures should be designed to be substantially concealed from view when viewed from below... **(UNQUOTE)** These are materially false statements in the draft EIR that are contradicted by the design described in general terms in Appendix C.

The City of Lafayette, in its comment letter dated March 16, 2018, stated that the plan to not replace the embankment and leave the tanks exposed to view from Leland Drive and homes to the east is (QUOTE) unacceptable and inconsistent with the policies of the Lafayette General Plan. (UNQUOTE)

Contrary to the conclusions of the draft EIR, the exposed tanks would have a material adverse impact on the aesthetics of the area. You should actually do what you said you would 16-6 do, and comply with the Lafayette General Plan. I urge you to direct staff to fully consider the alternate design and mitigating actions included in our March 1 letter, and would welcome the opportunity to provide staff with some additional suggestions.

Bill Lau 1024 Leland Drive Lafayette, CA 994549 wmylau@yahoo.com (925) 256-4428

From:	<u>Bill Lau</u>
To:	Leland Reservoir Replacement EIR; McGregor, Jennifer
Subject:	Comments on Draft Environmental Impact Report "DEIR") on Leland Reservoir Replacement Project (the "Project")
Date:	Friday, March 02, 2018 12:25:38 PM

Further to our Email of March 1, we would like to point out one additional matter. The minutes of the Lafayette City Council Meeting on November 28, 2016, where EBMUD presented its status report on the Project, state (on page 5) that EBMUD "would place excavated soil around the tanks to minimize off-haul and, following this, RHA would landscape the site with a theme of Oak Savannah and **restore it to its original condition**." (Our bold print) The minutes do not indicate that the extent of the exposed tanks was disclosed, and it appears that the same photos shown at the Feb. 8, 2018 public meeting were shown to the Council. While we were not at the City Council meeting, the minutes suggest that the council was not explicitly told that a substantial portion of the embankment would not be replaced. We pointed this out in an Email today to the Lafayette Planning Department.

Regards,

Bill and Ana Lau 1024 Leland Drive Lafayette, CA 94549 wmylau@yahoo.com (925) 256-4428

Bill Lau
Leland Reservoir Replacement EIR
kalexander0317@hotmail.com; rjalexander@msn.com; paulng1008@yahoo.com; hskuo1012@comcast.net; alisondr@aol.com; robertschick@gmail.com; wmylau@yahoo.com; twatchers@wavecable.com; rrusay@gmail.com; octavio.lacayo@gmail.com; johyunil1@gmail.com; jimolufson@comcast.net; camolufson@comcast.net; dkidsot@gmail.com; m3cookie@gmail.com; cho@excelgraphicsprinting.com; syokoi@comcast.net
Comments on Draft Environmental Impact Report ("DEIR") on Leland Reservoir Program Thursday, March 01, 2018 6:57:29 PM <u>Final Comments on DEIR.docx</u>

Mr. Oscar Herrera

Project Manager of Leland Reservoir Replacement Project (the "Project") East Bay Municipal Utilities District

Subject: Comments on Draft Environmental Impact Report ("DEIR") on the Project

Attached is our response to the DEIR from ourselves and twenty-six other residents of Leland Drive. In Appendix C (pages 13 and 14) of the DEIR, there are several comments to the effect that two design options were presented at the first public meeting on Aug. 3, 2016, and that "the community" preferred the option with only a partial, and not a full, restoration of the embankment. This assertion is <u>very misleading</u> in that, as you well know, the meeting was not well-attended by Leland Drive residents. Unfortunately, we had no idea that such a dramatic change in design was even being contemplated – the notice of that meeting did not have that level of detail. Furthermore, as pointed out in our attached letter, the DEIR and related materials, and the presentation on Feb. 8, did not provide specific details on the extent of the embankment cut and, in fact, obfuscated the issue. We felt it necessary, therefore, to draft a joint letter and circulate it among our neighbors to provide you with a more representative view of "the community's" opinions. Several of our neighbors indicated that they wanted to send in their own letters, so you may hear from them separately.

We would also like to notify you that we will be forwarding a copy of our comments on the DEIR to the Lafayette Planning Department. As stated in our attached letter, we believe that the statements on page 3.1-7 of the DEIR are materially false in that they claim that (1) the tanks would be screened from view by the reservoir embankment which would remain in place, and (2) the Project's impact would be less than significant because "the site would be restored to be visually comparable to its existing condition." Contrary to the claim in paragraph 3 of that page, we do not feel that the design is consistent with Lafayette General Plan policies regarding hillside overlay areas.

You will note that the signatories of the letter have been cc'd on this Email. If you need direct confirmation from them of their concurrence with it, then hit "Reply to All" and make that request. Please feel free to contact the undersigned if you have any questions.

Bill and Ana Lau 1024 Leland Drive Lafayette, CA 94549 wmylau@yahoo.com (925) 256-4428

March 1, 2018

Mr. Oscar Herrera Project Manager East Bay Municipal Utilities District 375 Eleventh Street, MS 701 Oakland, CA 94607-4240

Subject: Response to Draft Environmental Impact Report ("DEIR") on Leland Reservoir Replacement Project (the "Project")

Dear Mr. Herrera:

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Replacement of the Leland Reservoir is an important and necessary infrastructure project, and we appreciate and support EBMUD's proactive efforts in this matter. Nevertheless, the current design plan will have a significant negative aesthetic impact on our neighborhood, and we strongly request that the plan be amended to mitigate this problem, as described below. Furthermore, the DEIR and public presentations on the Project have been very misleading on this topic; they should be revised to fully and explicitly disclose the visual impact of the completed reservoir on the immediately surrounding neighborhood.

The current Leland Reservoir is almost completely buried on top of a hill that is at an elevation of approximately 360 feet. The ceiling of the reservoir, itself, is about two feet above ground but it is set back from the edge of the hilltop, and surrounded by mature trees, so that it is barely visible from Leland Drive and most of the immediately surrounding streets. Visitors to the area, and even some of the residents, are not even aware of the reservoir's existence – an ideal situation for an unsightly structure in the middle of a residential neighborhood.

The two new reservoir tanks, on the other hand, will have ceilings that are 5 to 7 feet higher than the existing structure. (We could find no explanation of the reason for this increased height.) Furthermore, a substantial amount of the dirt embankment on the eastern (Leland Drive) side will be removed to provide access to the reservoir basin, and not replaced, thereby making the tanks very visible from Leland Drive.

According to discussions with EBMUD staff, upon Project completion, the embankment cut would be approximately 280 feet wide at the top of the hill (at an elevation of 360 feet), and would slope down from both the north and south edges at an approximately 3:1 slope to an elevation of 330 feet at the bottom of the reservoir basin. At the point of entry of the access road to the reservoir basin, the entire 37-foot height of the tanks will be visible, unlike the current tanks which are almost completely buried. This excavated basin would cause rainwater to collect around the tanks, thereby increasing drainage problems on the hillside.

It is difficult to ascertain exactly how much of the tanks will be visible from Leland Drive since they will be set back from the edge of the hilltop, and the access road will be curvilinear. Only a computerized simulation at the appropriate elevation angle and direction can show this. It is safe to assume, though, that the new tanks will be much more visible than the existing reservoir. Combined with the removal of many mature trees surrounding the reservoir, the net result will be extremely unsightly, and give our neighborhood the appearance of a couple other nearby towns with large gasoline storage tanks on surrounding hills.

The statements on page 3.1-7 of the DEIR, then, are materially false. Paragraph 3 states "The new tanks at the reservoir site would be screened from view by the reservoir embankment,

16-9

which would [be] remain in place after Project construction. Design of the tanks is thus consistent with Lafayette General Plan policies regarding hillside overlay areas, which state that structures should be designed to be substantially concealed from view when viewed from below from publicly owned property." And paragraph 4 states "The Project's impact would be less than significant because replacement vegetation would become established and the site would be restored to be visually comparable to its existing condition." Contrary to those statements, the current design plan clearly violates the city's policies on hillside overlay areas, and the site's aesthetics would be significantly degraded.

We could not find a detailed description of the visual impact of the exposed tanks anywhere in the DEIR or in the background materials provided at the public presentations. (The preceding measurement details of the excavation were only obtained after several discussions with EBMUD staff.) At the latest public meeting on Feb. 8, in response to a direct question as to how high above ground the new tanks would be, you said "5 feet", which was obviously incorrect. The computerized simulation of the view of the completed reservoir (page 26 of the Feb. 8 presentation and Fig. 3.1-3 of the DEIR) was also very misleading – it pointed in a southwesterly direction, and not directly west at the tanks at the bottom of the excavation valley, so only part of the tanks was visible in the upper right-hand corner of the photo. And, conveniently, several computer-generated ~20-year old trees were inserted to partially block the tanks. There was no computerized simulation of the view pointing directly west from Leland Drive towards the 280 feet wide valley, with the two tanks in the middle.

The only justification provided for this dramatic departure from the current design appears to be in the notes on Fig. 6.0 and Fig. 7.0 on the Visual Impact Assessment presented at Community Meeting #1. The notes state, in general terms, that the excavation of the embankments around the reservoir basin will be necessary to allow access for the demolition of the old reservoir and construction of the new tanks, but that construction stockpile limitations would not allow enough material to be stored onsite to completely backfill around the new tanks. This is a poor justification. Other project sponsors are not allowed to avoid refilling excavations to appropriate levels merely because there is insufficient space to temporarily store backfill. They are required to haul back sufficient fill to complete the job, particularly if failure to do so would have a significant negative impact on the aesthetics, and property values, of the neighborhood.

Our recommended mitigation measures are, as follows:

- Narrow the embankment cut to the minimum necessary for construction vehicles to enter and exit the reservoir basin. Restore the ground surrounding the reservoir to its pre-construction level (with the possible exception of a narrow cut for the service road) in order to comply with Lafayette General Plan policies regarding hillside overlay areas. Store as much backfill on site as possible and, if necessary, haul back landfill to make up the shortfall.
- 2. The new tanks should be colored such that they will blend in better with the hillside.
- 3. Since the new trees will take many years to grow, fast-growing, drought-resistant shrubs or hedges (oleander or photinia fraseri, for example) should be planted close to the top of the embankment to break up the profile of the tanks. We recognize that planting trees close to the tanks is not advisable due to future root problems, but shrubs or hedges should not create the same issues.
- 4. The DEIR and related presentations to the public should be amended to explicitly describe (with detailed measurements of the permanent excavation) the aesthetics of the Project design addressed in this letter. Additionally, computer simulations should

16-9 cont'd be made of the views of the Project from the actual properties, which are elevated from the street, directly to the east (1040 through 1056 Leland Drive) and pointed directly west at the tanks. The simulations should also be for one year after Project completion, and not just fifteen years (in 2040!)

We recognize that Item #1 would add to the cost of the Project, but it will be insignificant compared to the permanent deterioration of the aesthetics, and consequent decline in property values, that the current design plan would create. Quite frankly, we cannot understand how the current design could have even been conceived of by EBMUD management and staff.

In another matter, we would like to make one observation on the traffic impact of the Project. An infrastructure project that will last for three years and require partial road closures for six months (or more) should not have a finding of "Less than Significant with Mitigation" impact on traffic. (Page 30 of Feb. 8, 2018 presentation.) A more appropriate finding should be "Significant and Unavoidable." Having said that, the Transportation Impact Study of December 2017 includes a detailed list of mitigation actions which will be updated as the Project progresses. We request that all of the neighbors be kept informed of the traffic plan as it is being finalized.

We hope that you will incorporate our suggestions into the revised Project plan. Please feel free to contact our coordinator (Bill Lau) if you need further clarification.

* Our calculation of the post-Project excavation cut – Looking directly west at the tanks, the maximum width of the cut at the top of the hill will be 280 feet. From there, the embankment will slope downward from each side at a 3:1 slope, dropping in elevation 30 feet (from 360 feet to 330 feet). This will take 90 feet of horizontal distance, from each side, to accomplish. Therefore, the width of the "valley floor" would be approximately 100 feet (280 minus (2X90)), exposing a substantial portion of the tanks to view from Leland Drive.

Signed (by Email):

/s/ Richard Alexander /s/ Paul & Andreina Ng /s/ Harng shen & /s/ Katherine Alexander 1008 Leland Drive Jean Kuo 1012 Leland Drive 1004 Leland Drive /s/ Jeff & Alison Fingerut /s/ Robert Schick /s/ Bill & Ana Lau 1016 Leland Drive /s/ Eun Hee Chang 1024 Leland Drive 1020 Leland Drive /s/ Tim Watchers /s/Ron & Sue Rusay /s/ Octavio & 1030 Leland Drive Mayra Lacayo 1028 Leland Drive 1040 Leland Drive /s/ Jim & Cam Olufson /s/ Bob & Celia Lewis /s/ Hyunil Jo & 1046 Leland Drive Sung Jung Hong 1044 Leland Drive 1042 Leland Drive /s/ John & Deborah Kwan /s/ Meadine Mah /s/ Scott Yokoi & 1050 Leland Drive Suzanne Ishii 1048 Leland Drive 1078 Leland Drive

16-9 cont'd



City Council

Don Tatzin, Mayor Cameron Burks, Vice Mayor Mike Anderson, Council Member Mark Mitchell, Council Member Ivor Samson, Council Member

March 16, 2018

Oscar Herrera, Associate Civil Engineer M/S # 701, 375 Eleventh Street, Oakland, CA 94607-4240

Subject: City of Lafayette Comments on Draft Environmental Impact Report (SCH#2016082082) prepared for Leland Reservoir Replacement Project

Dear Mr. Herrera,

Thank you for including the City of Lafayette in the environmental review process for the above referenced project. City staff has reviewed the Draft Environmental Impact Report (DEIR) prepared for replacement of the existing 18-million-gallon (MG), open-cut Leland Reservoir with two new 8 MG prestressed concrete tanks within the existing reservoir basin, and supportive improvements including but not limited to replacement of approximately 1,700 linear feet of existing 36-inch transmission pipeline that currently runs beneath the reservoir with approximately 2,700 linear feet of 36-inch pipeline to be constructed in Windsor Drive, Condit Road, and a short section of Leland Drive between Condit Road and Meek Place, and approximately 950 feet of 36-inch pipeline within the Leland Reservoir Site. The project also proposes to remove existing trees on the site including sixteen protected trees.

16-10

On March 12, the City Council reviewed the City's response letter and provided additional comments on the DEIR. The City's comments are listed below.

1. Visual impacts. During the November 2018 presentation of the proposed project to City Council, it was indicated that in order to minimize off-haul, the project would place excavated soil around the tanks and landscape it to restore it to its original condition. This is consistent with paragraph 3 of page 3.1-7 of the DEIR which states "The new tanks at the reservoir would be screened from view by the reservoir embankment, which would [be] remain in place." However, the DEIR also suggests that while the reservoir embankment will remain, its configuration particularly because of the installation of access roads, staging, etc. will change such that rather than providing complete screening as suggested in the document, there might be a potential of exposing the tanks to view from the adjoining residential streets and Leland Drive. In Figure 18.0 of Appendix C, for example, it appears that a substantial portion of the embankment would not be replaced, leaving the tanks exposed to view from Leland Drive and homes to the east. This is unacceptable and inconsistent with the policies of the Lafayette General Plan.

In an effort to better explain the visual impacts of the proposal, the City recommends:

3675 Mount Diablo Boulevard, Suite 210, Lafayette, CA 94549 Phone: 925.284.1968 Fax: 925.284.3169 www.ci.lafayette.ca.us

- a. providing visual simulations/line-of-site diagrams at eye/pedestrian level from Leland Drive and adjoining neighborhood streets to the area of the project site where the service road meets the proposed tanks (shown in the diagram),
- b. providing an explanation as to the proposed height of the tanks. We could find no explanation in the DEIR for the increased height of the tanks, as opposed to the alternatives of setting them deeper into the ground and/or increasing their diameters. While this is an engineering decision, it should at least be explained to show that all practical alternatives to mitigating the significantly negative aesthetic impact of the exposed tanks have been explored.



- c. reducing the proposed height so as to reduce the visual impacts further, and
- providing additional solutions to further mitigate the visual impact of the proposal including, but not limited to, camouflaging the tanks with color treatment and installation of landscaping (trees and shrubs).
- 2. Construction at Night. The Project Description and Noise chapters discuss the violation of the City of Lafayette's Noise Ordinance due to the need of the project to make new pipeline connections to existing pipelines each at Old Tunnel Road/Windsor Drive, Leland Drive/Meek Place, and southern edge of the reservoir site requiring construction estimated for 71 to 76 hours and night work for tie-ins which would take up to 24 hours of continuous work. Following drying of the mortar joints, the pipelines will need to be flushed, chlorinated and returned to service which is an activity that takes approximately 7 to 9 hours requiring pumps and is anticipated to occur during nighttime hours.

It is our understanding that the night time work activities will be limited to only twice during the project construction. The City recommends that clarifying language be added to the Final EIR outlining number of times night time work expected to occur. While the document recognizes that certain functions of the project implementation will violate the City of Lafayette's Noise Ordinance, the City recommends that EBMUD team discuss in the Final EIR alternative construction scenarios that would lend to compliance of the City's Noise Ordinance and explain in detail why those scenarios do not meet project objectives or are otherwise not appropriate. Moreover, the City recommends that as part of the encroachment permit process, EBMUD seek formal approval from the City Council to perform overnight work.

3. Tree Removal. The Draft EIR anticipates removal of 125 trees out of which 16 trees were identified as "protected trees" per the City of Lafayette Tree Ordinance and proposes to plant 75 coast live oak and valley oak trees on the reservoir site. While, the project is not subject to the City's Tree Ordinance, given that the proposed tanks will be taller than the current reservoir which will impact and alter the visual character to of the site, the City recommends that the project investigate and describe in detail the analysis and outcome in the Final EIR, and an alternative that reduces the proposed tree removal to the minimum absolutely necessary.

16-10 cont'd The City also recommends that the project description be amended to include 1:1 replacement of the trees on site with a combination of native tree species. The project plans should also be amended to include native landscaping (trees and shrubs) in close vicinity of the proposed tanks so as to further mitigate the visual changes associated with the project. The goal should be to restore the site to as nearly the present condition as possible.

- 4. Noticing. The document establishes different noticing criteria during different stages of the project; however, the City recommends that the noticing criteria to be as follows:
 - an initial notice to the neighbors at 30 days prior to activity occurring, and
 - a follow up notice no later than 14 days prior to the activity occurring.

Please provide notices to all neighbors within 1000-feet radius of the project site, rather than 500-feet as outlined in the Draft EIR. We also ask that notices include contact information for the job superintendent such that complaints can be addressed efficiently. Lastly, the City would like to be part of the notification list.

5. Stormwater Requirements. The Draft EIR notes that construction activities will comply with C.3 stormwater requirements, although details of how this will be achieved are not discussed. Please make a concerted effort to reduce the amount of impermeable area. Please also provide the existing square footage of impermeable area site-wide versus the square footage of impermeable area planned at project completion.

16-10 cont'd

- Storm Drain. Please confirm the size and type of storm drain into which the drainage from the regraded site will be directed and provide hydraulic calculations to support that storm drain system at tie-in and downstream is adequate as part of the Final EIR.
 - 7. Road Restoration. The City recommends providing a slurry seal and fresh striping in addition to patch paving to restore roadway following the installation of new water main.
 - 8. Haul Routes. On Page 3.13-11, it is assumed 50% of material and equipment delivery trips will originate west of the project and 50% will originate east of the project. It is further presumed that said material and equipment delivery trips will choose the most direct access route from State Route 24 to Pleasant Hill Road, Old Tunnel Road, and Leland Drive, irrespective of their origin. These assumptions preclude alternative, proximate access routes.

The majority of parcels abutting Old Tunnel Road are zoned single-family residential. Portions of Old Tunnel Road are very narrow for heavy truck traffic, and, there is little shoulder room for pedestrian and bicycle traffic. It is also a school bus route. The City recommends establishing the preferred project access route as being to and from freeways via the El Curtola Boulevard bridge and Camino Diablo. This route is preferred because it features more generous travel lane widths and predominantly commercial and office land uses sited more sparsely than comparative development along the currently-presumed Project access route. Additionally, we recommend that the DEIR investigate and study other possible haul routes that are less impactful to residential areas.

Chapter 4.3 and 4.4 discusses Project Design Alternatives and Alternatives Rejected from Further Consideration, including an "Off Haul Most" Alternative. The City interprets this latter alternative as being technically feasible, although it is noted that this could result in construction closer to residences west of the site. Based on this interpretation, the City considers it reasonable that less off haul could result in fewer truck trips associated with the project. On that premise, the City recommends also documenting the amounts of cubic yards of soil and truck trips for the "Off Haul Most" Alternative.

- 9. **Highway 24.** The Transportation chapter indicates the SR 24 on- and off-ramps at Pleasant Hill Road are closer to the project site than the nearest alternative on- and off-ramps at the SR 24/I-680 interchange that is one mile east. The City recommends for accurate comparison, the document specify the distance of the former from project site.
- 10. Methodology. It is noted a total of six intersections were analyzed for the project. However, it is unclear how and why these particular intersections were selected. The City recommends providing an explanation of the methodology for selecting these particular intersections.
- 11. Weather. The City recommends weather information accompanies description of intersection turning movement counts, to clarify the elements in which data was collected.
- 12. HCM Methodology. The document notes study intersections were evaluated using the 2000 Highway Capacity Manual (HCM). However, that version of HCM has been superseded by Highway Capacity Manual 2010 (HCM2010). (It is further noted that an HCM 6th Edition was released in late 2016, after turning movement counts occurred). The City recommends the Final EIR explain the rationale for using HCM rather than HCM2010.
- 13. Level of Service. Table 3.13-1 apparently pertains to Intersection Level of Service (LOS), however the PM Peak Hour LOS for Intersection #1 is described in terms of a single movement ("EB"). This is interpreted as data skew based on a single intersection movement. The City recommends absent a statement clarifying the purpose of calling out the delay and LOS for this single turn movement, the document clarify the intersection-wide PM Peak Hour LOS for Intersection #1 consistent with all other listed intersection delay and LOS values.
- 14. Traffic Counts. The document indicates existing traffic conditions were assessed using 120-hour traffic counts between Thursday, June 9, 2016 and Monday, June 13, 2016. The City believes it is inaccurate to express the data as "average" given its timing; all but one sampled date occurred when school was either out of session or local school instruction time curtailed (i.e., last day of school on Friday, June 10, 2016). The City recommends conducting new traffic volume counts Tuesday through Thursday in spring or fall, on dates devoid of Federal, State and local school holidays and/or curtailed instruction days and revising the document to state the noted caveats pertaining to the current data, as presented.
- 15. Meher School. As it relates to transportation impacts, the City recommends clarifying that the Meher School is either wholly or partially operational during summer months. This would provide more accurate context with respect to traffic and parking data integrity.
- 16. Swim Meets. Page 3.13-7 references "high parking demand" in the Project vicinity due to summertime swim meets. This condition description should be associated with a discrete quantitative threshold. The City recommends a threshold of 85% or higher as defining "high parking demand". Absent that level of demand, the City recommends restating this observed parking condition accordingly.

16-10 cont'd 17. **Truck route.** The City concurs with inferences that the project is exempt from City truck route restrictions. However, for clarity, the City recommends citing the specific relevant City Municipal Code Section 8-705. Per this policy, it should be further clarified in the document that the subject policy pertains to "gross vehicle weight rating (GVWR) of 10,000 pounds".

16-10 cont'd

Please revise the Draft EIR per the comments provided above. We appreciate you keeping the City of Lafayette involved in the review of the Final Environmental Impact Report and other steps associated with the execution of the Leland Reservoir Replacement Project. Should you have any questions regarding the issues outlined in this letter, please do not hesitate to reach out to Payal Bhagat, Senior Planner at <u>PBhagat@lovelafayette.org</u> or 925-299-3219.

Regards,

Aluoop & Omate

Niroop K. Srivatsa, Planning & Building Services Director

From: Coleman, John
Sent: Wednesday, March 28, 2018 6:43 AM
To: Bill Lau
Subject: Re: Draft EIR for Leland Reservoir Replacement Project

Bill -

I agree that three minutes is limiting to how much can be raised. There are some meetings which we have over 40 speakers, and even keeping them to three minutes can be difficult.

I will convey your email to management to be included for comments.

All the best,

John

Sent from my iPad

On Mar 27, 2018, at 4:48 PM, Bill Lau <<u>wmylau@yahoo.com</u>> wrote:

John – Thank you for your interest in our issue. Three minutes do not provide enough time to express one's views on a complicated topic. For your upcoming meeting with staff, I wanted to provide you with additional background on some suggestions for modifying the design plan.

1. Narrow the embankment cut to the minimum width necessary – Appendix C of the DEIR has a simple statement (with no detailed calculations) that there is not sufficient space on site to store enough excavated dirt to completely refill the embankment, but there is no explanation on the rationale for the size of the embankment cut in the first place. We believe that, once the assumption was made to not completely re-fill the excavation, the project team unilaterally decided to expose the entire space between the two tanks and widen the access to 100 feet. A more viable alternative would be to limit the cut to the minimum width necessary for demolition and construction vehicles to access the reservoir basin, thereby significantly reducing the amount of excavation and temporary storage of backfill. Building retaining walls could also reduce the width of the excavation.

 Scrape additional dirt from the rest of the site for backfill – Project Engineer Jeni McGregor admitted that this option had not been explored. Among other places, there is a hill on the north end of the property which could be a source of additional dirt. Only the west side of that hill should be used for this purpose, however, since excavating the top or east side would expose the tanks to sightlines from houses on that end of the property.

3. Increase curvature of access road – This would block a direct view of the tanks.

4. Build berms on east side of the tanks and on sides of the access road as it approaches the reservoir basin. If it can be shown that this would effectively block the sightlines from the houses on the east, this would require less dirt than completely refilling the excavation.

5. If Steps 1 through 4 are not sufficient to restore the site to its original condition, haul back enough dirt to do so. - This is what is needed to comply 17-5

17-1

17-3

17-5 cont'd	with the Lafayette General Plan and with the draft EIR, and is no more than what other project sponsors would be required to do.
17-6	Construct tanks in a color that blends in with the hillside – Inexpensive mitigation.
17-7	7. Plant fast-growing shrubs and hedges on top of the berms closer to the tanks – This would break up the hillside profile of the tanks, and provide effective screening while the newly-planted trees on the site matured.

I would be more than willing to talk with you and/or staff by phone, or in person, at your offices.

Bill Lau 1024 Leland Drive Lafayette, CA 94549 (925) 256-4428 wmylau@yahoo.com

Deborah -

Thank you for your email. I appreciate the comments that Bill Lau raised very effectively at our meeting yesterday, and have since forwarded a more recent message from Bill to our GM. I have and will continue to push and represent the issues that you and so many others have raised.

All the best,

John

Sent from my iPad

On Mar 27, 2018, at 5:47 PM, Deborah Kwan <<u>dkidsot@gmail.com</u>> wrote:

Dear Mr. Coleman,

Bill Lau has shared the letter and discussion that he has had with you. I hope that these concerns are shared completely with EBMUD officials. He has done a lot of work for our sake and yet, we ALL are concerned about the points raised.

Since my husband and I have lived DIRECTLY across the street from the Lafayette Reservoir at 1048 Leland for almost 27 years, we are especially concerned about the view from our house. We are also concerned about the effect that a BARE hill and two visible reservoirs would do for our property value.

As you know, the design will allow the reservoirs to be seen from street level. We will unfortunately, have even more visibility from our front yard and house, since most of the houses on Leland are set up steep driveways and not at street level. 18-2

Without restating the points that have been included in Mr. Lau's letter, we would appreciate being contacted in the future as to what changes will, hopefully, be made to the currently stated 18-3 plan.

We are especially concerned about the contradictions between the EIR and Appendix C.We
believe that many aspects of the EBMUD plan for Leland Drive Reservoirs18-4are UNACCEPTABLE and INCONSISTENT with Lafayette's general plan.18-4

Thank you for your time and attention to this matter.

Sincerely, Deborah

Deborah and John Kwan dkidsot@gmail.com

925-639-7215 perieau@hotmail.com 925-639-7218 18-1

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Chapter 11 Draft EIR Revisions

11.1 Introduction

This chapter presents revisions that have been made to the Draft EIR text. These revisions provide corrections, additions or clarifications as requested by specific comments. The text revisions are organized by chapter. <u>Underlined</u> text represents language that has been added to the Draft EIR; text shown with strikethrough has been deleted from the Draft EIR.

11.2Text Revisions

Chapter 2 Project Description

Page 2-11 the first paragraph is revised as follows:

The new tanks would be constructed with new valve pits to house electrical and mechanical equipment for the facility. The floor of the tanks would be approximately two feet below the existing bottom of the reservoir basin, and the tanks would be approximately 37 feet tall at the outside wall (elevation of 367 feet) and approximately 39 feet tall at the peak of the roof (elevation of 369 feet), as measured from the ground elevation within the existing reservoir basin (330 feet). The new tanks would have a roof elevation approximately 4 to 6 feet higher than the existing reservoir roof elevation (363 feet). Soil would be replaced around the tanks, partially backfilling the reservoir basin, and the embankment would be reconstructed with a road through the embankment. Access into the bottom of the basin thus would be retained. The site would be restored and trees and other vegetation would be planted on the site. To maintain security, the tanks would be enclosed with EBMUD standard 8-foot black vinyl coated security chain link fencing with barbed wire at the top (**Figure 2-5**).

Page 2-11, the first bullet is revised as follows:

• Sev One hundred twenty-five (7 125) replacement trees would be planted on the site on slopes that are less that 3:1. Trees shall be coast live oak and valley oak.

Page 2-17, the last sentence in the last paragraph is revised as follows:

Construction of the connections is estimated to require a 71- to 76-hour period <u>for each</u> <u>connection.</u>, and night work <u>To limit the duration of the shutdown of the critical transmission</u> <u>pipeline, continuous work would be necessary, resulting in one night of work would be necessary</u> for <u>each of</u> the tie-ins at Old Tunnel Road/Windsor Drive and Leland Drive/Meek Place-<u>Continuous work would not be necessary for the tie-in at Leland Drive and the Leland Reservoir</u> site, therefore night work would not be needed at this connection location.

Page 2-20, the last sentence in the paragraph before the heading 2.5.4, Construction Schedule, is revised as follows:

A total of $7 \underline{12}5$ coast live oak and valley oak trees would be planted. Newly planted tree would be irrigated until the plants are well-established, typically five years.

Page 2-20, the first paragraph under Section 2.5.4, Construction Schedule is revised as follows:

Construction is planned to start in the fall 2022, beginning with pipeline construction in the public ROW. Pipeline construction would occur first and would take approximately six months to complete. The reservoir construction may begin in early 2023 after the pipeline construction is complete. Reservoir construction is expected to be completed by the end of 2025. Construction would typically occur between 7:00 a.m. and 7:00 p.m. 8:00 a.m. and 8:00 p.m., Monday through Friday, with afterhours or weekend construction activity limited to unplanned/unexpected occurrences or critical shutdowns and emergencies. Construction trucks and personnel could

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report to the site at 7:00 a.m. for minor tasks and meetings, but as required by EBMUD Standard Specification 01-14-00 (subsection 1.8A, Construction Noise) specified by Section 5-207 of the Lafayette Code of Ordinances, no construction equipment would be operated work that generates noise over 90 dBA would occur until 8:00 a.m., except for concrete pours and pipeline tie-ins at Old Tunnel Road/Windsor Drive and Leland Drive/Meek Place. A 6:00 a.m. start time is needed during reservoir foundation and roof slab concrete pour work, which is estimated to occur over a total of about 16 days for both tanks (8 days per tank). To minimize interruptions on the pipeline construction in front of The Meher Schools, pipeline construction in front of the school would be scheduled during periods when school is not in session.

Section 3.1 Aesthetics

Page 3.1-7, the second sentence in the second full paragraph is revised as follows:

The new tanks at the reservoir site would be screened from view by the reservoir embankment, <u>most of</u> which would be remain in place after Project construction. Design of the tanks is thus consistent with Lafayette General Plan policies regarding hillside overlay areas, which state that structures should be designed to be substantially concealed from view when viewed from below from publicly owned property.

Section 3.11 Noise

Pages 3.11-19 and 3.11-20, text under Impact NOI-1, Construction Activities Occurring Outside 8:00 a.m. to 8:00 p.m. Time Frame, is revised as follows

Construction Activities Occurring Outside 8:00 a.m. to 8:00 p.m. Timeframe

The Project's construction hours for most activities would be 7:00 a.m. to 7:00 p.m. 8:00 a.m. to 8:00 p.m., Monday through Friday, and construction-related vehicles could travel on neighborhood streets prior to 7:00 8:00 a.m. in order to reach the site by 7:00 8:00 a.m. On a typical day, construction trucks and personnel would report to the site at 7:00 a.m. for minor tasks and meetings, and there would be morning construction related activities between 7:00 a.m. and 8:00 a.m. but as specified by Section 5-207 of the Lafayette Code of Ordinances, no construction equipment would be operated until 8:00 a.m., except for concrete pours and pipeline tie-ins at Old Tunnel Road/Windsor Drive and Leland Drive/Meek Place. A 6:00 a.m. start time is needed during reservoir foundation and roof slab concrete pour work, which is estimated to occur over a total of approximately 16 days for both tanks (approximately 8 days per tank).

Because of the Project's proximity to residential areas, <u>any</u> construction noise occurring outside of the 8:00 a.m. to 8:00 p.m. timeframe is expected to exceed the ordinance's more stringent noise limits. <u>Construction work before 8:00 a.m. would only be allowed during concrete pours</u>, which are expected to occur for a total of about 16 days and for pipeline tie-ins, which would occur over two nights (one night at each tie-in locations at Old Tunnel Road/Windsor Drive and <u>Leland Drive/Meek Place</u>). The ordinance requires noise occurring between 10:00 p.m. and 7:00 a.m. to remain below 53 dBA (Leq), and noise occurring between 7:00 a.m. and 8:00 a.m. to remain below 58 dBA (Leq). As explained above, the Project would include work on a daily basis beginning at 7:00 a.m., as well as limited amounts of overnight and early morning work, all of which could exceed these limits.

Table 3.11-4 presents estimated Project-related construction equipment noise levels generated during typical work on the Project, including work likely concrete pours to be conducted completed prior to 8:00 starting as early as 6:00 a.m. As the table indicates, construction noise could exceed the Lafayette Noise Ordinance's applicable limits of 58 dBA (Leq) between 7:00 a.m. and 8:00 a.m. and 8:00 p.m. and 10:00 p.m., and 53 dBA (Leq) between 10:00 p.m. and 7:00 a.m., a significant noise impact. EBMUD has considered the practicability of prohibiting

construction work before 8:00 a.m. <u>and after 8:00 p.m. during all construction phases</u> in order to meet the ordinance time limit and has determined that this is not feasible <u>during concrete pours</u> for the reservoir foundation and roof slab as well as for pipeline tie-ins at Old Tunnel <u>Road/Windsor Drive and Leland Drive/Meek Place</u> because:

- Construction work must start as early in the morning as possible to allow workers, deliveries, and equipment movement to avoid the heaviest rush hour traffic on highways and roads. Deliveries may arrive early in the morning before 7:00 a.m. due to either lighter traffic or permits that prohibit travel during certain hours.
- Earlier start times also allow the work to avoid the heat of the day in summer and the darkness when the daylight hours are shorter. During summertime heatwaves, contractors will sometimes request earlier start times to avoid working throughout the heat of the day.
- Starting early in the morning also allows for a larger time buffer in the afternoon, when adhering to an 8-hour work day. The buffer can provide extra daylight hours in case the project schedule slips or a construction issue comes up during the day that must be corrected.
- Concrete work requires a 6:00 a.m. start time due to the need for setup in the morning to mobilize a pump truck prior to the first delivery of concrete. Pump trucks will typically arrive at 6:00 a.m., ahead of the rest of the concrete crew. Disruptions in the concrete pour can affect the quality of the concrete work and service life of the structure; therefore, it is extremely important that concrete trucks arrive at regular intervals, particularly later in the concrete pour. If concrete truck movement is inhibited by heavy traffic later during afternoon commute hours, the concrete pour operation could be disrupted. In addition, concrete work is affected by temperature. Early start times ensure longer periods of time when temperatures are lower and concrete sets slower and is easier to work with.
- For concrete work that involves flat work, such as the tank floor, the concrete finishers typically stay later to finish the concrete after the remainder of the crew has gone home. Starting concrete work early allows concrete finishers to complete their work during daylight hours, or at least minimize the amount of work being performed after dark under floodlights. Finishing concrete after dark can negatively affect the quality of the concrete finish.
- <u>Pipeline tie-ins to the existing EBMUD water transmission system at Old Tunnel</u> <u>Road/Windsor Drive and Leland Drive/Meek Place require a continuous 71- to 76-hour</u> <u>period because the tie-in necessitates shutting down and draining a portion of the</u> <u>transmission system. Once the system is shut down the tee connection must be inserted and</u> <u>welded in place in an uninterrupted process, so night work would be necessary at the two</u> <u>locations where tie-ins must be constructed.</u>

Page 3.11-20, the first full paragraph after the bullet list is revised as follows:

In addition to early morning activities, construction activities would need to extend later than the 8:00 p.m. ordinance time limits for pipeline tie-ins at Old Tunnel Road at Windsor Drive and Leland Dre at Meek Place. The entire tie-in process could require continuous work for approximately 71 to 76 hours for each connection, although the noisiest activity would occur over a 24-hour period. The tie-in process would be short-term, intermittent in nature, and would cease upon completion of the tie-in process. At two tie-in locations (Old Tunnel Road/Windsor Drive and Leland Drive/Meek Place), The the process would entail some limited construction activities during nighttime (7:00 p.m. to 7:00 a.m.) weekday hours. Night work would not be needed at the tie-in at Leland Drive and the Leland Reservoir site. The nighttime work would occur primarily during one 24-hour period. The tie-in process would involve: (1) approximately 5 to 7 hours to

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dewater and shut down existing mains (no major equipment noise sources); (2) approximately 24 hours to cut and weld the inside and outside of the each pipeline connection and valve installation (audible equipment noise would be generated during this process); (3) approximately 36 hours to apply the mortar and allow it to dry (little to no noise); and (4) approximately 6 to 9 hours to flush/chlorinate/recharge/return existing pipelines back into service (no major equipment noise sources).

Page 3.11-22, the first paragraph is revised as follows:

In summary, Project construction hours would extend one hour earlier than <u>comply with</u> ordinance time limits (7:00 a.m. versus 8:00 a.m.) on most days (as specified by Section 5-207 of the Lafayette Code of Ordinances, no construction equipment would be operated until 8:00 a.m., except for concrete pours and pipeline tie-ins) and would start two hours earlier than ordinance time limits (6:00 a.m. versus 8:00 a.m. on reservoir foundation and roof slab concrete pour days) for 16 days during the 3+ year construction duration. Additionally, Project construction activities would extend overnight for two days (8:00 p.m. to 8:00 a.m. 7:00 p.m. to 7:00 a.m.) for the two tie-in locations (one night per tie-in) and construction noise levels during this work would exceed the applicable noise level limits set forth in Lafayette's Noise Ordinance. These conflicts with the ordinance for overnight and early morning work are considered to be a significant and unavoidable noise impact.

Page 3.11-23, the second bullet under Mitigation Measure NOI-1c, Construction Liaison, is revised as follows:

<u>The City of Lafayette, schools, businesses, recreational facilities, and residents located within a 1,000-foot radius of the construction site shall be notified at least 30 days Residents located within 500 feet of project construction and with a direct line of sight to the construction area will be notified at least seven (7) days in advance of noisy activities and about the estimated duration of the activity; a second notice will also be sent no later than 14 days prior. EBMUD will also send emails to individuals on the Project's mailing list to update them prior to noisy phases.</u>

Page 3.11-23, the first paragraph under Significance Determination after Mitigation is revised as follows:

Significance Determination after Mitigation

The impacts of Project construction occurring outside of the noise ordinance's 8:00 a.m. to 8:00 p.m. timeframe for relaxed construction noise standards would be significant and unavoidable because construction noise prior to 7 <u>8</u>:00 a.m. could exceed the Lafayette Noise Ordinance's applicable limits of 58 dBA (Leq) between 7:00 a.m. and 8:00 a.m. <u>as well as between 8:00 p.m.</u> and 10:00 p.m. and 53 dBA between 10:00 p.m. and 7:00 a.m. (See **Table 3.11-5**). EBMUD has considered the practicability of prohibiting construction work before 8:00 a.m. in order to meet the ordinance time limit and has determined that this is not feasible <u>during concrete pours for the reservoir foundation and roof slab as well as for pipeline tie-ins at Old Tunnel Road/Windsor</u> Drive and Leland Drive/Meek Place, as detailed above.

Page 3.11-27, in the footnote at the bottom of Table 3.11-6 the following text is deleted from the second sentence:

based on proposed construction hours of 7:00 a.m. to 7:00 p.m.

Page 3.11-29, the second paragraph under Impact NOI-3 is revised as follows:

If groundborne vibration generated by Project-related demolition and construction activities were to exceed 0.5 in/sec PPV, vibration could cause damage to nearby structures, including adjacent buildings. As detailed in the Project Description, a number of EBMUD standard practices and procedures, applicable to all EBMUD projects, have been incorporated into the Project, including Standard Construction Specification 01 35 44, Environmental Requirements. Section 3.5 of

EBMUD Standard Construction Specification 01 35 44 establishes a threshold vibration limit of 0.5 in/sec PPV to minimize the potential for structural damage from vibration. The EBMUD Practices and Procedures Monitoring and Reporting Plan (**Table 7-2** in Chapter 7) lists the applicable standards specifications language. In addition to providing preconstruction surveys of homes, sensitive structures and other areas of concern within 15 feet of continuous vibration-generating activity, EBMUD will also conduct preconstruction surveys of homes, sensitive structures, and other areas of concern on properties that share a property boundary with the Leland Reservoir site or are located on the pipeline route in Old Tunnel Road, Windsor Drive, Condit Road, and Leland Drive. The preconstruction surveys would be completed only upon homeowner request and with homeowner permission."

Section 3.13 Transportation

Page 3.13-8, the paragraph under Lafayette Municipal Code, Ordinance No. 646 is revised as follows:

Sections 8-702, 8-703 and 8-704 of the City of Lafayette Municipal Code were amended on March 28, 2016 to address the allowable weight of vehicles traveling along streets within the City. The Ordinance specifies that vehicles weighing more than 10,000 pounds shall not travel on any street within the City other than designated truck routes except for commercial vehicles needed for the construction, installation or repair of a public utility. Designated truck routes in the City of Lafayette are Pleasant Hill Road, Deer Hill Road, First Street, Oak Hill Road, Mt. Diablo Boulevard, Olympic Boulevard, and Moraga Road. Section 8-705 of the Municipal Code lists exceptions to the prohibitions of trucks with gross vehicle weight ratings over 10,000 pounds; item (c) states that prohibitions do not apply to 'A commercial vehicle necessarily in use in the construction, installation, or repair of a public utility as described in Vehicle Code Section 35704.' Because Project construction would involve construction of a public utility, Project-generated truck trips are exempt from this ordinance."

Page 3.13-10, the third sentence in the paragraph under the heading "Construction Worker Trips is revised as follows:

Construction shifts would generally occur between <u>8:00 a.m. and 8:00 p.m.</u> 7:00 a.m. and 7:00 p.m.

Page 3.13-16, the end of the sentence at the top of the page is revised as follows:

It is anticipated that the construction of 2,700 feet of pipelines in Windsor Drive, Condit Road and Leland Drive would last approximately seven weeks (not including construction mobilization activities), and construction on local roadways would occur between <u>8:00 a.m. and 8:00 p.m.</u> 7:00 a.m. and 7:00 p.m., Monday through Friday.

Page 3.13-17, the second sentence in the second paragraph under the heading "Condit Road" is revised as follows:

The closure would affect approximately 1,618 vehicles currently traveling along Condit Road between Windsor Drive and Leland Drive between <u>8:00 a.m. and 8:00 p.m.</u> 7:00 a.m. and 7:00 p.m. (about 242 of which occur during the peak hour).

Page 3.13-18, the third sentence in the first full paragraph is revised as follows:

The closure would affect approximately 576 vehicles currently traveling along Leland Drive between Old Tunnel Road and Condit Road between 8:00 a.m. and 8:00 p.m. 7:00 a.m. and 7:00 p.m. (about 102 of which occur during the peak hour).

Page 3.13-18, the beginning of the second full paragraph is revised as follows:

The parking lot for The Meher Schools is located on the west side of Leland Drive adjacent to the construction zone, and access to the parking lot may be affected during construction. The Meher Schools are generally open between the hours of 7:00 a.m. and 6:30 p.m., with peak drop-off and pick-up activities occurring from 8:00 a.m. to 9:00 a.m. and from 1:45 p.m. to 2:45 p.m., respectively. The school year typically starts after Labor Day and runs to mid-June, but because summer programs are offered, the school operates almost year-round. The campus is closed for only about one week in late June and another week in late August. School staff have indicated that the months of July and August would be the least disruptive for construction near the school (The Meher Schools 2016).

Page 3.13-20, Mitigation Measure TRA-2, Maintain Emergency Access, is revised as follows:

Emergency responders (i.e., local police, fire, and ambulance services) shall be notified at least seven days in advance of any activities requiring full or partial roadway closures. Emergency access detour routes shall be determined in consultation with emergency responders as part of the notification process. The City of Lafayette, sSchools, businesses, recreational facilities, and residents located within a 1,000-foot radius of the construction site 300 feet of construction zone shall be notified at least seven30 days in advance of activities requiring roadway closures, outlining the Project schedule and the duration of construction activities; a second notice will also be sent no later than 14 days prior to the planned activity. EBMUD will send notices to the individuals and organizations on the Project's mailing list to update them prior to any roadway closures. Temporary barricades and directional cones that can be readily removed shall be used during full or partial roadway closures. Road barricades shall be removed and open trenches shall be covered (plated) at the end of the day on a daily basis to provide access. A portion of the on-street parking zones may be retained to allow for storage and/or staging of construction equipment.

Chapter 4 Alternatives

Page 4-6, the last sentence in the last paragraph in Section 4.5.3, Impact Discussion, is revised as follows:

<u>Although EBMUD would comply with the City of Lafayette Noise Ordinance to the extent</u> <u>possible, and would adjust use standard construction hours to be 8:00 a.m. to 8:00 pm (instead of</u> 7:00 a.m. to 7:00 p.m. <u>as identified in Standard Construction Specifications</u>) <u>some work for the</u> roof replacement <u>would still need to occur before 8:00 a.m.</u>, so significant noise impacts during construction would still be expected to occur.

Page 4-8, the first paragraph in Section 4.6 is revised as follows:

Section 15126.6 of the CEQA Guidelines states that "Evaluation is to focus on those alternatives capable of either avoiding or substantially lessening any significant environmental effects of the project". For the Leland Reservoir Replacement, the only significant unavoidable impacts are construction noise. Standard construction hours are 7:00 a.m. to 7:00 p.m., and per EBMUD's Standard Construction Specification 01 14 00, Work Restrictions, <u>but EBMUD would adjust schedules so that most work would occur between 8:00 a.m. and 8:00 p.m. and any construction work that generates noise levels above 90 dBA would not be allowed to occur before 8:00 a.m. or after 4:00 p.m. The Lafayette Noise Ordinance limits construction hours to 8:00 a.m. to 8:00 p.m., and 8:00 a.m., so <u>but even though EBMUD would limits</u> the types of activities that can occur between 7:00 a.m. and 8:00 a.m. is not consistent with the ordinance, and is thus considered to be a significant impact. Limited nighttime construction is also proposed for pipeline tie-ins, but due to the nature of the tie-in process, this activity is unavoidable. In addition to the conflict with the noise ordinance, noise levels for truck traffic during reservoir construction and nighttime construction of pipeline</u>

connections would constitute a significant impact. EBMUD has thus considered alternatives to reduce construction noise at the Leland Reservoir site.

Page 4-8, the first sentence in the first paragraph in Section 4.6.2, Impact Discussion is revised as follows:

EBMUD would use standard still have to complete some construction hours (7:00 a.m. to 7:00 p.m.) before 8:00 a.m. for construction of a single tank at the Leland Reservoir Site, so there would still be significant construction noise impacts in the City of Lafayette because construction would conflict with the City of Lafayette Noise Ordinance.

Page 4-9, the first paragraph under Figure 4-1 is revised as follows:

The Rudgear Road reservoir site is located within 60 feet of residences so construction at this site would also result in potentially significant noise impacts associated with both construction activities and noise from haul trucks. EBMUD construction hours <u>for some activities</u> for the New Leland Pressure Zone Reservoir would be in conflict with the City of Walnut Creek Municipal Code (City of Walnut Creek 2017), which only allows construction from 7:00 a.m. to 6:00 p.m. Nighttime construction would also be required at the Rudgear Road site for tie-in of the new pipeline connecting the tank to the existing EBMUD transmission system. The New Leland Pressure Zone Reservoir Alternative would thus reduce noise impacts at the Leland Reservoir site, though not to a less-than-significant level, but would result in significant and unavoidable noise impacts at the Rudgear Road site in Walnut Creek due to construction activity at that site, which is assumed to occur at the same hours as those proposed for the Project: <u>concrete pours</u> would have to start at 6:00 a.m. and limited nighttime work would be required. 7:00

Chapter 5 Other CEQA Considerations

Page 5-1, the second paragraph in Section 5.1, Significant Unavoidable Impacts, is revised as follows:

Impact NOI-1: the Project would result in 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. It would not be feasible for all Project construction to comply with the City of Lafayette Noise Ordinance, which limits construction activities to 8:00 a.m. to 8:00 p.m. Monday through Saturday and 10:00 a.m. to 6:00 p.m. on Sundays and legal holidays. EBMUD has considered the practicability of prohibiting construction work before 8:00 a.m. in order to meet the ordinance time limit and has determined that most activities can occur between 8:00 a.m. and 8:00 p.m., but for some activities this is not feasible. To safely accomplish required tasks at the reservoir site, c Construction hours for most activities would need to be 7:00 a.m. to 7:00 p.m. be 8:00 a.m. to 8:00 p.m. Monday through Friday. During concrete foundation and roof slab pour tasks a 6:00 a.m. start time would be required to minimize interruptions of the concrete pour activities. Pipeline construction tie-ins would also require nighttime work and noise generating activities would occur primarily during one 24-hour time period for each tie-in. Noise levels during the tie-in process would exceed the 53-dBA Nighttime Ordinance Noise Limit at the nearest sensitive receptors. Per Mitigation Measure NOI-1c, EBMUD will maintain ongoing communication with residents and will address noise issues during construction, and Mitigation Measure NOI-1b, Nighttime Construction Measure, would provide alternative lodging for affected residents, but the impact would still be considered significant because residents may choose not to move to alternative lodging for one night and would be subject to nighttime noise. As a result, the impacts of Project construction outside of the noise ordinance's 8 a.m. to 8 p.m. timeframe would be significant and unavoidable because construction noise prior to 7 a.m. could exceed the Lafayette Noise Ordinance's applicable limits of 58 dBA (Leq) between 7 a.m. and 8 a.m. and 53 dBA between 10 p.m. and 7 a.m. for nighttime work.

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Chapter 12 Final Mitigation Monitoring and Reporting Program

12.1 CEQA Requirements

CEQA requires the adoption of feasible mitigation measures to reduce the severity and magnitude of potentially significant environmental impacts associated with project development.

Section 20181.6 of the California Public Resources Code requires a CEQA lead or responsible agency that approves or carries out a project where an EIR has identified measures to mitigate significant environmental effects to "adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation."

CEQA Guidelines Section 15097 (a) states that "In order to assure the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revision which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects."

Chapter 7 of the Draft EIR included the Draft Mitigation Monitoring and Reporting Program (MMRP) for the proposed project. This MMRP has been finalized and reflects changes made as a result of comments on the Draft EIR.

12.2 MMRP Matrix

The Final MMRP is presented in **Table 12-1** and **Table 12-2** and lists all impacts identified in the EIR as significant or potentially significant along with the proposed mitigation measures (**Table 12-1**) and EBMUD's Practices and Procedures (**Table 12-2**) that are required to reduce impacts to less than significant levels. The impacts are briefly summarized in the table.

For each mitigation measure or EBMUD Practice and Procedure, the following information is provided:

- Significance Criteria. This column indicates impact areas that could be considered significant
- **Mitigation Measure.** This column contains the full text of the mitigation measures, excerpt from the relevant standard specification, or identifies the applicable EBMUD design standard.
- **EBMUD Practices and Procedures/Standard Specifications.** This column contains excerpts from the relevant standard specification or identifies the applicable EBMUD design standard.
- **Responsible for Implementation.** This column provides additional information on how the mitigation measures will be implemented to help clarify how compliance can be monitored
- **Responsible for Monitoring and/or Enforcement**. This column contains an assignment of responsibility for the monitoring and reporting tasks
- **Timing of Implementation.** This column indicates when the mitigation measure would be applied.

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Table 12-1: Mitigation Monitoring and Reporting Plan

Significance Criteria	Mitigation Measure	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
Aesthetics				
AES-2: Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	AES-1: Nighttime Lighting Controls To the extent possible, EBMUD will ensure that temporary stationary lighting used during nighttime construction is of limited duration, shielded and directed downward or oriented such that little or no light is directly visible from nearby residences.	EBMUD and EBMUD's Construction Contractor	EBMUD	For the duration of nighttime construction
Biological Resources				
BIO-1: 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 Wildlife or U.S. Fish and Wildlife Service.	 BIO-1a: Preconstruction Rare Plant Survey In the year prior to commencing ground-disturbing activities, a qualified botanist will conduct a floristic plant survey in vegetated areas to be disturbed by Project activities including the reservoir embankment, soil stockpile area, new access road, new storm drain, new inter/outlet pipeline, construction trailer site and any other areas where vegetation would be removed. Surveys will be conducted in accordance with CNPS and CDFW rare plant survey guidelines. Surveys will be conducted during the flowering period(s) when species are found during the surveys, the qualified botanist will flag and map any observed sensitive plant species for avoidance where feasible. EBMUD will notify CDFW, USFWS, and/or CNPS of the preconstruction survey results, depending on the status of species encountered. EBMUD will employ the following measures: Before beginning construction, all Contractor construction personnel are required to attend an environmental training program provided by EBMUD of up to one day for site supervisors, formern and project managers and up to 30 minutes for nonsupervisory Contractor personnel will be evelowe a worker environmental awareness training from a qualified biologist (EBMUD). The training will include a description of the sensitive plant species in the Project vicinity, including natural history and habitat, the general protection measures to be implemented to protect the species, and a delineation of the limits of the work areas. Contractor construction personnel will be delineated and lagged prior to construction by the Contractor. All construction activities will be conducted within the delineated Project boundaries will be delineated and flagged prior to construction by the Contractor. All construction activities will be conducted within the delineated areas. Staging areas and construction access points will be delineated in the field away from sensitive plants accur. Disturbance shall be avoided by establishing	EBMUD	EBMUD	Survey at least 1 year and no more than 3 years prior to Construction; training before start of construction; avoidance or relocation during construction if present
BIO-1: 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 Wildlife or U.S. Fish and Wildlife Service.	 BIO-1b: Avoidance or minimization measures for the San Francisco Dusky-footed Woodrat Before beginning construction, all Contractor construction personnel are required to attend an environmental training program provided by EBMUD. Contractor construction personnel will receive worker environmental awareness training from a qualified biologist (EBMUD). The training will include a description of the San Francisco dusky-footed woodrat, including natural history and habitat, a review of the status of the species, the general protection measures to be implemented to protect the San Francisco dusky-footed woodrat, and a delineation of the limits of the work areas. Contractor construction personnel will be required to sign documents stating that they understand the training and consequences of impacting the species or its habitat. 		EBMUD	Survey within 30 <u>7</u> days before <u>ground</u> <u>disturbing activities</u> , <u>including</u> vegetation removal; training before start of construction; avoidance or relocation during construction if present

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Significance Criteria	Mitigation Measure	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
Hazards and Hazardous	 A preconstruction survey will be performed by a qualified biologist (EBMUD) within seven days prior to the start of ground-disturbing activities to identify the locations of active San Francisco dusky-footed woodrat nests within the Project boundary. Any woodrat nests detected will be mapped and flagged for avoidance by the qualified biologist (EBMUD). If active nests are determined to be present, avoidance measures will be implemented first. Because San Francisco dusky-footed woodrats are year-round residents, avoidance mitigation is limited to restricting Project activities to avoid direct impacts to San Francisco dusky-footed woodrats and their active nests to the extent feasible. A minimum ten-foot buffer should be maintained between Project construction activities and each nest to avoid disturbance. In some situations, a smaller buffer may be allowed if, in the opinion of a qualified biologist (EBMUD), removing the nest would be a greater impact than that anticipated as a result of Project activities. If an unoccupied woodrat nest is found within the Project site and it cannot be avoided, the nest should be disassembled by hand by a qualified biologist (EBMUD). The nest materials should be relocated off site to prevent rebuilding. If occupied nests are found within the Project site, and a litter of young is found or suspected, the nest shall be left alone for two to three weeks before a recheck to verify that young are capable of independent survival before proceeding with nest dismantling. Dismantling shall be done by hand, allowing any animals to escape either along existing woodrat trails or toward other available habitat. EBMUD will notify CDFW of any nests, unoccupied or occupied, before they are dismantled. Because Mitigation Measure BIO-1b requires preconstruction dusky-footed woodrat surveys, avoidance measures and buffer zones for active nests, and mitigations for both occupied and unoccupied nests, implementation of Mitigation Measu			
Materials				
 HAZ-4: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. TRA-3: Result in inadequate emergency access. 	TRA-2: Maintain Emergency Access Emergency responders (i.e., local police, fire, and ambulance services) shall be notified at least seven days in advance of any activities requiring full or partial roadway closures. Emergency access detour routes shall be determined in consultation with emergency responders as part of the notification process. <u>The City of Lafayette, Ss</u> chools, businesses, recreational facilities, and residents located within <u>a 1,000-foot radius of the construction site 300 feet of construction zone</u> shall be notified at least seven <u>30</u> days in advance of activities requiring roadway closures, outlining the Project schedule and the duration of construction activities; <u>a second notice will also be sent no later than 14 days prior to the</u> <u>planned activity</u> . EBMUD will send notices to the individuals and organizations on the Project's mailing list to update them prior to any roadway closures. Temporary barricades and directional cones that can be readily removed shall be used during full or partial roadway closures. Road barricades shall be removed and open trenches shall be covered (plated) at the end of the day on a daily basis to provide access. A portion of the on-street parking zones may be retained to allow for storage and/or staging of construction equipment.	EBMUD and EBMUD's Construction Contractor	EBMUD	During Construction, 7-days prior to partial or full roadway closures <u>for</u> <u>emergency</u> <u>responders; 14 and</u> <u>30 days in advance</u> <u>for City, schools,</u> <u>businesses,</u> <u>recreational facilities</u> <u>and residents</u>
Noise				
 NOI-1: Result in 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. NOI-2: Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. 	 NOI-1a: Noise Control Measures for Hoe Ram and Concrete Crusher During reservoir construction, EBMUD shall locate the concrete crusher within the reservoir basin (east of the access road) and at least 110 feet away from the closest property line to the west. During periods when the hoe ram needs to be operated within 70 feet of the closest property line to the west, a temporary noise barrier will be erected as necessary to ensure that the noise from the hoe ram does not exceed the 80-dBA (Leq) ordinance limit at the western property line. NOI-2a: Nighttime Construction Measure EBMUD will provide alternative lodging for residents, if requested, that are adversely affected by nighttime pipeline tie-in construction at Windsor Drive /Old Tunnel Road and Leland Drive /Meek Place. This measure would only be implemented if nighttime construction occurs. EBMUD will notify residents that could be affected by nighttime project construction may request alternative lodging for the night(s) of the potential nighttime construction from EBMUD; alternative lodging will consist of a standard room at a hotel located within 6 miles of the affected residence or as close as feasible. Alternative lodging will be provided and approved by EBMUD the day before the known nighttime construction occurs, or sooner, based upon the types of construction activities that may occur during the nighttime hours (10:00 p.m. to 7:00 a.m.). 	EBMUD and acoustical consultant	EBMUD	During Construction

¹ The 500-foot distance applies only to residences with a direct line-of-sight to construction activities, and is determined by applying spherical spreading losses (6 dBA per doubling of distance) to a noise level of 80 dBA (Leq) at 50 feet, resulting in a noise level of 60 dBA (Leq) at 500 feet. While an exterior noise level of 60 dBA (Leq) would still exceed the 53-dBA nighttime ordinance threshold, the exterior shell of a house can reduce exterior noise levels by 25 dBA with the windows closed, which would result in an interior level of 35 dBA (Leq) with windows closed. Based on available sleep criteria data, an interior nighttime level of 35 dBA is considered acceptable (U.S. EPA, 1974). The requirement that windows must be closed to achieve this acceptable level is assumed to be feasible since exposure would only be for one night.

Significance Criteria	Mitigation Measure	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
	 NOI-1c: Construction Issues Liaison EBMUD will maintain ongoing communication with residents adjacent to active construction areas. The following measures would be implemented during construction of the proposed Project. An EBMUD contact person will be designated to respond to construction-related issues, including noise. The phone number of the liaison will be conspicuously posted at construction areas, on all advanced notifications, and on the EBMUD Project website. The EBMUD contact person will take steps to resolve complaints, including coordinating periodic noise monitoring, if necessary. <u>The City of Lafayette, and schools, businesses, recreational facilities, and residents located within a 1,000-foot radius of the construction site shall be notified at least 30 days Residents located within 500 feet of project construction and with a direct line-of-sight to the construction area will be notified at least seven (7) days in advance of noisy activities and about the estimated duration of the activity: a second notice will also be sent no later than 14 days prior. EBMUD will also send emails to individuals on the</u> 			
Traffic and Transportation	Project's mailing list to update them prior to noisy phases.			
TRA-2: Substantially increase hazards due to a design feature or incompatible uses. TRA-4: Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	 TRA-1: Traffic Control Measures for Windsor Drive, Condit Road and Leland Drive The following measures will be implemented throughout the entire duration of the Project construction, to reduce the Project's temporary impacts to traffic circulation through the Project site: When construction activities occur on Windsor Drive, Condit Road, or Leland Drive, construction contractor shall provide advance warning signs and flaggers at both ends of construction zone on Windsor Drive, Condit Road, or Leland Drive is closed to through traffic, the construction contractor shall provide advance warning signs and detour signs along Pleasant Hill Road, Old Tunnel Road, and other affected roadways to advise motorists and bicyclists to follow appropriate detour routes well in advance of the roadway closure to through traffic. During the entire period Project construction (including both reservoir and pipeline construction), truck trips shall be avoided during the typical school drop-off and pick-up hours occur from 8:00 a.m. to 9:00 a.m. and from 1:45 p.m. to 2:45 p.m., respectively. The construction contractor shall provide advance "Road Work Ahead" warning additional flaggers during school drop-off and pick-up hours near the construction zone on Leland Drive to manage traffic flow and maintain traffic safety. When construction activities occur on Windsor Drive, Condit Road, or Leland Drive, roadside safety protoclos shall be implemented. Advance "Road Work Ahead" warning signs and speed control (including signs informing drivers of state-legislated double fines for speed infractions in a construction zone) shall be provided to achieve required speed reductions for safer traffic flow through Leland Drive, Condit Road, or Leland Drive, roadside safety protoclos shall be installed along Leland Drive, advance warning signs (e.g., "Truck Crossing") shall be installed along Leland Drive, advance as as much and bicycless and bicyclists of construction traffic to minimize hazards associa	EBMUD and EBMUD's Construction Contractor	EBMUD	Prior to and During Construction
TRA-3 : Result in inadequate emergency access.	TRA-2: Maintain Emergency Access (Details as previously listed)	EBMUD and EBMUD's Construction Contractor	EBMUD	During Construction 7-days prior to partia or full roadway closures for emergency responders; 14 and 30 days in advance for City, schools, businesses, recreational facilities and residents

Notes: LTS = Less than Significant, PS = Potentially Significant, S = Significant, LSM = Less than Significant with Mitigation SU = Significant and Unavoidable.

Table 12-2: EBMUD Practices and Procedures Monitoring and Reporting Plan

Impacts Being Mitigated	EBMUD Practices and Procedures/Standard Specification	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
Aesthetics				
AES-1: Substantially degrade the existing visual character or quality of the site and its surroundings.	EBMUD Standard Construction Specification 01 35 44, Section 1.1 (B) Site Activities B. Site Activities			
GEO-2: Potential to result in substantial soil erosion or the loss of topsoil.	1. No debris including, but not limited to, demolition material, treated wood waste, stockpile leachate, soil, silt, sand, bark, slash, sawdust, asphalt, rubbish, paint, oil, cement, concrete or washings thereof, oil or petroleum products, or other organic or earthen materials from construction activities shall be allowed to enter into storm drains or surface waters or be placed where it may be washed by rainfall or runoff outside the construction limits. When operations are completed, excess materials or debris shall be removed from the work area as specified in the Construction and Demolition Waste Disposal Plan.			
HAZ-2: Create a significant hazard to the public or the environment	2. Excess material shall be disposed of in locations approved by the Engineer consistent with all applicable legal requirements and disposal facility permits.			
through reasonably foreseeable upset and accident conditions	3. Do not create a nuisance or pollution as defined in the California Water Code. Do not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Board or the State Water Resources Control Board, as required by the Clean Water Act.			
involving the likely release of hazardous materials into the	4. Clean up all spills and immediately notify the Engineer in the event of a spill.			
environment.	5. Stationary equipment such as motors, pumps, and generators, shall be equipped with drip pans.			
HYD-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality.	6. Divert or otherwise control surface water and waters flowing from existing projects, structures, or surrounding areas from coming onto the work and staging areas. The method of diversions or control shall be adequate to ensure the safety of stored materials and of personnel using these areas. Following completion of Work, ditches, dikes, or other ground alterations made by the Contractor shall be removed and the ground surfaces shall be returned to their former condition, or as near as practicable, in the Engineer's opinion.	EBMUD,		
HYD-3 : Substantially alter the existing drainage pattern of the site	7. Maintain construction sites to ensure that drainage from these sites will minimize erosion of stockpiled or stored materials and the adjacent native soil material.		EBMUD	During Construction
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 or create or contribute runoff water which would exceed the capacity of existing or planned	8. Furnish all labor, equipment, and means required and shall carry out effective measures wherever, and as often as necessary, to prevent Contractor's operations from causing visible dust emissions to leave the work areas. These measures shall include, but are not limited to, providing additional watering equipment, reducing vehicle speeds on haul roads, restricting traffic on haul roads, covering haul vehicles, and applying a dust palliative to well-traveled haul roads. The Contractor shall provide the specifications of the dust palliative for Engineer approval prior to use. The Contractor shall be responsible for damage resulting from dust originating from its operations. The dust abatement measures shall be continued for the duration of the Contract. Water the site in the morning and evening, and as often as necessary, and clean vehicles leaving the site as necessary to prevent the transportation of dust and dirt onto public roads. Dust control involving water shall be done in such a manner as to minimize waste and runoff from the site.			
stormwater drainage systems or provide substantial additional sources of polluted runoff.	9. Construction staging areas shall be graded, or otherwise protected with Best Management Practices (BMPs), to contain surface runoff so that contaminants such as oil, grease, and fuel products do not drain towards receiving waters including wetlands, drainages, and creeks.			
HYD-4: Substantially alter the existing drainage pattern of the site	10. All construction equipment shall be properly serviced and maintained in good operating condition to reduce emissions. Contractor shall make copies of equipment service logs available upon request.			
or area, including through the alteration of the course of a stream	11. Any chemical or hazardous material used in the performance of the Work shall be handled, stored, applied, and disposed of in a manner consistent with all applicable federal, state, and local laws and regulations.			
or river, or substantially increase the rate or amount of surface runoff in a manner which would result in	12. Contaminated materials excavated and/or removed from the construction area shall be disposed of in a manner consistent with all applicable local, state, and federal laws and regulations.			
flooding on or off site.	EBMUD Standard Construction Specification 01 35 44, Section 3.7, Protection of Native and Non-native Protected Trees			
	A. Tree Protection			
AES-1: Substantially degrade the existing visual character or quality of the site and its surroundings. BIO-2: Conflict with any local policies or ordinances protecting biological resources, such as a tree	1. Locations of trees to be removed and protected are shown in the construction drawings. Pruning and trimming shall be completed by the Contractor and approved by the Engineer. Pruning shall adhere to the Tree Pruning Guidelines of the International Society of Arboriculture.	EBMUD,		Dries to
	2. Erect exclusion fencing five feet outside of the drip lines of trees to be protected. Erect and maintain a temporary minimum 3-foot high orange plastic mesh exclusion fence at the locations as shown in the drawings. The fence posts shall be six-foot minimum length steel shapes, installed at 10-feet minimum on center, and be driven into the ground. The Contractor shall be prohibited from entering or disturbing the protected area within the fence except as directed by the Engineer. Exclusion fencing shall remain in place until construction is completed and the Engineer approves its removal.	EBMUD's Construction Contractor, and EBMUD's Engineer	EBMUD	Prior to Construction and During Construction
preservation policy or ordinance.	3. No grading, construction, demolition, trenching for irrigation, planting or other work, except as specified herein, shall occur within the tree protection zone established by the exclusion fencing installed shown in the drawings. In addition, no excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the tree protection zone.			

				FINAL
Impacts Being Mitigated	EBMUD Practices and Procedures/Standard Specification	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
	4. In areas that are within the tree drip line and outside the tree protection zone that are to be traveled over by vehicles and equipment, the areas shall be covered with a protective mat composed of a 12-inch thickness of wood chips place until construction is completed and the Engineer approves its removal.			
	5. Tree roots exposed during trench excavation shall be pruned cleanly at the edge of the excavation and treated to the satisfaction of a certified arborist provided by the District.			
	6. Any tree injured during construction shall be evaluated as soon as possible by a certified arborist provided by the District, and replaced as deemed necessary by the certified arborist.			
	EBMUD Standard Construction Specification 01 74 05, Cleaning			
	3.1 GENERAL			
	A. At all times maintain areas covered by the Contract and public properties free from accumulations of waste, debris, and rubbish caused by construction operations.			
	B. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws. Do not burn or bury rubbish and waste materials on project site. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains. Do not dispose of wastes into streams or waterways.			
	C. Use only cleaning materials recommended by manufacturer of surface to be cleaned.			
	D. Use cleaning materials only on surfaces recommended by cleaning material manufacturers.	EBMUD and		
AES-1: Substantially degrade the existing visual character or quality of	3.2 CLEANING DURING CONSTRUCTION	EBMUD's	EBMUD	During
the site and its surroundings.	A. During execution of work, clean site and public properties and legally dispose of waste materials, debris, and rubbish to assure that buildings, grounds, and public properties are maintained free from accumulations of waste materials and rubbish. All soil and any other material tracked onto the streets by the Contractor shall be cleaned immediately. The Contractor shall comply with all rules and regulations as applicable for its cleaning method.	Construction Contractor		Construction
	B. Dispose of all refuse off District property as often as necessary so that at no time shall there be any unsightly or unsafe accumulation of rubbish.			
	1. Pine needles, leaves, sticks, and other vegetative debris on the ground shall be removed if they are in the way of construction, present a safety hazard, or present a fire hazard. Otherwise they shall be left in place during construction and final cleaning			
	C. Wet down dry materials and rubbish to lay dust and prevent blowing dust.			
	D. Provide approved containers for collection and disposal of waste materials, debris, and rubbish.			
Air Quality				
	EBMUD Standard Construction Specification 01 35 44, Section 1.3 Submittals			
	E. Dust Control and Monitoring Plan			
AIR-1: Violate any air quality standard or contribute substantially to an existing or projected air quality violation. AIR-3: Conflict with or obstruct	1. Submit a plan detailing the means and methods for controlling and monitoring dust generated by demolition and other work on the site for the Engineer's acceptance prior to any work at the jobsite. The plan shall comply with all applicable regulations including but not limited to the Bay Area Air Quality Management District (BAAQMD) visible emissions regulation and Public Nuisance Rule. The plan shall include items such as mitigation measures to control fugitive dust emissions generated by construction activities. The Plan shall outline best management practices for preventing dust emissions, provide guidelines for training of employees, and procedures to be used during operations and maintenance activities. The plan shall also include measures for the control of paint overspray generated during the painting of exterior surfaces. The plan shall detail the equipment and methods used to monitor compliance with the plan. The handling and disposal of water used in compliance with the Dust Control Plan shall be addressed in the Water Control and Disposal Plan.			
implementation of the applicable air quality plan.	EBMUD Standard Construction Specification 01 35 44, Section 3.3 Dust Control and Monitoring	EBMUD and		
AIR-5: Result in a cumulatively	B. Dust Control	EBMUD's	EBMUD	During
considerable net increase of any	1. Contractor shall implement all necessary dust control measures, including but not limited to the following:	Construction Contractor		Construction
criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient	a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered minimum two times per day or as directed by the Engineer			
air quality standard (including	b. Water and/or coarse rock all dust-generating construction areas as directed by Engineer to reduce the potential for airborne dust from leaving the site.			
releasing emissions that exceed quantitative thresholds for ozone	c. Cover all haul trucks entering/leaving the site and trim their loads as necessary.			
precursors).	d. Using wet power vacuum street sweepers to:			
	1) Sweep all paved access road, parking areas and staging areas at the construction site daily or as often as necessary.			
	T) Sweep all paved access road, parking aleas and staging aleas at the construction site daily of as offen as necessary.			

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Impacts Being Mitigated	EBMUD Practices and Procedures/Standard Specification	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementatior
	e. The use of dry power sweeping is prohibited.			
	f. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.			
	g. Gravel or apply non-toxic soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.			
	h. Water and/or cover soil stockpiles daily.			
	i. Site accesses to a distance of 100 feet from the paved road shall be treated with 12-inches layer of compacted coarse rock.			
	j. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.			
	k. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.			
	I. Building pads shall be laid as soon as possible after grading.			
	m. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.			
	n. Wind breaks (e.g., fences) shall be installed on the windward sides(s) of actively disturbed areas of construction. Wind breaks should have a maximum 50 percent air porosity.			
	o. The simultaneous occurrence of excavation, grading, and ground disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.			
	p. All excavation, grading and/or demolition activities shall be suspended when average wind speeds exceed 20 mph			
	q. All vehicle speeds shall be limited to fifteen (15) mph or less on the construction site and any adjacent unpaved roads.			
	EBMUD Standard Construction Specification 01 35 44, Section 3.4, Emissions Control			
	A. Air Quality and Emissions Control			
	1. The Contractor shall ensure that line power is used instead of diesel generators at all construction sites where line power is available.			
AIR-1: Violate any air quality	2. The Contractor shall ensure that for operation of any stationary, compression-ignition engines as part of construction, comply with Section 93115, Title 17, California Code of Regulations, Airborne Toxic Control Measure for Stationary Compression Ignition Engines, which specifies fuel and fuel additive requirements as well as emission standards.			
standard or contribute substantially to an existing or projected air quality violation.	3. Fixed temporary sources of air emissions (such as portable pumps, compressors, generators, etc.) shall be electrically powered unless the Contractor submits documentation and receives approval from the Engineer that the use of such equipment is not practical, feasible, or available. All portable engines and equipment units used as part of construction shall be properly registered with the California Air Resources Board or otherwise permitted by the appropriate local air district, as required.			
AIR-3: Conflict with or obstruct	4. Contractor shall implement standard air emissions controls such as:			
implementation of the applicable air quality plan.	a. Minimize the use of diesel generators where possible.			
AIR-4: Create objectionable odors affecting a substantial number of	b. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes as required by the California Airborne Toxics Control Measure (ATCM) Title 13, Section 2485 of California Code of Regulations. Clear signage shall be provided for construction workers at all access points.	EBMUD's Construction	EBMUD	During
people.	c. Follow applicable regulations for fuel, fuel additives, and emission standards for stationary, diesel-fueled engines.	Contractor		Construction
EN-1: Potential to result in a significant consumption of energy.	d. Locate generators at least 100 feet away from adjacent homes and ball fields.			
GHG-1: Generate greenhouse gas	e. Perform regular low-emission tune-ups on all construction equipment, particularly haul trucks and earthwork equipment.			
emissions, either directly or	5. Contractor shall implement the following measures to reduce greenhouse gas emissions from fuel combustion:			
indirectly, that may have a significant impact on the	a. On road and off-road vehicle tire pressures shall be maintained to manufacturer specifications. Tires shall be checked and re-inflated at regular intervals.			
environment.	b. Construction equipment engines shall be maintained to manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.			
	c. All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of Oxide of Nitrogen (NOx) and Particulate Matter (PM).			
	d. Demolition debris shall be recycled for reuse to the extent feasible.			

Impacts Being Mitigated	EBMUD Practices and Procedures/Standard Specification
Biological Resources	
	EBMUD Standard Construction Specification 01 35 44, Section 3.8, Protection of Birds Protected Under the Migratory Bird Treaty Act and Roosting Bats
	A. The District will conduct biological reconnaissance in advance of construction and will conduct biologic monitoring during construction as necessary.
	B. Protected Species
	1. If protected species or suitable habitat for protected species is found during biological reconnaissance surveys:
	a. Before beginning construction, all Contractor construction personnel are required to attend an environmental training program provided by the District of up to one-day site supervisors, foreman and project managers and up to 30-minutes for non-supervisory contractor personnel. The training program will be completed in person or by watching a video, at a District-designated location, conducted by a qualified biologist provided by the District. The program will discuss all sensitive habitats and sensitive species that may occur within the project work limits, including the responsibilities of Contractor's construction personnel, applicable mitigation measures, and notification requirements. The Contractor is responsible for ensuring that all workers requiring training are identified to the District. Prior to accessing or performing construction wor all Contractor personnel shall:
	1. Sign a wallet card provided by the Engineer verifying that all Contractor construction personnel have attended the appropriate level of training relative to their position have read and understood the contents of the training program; and shall comply with all project environmental requirements.
	2. Display an environmental training hard hat decal (provided by the District after completion of the training) at all times.
	b. Birds Protected under the Migratory Bird Treaty Act (MBTA):
	1. The Migratory Bird Treaty Act states that without a permit issued by the U.S. Department of the Interior, it is unlawful to pursue, hunt, take, capture, or kill any migrate bird. During the nesting bird season, the recommended construction exclusion zone around active passerine nests is 50 to 100 feet, and an exclusion zone of 250 to 5 feet for nesting raptors.
	2. Appropriate measures should be taken to begin field construction work between September 1 and January 31, which is outside of the nesting season, when feasible
BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any	3. If site clearing, demolition, and construction do not commence between September 1 and January 31, then a preconstruction survey for nesting birds should be conducted by a qualified biologist provided by the District within 7 days prior to construction to ensure that no nest will be disturbed during project implementation
species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California	4. If active nests of migratory bird species (listed in the MBTA and/or raptors) are found within the Project area or in areas subject to disturbance from project activities, no-disturbance buffer will be required in order to avoid nest disturbance. The avoidance buffer is based on the nest location, topography, cover and species' tolerance disturbance and is determined by a qualified biologist provided by the District upon consultation with California Department of Fish & Wildlife (CDFW) or the U.S. Fish & Wildlife Service (USFWS).
Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	5. If an avoidance buffer is not achievable, a qualified biologist provided by the District will monitor the nest(s) to document that no take of the nest (nest failure) has occurred. Active nests cannot be taken or destroyed under the MBTA and, for raptors, under the CDFW Code. If it is determined that construction activity is resulting in nest disturbance, work should cease immediately and CDFW should be contacted.
	6. If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further action is required. Trees and sh within the construction footprint that have been determined to be unoccupied by special-status birds or that are located outside the no-disturbance buffer for active nest may be removed. Nests initiated during construction (while significant disturbance from construction activities persist) may be presumed to be unaffected, and only a minimal buffer would be necessary.
	c. Roosting Bats:
	1. Appropriate measures should be taken to begin field construction work between August 1 and February 28 in order to avoid the bat maternity period, when feasible.
	2. If site clearing, demolition, and construction do not commence between August 1 and February 28, then a preconstruction survey for roosting bats should be conduct by a qualified biologist provided by the District within two weeks prior to construction to ensure that no roosting bats will be disturbed during project implementation.
	3. If roosting surveys are inconclusive, indicate potential occupation by a special-status bat species, and/or identify a large day roosting population or maternity roost b any bat species within 200 feet of an active construction work area, a qualified biologist provided by the District shall conduct focused day- and/or night-emergence surveys as appropriate.
	4. If active maternity roosts or day roosts are found in areas that would be removed or modified as part of project construction, activities shall commence before matern colonies form (before March 1) or after young are flying (after July 31). Disturbance-free buffer zones (determined by a qualified biologist provided by the District in coordination with CDFW) shall be observed during the maternity roost season (March 1 through July 31) for any active maternity colony identified during the surveys to protect maternity roosts.
	5. If a non-breeding bat roost is found in a structure scheduled for modification or removal, the individual(s) shall be safety evicted, under the direction of a qualified biologist provided by the District (as determined in consultation with CDFW) in such a way that ensures individuals are not injured.

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	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
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Impacts Being Mitigated	EBMUD Practices and Procedures/Standard Specification	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
	6. If preconstruction surveys indicate that no roosting is present or potential roosting habitat is unoccupied during the construction period, no further action is required. Trees and shrubs within the construction footprint that have been determined to be unoccupied by roosting bats or that are located outside the no-disturbance buffer for active roosting sites may be removed. Roosting initiated during construction is presumed to be unaffected, and no buffer would be necessary.			
Cultural Resources				
	EBMUD Standard Construction Specification 01 35 44, Section 3.9, Protection of Cultural and Paleontological Resources			
	A. Confidentiality of Information on Cultural Resources			
	1. Prior to, or during the course of the Contractor's performance under this contract, the Contractor may obtain information as to the location and/or nature of certain cultural resources, including Native American artifacts and remains. This information may be provided to the Contractor by the District or a third party, or may be discovered directly by the Contractor through its performance under the contract. All such information shall be considered "Confidential Information" for the purposes of this Article.			
	2. The Contractor agrees that the Contractor, its subcontractors of any tiers, and their respective agents and employees shall not publish or disclose any Confidential Information to any person, unless specifically authorized in advance, in writing by the Engineer.			
	3. The indemnity obligations of Document 00 72 00 - General Conditions Article 4.7.5 shall apply to any breach of this Article.			
	B. Conform to the requirements of statutes as they relate to the protection and preservation of cultural and paleontological resources. Unauthorized collection of prehistoric or historic artifacts along the Work Area, or at Work facilities, is strictly prohibited.			
CUL-2: Cause a substantial adverse	C. Before beginning construction, all Contractor construction personnel shall attend a cultural resources training course provided by the District of up to two hours for site supervisors, foreman, project managers, and non-supervisory contractor personnel. The training program will be completed in person or by watching a video, at a District designated location, conducted by a qualified archaeologist provided by the District, or by District staff. The program will discuss cultural resources awareness within the project work limits, including the responsibilities of Contractor's construction personnel, applicable mitigation measures, confidentiality, and notification requirements. The Contractor is responsible for ensuring that all workers requiring training are identified to the District. Prior to accessing the construction site, or performing site work, all Contractor personnel shall:			
change in the significance of an archaeological resource, pursuant to Section 15064.5. CUL-3: Directly or indirectly destroy	1. Sign an attendance sheet provided by the Engineer verifying that all Contractor construction personnel have attended the appropriate level of training; have read and understood the contents of the contents of the training; have read and understood the contents of the "Confidentiality of Information on Archaeological Resources" and shall comply with all project environmental requirements.	EBMUD,		
a unique paleontological resource or site or unique geologic feature.	D. In the event that potential cultural or paleontological resources are discovered at the site of construction, the following procedures shall be instituted:	EBMUD's Construction		Prior to
CUL-4: Disturb any human remains,	1. Discovery of prehistoric or historic-era archaeological resources requires that all construction activities shall immediately cease at the location of discovery and within 100 feet of the discovery.	Contractor, EBMUD's	EBMUD	Construction and During
including those interred outside of dedicated cemeteries.	a. The Contractor shall immediately notify the Engineer who will engage a qualified archaeologist provided by the District to evaluate the find. The Contractor is responsible for stopping work and notifying the proper personnel, and shall not recommence work until authorized to do so by the Engineer.	Engineer, and EBMUD's Archaeologist		Construction
CUL-5: Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074.	b. The District will retain a qualified archaeologist to inspect the findings within 24 hours of discovery. If it is determined that the Project could damage a historical resource as defined by CEQA (or a historic property as defined by the National Historic Preservation Act of 1966, as amended), construction shall cease in an area determined by the archaeologist until a mitigation plan has been prepared, approved by the District, and implemented to the satisfaction of the archaeologist (and Native American representative if the resource is prehistoric, who shall be identified by the Native American Heritage Commission [NAHC]). In consultation with the District, the archaeologist (and Native American representative) will determine when construction can resume.			
	2. Discovery of human remains requires that all construction activities immediately cease at, and within 100 feet of the location of discovery.			
	a. The Contractor shall immediately notify the Engineer who will engage a qualified archaeologist provided by the District to evaluate the find. The Contractor is responsible for stopping work and notifying the proper personnel and shall not recommence work until authorized to do so by the Engineer.			
	b. The District will contact the County Coroner to determine whether or not the remains are Native American. If the remains are determined to be Native American, the Coroner will contact the Native American Heritage Commission (NAHC). The NAHC will then identify the person or persons it believes to be the most likely descendant from the deceased Native American, who in turn would make recommendations to the District for the appropriate means of treating the human remains and any associated funerary objects.			
	3. Discovery of paleontological resources requires that all construction activities immediately cease at, and within 100 feet of the location of discovery.			
	a. The Contractor shall immediately notify the Engineer who will engage a qualified paleontologist provided by the District to evaluate the find. The Contractor is responsible for stopping work and notifying the Engineer, and shall not recommence work until authorized to do so by the Engineer.			
	b. The District will retain a qualified paleontologist to inspect the findings within 24 hours of discovery. The qualified paleontologist, in accordance with Society of Vertebrate Paleontology guidelines (Society of Vertebrate Paleontology 2010), will assess the nature and importance of the find and recommend appropriate salvage, treatment, and future monitoring and management. If it is determined that construction activities could damage a paleontological resource as defined by the Society of Vertebrate Paleontology 2010), construction shall cease in an area determined by the paleontologist until a salvage,			

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Impacts Being Mitigated	EBMUD Practices and Procedures/Standard Specification	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
	treatment, and future monitoring and management plan has been prepared, approved by the District, and implemented to the satisfaction of the paleontologist. In consultation with the paleontologist, the District will determine when construction can resume.			
	E. If the District determines that the find requires further evaluation, at the direction of Engineer, the Contractor shall suspend all construction activities at the location of the find and within a larger radius, as required.			
Geology and Soils				
GEO-1: Potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure (liquefaction); or landslides.	EBMUD Reservoir Design Guide EBMUD's Reservoir Design Guide establishes the minimum requirements to be followed in the design of EBMUD above and below ground drinking water reservoirs. The Design Guide provides a list of goals, with each project design team using its engineering judgment for project-specific applications. Chapter 4 includes criteria specific to the design of prestressed concrete reservoirs, which is the type of reservoir design proposed for the Leland Reservoir site. The Design Guide requires completion of a geotechnical investigation during design and incorporation of geotechnical design recommendations in project plans and specifications.	EBMUD's Design Engineers	EBMUD	During Design of Reservoir
GEO-1: Potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure (liquefaction); or landslides. GEO-4: Potential to be located on	EBMUD Engineering Standard Practice 512.1, Water Main and Services Design Criteria This Engineering Standard Practice establishes basic criteria for the design of water pipelines and establishes minimum requirements for pipeline construction materials.	EBMUD's Design Engineers	EBMUD	During Design of Pipeline
expansive or corrosive soils that would create substantial risks to life or property. GEO-1: Potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure (liquefaction); or landslides.	EBMUD Engineering Standard Practice 550.1, Seismic Design Requirements This Engineering Standard Practice addresses seismic design of the pipelines to withstand seismic hazards including ground shaking, and requires that EBMUD establish project specific seismic design criteria for pipelines with a diameter of greater than 12-inches, such as the water pipelines that would be installed as part of the Project.	EBMUD's Design Engineers	EBMUD	During Design of Pipeline
GEO-4: Potential to be located on expansive or corrosive soils that would create substantial risks to life or property.				
GEO-3: Potential to be located on a geologic unit or soil that is unstable or that would become unstable as a result of the proposed project, and potentially could result in on-site or off-site landslides, lateral spreading, subsidence (i.e. settlement), liquefaction, or collapse.	 EBMUD Standard Construction Specification 01 35 24, Section 1.3(C), Excavation Safety Plan 1. Submit detailed plan for worker protection and control of ground movement for the Engineer's review prior to any excavation work at jobsite. Include drawings and details of system or systems to be used, area in which each type of system will be used, de-watering, means of access and egress, storage of materials, and equipment restrictions. If plan is modified or changed, submit revised plan. 2. All surface encumbrances that are located and determined to create a hazard to employees shall be removed or supported, as necessary, to safeguard employees. 3. Tunnel work shall comply with the Tunnel Safety Orders 	EBMUD, EBMUD's Construction Contractor, and	EBMUD	Prior to Construction
HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.		EBMUD's Engineer		

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Impacts Being Mitigated	EBMUD Practices and Procedures/Standa	rd Specification			Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
Greenhouse Gas Emissions							
GHG-2: Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	EBMUD Climate Mitigation Action Plan an Climate Change Scoping Plan.	d Climate Change Monitoring and Resp	onse Plans. These plans ensure that EE	MUD operations are consistent with the California	EBMUD	EBMUD	Ongoing
Hazards and Hazardous Materials							
 HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions nvolving the likely release of nazardous materials into the environment. HYD-1: Violate any Water Quality Standards or Waste Discharge Requirements or Otherwise Substantially Degrade Water Quality. HYD-3: 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 or 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. 	 District's account as a Data Submitter. The C Intent, a Site Specific Risk Assessment, a Sit SWRCB, for coverage under the General Co Engineer will electronically certify and file the SWRCB. b. The Contractor shall be responsible for co providing qualified professionals as described management practices, and conducting inspe- all required documents, photos, data, and/or of Termination on SMARTS. The Contractor 2. Storm Water Pollution Prevention Plan a. Submit a Stormwater Pollution Prevention 	t on the SWRCB's Storm Water Multi-Appli Contractor shall prepare and upload to SMA te Map, and a Storm Water Pollution Preve nstruction Stormwater Permit (Order No. 2 PRDs to gain permit coverage and the Co mplying with the requirements of the Const d in the permit to prepare and certify all per ections and monitoring as required by the p reports (including the Annual Reports) and shall inform the Engineer when documents Plan that describes measures that shall be de, but are not limited to, soil, sediment, co	ication & Report Tracking System (SMAR RTS Permit Registration Documents (Pf Intion Plan (SWPPP) for the Engineer's ro 009-0009-DWQ) and amendments there intractor shall submit the registration and truction General Permit. The Contractor's rmit-required documents/submittals and to permit. The Contractor shall, in compliance ensure permit coverage termination upor /reports are available on SMARTS for Er	eview which meets the requirements of the to. Upon acceptance by the Engineer, the the subsequent annual fees as required by the responsibilities include, but are not limited to, o implement effective stormwater/non-stormwater with the permit, prepare and upload to SMARTS in construction completion by preparing a Notice agineer certification and submittal.	EBMUD and EBMUD's Construction Contractor	EBMUD	Prior to Construction and During Construction
HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. HYD-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality.	TABLE 1 - Discharge Permit Summary Table Permit* SWRCB Order WQ 2014-0194- DWQ/General Order No. CAG 140001 – NPDES Permit for Drinking Water System Discharges SWRCB Order No. 2012-0006-DWQ NPDES No. CAS 000002 – Construction General Permit Sanitary Sewer Discharge Permit * The most recent version of applicable permit	ter Control and Disposal Plan for the Engir the Specification and applicable discharge Permit Coverage Discharges from a drinking water system of water that has been dedicated for drinking water purposes Discharges from construction sites and linear underground/overhead projects greater than 1 acre Publicly Owned Treatment Works approved discharges	eeer's acceptance prior to any work at the permits. Table 1 summarizes discharge Permit Owner EBMUD EBMUD – Contractor will provide Qualified SWPPP Practitioner/Developer Contractor	e jobsite. permits that may be applicable to District projects.	EBMUD and EBMUD's Construction Contractor	EBMUD	Prior to and During Construction

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Impacts Being Mitigated	EBMUD Practices and Procedures/Standard Specification	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
	2. Drinking Water System Discharges			
	a. Plan shall include the estimated flow rate and volume of all proposed discharges to surface waters, including discharges to storm drains. All receiving waters shall be clearly identified.			
	b. Contractor shall track all discharges directly to a surface water body or a storm drain system that drains to a surface water body. A record consisting of discharge locations and volumes shall be submitted to the Engineer prior to Contract Acceptance.			
	c. A monitoring program is required for drinking water system discharges greater than 325,850 gallons in conformance with Attachment E, Monitoring and Reporting Program, of the General Drinking Water Discharges Permit, when the water will be discharged either directly into a surface water body or a storm drain system that drains to a surface water body. A record consisting of discharge locations, volumes and Water Quality (WQ) data shall be submitted to the Engineer. The Planned Discharge Tracking Form, attached to the end of this section, may be used to fulfill this requirement. All monitoring results shall be submitted to the Engineer prior to Contract Acceptance.			
	1) Contractor shall notify the Engineer, at least one week prior to the start of a planned discharge equal to or greater than 325,850 gallons, of the following:			
	a) The discharge start date;			
	b) The discharge location and the applicable receiving water;			
	c) The flow rate and volume to be discharged; and			
	d) The reason(s) for discharge.			
	d. Contractor shall dechlorinate all drinking water system discharges to achieve a total chlorine residual concentration of < 0.1 mg/L measured with a handheld chlorine meter utilizing a US EPA approved method and provide effective erosion & sediment control to achieve a visual turbidity concentration of ≤ 100 NTU by implementing BMPs which meet the District minimum standards (see Figure 1 attached to the end of this section) or better.			
	e. Instead of discharging to surface waters, where feasible, Contractor shall beneficially reuse water derived from drinking water systems as defined in the General Drinking Water Discharges Permit. Potential reuse strategies include, but are not limited to, landscape irrigation, agricultural irrigation, dust control, and discharge to stormwater capture basins or other groundwater recharge systems. Contractor shall do so without impacting property or the environment. Contractor shall provide a record of reuse location(s) and volume(s) and submit it to the Engineer prior to Contract Acceptance.			
	f. Contractor shall ensure that the pH level of any discharges shall not be depressed below 6.5, nor elevated above 8.5. If there is potential for discharges to be below 6.5 or above 8.5, Contractor shall employ pH adjustment best management practices to ensure discharges are within the range of 6.5 and 8.5. Contractor shall conduct onsite field measurements for pH per quality assurance and quality control (QA/QC) protocol that conform to U.S. EPA guidelines, or procedures approved by the American Water Works Association or other professional drinking water industry association. Contractor shall submit all monitoring results to the Engineer prior to Contract Acceptance.			
	3. Non-Stormwater Discharges			
	a. Plan shall describe measures for containment, handling, treatment (as necessary), and disposal of discharges such as groundwater (if encountered), runoff of water used for dust control, stockpile leachate, tank heel water, wash water, sawcut slurry, test water and construction water or other liquid that has been in contact with any interior surfaces of District facilities. Contractor shall provide the Engineer with containment, handling, treatment and disposal designs and a sampling & analysis plan for approval before commencing the Work. Sampling and analysis shall be in conformance with Sections 1.3 (K) Analytical Test Results and 3.1 SAMPLING AND ANALYSIS.			
	4. Sanitary Sewer Discharges			
	a. It is District policy to send superchlorinated discharges from pipeline disinfection to the sanitary sewer system. Plan shall include a sampling and analytical program for superchlorinated discharges in conformance with the Sanitary Sewer Discharge Permit. All monitoring results shall be submitted to the Engineer prior to the end of the Work.			
	b. Obtain and provide to the Engineer documentation from the agency (e.g., wastewater treatment plant, local sewer owner) having jurisdiction, authorizing the Contractor to dispose of the liquid and describing the method of disposal. Discharges destined for the District's main wastewater treatment plant in Oakland can reference Special Discharge Permit (SDP) #50333261, issued to the District's Regulatory Compliance Office, when obtaining authorization from the pertinent local jurisdiction that owns the sewers to be used. Contractor shall, prior to the end of the Work, report to the Engineer the volumes of all discharges performed pursuant to the said SDP along with copies of any profile forms and/or correspondence between Contractor and disposal facility.			
	EBMUD Standard Construction Specification 01 35 44, Section 1.3(C), Construction and Demolition Waste Disposal Plan			
HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable	1. Prepare a Construction and Demolition Waste Disposal Plan and submit a copy of the plan for the Engineer's acceptance prior to disposing of any material (except for water wastes which shall be addressed in the Water Control and Disposal Plan).	EBMUD and		
upset and accident conditions involving the likely release of	a. The plan shall identify how the Contractor will remove, handle, transport, and dispose of all materials required to be removed under this contract in a safe, appropriate, and lawful manner in compliance with all applicable regulations of local, state, and federal agencies having jurisdiction over the disposal of removed materials.	EBMUD's Construction Contractor	EBMUD	Prior to Waste Disposal
hazardous materials into the environment.	b. The Contractor shall procure the necessary permits required by the local, state, and federal agencies having jurisdiction over the handling, transportation, and disposal of construction and demolition waste.			

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Impacts Being Mitigated	EBMUD Practices and Procedures/Standard Specification	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
	c. Include a list of reuse facilities, recycling facilities and processing facilities that will be receiving recovered materials.			
	d. Identify materials that are not recyclable or not recovered which will be disposed of in a landfill (or other means acceptable by the State of California and local ordinance and regulations).			
	e. Identify how the Contractor will comply with The California Department of Toxic Substances Control's (DTSC) Alternative Management Strategies (AMS) when handling and disposing of treated wood waste (TWW) in compliance with 22 CCR 66261.9.5.			
	f. TWW records including but not limited to manifests, bills of lading should be submitted to the Engineer within 5 working days of off-haul. Records should include: (1) name and address of the TWW facility to which the TWW was sent; (2) estimated weight of TWW, or the weight of the TWW as measured by the receiving TWW facility; and (3) date of the shipment of TWW. (Cal. Code Regs., tit. 22, Sections 67386.8(a) and (e)(1)).			
	g. List the permitted landfill, or other permitted disposal facilities, that will be accepting the disposed waste materials.			
	h. Identify each type of waste material to be reused, recycled or disposed of and estimate the amount, by weight.			
	i. Plan shall include the sampling and analytical program for characterization of any waste material, as needed, prior to reuse, recycle or disposal.			
	2. Materials or wastes shall only be recycled, reused, reclaimed, or disposed of at facilities approved of by the District.			
	3. Submit permission to reuse, recycle, reclaim, or dispose of material from reuse, recycling, reclamation, or disposal site owner along with any other information needed by the District to evaluate the acceptability of the proposed reuse, recycling, or disposal site and obtain acceptance of the Engineer prior to removing any material from the project site.			
	4. All information pertinent to the characterization of the material or waste shall be disclosed to the District and the reuse, recycling, reclamation, or disposal facility. Submit copies of any profile forms and/or correspondence between the Contractor and the reuse, recycling, reclamation, or disposal facility.			
	5. Submit name and Environmental Laboratory Accreditation Program Certificate number of laboratory that will analyze samples for suspected hazardous substances. Include statement of laboratory's certified testing areas and analyses that laboratory is qualified to perform. Submit prior to any laboratory testing.			
 HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. HYD-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality. HYD-3: 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 or 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. 	 EBMUD Standard Construction Specification 01 35 44, Section 1.3(D), Spill Prevention and Response Plan 1. Submit plan detailing the means and methods for preventing and controlling the spilling of known hazardous substances used on the jobsite or staging areas. The plan shall include a list of the hazardous substances, and provide immediate response to spills. Spill response measures shall address notification of the Engineer and appropriate agencies including phone numbers; spill-related worker, public health, and safety issues; spill control, and spill cleanup. 2. Submit a Material Safety Data Sheet (MSDS) for each hazardous substance proposed to be used prior to delivery of the material to the jobsite. 	EBMUD and EBMUD's Construction Contractor	EBMUD	Prior to and During Construction
HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	 EBMUD Standard Construction Specification 01 35 24, Section 1.3(B), Project Health and Safety Plan 1. Submit prior to start of the Work for the Engineer's review a Project Safety and Health Plan for the Work to be performed only if actual, potential, or anticipated hazards include: a) hazardous substances; b) fall protection issues; c) confined spaces; d) trenches or excavations; or, e) lockout/tagout. If the actual, potential, or anticipated hazards do not include one or more of these five hazards, no Plan is required. 2. Submit prior to start of Work the name of individual(s) who has been designated as: 	EBMUD and EBMUD's Construction Contractor	EBMUD	Prior to Construction

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Impacts Being Mitigated	EBMUD Practices and Procedures/Standard Specification	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation		
	a. Contractor's Project Safety and Health Representative					
	b. Submit principal and alternate Competent/Qualified Persons for:					
	1) scaffolding;					
	2) fall protection systems and equipment; and					
	3) employee protective systems for trenches and excavations.					
	c. Qualified person to conduct and take samples and air measurements of known or suspect hazardous substance for personnel and environmental exposure. Sample results shall be submitted to the Engineer in writing and electronic format.					
	3. Plan shall include an emergency action plan in the event of an accident, or serious unplanned event (e.g.: gasoline break, fire, structure collapse, etc.) that requires notifying any responsive agencies (e.g.: fire departments, PG&E, rescue teams, etc).					
	EBMUD Standard Construction Specification 02 83 13, Lead Hazard Control Activities					
	1.1 COMPLIANCE AND INTENT					
	A. Furnish all labor, materials, facilities, equipment, services, employee training and testing, permits, and agreements necessary to perform the lead removal in accordance with these specifications and with the latest regulations from the U.S. Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Air Quality Management District with authority over the project, the Cal/EPA Department of Toxic Substance Control, the California Occupational Safety and Health Administration (Cal/OSHA), and other federal, state, county, and local agencies. Whenever there is a conflict or overlap of the above references, the most stringent provision is applicable.	EBMUD and EBMUD's Construction Contractor				
HAZ-2: Create a significant hazard	B. During demolition procedures, the Contractor shall protect against contamination of soils, water, adjacent buildings and properties, and the airborne release of hazardous materials and dusts. The costs associated with the implementation of controls will be incurred by the Contractor.					
to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of	C. Any information developed from exploratory work done by the District and any investigation done by the Contractor to acquaint himself with available information will not relieve the Contractor from the responsibility of properly estimating the difficulty or cost of successfully performing the work. The District is not responsible for any conclusions or interpretations made by the Contractor based on the information made available by the District or District's representative.		EBMUD	During Construction		
hazardous materials into the environment.	D. Hazardous materials uncovered during the demolition activities shall be disposed of in an approved manner complying with all applicable federal, state, and local regulations. Appropriate waste manifests shall be furnished to the Engineer as per Section 01 35 44, Environmental Requirements. Materials are conveyed to the Contractor "as is," without any warranty, expressed or implied, including but not limited to, any warranty to marketability or fitness for a particular purpose, or any purpose.					
	1.2 SCOPE OF WORK					
	A. The work covered by this specification includes the handling, removal, and proper disposal of lead-containing coating as required					
	B. The Contractor shall perform all work according to the procedures outlined in these specifications.					
	C. The hazardous materials removal and disposal include the following:					
	1. Properly remove and dispose of all lead-containing material as part of the demolition and disposal of the reservoir tank.					
	EBMUD Procedure 711, Hazardous Waste Removal					
	The purpose of this procedure is to define hazardous waste and establish responsibilities for removal of hazardous wastes from District facilities. Responsibilities are delineated as follows:					
	The Unit Supervisor or Project Manager (or his/her designee)					
HAZ-2: Create a significant hazard	• Determines if the Waste is a Hazardous Waste, either with assistance from the Environmental Compliance Section (ECS) or based on knowledge.					
to the public or the environment through reasonably foreseeable	Contacts ECS staff to coordinate Waste disposal, reuse, or recycling issues.					
upset and accident conditions involving the likely release of hazardous materials into the	Provides all known information about the Waste asked for by the ECS.	EBMUD	EBMUD	During Construction		
	Assists in the determination of the analyses to be performed by the District Laboratory or other certified laboratory based on his/her knowledge of the Waste.					
environment.	Labels, stores, inspects, and maintains inventory records for the Waste in an appropriate manner as directed by ECS.					
	Ensures that Waste is available for transportation when notified by the ECS that Waste collection is scheduled.					
	Helps the ECS coordinate interim storage of non-routine Hazardous Waste while it is being characterized for disposal.					
	Reviews Hazardous Waste manifests prepared by haulers, to confirm the accuracy of information.					

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Impacts Being Mitigated	EBMUD Practices and Procedures/Standard Specification	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
	Signs the Hazardous Waste manifest indicating approval if authorized and trained by ECS.			
	• Sends the signed Generator copy of the manifest to the ECS within seven (7) days of the off-haul date, unless previous agreement has been made with ECS and the hauler to send Generator copy directly to ECS.			
	• Provides the ECS with a budget unit number and a job number.			
	Environmental Compliance Section			
	Coordinates the appropriate steps to characterize the Waste.			
	• Determines, with the help of the requesting department, what analyses are needed to classify the Waste.			
	• Works with the District Laboratory and/or the Hazardous Waste contract hauler to analyze the Hazardous Waste or to assist in identifying other labs certified to perform the analysis.			
	Obtains Hazardous Waste acceptance documents (e.g., waste profile) from disposal facility and provides to generating department to be included with Hazardous Waste shipment, as needed.			
	Identifies and approves disposal, reuse or recycling method and disposal, reuse, or recycling facility.			
	Obtains and provides EPA generator identification number.			
	• Identifies and/or manages companies providing Hazardous Waste management services (for sampling, hauling, and disposal) depending on District departmental needs.			
	• Provides training and guidance to unit or project staff on Hazardous Waste handling and disposal requirements and Hazardous Waste manifest completion requirements.			
	Reviews completed and signed Hazardous Waste manifests prior to submittal to Department of Toxic Substances Control.			
	• Tracks manifest in a database and generates reports and summaries as needed.			
	Provides other information as needed.			
HAZ-4: Impair implementation of or	EBMUD Standard Construction Specification 01 55 26, Section 3.1(G), Immediate access for emergency vehicles	EBMUD and		
physically interfere with an adopted emergency response plan or emergency evacuation plan.	G. For complete road closures, immediate emergency access to be provided if needed to emergency response vehicles.	EBMUD's Construction Contractor	EBMUD	During Construction
Noise				
NOI-1: Result in exposure of persons to or generation of noise	EBMUD Standard Construction Specification Work Restrictions 01 14 00, Section 1.8(A), Construction Noise	EBMUD and		
levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	A. Noise-generating activities greater than 90 dBA (impact construction such as concrete breaking, concrete crushing, tree grinding, etc) shall be limited to the hours of 8:00 a.m. and 4:00 p.m., Monday through Friday	EBMUD's Construction Contractor	EBMUD	During Construction
	EBMUD Standard Construction Specification 01 35 44, Section 3.6, Noise Control			
NOI-1: Result in exposure of	A. Comply with sound control and noise level rules, regulations and ordinances as required herein and in the CEQA documents which apply to any work performed pursuant to the contract.			
persons to or generation of noise levels in excess of standards established in the local general plan	B. Contractor is responsible for taking appropriate measures, including muffling of equipment, selecting quieter equipment, erecting noise barriers, modifying work operations, and other measures as needed to bring construction noise into compliance.			
or noise ordinance, or applicable standards of other agencies.	C. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler.	EBMUD and EBMUD's Construction	EBMUD	During Construction
NOI-2: Result in a substantial temporary or periodic increase in ambient pains levels in the preject	D. Best available noise control techniques (including mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) shall be used for all equipment and trucks, as necessary.	Contractor		Construction
ambient noise levels in the project vicinity above levels existing without	E. Truck operations (haul trucks and concrete delivery trucks) will be limited to the daytime hours specified in Section 01 14 00.			
the project.	F. Stationary noise sources (e.g. chippers, grinders, compressors) shall be located as far from sensitive receptors as possible. If they must be located near receptors, adequate muffling (with enclosures) shall be used. Enclosure opening or venting shall face away from sensitive receptors. Enclosures shall be designed by a registered engineer regularly involved in noise control analysis and design.			

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Impacts Being Mitigated	EBMUD Practices and Procedures/Standard Specification	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
	G. Material stockpiles as well as maintenance/equipment staging and parking areas (all on-site) shall be located as far as practicable from residential receptors.			
	H. If impact equipment (e.g., jack hammers, pavement breakers, rock drills etc.) is used during project construction, Contractor is responsible for taking appropriate measures, including but not limited to the following:			
	1. Hydraulically or electric-powered equipment shall be used wherever feasible to avoid the noise associated with compressed-air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed-air exhaust shall be used (a muffler can lower noise levels from the exhaust by up to about 10 dB). External jackets on the tools themselves shall be used, where feasible, which could achieve a reduction of 5 dB. Quieter procedures, such as drilling rather than impact equipment, will be used whenever feasible. It is the Contractor's responsibility to implement any mitigations necessary to meet applicable noise requirements.			
	2. Impact construction including jackhammers, hydraulic backhoe, concrete crushing/recycling activities, vibratory pile drivers etc. shall be limited to the day time hours specified in Section 01 14 00.			
	3. Erect temporary noise barriers or noise control blankets around the construction site, particularly along areas adjacent to residential buildings.			
	4. Utilize noise control blankets around the major noise sources to reduce noise emission from the site.			
	5. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example.			
	6. Limit the noisiest phases of construction to 10 work days at a time, where feasible.			
	7. Notify neighbors/occupants within 300 feet of project construction at least thirty days in advance of extreme noise generating activities about the estimated duration of the activity.			
	8. Noise Monitoring shall be conducted periodically during noise generating activities. Monitoring shall be conducted using a precision sound-level meter that is in conformance with the American National Standards Institute (ANSI) Standard S1.4, Specification for Sound Level Meters. Monitoring results shall be submitted weekly to the Engineer			
	EBMUD Standard Construction Specification 01 35 44, Section 3.5, Vibration Control			
	A. Limit surface vibration to no more than 0.5 in/sec PPV, measured at the nearest residence or other sensitive structure. See Section 01 14 00.			
groundborne vibration or	B. Upon homeowner request, and with homeowner permission, the District will conduct preconstruction surveys of homes, sensitive structures and other areas of concern within 15 feet of continuous vibration-generating activities (i.e. vibratory compaction). Any new cracks or other changes in structures will be compared to preconstruction conditions and a determination made as to whether the proposed project could have caused such damage. In the event that the project is demonstrated to have caused the damage, the District will have the damage repaired to the pre-existing condition.*	EBMUD and EBMUD's Construction Contractor	EBMUD	During Construction
groundborne noise levels.	*For the Leland Reservoir Replacement Project only, EBMUD will also conduct preconstruction surveys of homes, sensitive structures, and other areas of concern on properties that share a property boundary with the Leland Reservoir site or are located on the pipeline route in Old Tunnel Road, Windsor Drive, Condit Road, and Leland Drive. The preconstruction survyes would be completed only upon homeowner request and with homeowner permission.			
Traffic and Transportation				
	EBMUD Standard Construction Specification 01 55 26, Traffic Regulation			
	PART 1 - GENERAL			
	1.1 DESCRIPTION			
TRA-2 : Substantially increase hazards due to a design feature or	A. Work included: Comply with the traffic regulation requirements as specified herein.			
incompatible uses. TRA-3: Results in inadequate	B. Where specific requirements are not detailed herein or in permits, comply with the requirements of the most current version of the CalTrans Manual of Traffic Controls for Construction and Maintenance Work Zones.			
emergency access. TRA-4: Conflict with adopted policies, plans, or programs	C. All proposed street closures shall be clearly identified in the Traffic Control Plan (TCP) and shall conform to the section "Traffic Control Devices" below. Construction area signs for street closure and detours shall be posted a minimum of forty-eight (48) hours prior to the commencement of street closure. Contractor shall maintain safe access around the project limit at all times. Street closures shall be limited to those locations indicated on the construction documents.	EBMUD and EBMUD's Construction Contractor	EBMUD	Prior to Construction and During Construction
regarding public transit, bicycle, or pedestrian facilities, or otherwise	1.2 SUBMITTALS			
decrease the performance or safety of such facilities.	A. Submit at least 15 calendar days prior to work a detailed traffic control plan, that is approved by all agencies having jurisdiction and that conforms to all requirements of these specifications and the most recently adopted edition of the California Manual on Uniform Control Devices. Traffic Control Plan shall include:			
	1. Circulation and detour plans to minimize impacts to local street circulation. Use haul routes minimizing truck traffic on local roadways to the extent possible.			

Impacts Being Mitigated	EBMUD Practices and Procedures/Standard Specification	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation	
	3. Procedures, to the extent feasible, to schedule construction of project elements to minimize overlapping construction phases that require truck hauling.				
	4. Designated Contractor staging areas for storage of all equipment and materials, in such a manner to minimize obstruction to traffic.				
	5. Locations for parking by construction workers.				
	1.3 QUALITY ASSURANCE				
	A. Detailed traffic control plan shall be prepared by a California licensed Traffic Engineer.				
	B. The Traffic Engineer who prepares the detailed traffic control plan shall be available at any time during the life of the contract to modify the traffic control plan if and as required by the agency having jurisdiction.				
	C. No changes or deviations from the approved detailed traffic control plan shall be made, except temporary changes in emergency situations, without prior approval of the Traffic Engineer, the District's Engineer, and all agencies having jurisdiction.				
	D. Immediately notify the Traffic Engineer, the District's Engineer, and the agencies having jurisdiction of occurrences that necessitate modification of the approved traffic control plan.				
	PART 2 - PRODUCTS				
	2.1 TRAFFIC CONTROL DEVICES				
	A. Traffic signs, flashing lights, barricades and other traffic safety devices used to control traffic shall conform to the requirements of the most recently adopted edition of the California Manual on Uniform Control Devices and the agency having jurisdiction.				
	1. Portable signals shall not be used unless permission is given in writing by the agency having jurisdiction.				
	2. Warning signs used for nighttime conditions shall be reflectorized or illuminated. "Reflectorized signs" shall have a reflectorized background and shall conform to the current State of California Department of Transportation specification for reflective sheeting on highway signs.				
	PART 3 - EXECUTION				
	3.1 GENERAL				
	A. Except where public roads have been approved for closure, traffic shall be permitted to pass through designated traffic lanes with as little inconvenience and delay as possible.				
	B. Install temporary traffic markings where required to direct the flow of traffic. Maintain the traffic markings for the duration of need and remove by abrasive blasting when no longer required.				
	C. Convenient access to driveways and buildings in the vicinity of work shall be maintained as much as possible. Temporary approaches to, and crossing of, intersecting traffic lanes shall be provided and kept in good condition.				
	D. When leaving a work area and entering a roadway carrying public traffic, the Contractor's equipment, whether empty or loaded, shall in all cases yield to public traffic.				
	E. Provide temporary signs as required by the traffic control plan and remove signs when no longer required.				
	F. Haul routes for each construction phase shall be provided to all trucks serving the site during the construction period.				
	G. For complete road closures, immediate emergency access to be provided if needed to emergency response vehicles.				
	H. A minimum of twelve (12) foot travel lanes must be maintained unless otherwise approved.				
	3.2 ALTERNATING ONE-WAY TRAFFIC				
	A. Where alternating one-way traffic has been authorized, the following shall be posted at each end of the one-way traffic section at least one week prior to start of work:				
	1. The approximate beginning and ending dates that traffic delays will be encountered.				
	2. The maximum time that traffic will be delayed.				
	B. The maximum delay time shall be approved by the agency having jurisdiction.				
	3.3 FLAGGING				
	A. Provide flaggers to control traffic where required by the approved traffic control plan.				
	1. Flaggers shall perform their duties and shall be provided with the necessary equipment in accordance with the current "Instructions to Flaggers" of the California Department of Transportation.				

mpacts Being Mitigated	EBMUD Practices and Procedures/Standard Specification	Responsible for Implementation	Responsible for Monitoring and/or Enforcement	Timing of Implementation
	2. Flaggers shall be employed full time on traffic control and shall have no other duties.			
	3.4 TEMPORARY TRAFFIC CONTROL			
	A. All traffic control devices shall conform to the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD), and as amended by the latest edition of the MUTCD California supplement. Electronic signage board with changeable message shall be placed on a street in both direction 2 weeks in advance.			
	B. The Contractor shall replace within 72 hours, all traffic signal loop detectors damaged during construction. Any work that disturbs normal traffic signal operations and ensure proper temporary traffic control (lane shifts, lane closures, detours etc.) shall be coordinated with the agency having jurisdiction, at least 72 hours prior to commencing construction.			
	C. A minimum of twelve (12) foot travel lanes must be maintained unless otherwise approved.			
	D. Access to driveways will be maintained at all times unless other arrangements are made.			
	E. All traffic control devices shall be removed from view when not in use.			
	F. Before leaving a work area, ensure the area is left orderly. Trenches must be backfilled or plated during non-working hours.			
	G. Sidewalks for pedestrians will remain open if safe for pedestrians. Alternate routes and signing will be provided if pedestrian routes are to be closed.			

Notes: LTS = Less than Significant, PS = Potentially Significant, S = Significant; LSM = Less than Significant with Mitigation, SU = Significant and Unavoidable.

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