



# SAN FRANCISCO PLANNING DEPARTMENT

---

## Preliminary Mitigated Negative Declaration

*Date:* May 21, 2014  
*Case No.:* 2013.0522E  
*Project Title:* **PG&E Line 101 ILI Upgrade and Lomita Park Regulator Station Rebuild –San Mateo County**  
*Zoning:* Various  
*Block/Lot:* Various  
*Lot Size:* 765,830 square feet  
*Project Sponsor:* Pacific Gas and Electric Company  
Mallory Clay – (925) 328-5108  
*Lead Agency:* San Francisco Planning Department  
*Staff Contact:* Brett Becker – (415) 554-1650  
Brett.Becker@sfgov.org

1650 Mission St.  
Suite 400  
San Francisco,  
CA 94103-2479

Reception:  
**415.558.6378**

Fax:  
**415.558.6409**

Planning  
Information:  
**415.558.6377**

### PROJECT DESCRIPTION:

Pacific Gas and Electric Company (PG&E) currently owns and operates Line 101, which is an existing natural gas pipeline that serves customers in Santa Clara, San Mateo, and San Francisco counties. PG&E is proposing to replace Line 101 and rebuild the Lomita Park Regulator Station to accommodate an in-line inspection (ILI) tool, often referred to as “smart pigs” (PIG). The upgrades are necessary to conduct inspections in accordance with a U.S. Department of Transportation mandate concerning pipeline integrity (Code of Federal Regulations 192 Subpart O). The California Public Utilities Commission has sole discretionary jurisdiction over the siting, design, construction, and operation of PG&E’s natural gas pipeline facilities. However, because the City and County of San Francisco (CCSF) is approving an easement, the anticipated physical changes associated with granting the easement are described and analyzed for purposes of environmental review under the California Environmental Quality Act, Pub. Resources Code sections 21000 et seq. As such, PG&E is proposing to complete these upgrades as part of the Line 101 ILI Upgrade and Lomita Park Regulator Station Rebuild Project (project). The project is composed of the following two primary components:

- Line 101 Pipeline Replacement – This component involves installing approximately 3,200 linear feet of 24-inch-diameter steel fusion-bonded epoxy-covered pipe via horizontal directional drilling and retiring approximately 3,700 linear feet of the existing 20-inch-diameter A.O. Smith pipe.
- Lomita Park Regulator Station Rebuild – This component involves the expansion of the existing Lomita Park Regulator Station from its current footprint of approximately 4,810 square feet to approximately 8,300 square feet. PG&E will also replace existing regulators, monitors, and associated piping, and install a PIG receiver at the station.

The project is located in northern San Mateo County, west of San Francisco International Airport (SFO) and U.S. Highway 101, and east of the Caltrain right-of-way (i.e., railroad tracks that are owned and operated by the Peninsula Corridor Joint Powers Board). The project is located within relatively undeveloped parcels (collectively known as the West-of-Bayshore property) that are owned by the CCSF. These parcels contain a utility corridor that includes Line 101 and aboveground electric transmission lines and structures. Bay Area Rapid Transit (BART) aerial structures and tracks transect the West-of-Bayshore property. Single-family homes are located immediately adjacent to the West-of-Bayshore property.

The new 24-inch-diameter pipeline will stretch from Lomita Park Regulator Station in the north to approximately 700 feet southeast of Santa Paula Avenue in the south. Between Madrone Street and Santa Paula Avenue, the pipeline will parallel Bay Street for approximately 1,535 feet. The pipeline will pass underneath South Lomita Canal and Marina Vista Park, which is a public recreational facility managed by the City of Millbrae. The existing Lomita Park Regulator Station is located approximately 200 feet east of the BART aerial structures and tracks, and 250 feet west of U.S. Highway 101.

The approval of easements by SFO is the Approval Action for this project.

**FINDING:**

This project could not have a significant effect on the environment. This finding is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15064 (Determining Significant Effect), 15065 (Mandatory Findings of Significance), and 15070 (Decision to Prepare a Negative Declaration), and the following reasons as documented in the Initial Evaluation (Initial Study) for the project, which is attached.

Mitigation measures are included in this project to avoid potentially significant effects. See pages 170 to 183.

# INITIAL STUDY

## Case No. 2013.0522E

### PG&E Line 101 ILI Upgrade and Lomita Park Regulator Station Rebuild Project

#### Table of Contents

	<i>Page</i>
Acronyms and Abbreviations .....	v
<b>A. Project Description .....</b>	<b>1</b>
A.1. Project Overview .....	1
A.2. Project Background and Purpose .....	2
A.3. Project Components.....	2
A.4. Construction Activities and Schedule.....	20
A.5. Operation and Maintenance .....	25
A.6. Required Approvals and Permits.....	26
<b>B. Regional and Local Setting .....</b>	<b>27</b>
B.1. Other Projects in the Vicinity .....	27
<b>C. Compatibility with Existing Zoning and Plans.....</b>	<b>33</b>
C.1. San Francisco General Plan.....	33
C.2. The Accountable Planning Initiative .....	34
C.3. Comprehensive Airport Land Use Compatibility Plan for the San Francisco International Airport.....	35
C.4. San Mateo County General Plan .....	35
C.5. City of Millbrae General Plan .....	35
C.6. City of San Bruno General Plan .....	35
C.7. Regional Plans.....	36
<b>D. Summary of Environmental Effects.....</b>	<b>38</b>
<b>E. Evaluation of Environmental Effects .....</b>	<b>38</b>
E.1. Land Use and Land Use Planning .....	40
E.2. Aesthetics .....	43
E.3. Population and Housing .....	49
E.4. Cultural and Paleontological Resources .....	51

E.5.	Transportation and Circulation.....	68
E.6.	Noise.....	78
E.7.	Air Quality.....	82
E.8.	Greenhouse Gas Emissions.....	98
E.9.	Wind and Shadow.....	102
E.10.	Recreation.....	103
E.11.	Utilities and Service Systems.....	106
E.12.	Public Services.....	110
E.13.	Biological Resources.....	112
E.14.	Geology and Soils.....	137
E.15.	Hydrology and Water Quality.....	144
E.16.	Hazards and Hazardous Materials.....	156
E.17.	Mineral and Energy Resources.....	164
E.18.	Agriculture and Forest Resources.....	166
E.19.	Mandatory Findings of Significance.....	167
F.	Mitigation Measures and Improvement Measures.....	<b>170</b>
F.1.	Mitigation Measures.....	170
F.2.	Improvement Measures.....	183
G.	Public Notice and Comment.....	<b>184</b>
H.	Determination.....	<b>185</b>
I.	Initial Study Authors and Project Sponsor Team.....	<b>186</b>

**List of Figures**

Figure 1: Regional Location.....	3
Figure 2: Parcel Map.....	5
Figure 3: Project Overview.....	9
Figure 4: Cumulative Projects.....	31
Figure 5: Vegetation Removal.....	47
Figure 6: Habitat Types.....	115
Figure 7: Wetlands.....	119
Figure 8: Geologic Formations.....	139
Figure 9: Hydrology.....	153

**List of Tables**

Table 1: Summary of Work Areas.....	19
Table 2: Construction Equipment Summary.....	24
Table 3: Past, Present, and Reasonably Foreseeable Actions.....	28
Table 4: Summary of Project Study Area Roadway Characteristics.....	70
Table 5: Definitions of Project Study Area Roadway Characteristics.....	75

Table 6: Local Ordinance Time Limits and Noise Standards .....79  
Table 7: National and California Ambient Air Quality Standards and Attainment Status .....84  
Table 8: Criteria Air Pollutant Significance Thresholds .....86  
Table 9: Project Construction Emissions.....93  
Table 10: Construction-related Greenhouse Gas Emissions .....101  
Table 11: Impacts to Wetlands and Other Waters .....132  
Table 12: Schools within 0.25 Mile of the Proposed Project .....160

This page intentionally left blank.

## ACRONYMS

µg/m <sup>3</sup>	micrograms per cubic meter
AADT	annual average daily traffic
ADRP	archeological data recovery plan
ALUCP	Comprehensive Airport Land Use Compatibility Plan
AMP	Archeological Monitoring Program
APE	Area of Potential Effects
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
BCDC	Bay Conservation and Development Commission
BMPs	best management practices
CAA	federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal. A.D.	calibrated Anno Domini
Cal. B.P.	calibrated Before Present
Caltrans	California Department of Transportation
CAP	Clean Air Plan
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCSF	City and County of San Francisco
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH <sub>4</sub>	methane
CNDDDB	California Natural Diversity Database
CO <sub>2</sub>	carbon dioxide
CO <sub>2e</sub>	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CRHR	California Register of Historic Resources
CWA	Clean Water Act
dB	decibel
dB <sub>A</sub>	A-weighted decibel
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
ECSTP	Erosion Control and Sediment Transport Plan
ERO	Environmental Review Officer
FAA	Federal Aviation Administration
FARR	Final Archeological Resources Report
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
GWP	global warming potential
HDD	horizontal directional drilling
HUC	Hydrologic Unit Code
ILI	in-line inspection
lbs.	pounds
L <sub>dn</sub>	day-night equivalent level

L <sub>max</sub>	maximum sound level
LOS	level of service
MLD	most likely descendent
MRZ	mineral resource zone
MT	metric ton
N <sub>2</sub> O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO <sub>x</sub>	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSR	New Source Review
NWIC	Northwest Information Center
OHP	California Office of Historic Preservation
PG&E	Pacific Gas and Electric Company
PIG	pipeline inspection gadget
PM <sub>10</sub>	particulate matter with diameter equal to or less than 10 microns
PM <sub>2.5</sub>	particulate matter with diameter equal to or less than 2.5 microns
PMND	preliminary mitigated negative declaration
POTW	publically owned treatment work
QACL	Qualified Archeological Consultants List
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SamTrans	San Mateo County Transit District
SFBAAB	San Francisco Bay Area Air Basin
SFO	San Francisco International Airport
SFPUC	San Francisco Public Utilities Commission
SPCC Plan	Spill Prevention, Control, and Countermeasures Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service



## **A. PROJECT DESCRIPTION**

### **A.1. PROJECT OVERVIEW**

Pacific Gas and Electric Company (PG&E) currently owns and operates Line 101, which is an existing natural gas pipeline that serves customers in Santa Clara, San Mateo, and San Francisco counties. PG&E is proposing to obtain new easements from the City and County of San Francisco (CCSF) to rebuild the Lomita Park Regulator Station and replace a section of Line 101 to accommodate an in-line inspection (ILI) tool (known as a pipeline inspection gadget [PIG]). The upgrades are necessary to conduct inspections in accordance with a U.S. Department of Transportation mandate concerning pipeline integrity (Code of Federal Regulations 192 Subpart O). The California Public Utilities Commission (CPUC) has sole discretionary jurisdiction over the siting, design, construction, and operation of PG&E's natural gas pipeline facilities. However, because the CCSF is approving an easement, the anticipated physical changes associated with granting the easement are included as part of the project description for purposes of California Environmental Quality Act (CEQA) review. The Line 101 ILI Upgrade and Lomita Park Regulator Station Rebuild Project (project) is composed of the following two primary components: Line 101 pipeline replacement and Lomita Park Regulator Station rebuild.

As shown on Figure 1: Regional Location, the proposed project is located in northern San Mateo County, west of San Francisco International Airport (SFO) and U.S. Highway 101, and east of the Caltrain right-of-way (i.e., railroad tracks that are owned and operated by the Peninsula Corridor Joint Powers Board). The proposed project is located within relatively undeveloped parcels (collectively known as the West-of-Bayshore property) that are owned by the CCSF (see Figure 2: Project Parcels). The northern work/excavation area is located at approximately 37.622077, -122.405081; the southern work area is located at approximately 37.601528, -122.382645. The relatively undeveloped parcels contain a utility corridor that includes Line 101 and aboveground electric transmission lines and structures. Bay Area Rapid Transit (BART) aerial structures and tracks transect the West-of-Bayshore property. Single-family homes are located immediately adjacent to the relatively undeveloped parcels.

As shown on Figure 3: Project Overview (p. 1 through 6), the new 24-inch-diameter pipeline would stretch from Lomita Park Regulator Station in the north to approximately 700 feet southeast of Santa Paula Avenue in the south. Between Madrone Street and Santa Paula Avenue, the pipeline parallels Bay Street for approximately 1,535 feet.

The pipeline passes underneath South Lomita Canal and Marina Vista Park, which is a public recreational facility managed by the City of Millbrae. As shown on Figure 3 (p. 3 of 6), the existing Lomita Park Regulator Station is located approximately 200 feet east of the BART aerial structures and tracks, and 250 feet west of U.S. Highway 101.

## **A.2. PROJECT BACKGROUND AND PURPOSE**

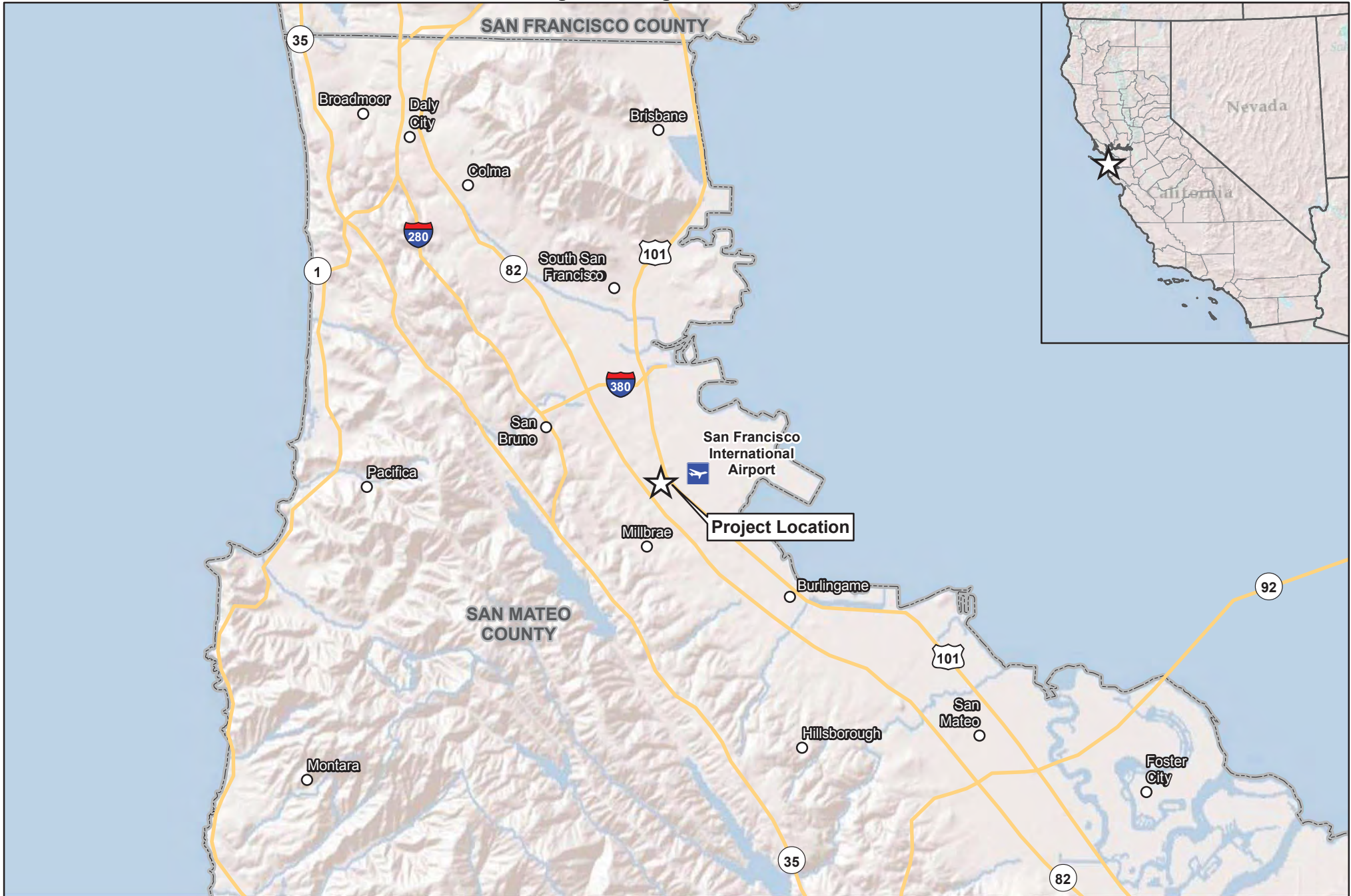
Line 101 is an existing natural gas transmission pipeline that serves customers in Santa Clara, San Mateo, and San Francisco counties. In accordance with Code of Federal Regulations 192 Subpart O, which specifies minimum requirements for integrity management programs for gas transmission pipelines, PG&E is required to inspect Line 101 to ensure that it meets prescribed pipeline integrity standards. Due to the age, diameter, and condition of the existing Line 101 pipeline and associated facilities within the project area, Line 101 and the Lomita Park Regulator Station require upgrades prior to the mandated inspection to accommodate use of the multi-diameter PIG tool used during ILI activities. As such, PG&E is proposing to complete these upgrades as part of the proposed project.

## **A.3. PROJECT COMPONENTS**

The project is composed of the following two components:

- Line 101 Pipeline Replacement – This component involves installing approximately 3,200 linear feet of 24-inch-diameter steel fusion-bonded epoxy-covered pipe via horizontal directional drilling (HDD) and retiring approximately 3,700 linear feet of the existing 20-inch-diameter A.O. Smith pipe. See Table 1: Summary of Work Area Dimensions for additional detail, including approximate length and width.
- Lomita Park Regulator Station Rebuild – This component involves the expansion of the existing Lomita Park Regulator Station from its current footprint of approximately 4,810 square feet to approximately 8,300 square feet. PG&E would also replace existing regulators, monitors, and associated piping, and install a PIG receiver at the station.

Figure 1: Regional Location



0 5,000 10,000 20,000 Feet  
1 inch = 10,000 feet  
1:120,000

- City
- Highway
- ▭ County Boundary

Source: Data compiled by AECOM in 2012

Line 101 ILI Upgrade and Lomita Park Station Rebuild Project

Case No. 2013.0522E





Figure 2: Project Parcel Map



0 300 600 1,200  
Feet

1 inch = 600 feet  
1:7,200

- Study Area
- Project Parcels

**Line 101 ILI Upgrade and Lomita Park Station Rebuild**

Source: AECOM, 2012

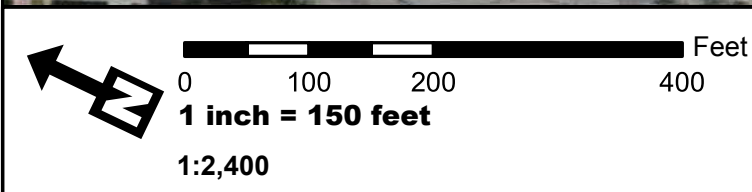
Case No. 2013.0522E





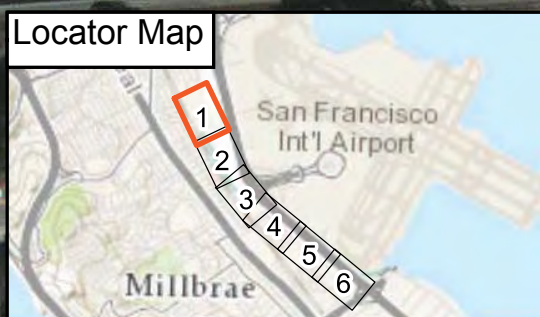


Figure 3: Project Overview (p. 1 of 6)



Existing Pipeline	PI Meter	Sniff Hole (10'x10' Excavation)	Drip Location	Gate
HDD 24-Inch Pipe and Cable	Exclusionary Fence	Sniff Hole Work Area	Drip Access	Access Road
HDD Interconnect	Tree Removal	HDD Excavation Area	Drip Work Area	New Graveled Driveway
Existing Station	Vegetation Removal	HDD Work Area	Drip Tanker Truck Staging	Baker Tank
Lomita Expansion Area			Staging Area	

Source: AECOM 2012, ESRI 2013



**Line 101 ILI Upgrade and Lomita Park Station Rebuild Project**

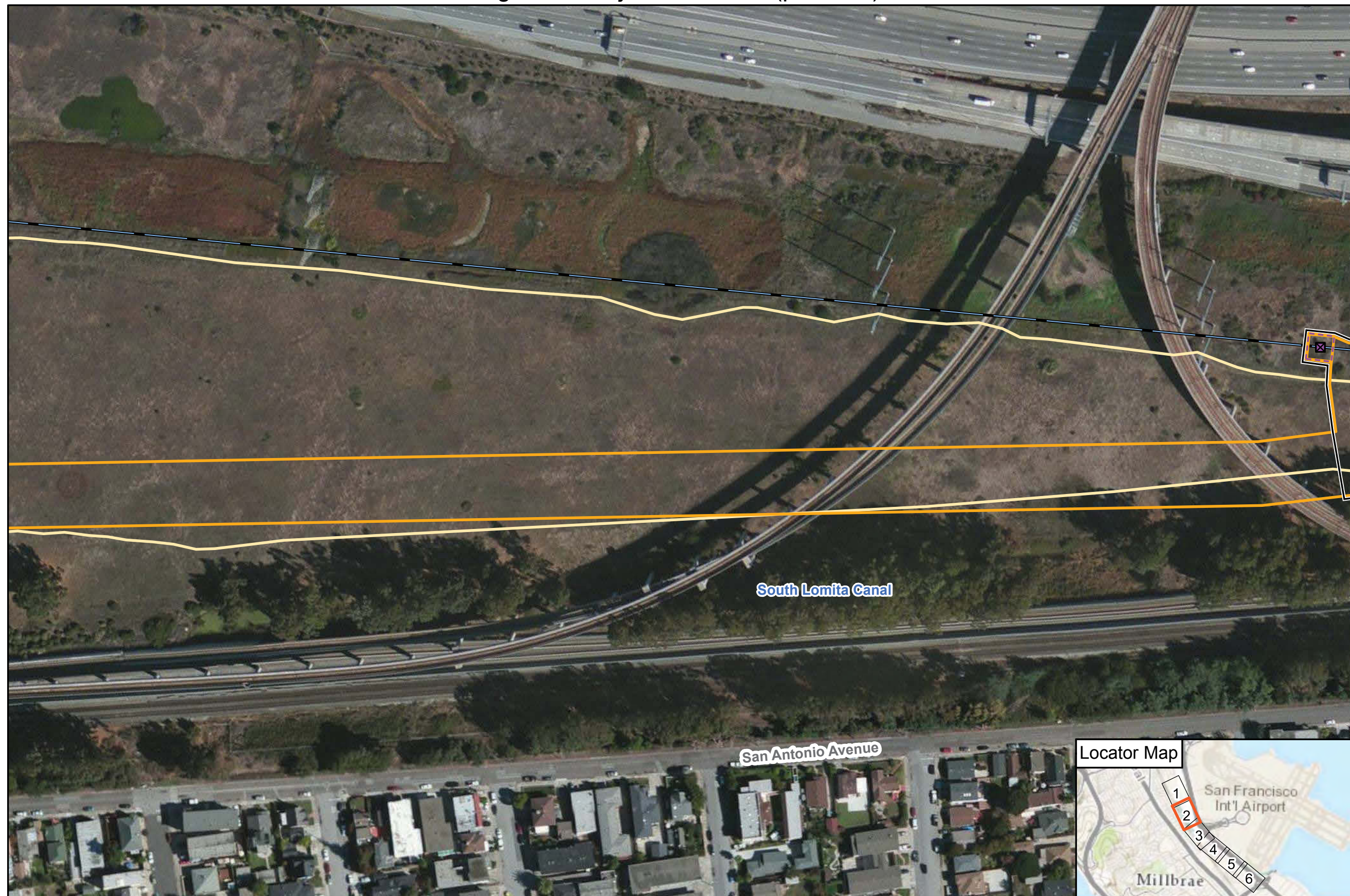
Case No. 2013.0522E





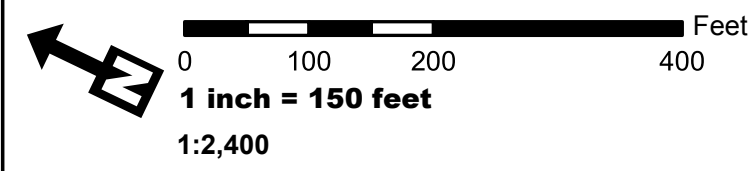
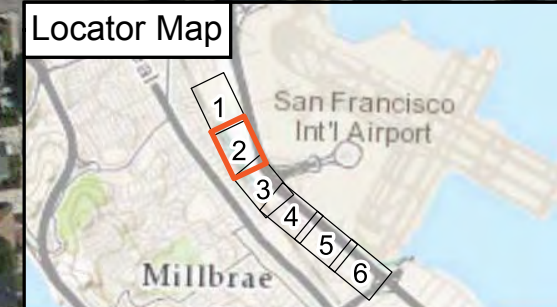


Figure 3: Project Overview (p. 2 of 6)



South Lomita Canal

San Antonio Avenue



Existing Pipeline	PI Meter	Sniff Hole (10'x10' Excavation)	Drip Location	Gate
HDD 24-Inch Pipe and Cable	Exclusionary Fence	Sniff Hole Work Area	Drip Access	Access Road
HDD Interconnect	Tree Removal	HDD Excavation Area	Drip Work Area	New Graveled Driveway
Existing Station	Vegetation Removal	HDD Work Area	Drip Tanker Truck Staging	Baker Tank
Lomita Expansion Area			Staging Area	

Source: AECOM 2012, ESRI 2013

**Line 101 ILI Upgrade and Lomita Park Station Rebuild Project**

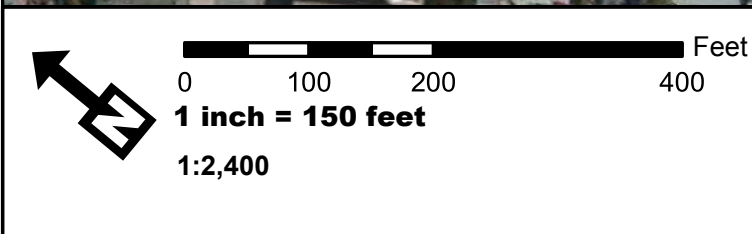
Case No. 2013.0522E





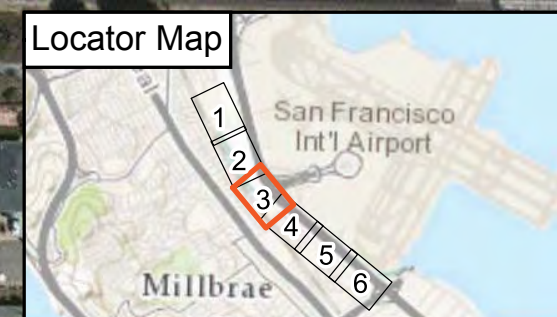


Figure 3: Project Overview (p. 3 of 6)



Existing Pipeline	PI Meter	Sniff Hole (10'x10' Excavation)	Drip Location	Gate
HDD 24-Inch Pipe and Cable	Exclusionary Fence	Sniff Hole Work Area	Drip Access	Access Road
HDD Interconnect	Tree Removal	HDD Excavation Area	Drip Work Area	New Graveled Driveway
Existing Station	Vegetation Removal	HDD Work Area	Drip Tanker Truck Staging	Baker Tank
Lomita Expansion Area			Staging Area	

Source: AECOM 2012, ESRI 2013



**Line 101 ILI Upgrade and Lomita Park Station Rebuild Project**

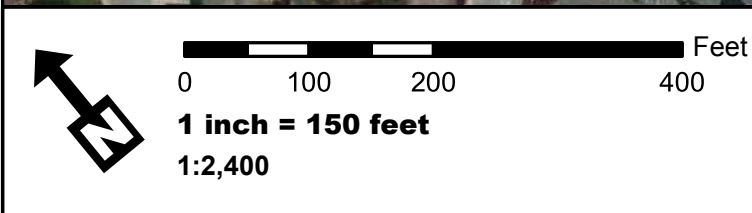
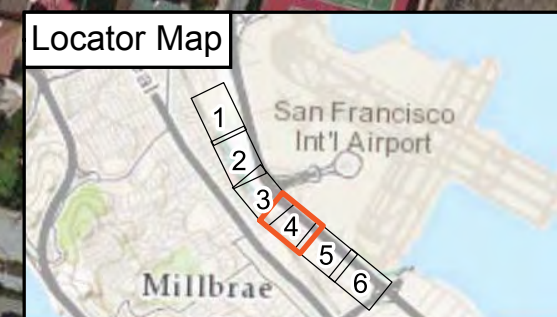
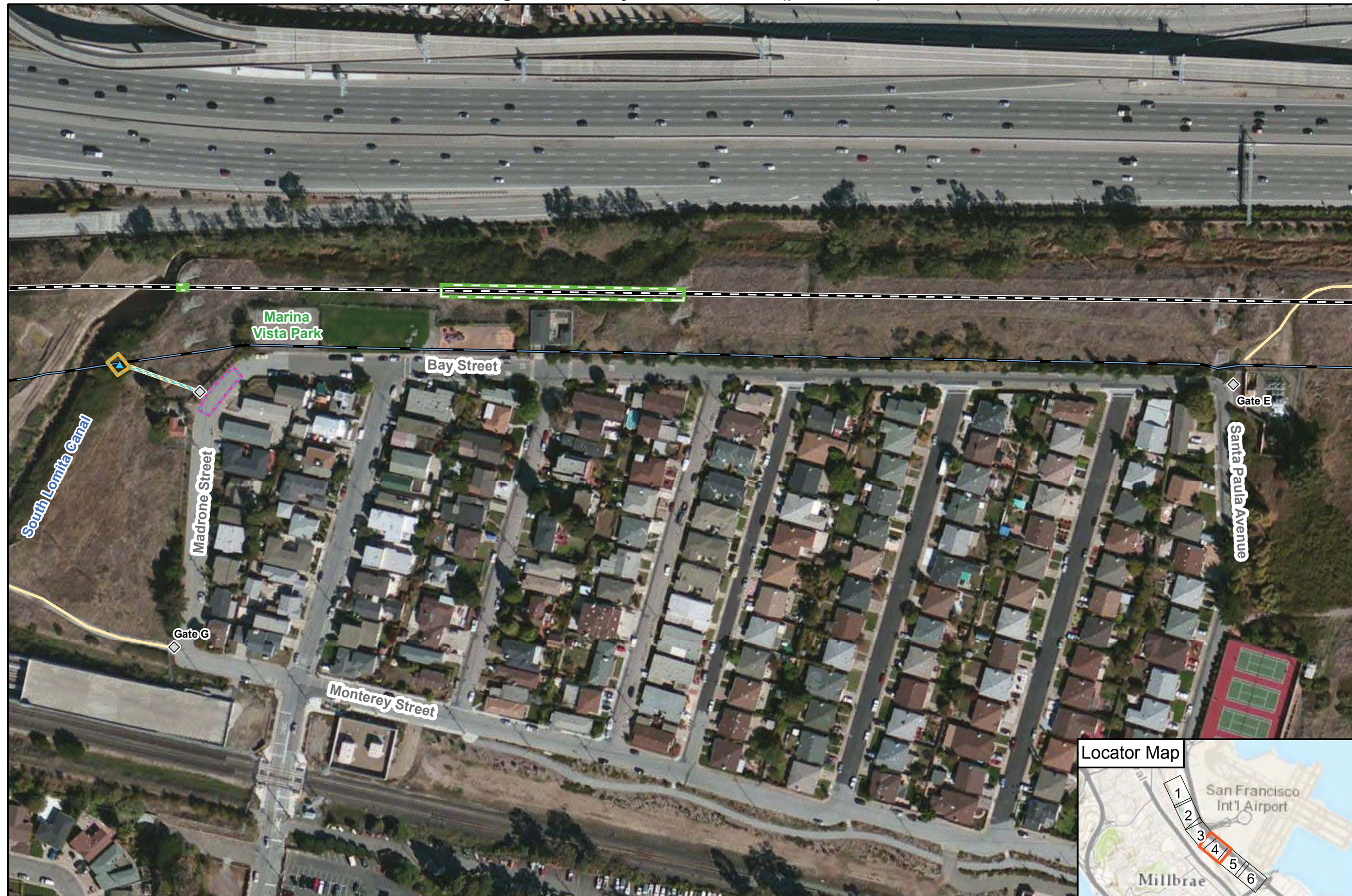
Case No. 2013.0522E







Figure 3: Project Overview (p. 4 of 6)



Existing Pipeline	PI Meter	Sniff Hole (10'x10' Excavation)	Drip Location	Gate
HDD 24-Inch Pipe and Cable	Exclusionary Fence	Sniff Hole Work Area	Drip Access	Access Road
HDD Interconnect	Tree Removal	HDD Excavation Area	Drip Work Area	New Graveled Driveway
Existing Station	Vegetation Removal	HDD Work Area	Drip Tanker Truck Staging	Baker Tank
Lomita Expansion Area			Staging Area	

Source: AECOM 2012, ESRI 2013

**Line 101 ILI Upgrade and Lomita Park Station Rebuild Project**

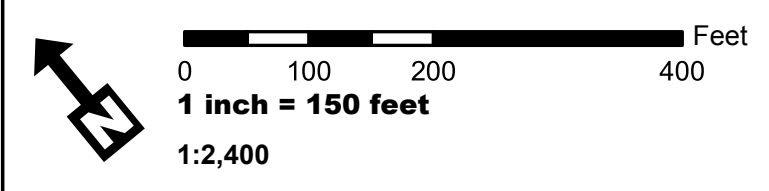
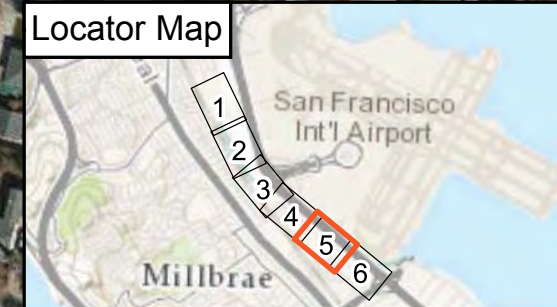
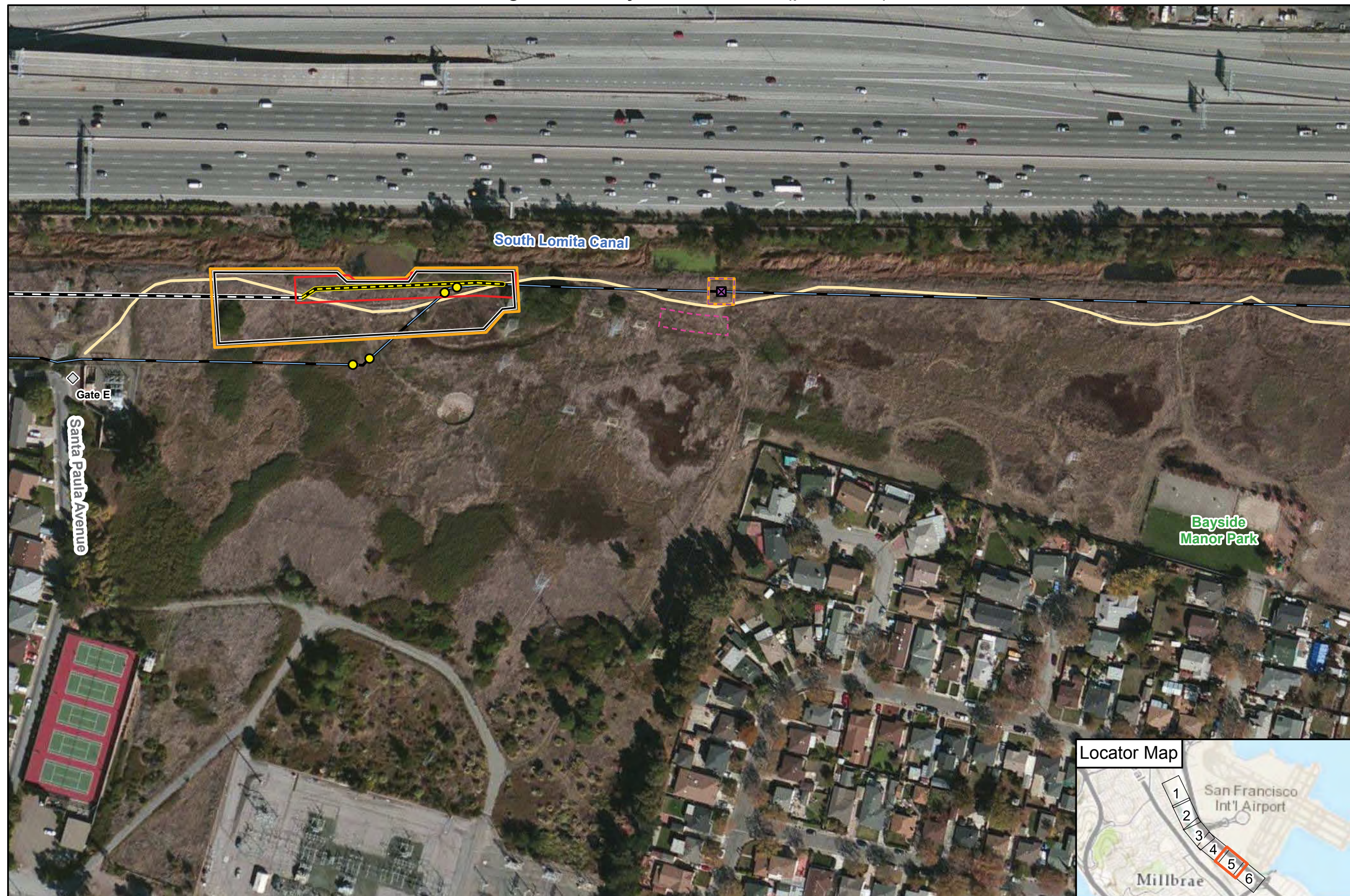
Case No. 2013.0522E







Figure 3: Project Overview (p. 5 of 6)



Existing Pipeline	PI Meter	Sniff Hole (10'x10' Excavation)	Drip Location	Gate
HDD 24-Inch Pipe and Cable	Exclusionary Fence	Sniff Hole Work Area	Drip Access	Access Road
HDD Interconnect	Tree Removal	HDD Excavation Area	Drip Work Area	New Graveled Driveway
Existing Station	Vegetation Removal	HDD Work Area	Drip Tanker Truck Staging	Baker Tank
Lomita Expansion Area			Staging Area	

Source: AECOM 2012, ESRI 2013

**Line 101 ILI Upgrade and Lomita Park Station Rebuild Project**

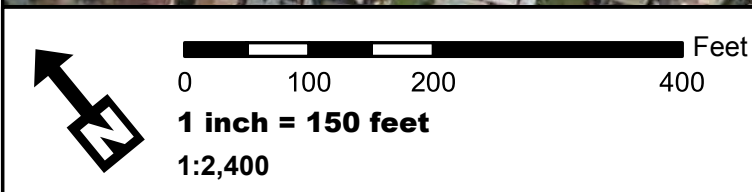
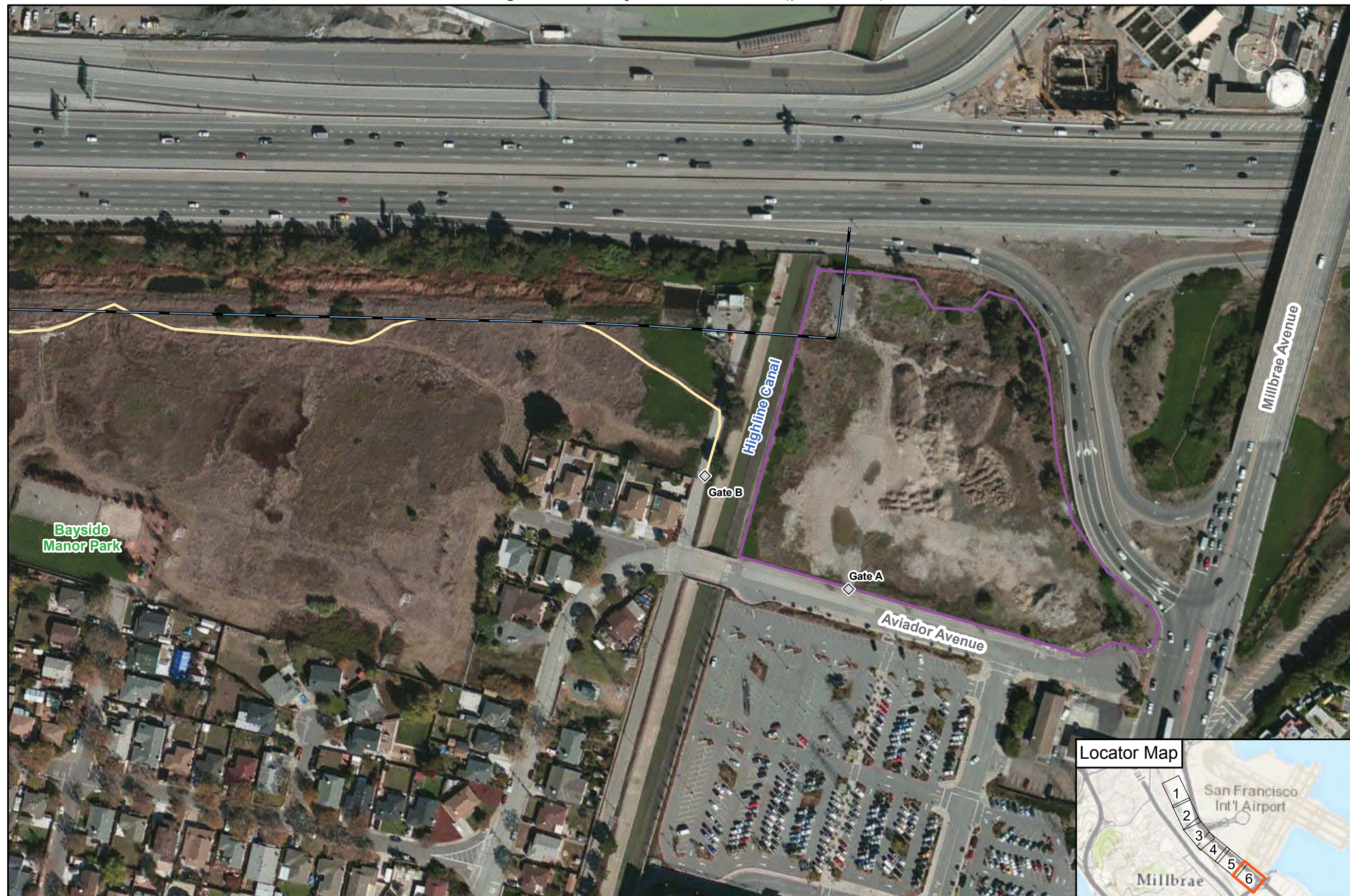
Case No. 2013.0522E





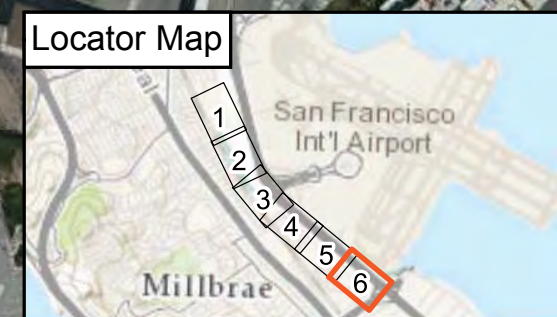


Figure 3: Project Overview (p. 6 of 6)



Existing Pipeline	PI Meter	Sniff Hole (10'x10' Excavation)	Drip Location	Gate
HDD 24-Inch Pipe and Cable	Exclusionary Fence	Sniff Hole Work Area	Drip Access	Access Road
HDD Interconnect	Tree Removal	HDD Excavation Area	Drip Work Area	New Graveled Driveway
Existing Station	Vegetation Removal	HDD Work Area	Drip Tanker Truck Staging	Baker Tank
Lomita Expansion Area			Staging Area	

Source: AECOM 2012, ESRI 2013



**Line 101 ILI Upgrade and Lomita Park Station Rebuild Project**

Case No. 2013.0522E





**TABLE 1: SUMMARY OF WORK AREAS**

Activity/Area	Approximate Length (feet)	Approximate Width (feet)	Approximate Area (square feet)
<i>Horizontal Directional Drilling: Pipe Weld Run-out Area</i>			
Work Area <sup>1</sup>	3,316	100	331,600
<i>Lomita Park Regulator Station and HDD: Excavation/Tie-in (North)</i>			
Work Area <sup>2</sup>	Varies	Varies	119,300
<i>Horizontal Directional Drilling Excavation/Tie-in (South)</i>			
Work area	480	100	48,000
<i>Horizontal Directional Drilling: Sniff Hole (Southern Excavation)</i>			
Work area	40	40	1,600
<i>Liquid Storage (Baker) Tanks<sup>3</sup></i>			
1 <sup>st</sup> Avenue	50	95	4,750
Southern HDD excavation	30	105	3,150
<b>Subtotal</b>	<b>N/A</b>	<b>N/A</b>	<b>7,900</b>
<i>Drip</i>			
Drip work area	20	30	600
Access to drip work area	125	2	250
Tanker trucks staging area	80	22.5	1,800
<b>Subtotal</b>	<b>N/A</b>	<b>N/A</b>	<b>2,650</b>
<i>Aviador Avenue Staging Area</i>			
Work Area <sup>4</sup>	Varies	Varies	239,300
<b>Total Disturbance Area</b>			<b>750,350</b>

Notes:

1. The HDD: Pipe Weld Run-out Area is outside of exclusionary fencing. Work in this area to be low impact for staging of pipe run.
2. The Lomita Park Regulator Station and HDD: Excavation / Tie-in (North) is within exclusionary fencing. This work area includes: permanent Lomita Park Regulator Station, two (2) excavation tie-in areas, two (2) sniff holes, one (1) Baker tank, tree removal area, and northern HDD excavation / tie-in area.
3. Liquid Storage Tanks does not include baker tank area found within Lomita Park Regulator Station and HDD: Excavation / Tie-in (North).
4. Aviador Avenue Staging Work Area encompasses entire parcel. This will be limited based on construction need and negotiations with land owner.

## **A.4. CONSTRUCTION ACTIVITIES AND SCHEDULE**

### **A.4.1 LINE 101 PIPELINE**

#### ***A.4.1.1 New Pipeline Installation***

To minimize impacts to sensitive aboveground resources, PG&E would use HDD techniques to install approximately 3,200 feet of 24-inch-diameter pipe. Prior to HDD activities, PG&E would establish two excavation areas—the northern excavation area would be used for the entry bore pit and the southern excavation area would be used for the exit bore pit. Once inserted, PG&E would connect the new pipe to the existing Line 101 pipe. The excavation areas would be excavated to a depth of approximately 20 feet, resulting in approximately 11,891 cubic yards of excavated soil. PG&E would use the excavated soil as backfill, where feasible. PG&E would dispose of any soil not used as backfill at an approved solid waste disposal site. Both excavation areas, shown on Figure 3 (p. 3 and 5 of 6), are surrounded by larger temporary work areas that would be used for equipment storage and construction crew access. PG&E would install temporary wildlife exclusion fencing around the larger work areas.

The approximately 3,200-foot-long pipe would be composed of shorter pipe segments that would be welded together in a temporary work area (i.e., pipe weld run-out) that extends from the northern HDD excavation area to Cupid Row Canal. The pipe would be placed on rollers so that it can be inserted into the HDD bore pit. After the pipe is welded together, PG&E would conduct hydrostatic pressure testing, which is discussed in further detail in the following section. Following the test, the water would be collected into seven liquid storage tanks, such as Baker™ Tanks, staged within the parking lot along 1<sup>st</sup> Avenue, as shown on Figure 3 (p. 1 of 6), and discharged into either a publically owned treatment work (POTW) or Cupid Row Canal.

Next, a pilot hole would be drilled and enlarged by using a reamer. During the drilling process, the HDD bore would be tracked by using an aboveground tracking wire. The tracking wire would run the entire length of the HDD bore, and vegetation removal may be required to ensure that the wire does not become entangled. The new 24-inch-diameter pipe would be pulled into the hole and connected—or tied in—to the existing pipe. The excavation areas would be backfilled with the excavated soil and restored to approximate pre-project conditions.

#### ***A.4.1.2 Hydrostatic Testing***

Hydrostatic testing, which is the industry standard for testing pipelines and pressure valves, is a safe method of verifying the maximum operating pressure and ensuring the integrity of a pipeline. Line 101

would be hydrostatically tested to verify that it is safe to operate at its designed maximum operating pressure. Test water would be taken from an on-site location and stored in liquid storage tanks throughout the filling process, or water would be brought in by truck from an off-site location. Once the pipeline is filled to the appropriate level and ready for testing, the water would be slowly pressurized to the appropriate test pressure. At the end of the test, the pipeline would be emptied of water and the water would be disposed of appropriately at either a POTW or Cupid Row Canal.

#### **A.4.1.3 Sniff Hole Installation**

A sniff hole typically consists of a vertical pipe that extends from an existing gas pipeline to several feet aboveground. Three sniff holes would be installed within the existing pipeline in the following locations (also shown on Figure 3 (p. 3 and 5 of 6)):

- Approximately 100 feet northwest of Lomita Park Regulator Station
- Approximately 100 feet southeast of Lomita Park Regulator Station (within the Lomita Park Regulator Station rebuild work area)
- Approximately 300 feet southeast of the southern HDD excavation area along the access road

Each sniff hole would require an excavation area of approximately 100 square feet surrounded by a work area footprint of approximately 1,600 square feet.

#### **A.4.1.4 Existing Pipeline Retirement**

The existing 20-inch-diameter A.O. Smith pipe with drip that is bypassed would be “retired in place.” A drip is a trap connected to a gas pipe used for collecting liquids and condensation. Liquids that have been collected in the drip located south of South Lomita Canal would be removed by installing a hose to connect the drip to a tanker truck parked on Madrone Street. The hose would drain the liquids trapped in the drip into the tanker trucks and the liquids would be disposed of at a POTW. The bypassed pipe would be “cut and capped” by cutting the existing pipe in two locations that are close to where the new pipe is connected.

### **A.4.2 LOMITA PARK REGULATOR STATION REBUILD**

The existing facilities at the Lomita Park Regulator Station are located within an area that measures approximately 74 feet by 65 feet (4,810 square feet), and are enclosed by a chain-link fence, which would be removed. Although these facilities are primarily located underground, the station does include several aboveground structures. To accommodate the required upgrades, the station would be expanded by a total

of approximately 3,490 square feet (18 feet to the west and 26 feet to south), for a new permanent footprint of approximately 8,300 square feet. Upgrades include the installation of belowground structures such as gas vaults and pipes, and aboveground structures such as a control building and antennas. This expansion also includes the establishment of a new approximately 40-foot-long and 15-foot-wide graveled driveway to the station. To accommodate the upgrades, PG&E would demolish similar existing belowground and aboveground structures that total approximately 65 short tons.<sup>1</sup> PG&E would recycle demolished materials, to the maximum extent possible. Any material not recycled would be disposed of at an approved solid waste disposal site. The expanded station would be located entirely within PG&E's existing parcel.

Prior to conducting construction activities at the Lomita Park Regulator Station, a temporary wildlife exclusion fence would be installed around the existing station. The exclusion fence would encompass an approximately 119,300-square-foot temporary construction area to protect wildlife from construction activities. The area would be used for storing spoils and staging construction equipment associated with the station expansion and would include the excavation areas associated with two sniff holes (which would be outside of the fence line of the station, but within the wildlife exclusion fencing). Additionally, two eucalyptus trees and two electric poles would be removed and a new electric pole would be installed within the exclusion fence. The work area, including the fence boundaries, is shown on Figure 3 (p. 3 of 6).

Once the rebuild of the Lomita Park Regulator Station is complete, the new facilities would be tied in to the Line 101 gas pipeline. Excavation areas for the tie-ins would be located north of the existing station and south of the expanded station area. The excavation areas would measure a combined maximum of approximately 390 square feet. These areas would be excavated to a depth of approximately 6 feet, resulting in approximately 87 cubic yards of excavated material. The excavation areas would be surrounded by a large work area measuring a combined total of approximately 3,150 square feet. Both excavation and work areas are shown on Figure 3 (p. 3 and 5 of 6).

Following construction, the chain-link fence surrounding the existing Lomita Park Regulator Station would be reinstalled; however, the fence would be expanded approximately 18 feet west and 26 feet south to accommodate the expanded station footprint. PG&E would install a gate at the northwestern end of the station. Finally, the approximately 119,300-square-foot work area within the temporary wildlife exclusion fence would be restored to approximate pre-project conditions.

---

<sup>1</sup> A short ton is a unit of mass equal to 2,000 pounds (907.18 kilograms)

### **A.4.3 DEWATERING**

Surface water and groundwater are likely to be present within the two HDD excavation areas and the station expansion area. To ensure that the work area is dry, water encountered during construction would be pumped into eight liquid storage tanks; four of the tanks would be located approximately 200 feet south of the Lomita Park Regulator Station and four would be located approximately 200 feet south of the southern HDD excavation area. Water would pass through the liquid storage tanks, sediment would be trapped at the bottom, and water quality testing would be conducted. If the water quality meets the requirements of the National Pollutant Discharge Elimination System (NPDES) for construction activities, PG&E would discharge it into adjacent seasonal wetlands and/or the South Lomita Canal. If the NPDES water quality requirements are not met, the water would be discharged at a POTW. A maximum of approximately 300 water tankers may be required to discharge water at a POTW.

### **A.4.4 ACCESS**

The work areas would be accessed using six gates, three access routes, and a walking path, which are described in further detail as follows:

- The Lomita Park Regulator Station rebuild area, the northern HDD excavation area, and the pipe weld run-out area would be accessed using two roads that extend from Gate H (at 1<sup>st</sup> Avenue) in the north to Gate G (at the intersection of Monterey Street and Madrone Street) in the south. The two roads split from one road approximately 0.24 mile south of Gate H and merge approximately 0.26 mile north of Gate G. The western fork road is a two-track haul route and the eastern fork road is an access route that measures approximately 8 feet wide. To accommodate the station expansion, PG&E would realign approximately 100 feet of the existing eastern fork road approximately 10 feet to the west. To connect the eastern fork road to the station gate, PG&E would establish a new permanent approximately 40-foot-long driveway that would be approximately 15 feet wide. Because the access roads contain extensive potholes, they would be repaired to operable condition prior to use. Minor tree trimming near Gate G would be conducted for vehicle clearance. Specifically, willow branches and herbaceous vegetation along approximately 1,600 feet of the access road would be trimmed to a width of 2 feet on each side of the road.
- The existing Line 101 drip location would be accessed using a walking path located approximately 123 feet from an undesignated gate near the intersection of Madrone Street and Bay Street.

- The southern HDD excavation area would be accessed using a road that extends from Gate E (at the intersection of Bay Street and Santa Paula Avenue) in the north to Gate B (near Aviador Avenue) in the south. The approximately 0.56-mile-long access road is in operable condition and no repairs would be necessary.
- Access to the staging area near Millbrae Avenue would be via Gate A along Aviador Avenue.

The access roads, gates, and walking path are illustrated on Figure 3 (p. 1 through 6 of 6).

#### **A.4.5 AVIADOR AVENUE STAGING AREA**

PG&E would use an undeveloped, generally barren/ruderal area that is owned by the CCSF and located between Highline Canal and Millbrae Avenue for staging material and equipment associated with Line 101 work. This area is approximately 5.5 acres in size and is shown on Figure 3 (p. 6 of 6).

#### **A.4.6 CONSTRUCTION PERSONNEL AND EQUIPMENT**

An average of approximately 20 crewmembers would be present on-site each day during construction; however, the specific number of crewmembers would vary depending on the work activities. The construction equipment that is anticipated to be required is provided in Table 2: Construction Equipment Summary.

**TABLE 2: CONSTRUCTION EQUIPMENT SUMMARY**

<b>Equipment Type</b>	<b>Approximate Quantity/Trips</b>
Trackhoes/backhoes	2
Welding rigs	4
Bulldozer	1
Water trucks	2
Pickup trucks	4
Air compressors/sand blasters	2
Generators	3
Xray/NDE truck	1
Grader	1
Drill rig	1
Power unit	1



Equipment Type	Approximate Quantity/Trips
Control cab/parts van	1
Fluid tanks (water and mud mixing and cleaning)	2 to 3
Pump (water and mud)	1
Fuel storage tank (1,300 gallons)	1
Vacuum trucks with booster pumps	2
5-ton haul trucks	2
Trailers	5
Bulk storage containers	2 to 3
Auxiliary equipment storage	2 to 3
Cranes	2
Sidebooms	5
Pipe support roller stands	52
Timber mats	24
Liquid storage tanks	15
Dump trucks	63 (trips)
Tanker trucks	Up to 300 (trips)
Frac tanks	12

Source: Data compiled by AECOM in 2013

#### **A.4.7 SCHEDULE**

Work would generally occur six days per week from approximately 7:30 a.m. to 5:30 p.m.; however, some activities, such as hydrostatic testing, may occur outside of these hours. Lomita Park Regulator Station rebuild activities, which would start in the first phase of construction, in the summer of 2014, and include mobilization of equipment and materials, expansion work, pipe tie-in, and site grading and restoration, are anticipated to take approximately 28 weeks to complete. Pipeline replacement activities would occur in the second phase, sometime between 2015 and 2017 during the dry season, and include mobilization of equipment and materials, HDD construction work, pipe tie-in, and site grading and restoration. Line 101 upgrade activities are anticipated to take approximately 10 weeks to complete.

#### **A.5. OPERATION AND MAINTENANCE**

The pipeline replacement and regulator station rebuild would require no change to existing operation and maintenance activities.

## A.6. REQUIRED APPROVALS AND PERMITS

The approval of easements by SFO is the Approval Action for this project. The proposed project may require the following agency approvals and permits:

- U.S. Army Corps of Engineers Clean Water Act (CWA) Section 404 Permit
- U.S. Fish and Wildlife Service federal Endangered Species Act Section 7 Consultation
- California Fish and Game Code Section 1602 Lake or Streambed Alteration Agreement
- San Francisco Regional Water Quality Control Board CWA Section 401 Permit Water Quality Certification
- State Water Resources Control Board CWA Section 402 Permits National Pollutant Discharge Elimination System Program – General Construction Storm Water Permit
- City of Millbrae – Building Permit for foundation of control building (PG&E fee property)
- City and County of San Francisco - Environmental Review and Approval of Easements

## **B. REGIONAL AND LOCAL SETTING**

The approximately 17.2-acre project site is located within relatively undeveloped parcels (known as the West-of-Bayshore property) owned by the CCSF. The parcels are located in northern San Mateo County, west of SFO and U.S. Highway 101, and east of the Caltrain right-of-way (i.e., railroad tracks that are owned and operated by the Peninsula Corridor Joint Powers Board). BART aerial structures and tracks transect the West-of-Bayshore property.

Primary access to the project site is by U.S. Highway 101, with local access by 1<sup>st</sup> Avenue, Monterey Street, and Madrone Street. Regional rail service to the project site is provided by Caltrain, which is a commuter rail service running along the San Francisco Peninsula from San Francisco to San Jose, at the San Bruno Station, and BART and Caltrain at the Caltrain/BART Millbrae Station. San Mateo County Transit District (SamTrans) provides bus service to the project area through fixed routes throughout San Mateo County.

The project site contains a utility corridor that includes Line 101 and aboveground electric transmission lines and structures. Single-family homes are located immediately adjacent to the relatively undeveloped parcels.

### **B.1. OTHER PROJECTS IN THE VICINITY**

Past, present, and reasonably foreseeable future projects occurring in the vicinity of proposed project sites could result in cumulative impacts in combination with the proposed project impacts. These include projects identified by the local planning agencies in the project vicinity (within 1.1 miles of the proposed project). A complete list of potential cumulative projects in the project vicinity is presented on Figure 4: Cumulative Projects and in Table 3: Past, Present, and Reasonably Foreseeable Actions. These projects include airport projects (runway reconstruction, terminal redevelopment, roadway development, and air traffic control tower relocation) and development projects (new residential construction and a Safeway store reconstruction). The discussion of potential cumulative impacts is included in the environmental issue area sub-sections in Section E, Evaluation of Environmental Effects.

**TABLE 3: PAST, PRESENT, AND REASONABLY FORESEEABLE ACTIONS**

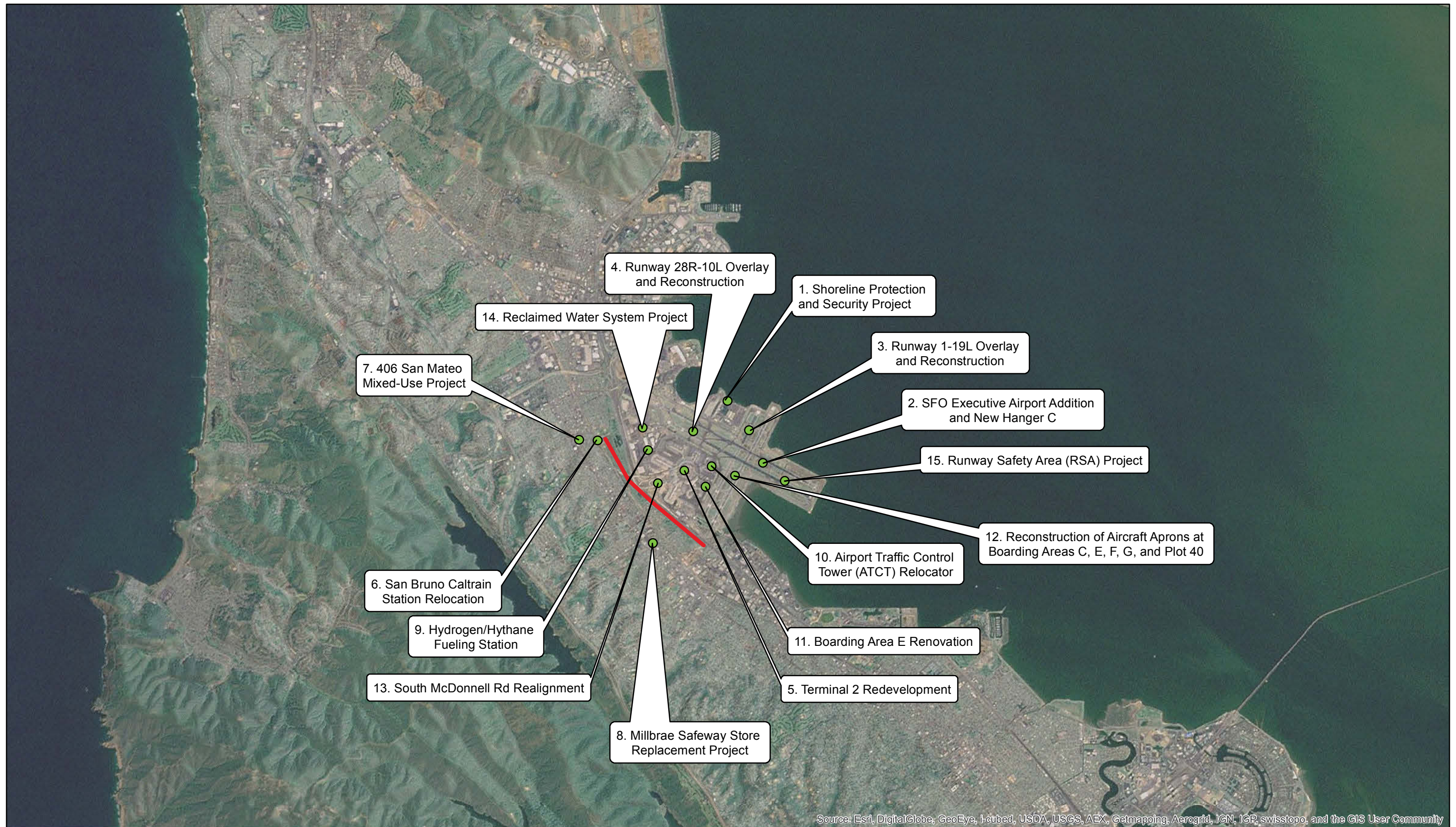
Map Number	Project Name	Location	Distance	Description
<i>Past</i>				
1	Shoreline Protection and Security Project	On San Francisco International Airport (SFO) Property	~ 1,100 feet	Construction of a 14,175-foot-long, 10-foot-high seawall in Bay Conservation and Development Commission jurisdiction.
2	SFO Executive Airport Addition and New Hangar C	On SFO Property	~ 1,100 feet	Addition of approximately 2,400 square feet to the existing 26-foot-tall, 10,000-square-foot Executive Terminal, built in 1996, and construction of a new 37-foot-tall, 25,000-square-foot aircraft storage Hangar C containing approximately 4,000 square feet of hangar service office space at the northern edge of SFO.
3	Runway 1-19L Overlay and Reconstruction	On SFO Property	~ 1,100 feet	Reconstruction of approximately 200,000 square yards of runway and taxiway pavement. The project will overlay and reconstruct Runway 1R-19L to repair deteriorating pavement, improve the surrounding drainage system, upgrade the electrical runway and taxiway lighting system, and repaint runway markings to improve visibility and improve safety for aircraft.
4	Runway 28R-10L Overlay and Reconstruction	On SFO Property	~ 1,100 feet	Repair of structural damages on Runway 28R-10L to level the runway profile, widen shoulder pavement, upgrade the electrical lighting system, and incorporate the most current Federal Aviation Administration (FAA) Advisory Circular guidelines pertaining to runway-related issues.
5	Terminal 2 Redevelopment	On SFO Property	~ 1,100 feet	Renovation would convert the facility from a 10-gate international widebody aircraft terminal to a 14-gate domestic narrowbody aircraft terminal. The renovation project includes the terminal building's interior space, including holdrooms, concession spaces, and baggage claim areas.
6	San Bruno Caltrain Station Relocation	San Mateo Avenue/San Bruno Avenue, San Bruno	4,560 feet	Relocation of San Bruno Caltrain station and grade separation of the right-of-way.
7	406 San Mateo Mixed-use Project	406 San Mateo Avenue, San Bruno	1.1 miles	Demolition of the old theater building and three adjacent bars in downtown to construct a mixed-use building with 48 condominium units, 14,600 square feet of ground-floor retail, and 152 parking spaces.
8	Millbrae Safeway Store Replacement Project	El Camino Real Between Taylor Boulevard and Silva Avenue, Millbrae	1 mile	Demolition of the existing store and reconstruction of a new, podium-style 59,001-square-foot store that would be on the second floor, with 181 surface parking spaces beneath. The new store would have two loading docks at the south end of the property.
9	Boarding Area E Renovation	On SFO Property	~ 1,100 feet	Airfield and terminal system improvements to the baggage handling system, utilities, moving conveyances, telecommunications, terminal systems, architectural improvements, holdroom seating, and building code compliance upgrades.

Map Number	Project Name	Location	Distance	Description
<i>Present</i>				
10	Hydrogen/Hythane Fueling Station	On SFO Property	~ 1,100 feet	The proposed facility, on South McDonnell Road south of Runways 1L and 1R, would dispense two types of alternative fuels—pure hydrogen and hythane, a mixture of hydrogen and compressed natural gas. Approximately 5,000 square feet of the 45,000-square-foot lot would be developed.
11	Airport Traffic Control Tower (ATCT) Relocator	On SFO Property	~ 1,100 feet	Relocation of the existing ATCT to modernize equipment and expand to accommodate new FAA technology and recent expansion projects at SFO. Construction scheduled June 2012 through May 2014; demolition August through October 2015.
<i>Future</i>				
12	Reconstruction of Aircraft Aprons at Boarding Areas C, E, F, G, and Plot 40	On SFO Property	~ 1,100 feet	Reconstruction of the aircraft parking aprons to repair deteriorating and unlevel pavement and underground utilities. Plot 40 is immediately east of the Signature Terminal and is used by United and American Airlines. Underground utilities may include stormwater drainage, apron lighting, and water. The project is needed to maintain serviceability of the pavement and to replace the existing pavement due to normal wear and tear from heavy use. The areas are the probable limits of the proposed apron and taxi lane reconstruction areas, for a combined project total area of approximately 546,000 square yards.
13	South McDonnell Road Realignment	On SFO Property	~ 1,100 feet	Realignment of South McDonnell Road through the former Hilton site to create more overnight aircraft parking spaces. Construction may begin anytime between 2011 and 2014.
14	Reclaimed Water System Project	On SFO Property	~ 1,100 feet	Treatment of the secondary effluent produced at the Mel Leong Treatment Plant (MLTP) to meet the requirements of Title 22 water for reuse as non-potable water throughout SFO. Phase I includes installation of underground pipelines to distribute treated water from the MLTP to storage tanks at Lot C, construction of tertiary and advanced treatment facilities at the MLTP, construction of an advanced treatment facility and hydro-pneumatic tank at Lot C, retrofitting of five existing storage tanks at Lot C, and the installation of distribution pipelines from the MLTP to Lot C and the Terminal 2 Building. Phase II includes construction of one tertiary and two advanced treatment facilities, installation of a distribution system, the retrofitting of storage tanks, and the installation of the Supervisory Control and Data Acquisition system. In Phase III, irrigation pipelines would be installed along the McDonnell Road corridor. Construction is estimated to end on January 1, 2015.

Map Number	Project Name	Location	Distance	Description
15	Runway Safety Area (RSA) Project	On SFO Property	~ 1,100 feet	<p>The San Francisco Airport Commission would implement the RSA Project that involves enhancing the level of safety provided by RSAs at SFO to comply with standards included in FAA Advisory Circular 150/5300-13, Airport Design, as required by Public Law 109-115, which requires completion of RSA improvements by airport sponsors to meet FAA design standards by December 31, 2015. RSAs are identified surfaces surrounding the runway prepared and suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway. The project includes relocating runway thresholds while maintaining existing runway lengths, installing Engineered Materials Arresting Systems where standard RSAs cannot reasonably be constructed, and using declared distances for several runways. A number of related components include demolition and relocation of an existing electrical substation building, construction of new underground drainage installations and a pump station, relocation of runway and taxiway lights and signage, and modifications to existing navigation aids. SFO is preparing for a dual runway closure to perform RSA improvements. The closure will last from May 2014 through September 2014.</p>



Figure 4: Cumulative Projects



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



0 1 2 4 Miles  
1 inch = 7,500 feet  
1:90,000

— Proposed Project

Line 101 ILI Upgrade and Lomita Park Station Rebuild Project

CASE NO. 2013.0522E







## C. COMPATIBILITY WITH EXISTING ZONING AND PLANS

	<u>Applicable</u>	<u>Not Applicable</u>
Discuss any variances, special authorizations, or changes proposed to the Planning Code or Zoning Map, if applicable.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discuss any conflicts with any adopted plans and goals of the City or Region, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discuss any approvals and/or permits from City departments other than the Planning Department or the Department of Building Inspection, or from Regional, State, or Federal Agencies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This section includes a discussion of the compatibility of the proposed project with current, applicable land use plans from various federal, state, and local agencies.

The project would be located entirely on property owned by the CCSF and would not change or conflict with the zoning provisions of the CCSF, San Mateo County, or nearby local jurisdictions. The project is within the discretionary jurisdiction of the CPUC and is not subject to local discretionary zoning or permitting requirements. Thus, these issues are not further discussed in detail in this document.

### C.1. SAN FRANCISCO GENERAL PLAN

The San Francisco General Plan includes the seven elements required by state law—Land Use, Circulation, Open Space, Housing, Conservation, Noise, and Safety—and three additional elements, including Commerce and Industry, Urban Design, and the Arts. The general plan is composed of objectives and policies that guide land use decisions and provide the framework for development in the city. All land use documents, such as the Planning Code, area-specific plans, and redevelopment plans, must be consistent with the general plan. The charter approved by the voters in November 1995 requires that the Planning Commission recommend amendments to the general plan to the Board of Supervisors for approval. This approval changes the general plan’s status from an advisory to a mandatory document and underscores the importance of referrals establishing consistency with the general plan before actions by the Board of Supervisors on a variety of actions.<sup>2</sup>

As they decide whether to approve or disapprove the project, decision makers will consider the compatibility of the proposed project with general plan policies that do not relate to physical environmental

---

<sup>2</sup> City and County of San Francisco. San Francisco General Plan. Internet website: [http://www.sf-planning.org/ftp/General\\_Plan/index.htm](http://www.sf-planning.org/ftp/General_Plan/index.htm). Accessed on January 28, 2014.

issues. Any conflict between the proposed project and policies that relate to physical environmental issues are discussed in Section E, Evaluation of Environmental Effects, of this Initial Study. Any potential conflicts identified as part of the approval process would not alter the physical environmental effects of the proposed project.

The proposed project involves replacing an existing gas pipeline and expanding an existing regulator station that are located within an established utility corridor. Because the proposed project would not result in changes to the general plan and is consistent with land use plans, the proposed project would not conflict with any general plan objectives or policies.

## **C.2. THE ACCOUNTABLE PLANNING INITIATIVE**

In November 1986, the voters of San Francisco approved Proposition M, the Accountable Planning Initiative that added Section 101.1 to the Planning Code to establish eight priority policies. These policies, and the sections of this environmental evaluation addressing the environmental issues associated with the policies, are: (1) preservation and enhancement of neighborhood-serving retail uses, (2) protection of neighborhood character (see Initial Study Checklist criterion E.1(c), Land Use and Land Use Planning), (3) preservation and enhancement of affordable housing (see Initial Study Checklist criterion E.3(b), Population and Housing), (4) discouragement of commuter automobiles (see Initial Study Checklist criteria E.5(a), E.5(b), and E.5(f), Transportation and Circulation), (5) protection of industrial and service land uses from commercial office development and enhancement of resident employment and business ownership (see Initial Study Checklist criterion E.1(c), Land Use and Land Use Planning), (6) maximization of earthquake preparedness (see Initial Study Checklist criteria E.14(a-d), Geology and Soils), (7) landmark and historic building preservation (see Initial Study Checklist criterion E.4(a), Cultural and Paleontological Resources), and (8) protection of open space (see Initial Study Checklist criteria E.9(a) and E.9(b), Wind and Shadow, and Initial Study Checklist criteria E.10(a) and E.10(b), Recreation). The City is required to find that the proposed project or legislation is consistent with the priority policies. It must do this before issuing a permit for any project that requires an initial study under CEQA; before issuing a permit for any demolition, conversion, or change of use; and before taking any action that requires a finding of consistency with the general plan. The consistency of the proposed project with the environmental topics associated with the priority policies is discussed in Section E, Evaluation of Environmental Effects.

### **C.3. COMPREHENSIVE AIRPORT LAND USE COMPATIBILITY PLAN FOR THE SAN FRANCISCO INTERNATIONAL AIRPORT**

The purpose of the Airport Land Use Compatibility Plan (ALUCP) is to provide a plan for the growth of the airport and the area surrounding the airport that is within the jurisdiction of the San Mateo County Airport Land Use Commission, and to maintain the welfare of the inhabitants and the general public within the vicinity of the airport. According to the ALUCP, the project site is not a part of the future airport layout plan. Furthermore, the proposed project would not conflict with the ALUCP since it involves replacing an existing gas pipeline and expanding an existing regulator station that are located within an established utility corridor.

### **C.4. SAN MATEO COUNTY GENERAL PLAN**

Although the project site is owned and operated by the CCSF, a large portion of the project is located within unincorporated San Mateo County on land designated as Airport by the general plan.<sup>3</sup> The Airport land use designation is associated with transportation uses, including air transportation and related terminal transfer, maintenance, and landing area facilities. The proposed project would not conflict with this land use designation, as it involves modifications to existing facilities within an established utility corridor.

### **C.5. CITY OF MILLBRAE GENERAL PLAN**

A portion of the proposed project is located within the City of Millbrae on land designated Parks and Open Space<sup>4</sup> by the City of Millbrae General Plan. Parks and open space areas are intended to provide recreational uses and open space for the general community. Public lands and private lands designated for open space or recreational uses are included. The proposed project would not conflict with this land use designation, as it involves modifications to existing facilities within an established utility corridor.

### **C.6. CITY OF SAN BRUNO GENERAL PLAN**

A portion of the project site is located within the City of San Bruno on land designated as Parks/Open Space by the general plan.<sup>5</sup> The Parks/Open Space land use designation provides parks, recreation facilities, and open space areas for the general community. Both public and private lands designated for open space are

---

<sup>3</sup> County of San Mateo. 1986. County of San Mateo General Plan. North County Land Use Map. Internet website: [http://www.co.sanmateo.ca.us/planning/genplan/pdf/gp/maps/gp%20north%20county%20land%20use%20\(11x17\).pdf](http://www.co.sanmateo.ca.us/planning/genplan/pdf/gp/maps/gp%20north%20county%20land%20use%20(11x17).pdf). Accessed on January 28, 2014.

<sup>4</sup> City of Millbrae. 2009. City of Millbrae Zoning Official Zoning Map. Internet website: <http://www.lsa-assoc.com/project-descriptions/238-millbrae-zoning-code-update>. Accessed January 28, 2014.

<sup>5</sup> City of San Bruno. 2009. City of San Bruno General Plan. Internet website: [http://sanbruno.ca.gov/comdev\\_generalPlan.html](http://sanbruno.ca.gov/comdev_generalPlan.html). Accessed January 28, 2014.

included. The proposed project would not conflict with this land use designation, as it involves modifications to existing facilities within an established utility corridor.

## C.7. REGIONAL PLANS

In addition to local general plans and related documents, regional environmental, transportation, and land use plans and policies consider the growth and development of the nine-county San Francisco Bay Area. Some of these plans and policy documents are advisory, and some include specific goals and provisions that must be adhered to when evaluating a project under CEQA. These regional plans include:

- **Bay Area Air Quality Management District, Bay Area 2010 Clean Air Plan.**<sup>6</sup> This comprehensive document updates the Bay Area 2005 Ozone Strategy, in accordance with the requirements of the California Clean Air Act, to implement feasible measures to reduce ozone and provide a control strategy to reduce ozone, particulate matter, air toxics, and greenhouse gases throughout the region.
- **The Association of Bay Area Governments, Projections 2009.**<sup>7</sup> This is an advisory policy document that includes population and employment forecasts to assist in the development of local and regional plans and policy documents.
- **Metropolitan Transportation Commission, Transportation 2035 Plan for the San Francisco Bay Area.**<sup>8</sup> This policy document, adopted by the nine San Francisco Bay Area counties, outlines transportation projects for highway, transit, rail, and related uses through 2035.
- **San Francisco Bay Regional Water Quality Control Board (RWQCB), Water Quality Control Plan for the San Francisco Bay Basin.**<sup>9</sup> This is the RWQCB's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the state, including surface waters and groundwater, and includes programs of implementation to achieve water quality objectives.

---

<sup>6</sup> Bay Area Air Quality Management District, Bay Area 2010 Clean Air Plan, adopted.

<sup>7</sup> Association of Bay Area Governments, Projections 2009. Internet website: <http://www.abag.ca.gov/planning/currentfcst/>. Accessed on January 28, 2014.

<sup>8</sup> Metropolitan Transportation Commission, Transportation 2035 Plan for the San Francisco Bay Area. Internet website: [http://www.mtc.ca.gov/planning/2035\\_plan/](http://www.mtc.ca.gov/planning/2035_plan/). Accessed on January 28, 2014.

<sup>9</sup> San Francisco Bay Regional Water Quality Control Board, Water Quality Control Plan for the San Francisco Bay Basin. Internet website: [http://www.swrcb.ca.gov/rwqcb2/basin\\_planning.shtml](http://www.swrcb.ca.gov/rwqcb2/basin_planning.shtml). Accessed on January 28, 2014.



- **San Francisco Bay Conservation and Development Commission (BCDC), San Francisco Bay Plan.**<sup>10</sup>  
This is the BCDC's guide that designates development, recreation, and conservation uses in its jurisdiction around the San Francisco Bay shoreline and various supporting waterways and estuaries. The San Francisco Bay Plan, and the jurisdictional boundary of the BCDC, was amended in October 2011 to reflect climate change issues and anticipated sea-level rise.

The proposed project would not conflict with any of these regional plans or policies.

---

<sup>10</sup> San Francisco Bay Conservation and Development Commission, San Francisco Bay Plan. Internet website: [http://www.bcdc.ca.gov/laws\\_plans/plans/sfbay\\_plan.shtml](http://www.bcdc.ca.gov/laws_plans/plans/sfbay_plan.shtml). Accessed on January 28, 2014.

## D. SUMMARY OF ENVIRONMENTAL EFFECTS

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Land Use                                 | <input checked="" type="checkbox"/> Air Quality        | <input checked="" type="checkbox"/> Biological Resources               |
| <input type="checkbox"/> Aesthetics                               | <input type="checkbox"/> Greenhouse Gas Emissions      | <input checked="" type="checkbox"/> Geology and Soils                  |
| <input type="checkbox"/> Population and Housing                   | <input type="checkbox"/> Wind and Shadow               | <input checked="" type="checkbox"/> Hydrology and Water Quality        |
| <input checked="" type="checkbox"/> Cultural and Paleo. Resources | <input type="checkbox"/> Recreation                    | <input checked="" type="checkbox"/> Hazards/Hazardous Materials        |
| <input type="checkbox"/> Transportation and Circulation           | <input type="checkbox"/> Utilities and Service Systems | <input type="checkbox"/> Mineral/Energy Resources                      |
| <input type="checkbox"/> Noise                                    | <input type="checkbox"/> Public Services               | <input type="checkbox"/> Agricultural and Forest Resources             |
|   |  | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

## E. EVALUATION OF ENVIRONMENTAL EFFECTS

All items on the Initial Study Checklist that have been checked “Less Than Significant Impact,” “No Impact,” or “Not Applicable” indicate that, upon evaluation, staff has determined that the proposed project could not have a significant adverse environmental effect relating to that issue. For items that have been checked “Less than Significant with Mitigation Incorporated,” staff has determined that the proposed project would not have a significant adverse environmental effect provided that the project sponsor implements mitigation measures presented in Section F of this Initial Study (see pages 170 through 183). A discussion is included for most issues checked “Less than Significant with Mitigation Incorporated,” “Less than Significant Impact,” “No Impact,” or “Not Applicable.” For all of the items without discussion, the conclusions regarding potential significant adverse environmental effects are based on field observation, staff experience and expertise on similar projects, and/or standard reference material available within the Planning Department, such as the Department’s Transportation Impact Analysis Guidelines for Environmental Review, or the California Natural Diversity Database and maps, published by the California Department of Fish and Wildlife. For each checklist item, the evaluation has considered the impacts of the project both individually and cumulatively.

The pipeline replacement and regulator station rebuild would require no change to existing operational and maintenance activities. Thus, impacts resulting from operation of the proposed project would not change from existing conditions and no net increase in operation-related impacts would occur. Therefore,

the impact analysis is limited to temporary and short-term impacts associated with project construction, including construction of the new pipeline and expansion of the regulator substation.



## E.1.LAND USE AND LAND USE PLANNING

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>1. LAND USE AND LAND USE PLANNING –</b>					
<b>Would the project:</b>					
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial impact upon the existing character of the vicinity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## ENVIRONMENTAL SETTING

The project site is located on relatively undeveloped parcels within the County of San Mateo, the City of Millbrae, and the City of San Bruno, just west of U.S. Highway 101 and SFO. The project parcels are owned by the City and County of San Francisco in conjunction with SFO.

The project area is flat and includes some wetlands. The area is largely undeveloped, with the exception of Marina Vista and Bayside Manor parks, which are owned by the City of Millbrae and located within the project site. According to the ALUCP, the project site is not a part of the future airport layout plan.

## IMPACT DISCUSSION

### **Impact LU-1: The proposed project would not physically divide an established community. (No Impact)**

The proposed project involves replacing an existing gas pipeline and expanding a regulator station that are located within an established utility corridor; thus, project construction would not create a physical barrier (division) for any existing communities or neighborhoods, nor would it result in new development that would physically divide an existing neighborhood. Therefore, the proposed project would not physically divide an established community. There would be no impact.

**Impact LU-2: The proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. (No Impact)**

The proposed project would not result in significant changes to the surrounding land use as it is located within an existing utility corridor. Construction would be temporary and short term, and the expansion of the existing Lomita Park Regulator Station by 3,490 square feet would not result in a significant physical change to the existing environment.

A continuation of PG&E's current use of the project area (i.e., operation and maintenance of the gas pipeline and regulator station) would be consistent with adopted general plan and zoning designations. Because the proposed project would not change land use and zoning designations, and is consistent with the ALUCP and local general plan and zoning designations, there would be no conflict to established planning or regulatory policies. There would be no impact.

**Impact LU-3: The proposed project would not have a substantial impact upon the existing character of the vicinity. (Less than Significant)**

The proposed project would not result in significant changes to the surrounding land use. Construction of the proposed project would be temporary and a continuation of PG&E's current use of the project area (i.e., operation and maintenance of the gas pipeline and regulator station), which would resume post-construction. As detailed in Section E.2, Aesthetics, the majority of proposed project construction activities would occur underground, and only a minor aboveground expansion of the existing Lomita Park Regulator Station would be completed. Because the expansion would be completed within the existing footprint of the project site and would not be highly visible from surrounding areas, the physical change of the Lomita Park Regulator Station would not be readily apparent to the public. As such, the proposed project would not result in a significant change to the existing visual character or quality of the site and surrounding vicinity. Further, operation and maintenance of the pipeline and regulator station post-construction would remain the same as before construction. Therefore, the proposed project would have a less-than-significant impact on the existing character of the vicinity.

**Impact C-LU-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity of the project area, would not result in a significant cumulative impact related to land use. (Less than Significant)**

Cumulative projects listed in Table 3 and shown on Figure 4 have the potential for impacts to all or some of the resource categories evaluated in this Initial Study, and include a geographic area close enough to the airport to potentially have cumulative impacts to on-airport projects and nearby development. However, because the proposed project would involve short-term, temporary changes to an existing utility corridor and would not substantially alter the existing character of the project area, it would have a less than significant contribution to cumulative land use impacts.



## E.2.AESTHETICS

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant Impact with Mitigation Incorporated</u>	<u>Less than Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>2. AESTHETICS – Would the project:</b>					
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people or properties?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## ENVIRONMENTAL SETTING

As shown on Figure 1, the project site is located in northern San Mateo County, west of SFO and U.S. Highway 101, and east of the Caltrain right-of-way (i.e., railroad tracks owned and operated by the Peninsula Corridor Joint Powers Board) on relatively undeveloped parcels owned by the CCSF. The site contains an existing utility corridor that includes the Line 101 gas transmission pipeline and aboveground electric transmission lines and structures. BART aerial structures and tracks transect the property and single-family homes are located immediately adjacent to the site. The area immediately surrounding the project site is characterized by highly urbanized development. Rolling hills are located farther north and west of the site, and San Francisco Bay (beyond SFO) is located approximately 1.25 miles east of the project site. The hillsides are recognizable landscape features in the area that can be seen from many locations, thus contributing to a strong sense of place and orientation in the project vicinity. The eastern view toward San Francisco Bay is impeded by SFO. The southern view from the project site is of residential areas.

## IMPACT DISCUSSION

### **Impact AE-1: The proposed project would not have a substantial adverse effect on a scenic vista. (No Impact)**

For purposes of this evaluation, a scenic vista is defined as a distant public view along or through an opening or corridor that is recognized and valued for its scenic quality. The majority of proposed project construction activities would occur underground, and only a minor aboveground expansion of the existing Lomita Park Regulator Station would be completed. The expansion of the Lomita Park Regulator Station would not result in any blockage or degradation of important scenic vistas, resources, or visual landscape elements because the expanded station would be located within the existing footprint of the project site and would not be visible from surrounding vista points. Therefore, there would be no impact.

### **Impact AE-2: The proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. (No Impact)**

No designated state scenic highways are located within the project vicinity, nor is the project site located near any scenic roadways or corridors identified in the Scenic Roads Element of the San Mateo County General Plan. Furthermore, the proposed project would not result in any impacts related to scenic highways. No rock outcroppings or other natural unique scenic resources or features, other than trees, are located within the project site. Furthermore, no historic buildings exist on the project site. As a result, there would be no impact.

### **Impact AE-3: The proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. (Less than Significant)**

The majority of the proposed project would involve temporary and short-term underground construction, which would not substantially degrade the existing visual character or quality of the site and its surroundings. Aboveground construction activities would be limited to the minor expansion of the existing Lomita Park Regulator Station.

Six eucalyptus trees and two toyon shrubs would be removed during boring excavation, station expansion, and pipe construction activities.<sup>11</sup> Three of the eucalyptus trees would also have their stumps ground out

---

<sup>11</sup> Arborist Evaluation for Lomita Station Rebuild (B-027) and Line 101 ILI (B-072), November 18, 2013. This document is on file and is available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103, as part of Case File No. 2013.0522E.

to avoid construction conflicts and stump re-sprouting. Two brush stands are located within the proposed pipeline laydown and construction area, and are of significant size. These areas would be trimmed, as needed, and cut vegetation removed. Two additional brush stands would be removed for guidance of the bore along its projected path. Brush stand 5 would be removed so that a drip from the decommissioned Line 101 can be removed. Figure 5: Vegetation Removal depicts the locations of vegetation removal at the project site.

Because the Lomita Park Regulator Station expansion would be completed within the existing footprint of the project site and would not be highly visible from surrounding areas, the change in the physical characteristics of the site would not be readily apparent to the public. Therefore, the project would have a less-than-significant impact on the existing visual character or quality of the site and surroundings.

**Impact AE-4: The proposed project would not create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area. (Less than Significant)**

Because no new lighting is proposed as part of the project, the project would not create permanent sources of substantial light or glare and would have no long-term effect on day or nighttime views in the area. Construction activities would occur primarily during daylight hours. If evening construction work is necessary, lighting to accommodate this work at the project site would be temporary and short-term in nature, and would be confined to a small area within the project footprint. Beyond minor glare from use of limited construction equipment—which would be similar to the existing glare from vehicles on local roads—there would be no new sources of glare associated with project construction. Therefore, this impact would be less than significant.

**Impact C-AE-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not have a significant cumulative effect on aesthetics. (Less than Significant)**

Cumulative development impacts to aesthetic resources in the project vicinity would not be significant, as the area has been transformed over time from a natural landscape to an urban/transportation viewshed in all directions. Due to this heavily altered landscape, there are no unobstructed scenic vistas from the project site, and sources of light and glare to the night sky are currently present. Alteration of the site from the proposed project would be relatively minor and consistent with the urban/transportation setting of the project site and nearby airport land use. Therefore, the proposed project's contribution to cumulative impacts to the aesthetic environment would be less than cumulatively considerable.



This page intentionally left blank.



Figure 5: Vegetation Removal



**Line 101 ILI Upgrade and Lomita Park Station Rebuild**



0 150 300 600  
Feet

1 inch = 300 feet  
1:3,600

Source: AECOM, 2012,  
Western ECI, 2013

- |                     |              |                      |
|---------------------|--------------|----------------------|
| --- New_Pipeline    | ● Eucalyptus | ■ Brush              |
| — Existing_Pipeline | ● Toyon      | # Brush Stand Number |
| □ Work Area         |              |                      |
| □ Study Area        |              |                      |

Case No. 2013.0522E







### E.3. POPULATION AND HOUSING

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>3. POPULATION AND HOUSING – Would the project:</b>					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### ENVIRONMENTAL SETTING

The project is located within undeveloped parcels (collectively known as the West-of-Bayshore property) that are owned by the CCSF. The parcels are within the County of San Mateo, City of Millbrae, and City of San Bruno, just west of U.S. Highway 101 and SFO. The undeveloped parcels contain a utility corridor that includes Line 101 and aboveground electric transmission lines and structures. No residences or employment-generating uses are located on the project site. Residential areas are located north of the West-of-Bayshore property beyond Lions Park, and along the western border of the property across the Caltrain right-of-way (refer to Figure 3 (p.1 through 6)).

### IMPACT DISCUSSION

**Impact PH-1: The proposed project would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). (No Impact)**

The proposed project is located within relatively undeveloped parcels that are owned by the CCSF. No residences or employment-generating uses are located on the project site. Construction of the proposed project is estimated to be completed over a period of approximately 38 weeks, and a maximum of approximately 20 construction workers are anticipated to be present on-site each day. Because the construction schedule is short-term and temporary, all construction workers are expected to be from the

local or regional labor pool. The proposed project would slightly shorten the pipeline infrastructure from 3,775 linear feet to 3,755 linear feet, and proposed project features are not intended or expected to allow for additional development. As such, the proposed project would not induce substantial population growth in the area and there would be no impact.

**Impact PH-2: The proposed project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. (No Impact)**

The proposed project would be located within an existing PG&E utility corridor and would not displace any existing housing or result in the need for replacement housing. There would be no impact.

**Impact PH-3: The proposed project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. (No Impact)**

Construction personnel are expected to commute from the greater San Francisco Bay Area and relocation of these workers is not anticipated for the proposed project. Therefore, the proposed project would not impact existing residences or businesses, nor would it result in the displacement of any people or the construction of new housing elsewhere. There would be no impact.

**Impact C-PH-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not have a cumulative impact on population and housing. (No Impact)**

Development in the area surrounding the proposed project is primarily industrial, with some recreation (parks) and residential uses. Other reasonably foreseeable projects in the vicinity of the proposed project include, but are not limited to, runway reconstruction, roadway development, and a groundwater storage and recovery project.

The proposed project would be located within an existing PG&E utility corridor and would not displace any existing housing or result in the need for replacement housing. Furthermore, because the proposed project is short-term and temporary, it is not anticipated to impact the existing labor force, residences, or businesses. Construction personnel for the proposed project are expected to commute from the greater San Francisco Bay Area and no relocation is anticipated, such that there would be cumulative housing and population impacts. Although current and reasonably foreseeable projects may result in an increase in population, the proposed project would not contribute to this cumulative impact.

## E.4.CULTURAL AND PALEONTOLOGICAL RESOURCES

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>4. CULTURAL AND PALEONTOLOGICAL RESOURCES – Would the project:</b>					
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## ENVIRONMENTAL SETTING

The analysis describes potential impacts to historical, archeological, and paleontological resources, as well as the potential to disturb human remains during construction activities. The assessment of proposed project impacts on archeological and historical resources includes these steps:

- Identify historical and archeological resources within the Area of Potential Effects
- Evaluate the legal significance of historical resources, as defined by CEQA Section 15064.5, that may be affected by the project
- Determine whether the proposed project may cause a substantial adverse change to significant historical, archeological, or paleontological resources

CEQA considers archeological resources as an intrinsic part of the physical environment and, thus, requires for any project subject to CEQA-review that its potential to adversely affect an archeological resource be analyzed (CEQA Sect. 21083.2). For a project that may have an adverse effect on a significant archeological resource, CEQA requires preparation of an environmental impact report (CEQA and Guidelines. Sect. 21083.2, Sect. 15065). CEQA recognizes two different categories of significant archeological resources: a “unique” archeological resource (CEQA Sect. 21083.2) and an archeological resource that qualifies as a “historical resource” under CEQA (CEQA and Guidelines. 21084.1, 15064.5).



### **Significance of Archeological Resources**

An archeological resource can be significant as both or either a “unique” archeological resource and an “historical resource” but the process by which the resource is identified under CEQA, as either one or the other, is distinct (*CEQA and Guidelines* 21083.2(g) and 15064.5(a)(2)).

An archeological resource is an “*historical resource*” under CEQA if the resource is:

- 1) listed on or determined eligible for listing on the California Register of Historic Resources (CRHR) (CEQA Guidelines Sect. 15064.5). This includes National Register of Historic Places (NRHP)-listed or –eligible archeological properties,
- 2) listed in a “local register of historical resources,”<sup>12</sup> or
- 3) listed in a “historical resource survey.” (CEQA Guidelines Sect. 15064.5(a)(2)).

Generally, an archeological resource is determined to be an “historical resource” due to its eligibility for listing to the CRHR/NRHP because of the potential scientific value of the resource, that is, “has yielded, or may be likely to yield, information important in prehistory or history” (CEQA and Guidelines Sect. 15064.5 (a)(3)). An archeological resource may be CRHR eligible under other Evaluation Criteria, such as Criterion 1, association with events that have made a significant contribution to the broad patterns of history; Criterion 2, association with the lives of historically important persons; or Criterion 3, association with the distinctive characteristics of a type, period, region, or method of construction. Appropriate treatment for archeological properties that are CRHR eligible under Criteria other than Criterion 4 may be different than that for a resource that is significant exclusively for its scientific value.

Failure of an archeological resource to be listed in any of these historical inventories is not sufficient to conclude that the archeological resource is not an “historical resource.” When the lead agency believes there may be grounds for a determination that an archeological resource is an “historical resource,” then the lead agency should evaluate the resource for eligibility for listing on the CRHR (CEQA Guidelines Sect. 15064.5(a)(4)).

---

<sup>12</sup> A “local register of historical resources” is a list of historical or archeological properties officially adopted by ordinance or resolution by a local government (Public Resources Code 5020.1 (k)).

A “*unique archeological resource*” is a category of archeological resources created by the CEQA statutes (CEQA *Guidelines* Sect. 21083.2(g)). An archeological resource is a unique archeological resource if it meets any of one of three criteria:

- 1) Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information
- 2) Has a special and particular quality such as being the oldest of its type or the best available example of its type
- 3) Is directly associated with a scientifically recognized important prehistoric or historic event or person

Under CEQA, evaluation of an archeological resource as an “historical resource” is privileged over the evaluation of the resource as a “unique archeological resource,” in that CEQA requires that “when a project will impact an archeological site, a lead agency shall first determine whether the site is an historical resource” (CEQA Sect. 15064.5 (c)(1)).

### ***Evaluation of an Archeological Resource Significance***

In requiring that a potentially affected archeological resource be evaluated as an historical resource, that is, as an archeological site of sufficient scientific value to be CRHR eligible, CEQA presupposes that the published guidance of the California Office of Historic Preservation (OHP) for CEQA providers is to serve as the methodological standard by which the scientific, and thus, the CRHR eligibility, of an archeological resource is to be evaluated. As guidance for the evaluation of the scientific value of an archeological resource, the OHP has issued two guidelines: *Archeological Resource Management Reports* (1989) and *Guidelines for Archeological Research Designs* (1991).

### ***Integrity of Archeological Resource***

Integrity is an essential criterion in determining that a resource, including an archeological resource, is an historical resource. In terms of CEQA, “integrity” can, in part, be expressed in the requirement that an historical resource must retain “the physical characteristics that convey its historical significance” (CEQA § 15064.5 (b)).

For an archeological resource that is evaluated for CRHR eligibility under Evaluation Criterion 4, has yielded or may be likely to yield information important to prehistory or history, integrity is conceptually

different than how it is usually applied to the built environment. For an historic building, possessing integrity means that the building retains the defining physical characteristics from the period of significance of the building. In archeology, an archeological deposit or feature may have undergone substantial physical change from the time of its deposition but it may yet have sufficient integrity to qualify as an historical resource. The integrity test for an archeological resource is whether the resource can yield sufficient data (in type, quantity, quality, diagnosticity) to address significant research questions. Thus, in archeology “integrity” is often closely associated with the development of a research design that identifies the types of physical characteristics (“data needs”) that must be present in the archeological resource and its physical context to adequately address research questions appropriate to the archeological resource.

### ***Significant Adverse Effect on an Archeological Resource***

The determination of whether an effect on an archeological resource is significant depends on the effect of the project on those characteristics of the archeological resource that make the archeological resource significant. For an archeological resource that is an historical resource because of its prehistoric or historical information value, that is, its scientific data, a significant effect is impairment of the potential information value of the resource.

The depositional context of an archeological resource, especially soils stratigraphy, can be informationally important to the resource in terms of datation and reconstructing the characteristics of the resource present at the time of deposition and interpreting the impacts of later deposition events on the resource. Thus, for an archeological resource eligible to be listed on the CRHR under Criterion 4, a significant adverse effect to its significance may not be limited to impacts on the artifactual material but may include effects on the soils matrix in which the artifactual matrix is situated.

### ***Mitigation of an Adverse Effect to an Archeological Resource***

Preservation in place is the preferred treatment of an archeological resource (*CEQA* and *Guidelines* Sect. 21083.2(b); 15126.4 (b)(3)(a)). When preservation in place of an archeological resource is not feasible, data recovery, in accordance with a data recovery plan prepared and adopted by the lead agency prior to any soils disturbance, is the appropriate mitigation (*CEQA* 15126.4 (b)(3)(C)). In addition to data recovery, under *CEQA*, the mitigation of effects to an archeological resource that is significant for its scientific value requires curation of the recovered scientifically significant data in an appropriate curation facility (*CEQA* 15126.4(b)(3)(C), that is, a curation facility compliant with the *Guidelines for the Curation of Archeological Collections* (California Office of Historic Preservation, 1993). Final studies reporting the interpretation,



results, and analysis of data recovered from the archeological site are to be deposited in the California Historical Resources Regional Information Center (*CEQA Guidelines* 15126.4(b)(3)(C)).

### ***Effects to Human Remains***

Under State law, human remains and associated burial items may be significant resources in two ways: they may be significant to descendant communities for patrimonial, cultural, lineage, and religious reasons and human remains may also be important to the scientific community, such as prehistorians, epidemiologists, and physical anthropologists. The specific stake of some descendant groups in ancestral burials is a matter of law for some groups, such as Native Americans (*CEQA Guidelines* 15064.5 (d), *Public Resources Code Sect. 5097.98*). In other cases, the concerns of the associated descendent group regarding appropriate treatment and disposition of discovered human burials may become known only through outreach. Beliefs concerning appropriate treatment, study, and disposition of human remains and associated burial items may be inconsistent and even conflict between descendent and scientific communities. *CEQA* and other State regulations concerning Native American human remains provide the following procedural requirements to assist in avoiding potential adverse effects to human remains within the contexts of their value to both descendant communities and the scientific community:

- When an initial study identifies the existence or probable likelihood that a project would impact Native American human remains, the lead agency is to contact and work with the appropriate Native American representatives identified through the Native American Heritage Commission (NAHC) to develop an agreement for the treatment and disposal of the human remains and any associated burial items (*CEQA Guidelines* 15064.5 (d), *Public Resources Code Sect. 5097.98*).
- If human remains are accidentally discovered, the county coroner must be contacted. If the county coroner determines that the human remains are Native American, the coroner must contact the NAHC within 24 hours. The NAHC must identify the most likely descendant (MLD) to provide for the opportunity to make recommendations for the treatment and disposal of the human remains and associated burial items. If the MLD fails to make recommendations within 24 hours of notification or the project applicant rejects the recommendations of the MLD, the Native American human remains and associated burial items must be reburied in a location not subject to future disturbance within the project site (*Public Resources Code Sect. 5097.98*).
- If potentially affected human remains/burial may have scientific significance, whether or not having significance to Native Americans or other descendent communities, then under *CEQA*, the appropriate

mitigation of effect may require the recovery of the scientific information of the remains/burial through identification, evaluation, data recovery, analysis, and interpretation (CEQA Guidelines 15064.5(c)(2)).

### ***Consultation with Descendant Communities***

Although not a requirement derived from CEQA, the cosmopolitan nature and history of San Francisco necessitates cultural management sensitivity to archeological remains associated with local indigenous, ethnic, overseas, and religious communities. On discovery of an archeological site<sup>13</sup> associated with descendant Native Americans, Overseas Chinese or, as appropriate any other community, the Environmental Review Officer (ERO) should seek consultation with an appropriate representative<sup>14</sup> of the descendant group with respect to appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. Documentary products resulting from archeological research of the descendant community associated with the site should be made available to the community.

### ***Prehistoric Setting***

This section describes the cultural changes in the San Francisco Bay Area. No discussion of the Clovis time (11,500 to 8000 calibrated Before Present [cal. B.P.]) is provided, as there has been no evidence related to this time found in the area, presumably because it has been submerged or buried (Milliken *et al.*, 2007). The sequence utilized here is very broad and includes the Lower, Middle, and Late Archaic periods, and the Emergent Occupation.

*Lower Archaic (8000 to 3500 cal. B.P.)* A generalized mobile forager pattern among prehistoric groups is characterized by portable milling stones, millingslabs (metates), and handstones (manos), as well as wide-stemmed projectile points. Archeobotanical remains suggest an economy focused on acorns.

*Middle Archaic (3500 to 500 cal. B.P.)* During the Middle Archaic there appears to be an increase in regional trade and possibly signs of sedentism. The first cut shell beads appear in mortuaries. Mortars and pestles are documented shortly after 4000 cal. B.P. Net sinkers are a typical marker for this time. The burial

---

<sup>13</sup> The term “archeological site” is intended here to minimally include any archeological deposit, feature, burial, or evidence of burial.

<sup>14</sup> An “appropriate representative” of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and, in the case of the Overseas Chinese, the Chinese Historical Society of America.

complexes with ornamental grave associations seem to represent a movement from forager to semi-sedentary land use (Milliken *et al.*, 2007).

*Upper Archaic (500 cal. B.P. to cal. Anno Domini [A.D.] 1050)* The Upper Archaic period shows continued specialization and an increase in the complexity of technology. Acorns and fish are the predominant food sources. New bone tools and ornaments appear, including whistles and barbless fish spears. Beads become very prominent with several types. Mortars and pestles continue to be the sole grinding tools. Net sinkers disappear at most sites. Mortuary practices change from a flexed position to an extended position.

*Emergent (cal. A.D. 1050 to Historic)* Many archeologists believe that craft specialization, political complexity, and social ranking were highly developed. New bead types and multi-perforated and bar-scored ornaments appear. The bow and arrow replace the dart and atlatl as the favored hunting tools (Moratto, 1984). Cultural traditions seem to be very similar to those witnessed at the time of European contact.

### ***Ethnographic Setting***

The proposed project lies within the territory occupied by the Native American group known to the Spanish as the Costanoan (Levy, 1978). The contemporary descendants of this group are members of the Ohlone Indian Tribe. The Costanoan group occupied the coast of California from San Francisco to Monterey and inland to include the coastal mountains from the southern side of the Carquinez Strait to the eastern side of the Salinas River south of the Chalone Creek.

Costanoan is a linguistic term for a family of eight related languages. Each language was spoken by a distinct group of people within a recognized geographic area. In the Martinez area the spoken language was Karkin. This language was spoken only in a very small area and probably all the speakers were related. Political units within each ethnic group were called tribelets and each tribelet contained between 50 and 500 people. Each tribelet had one or more permanent villages and probably several temporary camps within its territory.

The Costanoans were hunter gatherers, with acorns being the most important plant food. Various roots, nuts, berries, and seeds were important. The Costanoan group's practices managed burning of chaparral to encourage sprouting of seed plants and improve browsing for deer and elk. The favored animals for hunting were deer and rabbit. Whales and sea lions were eaten when found stranded on the beach.



Waterfowl were captured in nets using decoys. Important fish were steelhead, salmon, and sturgeon, and mussels and abalone were the preferred shellfish.

Dome thatched houses with rectangular doorways and a central hearth were the standard dwellings. Technology included tule balsa canoes, bows and arrows, and baskets.

### ***Historic Overview***

A number of Spanish expeditions passed through the area between 1769 and 1776, including those led by Portola, Fages, Anza, and Rivera. Although the exact routes of the early explorers cannot be determined, none are thought to have traveled near the project area (Milliken, 1995).

The Spanish government founded missions and secular towns with the land itself being held by the government. The Mexican government closed the missions in the early 1830s and former mission lands were given to individuals as land grants. These became large ranches primarily used for the raising of cattle. Agricultural pursuits continued to dominate the San Francisco Bay Area and the Santa Clara Valley even into the American Period (1869). Land grants were being divided for counties and railroad rights-of-way. Santa Clara County was one of the 27 original counties created on February 18, 1850 when California became a state. San Mateo County was extracted from a portion of San Francisco County in 1856.

### ***Archeological and Architectural Background Research***

Multiple record searches were conducted at the Northwest Information Center (NWIC) located at Sonoma State University in Rohnert Park, California. (File searches were conducted on 11/8/2011: 11-0454, 11-0440; 11/18/2011: 11-0482; and 11/14/2012: 12-0480.) The records searches identified 159 prior archeological and historical resource studies conducted within a 0.25-mile search extent of the proposed project. Forty-six studies intersect the Line 101 pipeline itself, and 11 of these are in portions of the proposed project. The 11 studies within the proposed project included 6 archeological surveys, 4 records/literature searches, and 1 monitoring report.

The records search identified 76 previously recorded resources within a 0.25-mile radius of the proposed project. These resources include: 15 prehistoric shell midden sites, 2 historic-era trash dumps/refuse deposits, 1 multi-component site, and 58 built environment resources. None of these previously recorded resources are located within the proposed project area. For the proposed project, the closest recorded resource is a prehistoric shell midden site CA-SMA-371 located approximately 100 meters (330 feet) west of the proposed project, adjacent to Lomita Park.

### ***Native American Consultation***

A sacred land file search request was submitted to the NAHC on October 21, 2011. A response letter dated November 2, 2011 stated that the search failed to identify the presence of Native American archeological resources within the project area but that contact information for eight appropriate Native American representatives was being provided for further identification efforts. Letters requesting concerns or information regarding the Lomita Park Regulator Station were sent to these Native American representatives on November 22, 2011, and was followed up by telephone calls on March 28, 2012. In response, Ms. Irene Zweirlein and Ms. Jean Feyling stated that the Lomita Park Regulator Station site area was potentially sensitive for prehistoric resources. In addition, Ms. Zweirlein requested that project construction personnel be instructed how to identify potential archeological resources. Letters were sent on January 3, 2012 regarding the pipeline portion of the project. Follow-up contact was made on April 27, 2012 to provide an updated scope of work and Area of Potential Effects (APE) maps. No particular concerns pertaining to the Line 101 upgrade project have been communicated.

### ***Field Surveys Results***

An historic assessment of the Lomita Park Regulator Station property was conducted because a rebuild of the control building is part of the proposed project. The property was purchased in the 1940s and the Lomita Park Regulator Station control building was constructed between 1946 and 1956. The Lomita Park Regulator Station control building was inventoried and evaluated in the *Cultural Resources Study for the Lomita Park, Martin, and Sullivan Regulator Stations Rebuild Project, San Mateo County, California*.<sup>15</sup> Far Western Anthropological Research Group, Inc. and PAR Environmental Services, Inc. determined that it does not meet the criteria for listing on the CRHR or NRHP. The archeological field surveys undertaken for the proposed project did not identify any surficial evidence of any prehistoric or historical archeological sites or isolates.

Line 101 is the oldest of the three main pipelines providing gas to the San Francisco Peninsula, and it has played an integral role in the Historic Era event of PG&E's initial natural gas delivery to the San Francisco Bay Area. The pipeline was constructed in 1929 and relocated from its original location on the east side of Highway 101 to the west side in the 1940s. The pipeline itself was not evaluated due to regulation 67 FR 16364-16365, which provides an exemption regarding historic preservation/Section 106 review for projects

---

<sup>15</sup> Far Western Anthropological Research Group, Inc. and PAR Environmental Services, Inc. *Cultural Resources Study for the Lomita Park, Martin, and Sullivan Regulator Stations Rebuild Project, San Mateo County, California*. Prepared for Pacific Gas and Electric Company, San Francisco, California. April 2012. This document is confidential and not for public distribution.

involving Historic Natural Gas pipelines. This exemption frees federal agencies from considering their effects on historic natural gas pipelines except in the case of specific types of abandonments/retirements. Abandonments wherein the lead federal agency is not required to take into account their effects on historic gas pipelines include minor abandonments. Such abandonments, by their nature, present much more limited, if not negligible, impacts on the pipeline as a whole. Because consideration and treatment of significant historical resources under State law is similar to that of federal law, the federal exemption is interpreted to apply in the case of PG&E gas transmission lines in California and may be used in compliance with CEQA.

An archeological pedestrian survey was conducted of all unpaved portions of the APE. This survey failed to identify any new archeological or historical resources.

### ***Buried Site Sensitivity Analysis***

The potential for buried prehistoric archeological sites in the project area was estimated based on the age and distribution of surface deposits combined with proximity to historic-era stream channels (i.e., distance to water). Because many Holocene-age alluvial fans and floodplains were formed after prehistoric people had occupied the region, these deposits have a general “geologic potential” to contain buried sites. Conversely, little or no potential exists for buried sites to occur in landforms that pre-date the Holocene because few, if any, people were present in the region. Previous studies have shown that prehistoric sites tend to be located within 200 meters (656 feet) or less of a known stream or other water source (Rosenthal and Meyer 2004, as cited by Far Western, 2013). Thus, Holocene-age deposits located within 200 meters of a historic-era water source are considered to have an elevated (i.e., high) potential to contain buried sites.

Historical maps show that areas in the project vicinity were located within the tidal flat of San Francisco Bay approximately 50 meters (164 feet) east of the former shoreline. Typically, Bay Mud deposits have a low potential for archeological deposits because they did not represent a stable occupyable land surface. However, where Middle to Late Holocene Bay Mud sediments are near former shorelines or paleo shorelines there is an increased potential for prehistoric remains to be present and under those conditions. The wet, slow action of tidal flats is often comparatively preservative of prehistoric deposits. The potential for buried prehistoric deposits within the project area is estimated to be very low in the archeological study prepared for the project based on the geological setting of the site within bay flats and late Bay Mud



deposits. However, models recently prepared of Holocene Sea Level Rise<sup>16</sup> indicate that the shoreline and, thus, land surface available for prehistoric occupation has shifted considerably within the Late Holocene. The elevation of the mean bay water level was 1 meter (3.3 feet) lower than at present 2,000 years B.P. and 2.5 (8.2 feet) meters lower 3,000 years B.P. suggesting that the project area was a stable, occupiable land surface prehistorically at a time in which there was a strong tendency for prehistoric settlements to be located along or near the shorelines and estuaries around the Bay.

Bearing on the potential archeological sensitivity of the project site is a nearby prehistoric shell midden deposit (CA-SMA-371) stratigraphically located over creek mud deposits consisting of a 1-meter-thick sandy clay matrix. The shell midden deposit was estimated to be 11 by 5 meters in area. Given the proximity of CA-SMA-371 and its depositional setting within a former creek channel, the sensitivity of the project site for the presence of prehistoric deposits is moderately likely, especially taking into additional consideration the rise in sea level within the last 3,000 years, which assumedly submerged many former prehistoric occupation or activity sites.

### ***Paleontological Setting***

The information provided here, including the results of the records search, is based on the Paleontological Resources Technical Report for the Line 101 ILI and Lomita Park Regulator Station Rebuild Project.<sup>17</sup> As described in this report, the proposed project is underlain by the following geologic units, from youngest to oldest: Holocene-age artificial fill and the Pleistocene-age Colma Formation.

Artificial fill in the San Francisco Bay Area has been deposited during the last 200 years. The thickness is variable and may exceed 300 feet in places. Some areas of fill are compacted and firm, but fill placed before 1965 is generally uncompacted. These Holocene deposits contain only the remains of extant, modern taxa, which are not considered “unique” paleontological resources. As a result, these deposits do not contain paleontological resources and are not considered to be paleontologically sensitive.

The Colma Formation is from the Pleistocene, and likely represents depositional episodes from several different sea levels. Sediments may have been carried from an ancient drainage of the Sacramento River. No fossils have been reported to the University of California, Berkeley from the proposed project area, but

---

<sup>16</sup> Far Western Anthropological Research Group, Inc. Archaeological Research Design and Treatment Plan for the Central SoMa Plan Area. Prepared for Randall Dean, Archeologist, Environmental Planning Division, San Francisco Planning Department. December 2013. This document is confidential and not for public distribution.

<sup>17</sup> AECOM. *Paleontological Resources Technical Report Line 101 ILI Upgrade and Lomita Park Regulator Station Rebuild Project*. Prepared for Pacific Gas and Electric Company, Walnut Creek, California. April 2013. This document is confidential and not for public distribution.

several vertebrate fossil specimens of mammoth, bison, and ground sloth have been recovered from the San Francisco Peninsula within the Colma Formation. Therefore, this geologic formation is considered to be paleontologically sensitive, and project-related earthmoving activities in this formation could result in damage to or destruction of unique paleontological resources.

## IMPACT DISCUSSION

### **Impact CP-1: The proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5. (No Impact)**

This project proposes to retire approximately 3,300 feet of pipeline, which is part of the 44-mile-long Line 101. This project is an instance of a minor retirement given the small percentage of the pipeline that would be retired and replaced. With this, given that natural gas pipelines exhibit considerable redundancy and uniformity in form over their entire extent, this minor retirement/replacement will not affect the integrity of the pipeline as a whole as a historic property or jeopardize adequate documentation of the pipeline in the future. Adding to this, over time the pipeline has been modified and repaired, but the function has remained the same. This ongoing modification and maintenance are mechanisms of a functioning gas transmission system and do not diminish the integrity of the resource; the retirement/replacement is considered part of this ongoing maintenance and will not cause a significant adverse change to the pipeline.

The Lomita Park Regulator Station property was purchased in the 1940s and the Lomita Park Regulator Station control building was constructed between 1946 and 1956. Because a rebuild of the control building is part of the proposed project, it was inventoried and evaluated in the *Cultural Resources Study for the Lomita Park, Martin, and Sullivan Regulator Stations Rebuild Project, San Mateo County, California*. Far Western Anthropological Research Group, Inc. and PAR Environmental Services, Inc. determined that it does not meet the criteria for listing on the CRHR or NRHP. The integrity of the control building has been compromised by the removal of some original equipment and the addition of a dehydrator and regulator rack. Because the Lomita Park Regulator Station does not meet the criteria for listing on the CRHR or NRHP and no other historical resources are present within the proposed project, no impact would occur.

### **Impact CP-2: The proposed project could cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5. (Less than Significant with Mitigation)**

Efforts to locate archeological resources in the proposed project vicinity included conducting a records search and background research, consultation with the local Native American community, a pedestrian survey of the unpaved portions of the pipeline corridor, and a buried archeological site sensitivity analysis.

Additional methods included monitoring of preconstruction pothole excavations in locations deemed to be archeologically sensitive.

There are no known archeological resources within the proposed project area. The proposed project is located within a region with low to moderate potential for buried archeological resources that could be impacted during ground-disturbing activities. However, with the implementation of **Mitigation Measure M-CP-2: Archeological Monitoring**, this impact would be reduced to a less-than-significant level.

#### **Mitigation Measure M-CP-2: Archeological Monitoring**

Based on the reasonable potential that archeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. PG&E shall retain the services of an archeological consultant from the rotational Qualified Archeological Consultants List (QACL) maintained by the Planning Department archeologist. PG&E shall contact the Department archeologist to obtain the names and contact information for the next three archeological consultants on the QACL. The archeological consultant shall undertake an archeological monitoring program. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for a maximum of four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less-than-significant level potential effects on a significant archeological resource as defined in CEQA Guidelines Sect. 15064.5 (a)(c).

*Archeological Monitoring Program (AMP)*. The archeological monitoring program shall minimally include the following provisions:

- The archeological consultant, PG&E, and ERO shall meet and consult on the scope of the AMP reasonably prior to any project-related soils-disturbing activities commencing. The ERO in consultation with the project archeologist shall determine what project activities shall be archeologically monitored. In most cases, any soils-disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring, etc.), site remediation, etc., shall require archeological monitoring because of the potential risk these activities pose to archeological resources and to their depositional context.
- The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archeological resource.
- The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with the archeological consultant, determined that project construction activities could have no effects on significant archeological deposits.
- The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis.

- If an intact archeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction crews and heavy equipment until the deposit is evaluated. If in the case of pile driving activity (foundation, shoring, etc.), the archeological monitor has cause to believe that the pile driving activity may affect an archeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO and the PG&E Cultural Resource Specialist of the encountered archeological deposit. The archeological consultant shall, after making a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit, present the findings of this assessment to the ERO.

*Consultation with Descendant Communities.* On discovery of an archeological site associated with descendant Native Americans or the Overseas Chinese, an appropriate representative of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to consult with the ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the Final Archeological Resources Report shall be provided to the representative of the descendant group.

If the ERO in consultation with the archeological consultant determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of PG&E, either:

- the proposed project shall be re-designed so as to avoid any adverse effect on the significant archeological resource; or
- an archeological data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

If an archeological data recovery program is required by the ERO, the archeological data recovery program shall be conducted in accordance with an archeological data recovery plan (ADRP). The project archeological consultant, PG&E, and ERO shall meet and consult on the scope of the ADRP. The archeological consultant shall prepare a draft ADRP that shall be submitted to the ERO for review and approval. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- *Field Methods and Procedures.* Descriptions of proposed field strategies, procedures, and operations
- *Cataloguing and Laboratory Analysis.* Description of selected cataloguing system and artifact analysis procedures
- *Discard and Deaccession Policy.* Description of and rationale for field and post-field discard and deaccession policies



- *Interpretive Program.* Consideration of an on-site/off-site public interpretive program during the course of the archeological data recovery program
- *Security Measures.* Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities
- *Final Report.* Description of proposed report format and distribution of results
- *Curation.* Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities

*Human Remains, Associated or Unassociated Funerary Objects.* The treatment of human remains and of associated or unassociated funerary objects discovered during any soils-disturbing activity shall comply with applicable State and federal laws, including immediate notification of the coroner of the City and County of San Francisco, along with the ERO and PG&E Cultural Resource Specialist, and in the event of the coroner's determination that the human remains are Native American remains, notification of the NAHC, who shall appoint an MLD (Pub. Res. Code Sec. 5097.98). The archeological consultant, PG&E, ERO, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines. Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, curation, possession, and final disposition of the human remains and associated or unassociated funerary objects.

*Final Archeological Resources Report.* The archeological consultant shall submit a Draft Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the draft final report.

Copies of the Draft FARR shall be sent to the ERO for review and approval. Once approved by the ERO copies of the FARR shall be distributed as follows: California Archeological Site Survey NWIC shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Environmental Planning Division of the Planning Department shall receive one bound, one unbound, and one unlocked, searchable PDF copy on CD of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the NRHP/CRHR. In instances of high public interest or interpretive value, the ERO may require a different final report content, format, and distribution than that presented above.

**Impact CP-3: The proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Less than Significant with Mitigation)**

Holocene deposits contain only the remains of extant, modern taxa, which are not considered "unique" paleontological resources, and the artificial fill in the proposed project consists of debris deposited in the San Francisco Bay Area within the last 200 years. As a result, these deposits do not contain paleontological resources and are not considered to be paleontologically sensitive. Therefore, ground-disturbing activities

associated with the proposed project within these deposits would have no impact on unique paleontological resources.

Several vertebrate fossil specimens of mammoth, bison, and ground sloth have been recovered from the San Francisco Peninsula within the Colma Formation. Therefore, this geologic formation is considered to be paleontologically sensitive, and project-related earthmoving activities in this formation can result in damage to or destruction of unique paleontological resources. However, with implementation of **Mitigation Measure M-CP-3: Unanticipated Discoveries for Paleontological Resources**, this impact would be reduced to a less-than-significant level.

**Mitigation Measure M-CP-3: Unanticipated Discoveries for Paleontological Resources**

If construction crews discover fossils or fossil-like material during excavation and/or earthmoving operations, all earthwork and other types of ground disturbance within 50 feet of the find shall stop immediately until a qualified paleontologist, as defined by the Society of Vertebrate Paleontology guidelines, can assess the nature and importance of the find. Based on the uniqueness of the find, the qualified paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may also include preparation of a report describing the finds. Fossil remains collected during monitoring and/or salvage shall be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections, and a paleontological report shall be written. The paleontologist's recommendations shall be subject to review and approval by the ERO or designee.

**Impact CP-4: The proposed project has the potential to disturb human remains, including those interred outside of formal cemeteries. (Less than Significant with Mitigation)**

No evidence of human remains in the proposed project was found in documentary research, and buried human remains are extremely unlikely to be present within the project area. Nevertheless, unknown prehistoric burials may exist and may be uncovered during ground-disturbing activities associated with project construction. California law recognizes the need to protect interred human remains, particularly Native American burials and associated items of patrimony, from vandalism and inadvertent destruction. With the implementation of **Mitigation Measure M-CP-2: Archeological Monitoring**, described above, this impact would be reduced to a less-than-significant level.

**Impact C-CP-1: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area, would result in a significant cumulative cultural and paleontological resources impact. (Less than Significant with Mitigation)**

The geographic scope of potential cumulative impacts on archeological and historical resources encompasses all past and present development (refer to Table 3) within 1.1 miles of the proposed project site. All cumulative projects identified are assumed to cause some degree of ground disturbance during construction with the potential for impacts to historic, archeological, and paleontological resources. It is, however, important to note that impacts to historic, archeological, and paleontological resources are site-specific and, as such, are not expected to combine with the development of other projects to cumulatively increase the risk of impacting these resources for the proposed project. Potential impacts for these resources are mitigated on a case-by-case basis. As previously discussed, construction of the proposed project is anticipated to have less-than-significant impacts to cultural and paleontological resources, and human remains with implementation of the proposed mitigation measures. With implementation of **Mitigation Measures M-CP-2: Archeological Monitoring and M-CP-3: Unanticipated Discoveries for Paleontological Resources**, the proposed project's contribution to cumulative impacts related to historical, archeological, and paleontological resources would be reduced to a less-than-cumulatively-considerable level.

## E.5. TRANSPORTATION AND CIRCULATION

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant Impact with Mitigation Incorporated</u>	<u>Less than Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>5. TRANSPORTATION AND CIRCULATION – Would the project:</b>					
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways??	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Construction-related impacts generally would not be considered significant due to their temporary and limited duration.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## ENVIRONMENTAL SETTING

The proposed project is located in northern San Mateo County, west of SFO and U.S. Highway 101, and east of the Caltrain right-of-way (i.e., railroad tracks that are owned and operated by the Peninsula Corridor Joint Powers Board). The backbone of the regional transportation system in the project vicinity is U.S. Highway 101, which would be used to access the project site during construction and operation. U.S. Highway 101 is a major coastal north-south route that links Los Angeles, the central coast, the San Francisco Bay Area, and the north coast.

The local transportation system in the project vicinity includes county-maintained and city-maintained roadways. Table 4: Summary of Project Study Area Roadway Characteristics summarizes the characteristics of relevant regional and local roadways in the project area that would most likely be used for access to the project. Table 4 also denotes applicable construction vehicle access gates, as depicted on Figure 3 (p. 1 to 6). Please note that alternative routes are available and may be utilized, if necessary.

Significance criteria (including thresholds of significance) commonly used by the San Francisco Planning Department to assess whether a proposed project would result in significant impacts to the transportation network typically expand upon and overlap with the Appendix G checklist provided above. However, expansion of analysis included in the Appendix G checklist is typically suggested for those projects that may result in ongoing, long-term impacts associated with project operation. In the case of the proposed project, construction would be limited to short-term, temporary impacts, and as such, a quantitative assessment of traffic level of service and travel demand related to public transit, pedestrians, bicyclists, commercial loading, and parking is not used for the analysis.

Following construction, PG&E would restore excavated areas to their general preconstruction conditions, with some additional improvements of private access roads and the expansion of the Lomita Park Regulator Station. Because the proposed project involves modifications to existing facilities, operations and maintenance activities would be similar in manner and consistent with current conditions. Therefore, project operation would not affect the transportation network.

The project would not result in operational impacts on traffic, and this discussion focuses solely on the potential short-term transportation-related effects of construction—including the temporary construction-related impact on traffic operations (including transit, emergency access), pedestrian/bicycle facilities, and parking. As indicated in the significance criteria included above, construction-related transportation

**TABLE 4: SUMMARY OF PROJECT STUDY AREA ROADWAY CHARACTERISTICS**

Roadway	Jurisdiction	Classification	Lanes	Annual Average Daily Traffic Volume <sup>1</sup> (Vehicles)	Peak-Hour Traffic Volume (Vehicles)	Physical Relationship to Project	Project Access Gate(s)	Utilized by Transit Services (Yes/No)
U.S. Highway 101 (at Millbrae Avenue)	California Department of Transportation (Caltrans)	Interstate	8	245,000	17,300	Access Road	Gates A, B, E, G and H	Yes
U.S. Highway 101 (at San Francisco International Airport/San Bruno Avenue)	Caltrans	Interstate	8	245,000	17,000	Access Road	Gates A, B, E, G and H	Yes
U.S. Highway 101 (at Interstate 380)	Caltrans	Interstate	8	230,000	16,700	Access Road	Gates A, B, E, G and H	Yes
San Bruno Avenue	City of San Bruno	Arterial	4	N/A	N/A	Access Road	Gate H	Yes
El Camino Real	City of San Bruno and City of Millbrae	Arterial	6	N/A	N/A	Access Road	Gates E, G, and H	Yes
Millbrae Avenue	City of Millbrae	Arterial	8	N/A	N/A	Access Road	Gates A and B	Yes
1 <sup>st</sup> Avenue (terminus)	City of San Bruno	Local	2	N/A	N/A	Access Road	Gate H	No
3 <sup>rd</sup> Avenue	City of San Bruno	Local	2	N/A	N/A	Access Road	Gate H	No
Pine Street	City of San Bruno	Local	2	N/A	N/A	Access Road	Gate H	No
Madrone Street	City of Millbrae	Local	2	N/A	N/A	Access Road	Gate G	No
Center Street	City of Millbrae	Local	2	N/A	N/A	Access Road	Gates G and E	No
Monterey Street	City of Millbrae	Local	2	N/A	N/A	Access Road	Gates G and E	No
Santa Paula Avenue	City of Millbrae	Local	2	N/A	N/A	Access Road	Gate E	No

Roadway	Jurisdiction	Classification	Lanes	Annual Average Daily Traffic Volume <sup>1</sup> (Vehicles)	Peak-Hour Traffic Volume (Vehicles)	Physical Relationship to Project	Project Access Gate(s)	Utilized by Transit Services (Yes/No)
Aviador Avenue (terminus)	City of Millbrae	Local	2	N/A	N/A	Access Road	Gates A and B	No
Rollins Road	City of Millbrae	Local	7	N/A	N/A	Access Road	Gates A and B	Yes

Note: N/A = not available

<sup>1</sup> Caltrans provides “back” peak-hour and annual average daily traffic (AADT) and “ahead” peak-hour and AADT traffic volumes. “Back” represents traffic south or west of the count location and “ahead” represents traffic north or east of the count location. For the purposes of this analysis, the highest peak hour and AADT traffic volumes, regardless if they are “back” or “ahead,” are represented in this table.

Sources: Caltrans 2012, City of Millbrae 1998, City of San Bruno 2009, GoogleEarth 1993, San Mateo County Transit District 2014

impacts are not generally considered significant because of their temporary duration and limited scope. The construction-related information used for the analysis is based on current project specifications, including construction durations (refer to Section A, Project Description), discussions with PG&E about the proposed specifications, and similar construction projects.

Construction of the project elements would generate vehicle traffic (construction workers' vehicles, equipment, and trucks) traveling to and from the access gates on local and regional roadways. Project construction is estimated to occur over approximately 38 weeks (10 weeks for pipeline replacement activities and 28 weeks for Lomita Park Regulator Station rebuild activities).

## IMPACT DISCUSSION

**Impact TR-1: The proposed project would not 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. (Less than Significant)**

Construction activities would occur within relatively undeveloped parcels and would not be conducted within regional or local roadways. Anticipated construction-related traffic impacts would be related to truck routes and project site access routes. The roadways that could potentially be affected by temporary and short-term construction-related traffic are provided in Table 4. Construction vehicles and equipment would be staged within the undeveloped Aviator Avenue staging area, located between Highline Canal and Millbrae Avenue. Construction vehicles would not block potential access to nearby land uses, including residences, parks, etc.

Construction of the proposed project would generate approximately 365 total equipment-related trips, anticipated to be at various periods throughout the 10- and 28-week construction schedules for pipeline replacement activities and Lomita Park Regulator Station rebuild activities, respectively. On average, construction for both the pipeline replacement and Lomita Park Regulator Station rebuild phases would generate approximately one to two equipment-related trips daily. In addition, construction of the proposed project would generate up to 40 trips per day from construction personnel, using a conservative assumption that 20 crewmembers would travel to and from the project site daily for each phase of construction.<sup>18</sup>

---

<sup>18</sup> As described in Section A, Project Description, Subsection A.3.4, the proposed project would have an average of approximately 20 crewmembers present on-site each day during construction; however, the specific number of



These impacts would be intermittent and temporary in nature, and would not be considered substantial. Similarly, although construction activities may generate increases in traffic on interstate highways, state routes, and local roads listed in Table 4, impacts would be temporary, short-term in nature, and as such, would be considered less than significant. Implementation of **Improvement Measure I-TR-1: Best Management Practices for Work Zone Barriers**, including installing appropriate barriers between work zones and transportation facilities, posting of adequate signage, and establishing adequate on- and off-site parking and staging areas, would serve to further reduce impacts. In addition, construction management contact information would be posted on-site for the public to call with questions and local businesses/residence would be notified of phases of construction in their area.

**Improvement Measure I-TR-1: Best Management Practices for Work Zone Barriers**

PG&E shall require the contractor to implement best management practices for work zone barriers, including, but not limited to the installation of appropriate barriers between work zones and transportation facilities, posting of adequate signage, establishment of adequate on- and off-site parking and staging areas, posting of construction management contact information, and notification to local businesses/residences regarding construction phases and scheduling.

*Transit.* As indicated in Table 4, the following roadways would be potentially utilized by construction vehicles and would overlap with existing transit routes: Highway 101 (SamTrans route KX), San Bruno Avenue (SamTrans routes 140, 49, and 398), Millbrae Avenue/Rollins Road near the Millbrae Caltrain transit station (SamTrans route 397), and El Camino Real (SamTrans routes ECR and 43). There are no SamTrans bus stops within the vicinity of proposed project access locations, which are described in Section A, Project Description, Subsection A.4.4, nor are any located near the Aviator Avenue staging area, which is located between Highline Canal and Millbrae Avenue.

Additional transit person-trips generated by construction personnel travelling from surrounding San Francisco Bay Area communities to the project site would be dispersed between the BART, Caltrain, and SamTrans service providers. The proposed project's construction would not noticeably affect transit service or operations in the project area, including on roadways to/from access gates.

*Pedestrians.* Construction activities would occur within relatively undeveloped parcels and would not be conducted within public sidewalks or otherwise interfere with pedestrian accessibility. The proposed project would not include sidewalk narrowing, roadway widening, removal of center medians, or other

---

crewmembers would vary depending on the nature of work activities. The above discussion assumes that all construction personnel would drive their own personal vehicles separately to and from the proposed project site each day. However, more likely, construction personnel would carpool to work and/or may choose to use various alternative public transit options.

conditions that could create potentially hazardous conditions or otherwise interfere with pedestrian accessibility to the site and adjoining areas.

*Bicycles.* The City of San Bruno's existing bicycle facilities consist of designated routes that share roadways with motorized vehicles. Such routes are Class III bicycle facilities, which are facilities designed as bicycle routes with no bicycle lane markings on the pavement, and Class II bicycle routes, which have markings within the roadway for use by bicyclists. None of these routes are located within the project vicinity (City of Millbrae, 1998; City of San Bruno, 2009).

*Parking.* The project would not permanently remove any parking spaces. During the first phase of construction (summer 2014), approximately 20 parking spaces, located at the public parking lot at Lions Park (adjacent to Gate H, refer to Figure 3 (p. 1 of 6)) may be temporarily used for approximately two to three weeks for the purposes of staging equipment needed for the Lomita Park Regulator Station rebuild activities. During this short time, displaced Lions Park visitors would be required to park vehicles on nearby public streets, increasing local competition for residential street parking. In addition, construction workers would utilize available public street parking near the Lomita Park Regulator Station and/or along the Line 101 pipeline alignment for personal vehicles, as needed, throughout both phases of the project (10- and 28-week construction schedule durations for pipeline replacement activities and Lomita Park Regulator Station rebuild activities, respectively). However, as indicated above, it is anticipated that an average of approximately 20 crewmembers would be present on-site each day and crew members would likely carpool and/or choose to use alternative modes of travel such as public transit. In addition, as discussed above, construction-related impacts, including the temporary loss of parking, is considered less than significant due to its temporary and limited nature.

**Impact TR-2: The proposed project would not conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. (Less than Significant)**

To evaluate the performance of congestion, a grading system is used to compare the traffic volume carried by a road with the capacity of that road. The volume/capacity ratio is an indicator of traffic conditions, speeds, and driver maneuverability. Table 4 presents roadway traffic flow characteristics for level of service (LOS). See Table 5: Definitions of Project Study Area Roadway Characteristics for an explanation of LOS designations.

**TABLE 5: DEFINITIONS OF PROJECT STUDY AREA ROADWAY CHARACTERISTICS**

LOS <sup>1</sup>	V/C <sup>2</sup> Ratio	Traffic Flow Characteristics
A	0.00 – 0.60	Free flow; insignificant delays
B	0.61 – 0.70	Stable operation; minimal delays
C	0.71 – 0.80	Stable operation; acceptable delays
D	0.81 – 0.90	Approaching unstable flow; queues develop rapidly but no excessive delays
E	0.91 – 1.00	Unstable operation; significant delays
F	>1.00	Forced flow; jammed conditions

Notes:

<sup>1</sup> LOS is level of service, which refers to the standard of operation of a particular roadway, intersection, or freeway.

<sup>2</sup> V/C is volume/capacity ratio, which is an indicator of traffic conditions, speeds, and driver maneuverability.

Source: Transportation Research Board 2000

The California Department of Transportation considers LOS D or better on State highway segments to be acceptable for planning purposes. Currently, U.S. Highway 101 (at Millbrae Avenue), U.S. Highway 101 (at SFO), and U.S. Highway 101 (at Interstate 380) are operating at LOS F.

As discussed under Impact TR-1, potential temporary, short-term, and periodic traffic congestion impacts would be less than significant and would be further reduced by implementation of **Improvement Measure I-TR-1: Best Management Practices for Work Zone Barriers**.

**Impact TR-3: The proposed project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. (No Impact)**

The project would not require the use of helicopters or any other equipment that would increase air traffic levels; therefore, there would be no impact.

**Impact TR-4: The proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (No Impact)**

A portion of an existing private access road will be realigned to accommodate the Lomita Park Regulator Station expansion, one new private access road will be established, and some of the existing private access roads within the project boundaries may require repair. No public roadways would require construction and, therefore, the project would not create hazards due to design features or incompatible uses. Therefore, there would be no impact.

**Impact TR-5: The proposed project would not result in inadequate emergency access. (Less than Significant)**

Emergency access routes will be maintained throughout project construction. As discussed above, construction-related activities would not alter emergency vehicle access to the project site, which would remain similar to existing conditions. Implementation of best management practices, as indicated in **Improvement Measure I-TR-1: Best Management Practices for Work Zone Barriers**, including the required notification of local emergency service providers regarding the timing, location, and duration of construction activities; posting of adequate signs; and establishment of adequate on- and off-site parking and staging areas, would further reduce the less-than-significant construction impacts on emergency vehicle access.

**Impact TR-6: The proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks). (Less than Significant)**

As discussed above under Impact TR-1, the proposed project will not conflict with any policies, plans, or programs that support alternative transportation (e.g., bus turnouts or bicycle racks) because construction-related activities will occur within relatively undeveloped parcels and would not be conducted within public sidewalks or roadways. The proposed project's construction would not noticeably affect transit service or operations in the project area, including on roadways to/from access gates.

**Impact TR-7: Construction-related impacts generally would not be considered significant due to their temporary and limited duration. (Less than Significant)**

As discussed above under Impact TR-1, construction-related impacts would be temporary and short-term in nature; therefore, these impacts are considered less than significant.

**Impact C-TR-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not result in cumulative impacts to transportation. (Less than Significant)**

The proposed project's contribution to area traffic would be limited to a minor increase in vehicular traffic on roadways in the proposed project vicinity during the construction period. This minor increase would be temporary and managed through the implementation of best management practices, as described in **Improvement Measure I-TR-1: Best Management Practices for Work Zone Barriers**. As described above, this minor increase would not represent a substantial increase in traffic volumes on local roads, or use of



public transit, bicycle and pedestrian facilities, parking facilities, or emergency access. Because the proposed project involves modifications to existing facilities on an undeveloped parcel, it would not result in increased vehicle traffic after construction is completed. Under cumulative conditions, the proposed project would not alter demand or facilities for existing or planned multimodal transportation options. Therefore, the proposed project's contribution to cumulative traffic impacts would be less than cumulatively considerable.

## E.6.NOISE

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>6. NOISE –Would the project:</b>					
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Be substantially affected by existing noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not near a private airstrip, nor does the proposed project include development of any noise-sensitive uses that could be substantially affected by existing noise levels. Therefore, significance criteria E.6(f) and E.6(g) above are not applicable.

## ENVIRONMENTAL SETTING

San Francisco International Airport is located directly east of the project site. The Airport Land Use Compatibility Plan establishes a noise contour map for SFO that represents the projected noise exposure of the area. The 65-decibel (dB) contour is the outermost noise boundary, representing the lowest noise area surrounding the airport. A portion of the proposed project alignment is within the 65-dB to 70-dB airport noise contour range. BART aerial structures and tracks transect the parcels, and single-family homes are located adjacent to the property. Noise and vibration sources in the project vicinity include vehicular traffic

from U.S. Highway 101 (e.g., motors, horns, and braking), Caltrain rail service (passing trains, braking), SFO operations (airplane departure and landing), and other miscellaneous noise and vibration generated in a highly urban environment. Sensitive receptors near the proposed project include single-family homes located approximately 100 to 800 feet west of the project site and Lions Park, which is located approximately 150 feet north (refer to Figure 3 [p. 1 of 6]).

Proposed project construction has the potential to result in short-term noise increases that could be in excess of local noise ordinances and standards. Because the CPUC has exclusive jurisdiction over project siting, design, and construction of the proposed project, it is not subject to local regulations. This section includes a summary of local standards or ordinances related to noise in the project area for informational purposes and to assist with the CEQA review process. Local ordinances regarding construction time and any applicable noise limits are presented in Table 6: Local Ordinance Time Limits and Noise Standards.

**TABLE 6: LOCAL ORDINANCE TIME LIMITS AND NOISE STANDARDS**

Jurisdiction	Construction Time Limits			Noise Limit for Construction Occurring Within Time Limits
	Weekdays	Saturdays	Sundays	
City and County of San Francisco <sup>19</sup>	7 a.m. to 8 p.m.	7 a.m. to 8 p.m.	7 a.m. to 8 p.m.	80 dB (L <sub>max</sub> ) at 100 feet <sup>20</sup>
San Mateo County <sup>21</sup>	7 a.m. to 6 p.m.	9 a.m. to 5 p.m.	—	None <sup>22</sup>
City of Millbrae <sup>23</sup>	7:30 a.m. to 7 p.m.	8 a.m. to 6 p.m.	9 a.m. to 6 p.m.	60 dBA L <sub>dn</sub> 75 dBA L <sub>dn</sub>

Notes:

L<sub>max</sub> = maximum sound level; dBA = A-weighted decibels; L<sub>dn</sub> = day-night equivalent level

<sup>19</sup> San Francisco Police Code Article 29

<sup>20</sup> San Francisco Police Code Article 29 Sec. 2905. Construction occurring outside the stated times may not create noise levels in excess of ambient noise by 5 dBA at the nearest property plane.

<sup>21</sup> San Mateo County Code of Ordinances Chapter 4.88

<sup>22</sup> San Mateo County Code of Ordinances Chapter 4.88.360 exempts noise sources associated with demolition, construction, repair, remodeling, or grading of any real property, provided said activities do not take place between the hours of 6 p.m. and 7 a.m. weekdays, 5 p.m. and 9 a.m. on Saturdays or at any time on Sundays, Thanksgiving, and Christmas.

<sup>23</sup> Millbrae Municipal Code Section 9-2.02

## IMPACT DISCUSSION

**Impact NO-1: The proposed project would not 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. (Less than Significant)**

Construction hours are proposed to be six days per week from approximately 7:30 a.m. to 5:30 p.m.; however, some activities, such as hydrostatic testing, may occur outside of these hours. These construction hours would be consistent with City of Millbrae ordinance time limits. Evening construction could occasionally occur, if necessary, for safety or electrical clearance purposes.

Equipment used during construction of the proposed project would generate noise. The noise levels of primary concern are those associated with the site preparation and excavation phases because the equipment used for clearing, grading, excavating, and removing material from the site usually generates the highest noise levels (typically 85 dB  $L_{max}$  at 50 feet) and are operated in the open conditions. Maximum noise exposure from assumed worst-case project construction is not expected to exceed 85 dB ( $L_{max}$ ) at a distance of 50 feet.<sup>24</sup> At a distance of 100 feet from the source, the noise level would be attenuated to approximately 79 dB ( $L_{max}$ ) due to spherical divergence (spreading loss). Because the nearest sensitive receptors (residences and parks) are located over 100 feet from the proposed project, noise from construction activities is not expected to exceed the 80 dB ( $L_{max}$ ) noise-level limit established by the noise control ordinance. Therefore, this impact would be considered less than significant.

**Impact NO-2: The proposed project would not result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. (Less than Significant)**

Construction of the proposed project would involve some ground-disturbing activities, including drilling, excavation, grading, and clearing, that would generate some localized groundborne vibration and noise; however, the groundborne vibration or noise generated by these temporary and short-term activities is not anticipated to be excessive. Construction activities resulting in minor groundborne vibration and noise are expected to occur only during daylight hours, and generally more than 100 feet from residences and parks. Therefore, this impact would be considered less than significant.

---

<sup>24</sup> Generally speaking, when addressing maximum noise exposure in terms of the  $L_{max}$ , the reference noise level from the loudest source of noise (e.g., loudest piece of construction equipment) is used to complete the analysis. This is consistent with the Federal Highway Administration RCNM analysis procedure.



**Impact NO-3: The proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. (No Impact)**

Proposed project construction would create temporary and short-term noise-related impacts, which would cease once construction is completed. Project operations would result in no change to ambient noise conditions. Therefore, the proposed project would not result in a permanent increase in noise relative to ambient noise levels in the project area, and there would be no impact.

**Impact NO-4: The proposed project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. (Less than Significant)**

Existing ambient noise levels in the area are due to active SFO operations, the nearby BART train, and Highway 101. Construction activities would result in minor temporary and short-term intermittent increases in noise levels relative to ambient conditions in the project vicinity. Therefore, this impact would be considered less than significant.

**Impact NO-5: The proposed project would not expose people residing or working within 2 miles of SFO to excessive noise levels. (No Impact)**

Implementation of the proposed project would not result in increased levels of noise from airport operations. There would be no impact.

**Impact C-NO-1: The proposed project, in combination with past, present, and reasonably foreseeable projects in the vicinity, would not have a significant cumulative noise impact. (Less than Significant)**

Construction activities would result in minor temporary and short-term intermittent increases in noise levels relative to ambient conditions in the project vicinity. There would be no change to the ambient noise levels from operation of the project. Therefore, the proposed project's contribution to cumulative noise impacts would be less than cumulatively considerable.

## E.7.AIR QUALITY

<i>Topics:</i> _____	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>7. AIR QUALITY – Would the project:</b>					
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## ENVIRONMENTAL SETTING

The project area is located in San Mateo County, which is part of the San Francisco Bay Area Air Basin (SFBAAB). The Bay Area Air Quality Management District (BAAQMD) is the regional agency with jurisdiction over the nine-county SFBAAB, which includes San Francisco, Alameda, Contra Costa, Marin, San Mateo, Santa Clara, and Napa counties and portions of Sonoma and Solano counties. The BAAQMD is responsible for attaining and maintaining air quality in the SFBAAB within federal and State air quality standards, as established by the federal Clean Air Act (CAA) and the California Clean Air Act (CCAA), respectively. Specifically, the BAAQMD has the responsibility to monitor ambient air pollutant levels throughout the SFBAAB and to develop and implement strategies to attain the applicable federal and State standards. The CAA and the CCAA require plans to be developed for areas that do not meet air quality standards, generally. The most recent air quality plan, the *2010 Clean Air Plan*, was adopted by the BAAQMD on September 15, 2010. The *2010 Clean Air Plan* updates the *Bay Area 2005 Ozone Strategy* in accordance with the requirements of the CCAA to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter, air toxics, and greenhouse gases in a single, integrated plan; and establish emission-control measures to be adopted or implemented.

The 2010 *Clean Air Plan* contains the following primary goals:

- attain air quality standards,
- reduce population exposure and protect public health in the San Francisco Bay Area, and
- reduce greenhouse gas emissions and protect the climate.

The 2010 *Clean Air Plan* represents the most current applicable air quality plan for the SFBAAB. Consistency with this plan is the basis for determining whether the proposed project would conflict with or obstruct implementation of air quality plans.

### **Criteria Air Pollutants**

In accordance with the State and federal CAAs, air pollutant standards are identified for the following six criteria air pollutants: ozone, carbon monoxide, particulate matter (PM), nitrogen dioxide, sulfur dioxide, and lead. These air pollutants are termed criteria air pollutants because they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. In general, the SFBAAB experiences low concentrations of most pollutants when compared to federal or State standards. The SFBAAB is designated as either in attainment<sup>25</sup> or unclassified for most criteria pollutants with the exception of ozone, PM<sub>2.5</sub>, and PM<sub>10</sub>, for which these pollutants are designated as non-attainment for either the State or federal standards. National and California ambient air quality standards<sup>26</sup> and attainment status designations for the project area are provided in Table 7: National and California Ambient Air Quality Standards and Attainment Status.

By its very nature, regional air pollution is largely a cumulative impact in that no single project is sufficient in size to, by itself, result in non-attainment of air quality standards. Instead, a project's individual emissions contribute to existing cumulative air quality impacts. If a project's contribution to cumulative air quality impacts is considerable, then the project's impact on air quality would be considered significant.<sup>27</sup>

---

<sup>25</sup> "Attainment" status refers to those regions that are meeting federal and/or State standards for a specified criteria pollutant. "Non-attainment" refers to regions that do not meet federal and/or State standards for a specified criteria pollutant. "Unclassified" refers to regions where there is not enough data to determine the region's attainment status for a specified criteria air pollutant.

<sup>26</sup> California Air Resources Board. 2012 (May). *CEQA Air Quality Guidelines*. Available: [http://www.baaqmd.gov/-/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines\\_Final\\_May%202012.ashx?la=en](http://www.baaqmd.gov/-/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines_Final_May%202012.ashx?la=en). Accessed April 8, 2013.

<sup>27</sup> Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2011, page 2-1.

**TABLE 7: NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS<sup>2829</sup>**

Pollutant	Averaging Time	California Standards <sup>1</sup>		National Standards <sup>2</sup>	
		Concentration <sup>3</sup>	Attainment Status	Primary <sup>3,4</sup>	Attainment Status
Ozone	1 hour	0.09 ppm (180 µg/m <sup>3</sup> )	Nonattainment	—	—
	8 hours	0.070 ppm (137 µg/m <sup>3</sup> )	Nonattainment	0.075 ppm (147 µg/m <sup>3</sup> )	Nonattainment
Respirable particulate matter (PM <sub>10</sub> )	24 hours	50 µg/m <sup>3</sup>	Nonattainment	150 µg/m <sup>3</sup>	Nonattainment
	Annual arithmetic mean	20 µg/m <sup>3</sup>	Nonattainment	—	—
Fine particulate matter (PM <sub>2.5</sub> )	24 hours	—	—	35 µg/m <sup>3</sup> <sup>13</sup>	Attainment
	Annual arithmetic mean	12 µg/m <sup>3</sup>	Nonattainment	12.0 µg/m <sup>3</sup> <sup>6</sup>	Nonattainment <sup>13</sup>
Carbon monoxide (CO)	8 hours	9.0 ppm (10 mg/m <sup>3</sup> )	Attainment	9 ppm (10 mg/m <sup>3</sup> )	Attainment
	1 hour	20 ppm (23 mg/m <sup>3</sup> )	Attainment	35 ppm (40 mg/m <sup>3</sup> )	Attainment
Nitrogen dioxide (NO <sub>x</sub> ) <sup>7</sup>	Annual arithmetic mean	0.030 ppm (57 µg/m <sup>3</sup> )	Attainment	0.053 ppm (100 µg/m <sup>3</sup> )	Attainment
	1 hour	0.18 ppm (339 µg/m <sup>3</sup> )	Attainment	0.100 ppb (188 µg/m <sup>3</sup> )	Unclassified
Sulfur dioxide <sup>8</sup>	24 hours	0.04 ppm (105 µg/m <sup>3</sup> )	Attainment	—	—
	1 hour	0.25 ppm (655 µg/m <sup>3</sup> )	Attainment	0.075 ppm (196 µg/m <sup>3</sup> )	Attainment
Lead <sup>9,10</sup>	30-day average	1.5 µg/m <sup>3</sup>	Attainment	—	—
	Rolling 3-month average	—	—	0.15 µg/m <sup>3</sup>	—
Visibility-reducing particles <sup>11</sup>	8 hours	See footnote <sup>12</sup>	Unclassified	No national standards	
Sulfates	24 hours	25 µg/m <sup>3</sup>	Attainment		
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m <sup>3</sup> )	Unclassified		
Vinyl chloride <sup>12</sup>	24 hours	0.01 ppm (26 µg/m <sup>3</sup> )	No information available		

<sup>28</sup> Bay Area Air Quality Management District. 2013. Air Quality Standards and Attainment Status. Available: [http://hank.baaqmd.gov/pln/air\\_quality/ambient\\_air\\_quality.htm](http://hank.baaqmd.gov/pln/air_quality/ambient_air_quality.htm). Accessed February 22, 2013.

<sup>29</sup> California Air Resources Board. 2008. *State Implementation Plan*. Available: <http://www.arb.ca.gov/planning/sip/sip.htm>. Accessed March 5, 2013.



Pollutant	Averaging Time	California Standards <sup>1</sup>		National Standards <sup>2</sup>	
		Concentration <sup>3</sup>	Attainment Status	Primary <sup>3,4</sup>	Attainment Status

Notes:

mg/m<sup>3</sup> = milligrams per cubic meter; PM<sub>2.5</sub> = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM<sub>10</sub> = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ppb = parts per billion; ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter

<sup>1</sup> California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility-reducing particles) are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

<sup>2</sup> National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than 1. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standards.

<sup>3</sup> Concentration expressed first in the units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and reference pressure of 760 torr; parts per million in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

<sup>4</sup> National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

<sup>6</sup> On January 15, 2013, EPA revised the national annual PM<sub>2.5</sub> standard to 12.0 µg/m<sup>3</sup> to provide increased protection against health risks.

<sup>7</sup> To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

<sup>8</sup> On June 2, 2010, a new 1-hour SO<sub>2</sub> standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO<sub>2</sub> national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

<sup>9</sup> CARB has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

<sup>10</sup> The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m<sup>3</sup> as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standards are approved.

<sup>11</sup> In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and the "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

<sup>12</sup> No information is available to designate the region for vinyl chloride.

<sup>13</sup> EPA lowered the 24-hour PM<sub>2.5</sub> standard from 65 µg/m<sup>3</sup> to 35 µg/m<sup>3</sup> in 2006. The EPA designated the Bay Area Air Quality Management District (BAAQMD) as nonattainment of the PM<sub>2.5</sub> standard on October 8, 2009. The effective date of the designation is December 14, 2009 and the BAAQMD had 5 years to develop an implementation plan that demonstrates how the region will achieve the revised standard by December 14, 2014. On January 9, 2013, the EPA issued a final rule to determine that the SFBAAB has attained the 24-hour PM<sub>2.5</sub> NAAQS. This action suspended federal SIP planning requirements for the Bay Area, but BAAQMD still needs to submit a redesignation request.

Land use projects may contribute to regional criteria air pollutants during the construction and operational phases of a project. Table 8: Criteria Air Pollutant Significance Thresholds identifies air quality significance thresholds followed by a discussion of each threshold. Projects that would result in criteria air pollutant emissions below these significance thresholds would not violate an air quality standard, contribute substantially to an air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants within the SFBAAB.

*Ozone Precursors.* As discussed previously, the SFBAAB is currently designated as non-attainment for ozone and particulate matter. Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>). The potential for a project to result in a cumulatively considerable net increase in criteria air pollutants, which may contribute to an existing or projected air quality violation, are based on the State and federal CAA emissions limits for stationary sources. To ensure that new stationary sources do not cause or contribute to a violation of an air quality standard, BAAQMD Regulation 2, Rule 2 requires that any new source that emits criteria air pollutants above a specified emissions limit must offset those emissions. For ozone precursors ROG and NO<sub>x</sub>, the offset emissions level is an annual average of 10 tons per year (or 54 pounds (lbs.) per day).<sup>30</sup> These levels represent emissions by which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants.

**TABLE 8: CRITERIA AIR POLLUTANT SIGNIFICANCE THRESHOLDS**

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO <sub>x</sub>	54	54	10
PM <sub>10</sub>	82 (exhaust)	82	15
PM <sub>2.5</sub>	54 (exhaust)	54	10
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	

Notes:

ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = particulate matter with aerodynamic diameter less than 10 microns; PM<sub>2.5</sub> = particulate matter with aerodynamic diameter less than 2.5 microns

<sup>30</sup> BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 17.

*Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>)*.<sup>31</sup> The federal New Source Review (NSR) program was created by the federal CAA to ensure that stationary sources of air pollution are constructed in a manner that is consistent with attainment of federal health-based ambient air quality standards. For PM<sub>10</sub> and PM<sub>2.5</sub>, the emissions limit under NSR is 15 tons per year (82 lbs. per day) and 10 tons per year (54 lbs. per day), respectively. These emissions limits represent levels at which a source is not expected to have an impact on air quality.<sup>32</sup> Although the regulations specified above apply to new or modified stationary sources, land use development projects result in ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions as a result of increases in vehicle trips, architectural coating, and construction activities. Therefore, the above thresholds can be applied to the construction and operational phases of land use projects and those projects that result in emissions below these thresholds would not be considered to contribute to an existing or projected air quality violation or result in a considerable net increase in ozone precursors or particulate matter. Due to the temporary nature of construction activities, only the average daily thresholds are applicable to construction-phase emissions.

*Fugitive Dust*. Fugitive dust emissions are typically generated during construction phases. Studies have shown that the application of best management practices (BMPs) at construction sites significantly control fugitive dust.<sup>33</sup> Individual measures have been shown to reduce fugitive dust by anywhere from 30 to 90 percent.<sup>34</sup> The BAAQMD has identified a number of BMPs to control fugitive dust emissions from construction activities.<sup>35</sup> The City's Construction Dust Control Ordinance (Ordinance 176-08, effective July 30, 2008) requires a number of fugitive dust-control measures to ensure that construction projects do not result in visible dust. The BMPs employed in compliance with the City's Construction Dust Control Ordinance is an effective strategy for controlling construction-related fugitive dust.

### **Local Health Risks and Hazards**

In addition to criteria air pollutants, individual projects may emit toxic air contaminants (TACs). TACs collectively refer to a diverse group of air pollutants that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but of short-term) adverse effects to human health, including carcinogenic effects. Human health effects of TACs include birth defects, neurological damage, cancer, and mortality. There are hundreds of different types of TACs with varying degrees of toxicity. Individual TACs vary

---

<sup>31</sup> PM<sub>10</sub> is often termed "coarse" particulate matter and is made of particulates that are 10 microns in diameter or smaller. PM<sub>2.5</sub>, termed "fine" particulate matter, is composed of particles that are 2.5 microns or less in diameter.

<sup>32</sup> BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 16.

<sup>33</sup> Western Regional Air Partnership. 2006. *WRAP Fugitive Dust Handbook*. September 7, 2006. This document is available online at [http://www.wrapair.org/forums/dejf/fdh/content/FDHandbook\\_Rev\\_06.pdf](http://www.wrapair.org/forums/dejf/fdh/content/FDHandbook_Rev_06.pdf). Accessed February 16, 2012.

<sup>34</sup> BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 27.

<sup>35</sup> BAAQMD, *CEQA Air Quality Guidelines*, May 2011.

greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another.

Unlike criteria air pollutants, TACs do not have ambient air quality standards but are regulated by the BAAQMD using a risk-based approach to determine which sources and pollutants to control as well as the degree of control. A health risk assessment is an analysis in which human health exposure to toxic substances is estimated, and considered together with information regarding the toxic potency of the substances, to provide quantitative estimates of health risks.<sup>36</sup>

Air pollution does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. Land uses such as residences, schools, children's day care centers, hospitals, and nursing and convalescent homes are considered to be the most sensitive to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress or, as in the case of residential receptors, their exposure time is greater than for other land uses. Therefore, these groups are referred to as sensitive receptors. Exposure assessment guidance typically assumes that residences would be exposed to air pollution 24 hours per day, 350 days per year, for 70 years. Therefore, assessments of air pollutant exposure to residents typically result in the greatest adverse health outcomes of all population groups.

Exposures to fine particulate matter (PM<sub>2.5</sub>) are strongly associated with mortality, respiratory diseases, and lung development in children, and other endpoints such as hospitalization for cardiopulmonary disease.<sup>37</sup> In addition to PM<sub>2.5</sub>, diesel particulate matter (DPM) is also of concern. The California Air Resources Board (CARB) identified DPM as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans.<sup>38</sup> The estimated cancer risk from exposure to diesel exhaust is much higher than the risk associated with any other TAC routinely measured in the region.

In an effort to identify areas of San Francisco most adversely affected by sources of TACs, San Francisco partnered with the BAAQMD to inventory and assess air pollution and exposures from mobile, stationary, and area sources within San Francisco. Areas with poor air quality, termed the "Air Pollutant Exposure

---

<sup>36</sup> In general, a health risk assessment is required if the BAAQMD concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggest a potential public health risk. The applicant is then subject to a health risk assessment for the source in question. Such an assessment generally evaluates chronic, long-term effects, estimating the increased risk of cancer as a result of exposure to one or more TACs.

<sup>37</sup> SFDPH, Assessment and Mitigation of Air Pollutant Health Effects from Intra-Urban Roadways: Guidance for Land Use Planning and Environmental Review, May 2008.

<sup>38</sup> California Air Resources Board (CARB), Fact Sheet, "The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines," October 1998.



Zone,” were identified based on two health-protective criteria: (1) excess cancer risk from the contribution of emissions from all modeled sources greater than 100 per one million population, and/or (2) cumulative PM<sub>2.5</sub> concentrations greater than 10 micrograms per cubic meter (µg/m<sup>3</sup>).

*Excess Cancer Risk.* The above 100 per one million persons (100 excess cancer risk) criteria is based on U.S. Environmental Protection Agency (USEPA) guidance for conducting air toxic analyses and making risk management decisions at the facility- and community-scale level.<sup>39</sup> As described by the BAAQMD, the USEPA considers a cancer risk of 100 per million to be within the “acceptable” range of cancer risk. Furthermore, in the 1989 preamble to the benzene National Emissions Standards for Hazardous Air Pollutants rulemaking,<sup>40</sup> the USEPA states that it “...strives to provide maximum feasible protection against risks to health from hazardous air pollutants by (1) protecting the greatest number of persons possible to an individual lifetime risk level no higher than approximately one in one million and (2) limiting to no higher than approximately one in ten thousand [100 in one million] the estimated risk that a person living near a plant would have if he or she were exposed to the maximum pollutant concentrations for 70 years.” The 100 per one million excess cancer cases is also consistent with the ambient cancer risk in the most pristine portions of the San Francisco Bay Area based on BAAQMD regional modeling.<sup>41</sup>

*Fine Particulate Matter.* In April 2011, the USEPA published *Policy Assessment for the Particulate Matter Review of the National Ambient Air Quality Standards*, “Particulate Matter Policy Assessment.” In this document, USEPA staff concludes that the current federal annual PM<sub>2.5</sub> standard of 15 µg/m<sup>3</sup> should be revised to a level within the range of 13 to 11 µg/m<sup>3</sup>, with evidence strongly supporting a standard within the range of 12 to 11 µg/m<sup>3</sup>. The Air Pollutant Exposure Zone for San Francisco is based on the health-protective PM<sub>2.5</sub> standard of 11 µg/m<sup>3</sup>, as supported by the USEPA’s Particulate Matter Policy Assessment, although lowered to 10 µg/m<sup>3</sup> to account for uncertainty in accurately predicting air pollutant concentrations using emissions modeling programs.

Land use projects within the Air Pollutant Exposure Zone require special consideration to determine whether the project’s activities would expose sensitive receptors to substantial air pollutant concentrations or add emissions to areas already adversely affected by poor air quality.

---

<sup>39</sup> BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 67.

<sup>40</sup> 54 Federal Register 38044, September 14, 1989.

<sup>41</sup> BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 67.

### ***Topography, Meteorology, and Climate***

The SFBAAB covers approximately 5,540 square miles of complex terrain, made up of coastal mountain ranges, inland valleys, and the San Francisco Bay. The SFBAAB includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, as well as the southern portion of Sonoma County and the southwest portion of Solano County. The SFBAAB is generally bordered on the west by the Pacific Ocean, on the north by the Coast Ranges, and on the east and south by the Diablo Range. The project area is located in the westernmost portion of the SFBAAB.

Meteorological conditions in the SFBAAB are warm and mainly dry in summers, and mild and moderately wet in winters. Marine air has a moderating effect on the climate throughout much of the year. Winds flow through the Golden Gate from the Pacific Ocean, but direct flow into eastern Alameda County is impeded by the East Bay hills. Marine air mostly is blocked from the area until late afternoons or on days when deep marine inversions develop with strong on-shore flows.

Winds from the west-southwest are most prevalent during spring and summer afternoons. These are the breezes that travel from the Pacific Ocean through gaps in the East Bay hills. When the ocean breeze is weak, winds become light and variable and nighttime drainage flows typically develop. On clear nights with light winds, inversions develop in the coastal valleys, separating the surface wind flow from winds aloft. The drainage flow is usually light and stable, flowing toward the Carquinez Strait.

### ***Local Air Quality Conditions***

The determination of whether a region's air quality is healthful or unhealthful is made by comparing contaminant levels in ambient air samples to the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). Both the CARB and USEPA ambient air concentrations are monitored at various regions throughout the SFBAAB to designate an area's attainment status with respect to the CAAQS and NAAQS, respectively, for criteria air pollutants. The purpose of these designations is to identify areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are "nonattainment," "attainment," and "unclassified." The "unclassified" designation is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards. The most recent attainment designations with respect to the SFBAAB are shown in Table 7: National and California Ambient Air Quality Standards and Attainment Status. With respect to the CAAQS, the SFBAAB is designated as a nonattainment area for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>, and as an attainment or unclassified area for all other pollutants. With respect to

the NAAQS, the SFBAAB is designated as a marginal nonattainment area for ozone and as an attainment or unclassified area for all other pollutants.

## IMPACT DISCUSSION

Potential project impacts on air quality were evaluated against the BAAQMD CEQA significance criteria<sup>42</sup> and are discussed in further detail in the following paragraphs. The pipeline replacement and regulator station rebuild would require no change to existing operational and maintenance activities. Thus, impacts on air quality resulting from operation of the proposed project would not change from existing conditions and no net increase in operation-related impacts would occur. Therefore, the impact analysis is limited to temporary and short-term impacts associated with project construction, including construction of the new pipeline and expansion of the regulator substation.

### **Impact AQ-1: The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. (Less than Significant)**

The Bay Area 2010 Clean Air Plan (CAP)<sup>43</sup> was adopted on September 15, 2010 and is the most recent applicable air quality plan within the BAAQMD. The CAP provides a comprehensive plan to improve San Francisco Bay Area air quality and protect public health. Specifically, the CAP defines a control strategy that the BAAQMD and its partners will implement to: (1) reduce emissions and decrease ambient concentrations of harmful pollutants; (2) safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily impacted by air pollution; and (3) reduce greenhouse gas emissions. Although the legal impetus for the CAP was to update the prior ozone plan, the 2010 CAP serves as a multi-pollutant plan addressing ozone precursors (reactive organic gases and oxides of nitrogen), particulate matter, air toxics, and greenhouse gases. The CAP control strategy has 55 specific control measures in 6 categories, including stationary sources, mobile sources, transportation control, land use/local impact, and energy/climate.

The project would not involve any new long-term operational emissions in the BAAQMD. The short-term construction emissions would be temporary and minor. The temporary construction activity would be managed consistent with applicable CAP control measures. As a result, this project would not conflict with

---

<sup>42</sup> Bay Area Air Quality Management District. 2010. *CEQA Air Quality Guidelines*. Available: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Updated-CEQA-Guidelines.aspx>. Accessed March 5, 2013.

<sup>43</sup> Bay Area Air Quality Management District. 2010. *2010 Clean Air Plan*. Available: <http://www.baaqmd.gov/Divisions/Planning-and-Research/Plans/Clean-Air-Plans.aspx>. Accessed April 12, 2013.

or obstruct implementation of the applicable air quality plan and this impact would be considered less than significant.

**Impact AQ-2: Project construction activities would generate fugitive dust and criteria air pollutants, and could violate applicable air quality standards. (Less than Significant with Mitigation)**

Construction emissions are considered short-term and temporary in nature; however, they have the potential to substantially affect air quality. During construction of the proposed project, various types of construction equipment and vehicles would temporarily operate on the project site. Construction exhaust emissions would be generated from a variety of sources: construction equipment, vegetation clearing, construction personnel commuting, and construction material hauling. These activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Generation of these emissions varies as a function of vehicle trips per day associated with delivery of construction materials, the importing and exporting of soil, vendor trips, and worker commute trips, as well as the types and number of heavy-duty, off-road equipment used, and the intensity and frequency of their operation.

Construction activities would generate fugitive PM emissions, which can also lead to adverse health effects and nuisance concerns such as reduced visibility and soiling of exposed surfaces. Construction fugitive PM dust emissions can vary greatly, depending on the level of activity, the specific operations taking place, number and types of equipment operated, vehicle speeds, local soil conditions, weather conditions, and amount of earth disturbance (e.g., site grading, excavation, cut and fill).

Temporary and short-term construction-generated emissions of criteria air pollutants and ozone precursors were assessed in accordance with methods recommended by the BAAQMD. Proposed project-related construction activities were quantified using the California Emission Estimator Model (CalEEMod) Versions 2013.2.2.<sup>44</sup> Specific construction information, such as construction schedule, duration of activities, types of equipment used, and acres of site disturbance, was provided by PG&E. Where project-specific information was not available, conservative assumptions and/or default assumptions contained in CalEEMod were used to quantify construction emissions.

---

<sup>44</sup> South Coast Air Quality Management District (SCAQMD). 2011. California Emission Estimator Model V 2013.2.2. Available: <http://www.caleemod.com/>. Accessed January 2014.



As indicated in Table 9: Project Construction Emissions, the project’s unmitigated NO<sub>x</sub> emissions would exceed the BAAQMD’s proposed threshold of significance.

**TABLE 9: PROJECT CONSTRUCTION EMISSIONS**

Pollutant	Average Daily Emissions <sup>2</sup> (lbs./day)	Average Daily Emissions with Mitigation <sup>2</sup> (lbs./day)	BAAQMD <sup>3</sup> Significance Threshold (lbs./day)	Exceeds Threshold after Mitigation?
ROG	7	3	54	No
NO <sub>x</sub>	64	49	54	No
Exhaust PM <sub>10</sub> <sup>1</sup>	3	2	82	No
Exhaust PM <sub>2.5</sub> <sup>1</sup>	3	2	54	No

Notes:

ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; CO = carbon monoxide; PM<sub>10</sub> = particulate matter with aerodynamic diameter less than 10 microns; PM<sub>2.5</sub> = particulate matter with aerodynamic diameter less than 2.5 microns; tons/yr = tons per year; lb/day = pounds per day

<sup>1</sup> BAAQMD’s PM<sub>10</sub> and PM<sub>2.5</sub> thresholds of significance only apply to exhaust emissions.

<sup>2</sup> Average daily emissions were estimated assuming a duration of 169 days for construction activities. In reality, construction activities could occur over a longer period of time due to delays. However, to account for the minimum number of days that construction potentially would be completed, and to conservatively estimate average daily construction emissions, 169 days were used.

<sup>3</sup> 2010 BAAQMD CEQA Air Quality Guidelines – As specified in the guidelines; the CEQA significance thresholds are average daily values not maximum daily values.

Source: Compiled by TRC in 2014 using CalEEMod V 2013.2.2

Implementation of **Mitigation Measure M-AQ-2a: Minimum USEPA Tier Standards for Construction Equipment**, would reduce average daily construction-related NO<sub>x</sub> emissions by approximately 23 percent, thereby reducing impacts to a less-than-significant level.

**Mitigation Measure M-AQ-2a: Minimum USEPA Tier Standards for Construction Equipment**

All construction equipment used for project construction shall meet a minimum USEPA Tier II engine standard. All generators, including the power unit on the drill rig, shall meet a minimum USEPA Tier III engine standard. This mitigation would decrease average daily construction-related NO<sub>x</sub> emissions from 64 lbs./day to 49 lbs./day. This measure will be included in the construction contract specifications for the project.

Furthermore, BAAQMD CEQA guidelines require that all projects, regardless of significance, implement the BAAQMD’s Basic Construction Mitigation Measures as specified below in **Mitigation Measure M-AQ-2b: BAAQMD Basic Construction Measures**.

**Mitigation Measure M-AQ-2b: BAAQMD Basic Construction Measures**

To limit dust and equipment exhaust emissions associated with project construction, the following BAAQMD-recommended Basic Construction Measures shall be included in the construction contract specifications for the project:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. The person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

With implementation of the above mitigation measures, the project's construction emissions would be consistent with the BAAQMD's requirements and would not conflict with the applicable air quality plan.

**Impact AQ-3: The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the proposed project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). (Less than Significant with Mitigation)**

As discussed in Impact AQ-2, PG&E would be required to implement **Mitigation Measures M-AQ-2a: Minimum USEPA Tier Standards for Construction Equipment** and **M-AQ-2b: BAAQMD Basic Construction Measures** to mitigate any significant impacts from project construction. These mitigation measures, in conjunction with the fact that emissions would be temporary and short-term, would ensure that the proposed project would not generate a cumulatively considerable contribution to regional air quality pollutants in the project area that are nonattainment under a State or federal ambient air quality standard.

**Impact AQ-4: The proposed project would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant)**

Construction activities would generate diesel PM exhaust emissions from heavy-duty trucks and off-road diesel equipment. Diesel PM has been classified as a TAC by the CARB, and even acute exposure may result in health impacts. Although construction activities can be fairly intensive during excavation and some phases of pipeline installation, all construction activities would be temporary and short-term, with construction activities anticipated to occur over a total duration of approximately 38 weeks. Lomita Park Regulator Station rebuild activities, which would start in the first phase of construction and include mobilization of equipment and materials, expansion work, pipe tie-in, and site grading and restoration, are anticipated to take approximately 28 weeks to complete. Pipeline replacement activities would occur in the second phase and include mobilization of equipment and materials, HDD construction work, pipe tie-in, and site grading and restoration. Line 101 upgrade activities are anticipated to take approximately 10 weeks to complete. Construction emissions would occur intermittently throughout proposed project construction (i.e., construction equipment would not operate continuously for eight hours each day), with only certain equipment expected to require intensive use for a portion of each day.

According to the Office of Environmental Health Hazard Assessment, health risk assessments that determine the health risks associated with exposure of residential receptors to TAC emissions should be based on a 70-year exposure period, and health risk assessments that address the health risk associated with exposure of children to TAC emissions should be based on a 9-year exposure period.<sup>45</sup> TAC exposure to children is of special concern because children typically metabolize more air per unit of body weight in comparison to adults and can be more sensitive to toxics during development. However, health risk assessments should be limited to the period/duration of activities associated with the emissions activity.<sup>46</sup>

As discussed above, total construction activity duration will be approximately 38 weeks, after which all construction emissions would cease. Therefore, the total exposure time would be approximately 5 percent of the minimum exposure time for a child-based health risk assessment (i.e., 9 years) and less than 1 percent of a typical residential health risk assessment (i.e., 70 years). Construction sites would be within 500 feet of residential receptors, with the closest receptor located at the corner of Santa Paula Avenue and Bay Street approximately 270 feet west of the south excavation site. Emissions occurring at each construction site

---

<sup>45</sup> Office of Environmental Health Hazard Assessment. 2003 (August). Air Toxics Hot Spots Program Risk Assessment Guidelines. Available: [http://oehha.ca.gov/air/hot\\_spots/pdf/HRAguidefinal.pdf](http://oehha.ca.gov/air/hot_spots/pdf/HRAguidefinal.pdf). Accessed March 21, 2012.

<sup>46</sup> Salinas, Julio. Staff toxicologist. Office of Environmental Health Hazard Assessment, Sacramento, CA. August 3, 2004—telephone conversation with Kurt Legleiter of EDAW regarding exposure period for determining health risk.

would last for a shorter time than the aggregate time for total construction. As shown in Table 9, average daily construction emissions of exhaust PM<sub>2.5</sub>, of which only a portion would be diesel PM (i.e., some PM<sub>2.5</sub> would be gasoline exhaust), would be minimal, totaling approximately 2 pounds per day. Because the use of off-road construction equipment would be short-term and temporary in nature, low exposure period (i.e., less than 1 percent of a typical residential health risk assessment), and low level of emissions (i.e., approximately 2 pounds per day), construction activities would not result in the exposure of sensitive receptors to levels that would result in a health hazard or exceed applicable standards, and this impact would be considered less than significant.

**Impact AQ-5: The proposed project would not create objectionable odors affecting a substantial number of people. (Less than Significant)**

The occurrence and severity of odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. Although offensive odors rarely cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and cause citizens to submit complaints to local governments and regulatory agencies. Projects with the potential to frequently expose individuals to objectionable odors are deemed to have a significant impact. Typical facilities that generate odors include wastewater treatment facilities, sanitary landfills, composting facilities, petroleum refineries, chemical manufacturing plants, and food processing facilities.

Construction activities involving heavy-duty trucks and off-road construction equipment would generate diesel PM exhaust, which can be considered offensive by some individuals. As described above, proposed project construction sites would be located as close as 270 feet from residences. However, unlike the typical stationary and permanent odor sources listed above, proposed project construction emissions would not be constantly generating odorous emissions. The proposed project would use typical construction techniques, and any odors generated would be temporary, short-term, and typical of most construction sites. Furthermore, construction activities would cease at night. Therefore, the intermittent and temporary construction activities are not expected to cause a significant odor impact on a substantial number of sensitive receptors, nor would the proposed project's construction activities expose a substantial number of receptors to odor emissions. This impact would be considered less than significant.



**Impact C-AQ-1: The proposed project, in combination with past, present, and reasonably foreseeable future development in the project area, would result in a significant cumulative air quality impact. (Less than Significant with Mitigation)**

As discussed above, regional air pollution is by its very nature largely a cumulative impact. Emissions from past, present, and future projects contribute to the region's adverse air quality on a cumulative basis. No single project alone would be sufficient in size to result in regional nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulative adverse air quality impacts.<sup>46</sup> The project-level thresholds for criteria air pollutants are based on levels by which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants. As previously discussed, construction of the proposed project is anticipated to have less-than-significant impacts to air quality with implementation of the proposed mitigation measures. With implementation of **Mitigation Measures M-AQ-2a: Minimum USEPA Tier Standards for Construction Equipment** and **M-AQ-2b: BAAQMD Basic Construction Measures**, the proposed project's contribution to cumulative impacts related to air quality would be reduced to a less-than-cumulatively-considerable level.

---

<sup>46</sup> BAAQMD, *CEQA Air Quality Guidelines*, May 2010, page 2-1.

## E.8. GREENHOUSE GAS EMISSIONS

<i>Topics:</i> _____	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>8. GREENHOUSE GAS EMISSIONS – Would the project:</b>					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## ENVIRONMENTAL SETTING

The term “climate” refers to the accumulation of daily and seasonal weather events over a long period of time, whereas “weather” is defined as the condition of the atmosphere at any particular time and place.<sup>48</sup> The project area is located in a climatic zone that is characterized as dry-summer subtropical or Mediterranean in the Köppen climate classification system.

The Köppen system’s classifications are based primarily on annual and monthly averages of temperature and precipitation. Refer to Section E.7, Air Quality for a description of the meteorology and climate of the San Francisco Bay Area Air Basin.

### ***Attributing Climate Change—Physical Scientific Basis***

Certain gases in the Earth’s atmosphere, classified as GHGs, play a critical role in determining the Earth’s surface temperature. When high-frequency solar radiation (e.g., visible light) enters the Earth’s atmosphere from space (i.e., the sun), a portion of the radiation is absorbed by the Earth’s surface, and a smaller portion of this radiation is reflected back toward space. However, the re-radiated energy by the Earth is not the same high-frequency solar radiation that was received, but is lower-frequency infrared radiation (i.e., thermal energy). The frequencies at which bodies emit radiation are proportional to temperature. Therefore, having a much lower temperature than the sun, the Earth will emit lower frequency (longer wavelength) radiation (i.e., infrared radiation). When infrared radiation comes into contact with GHGs in the atmosphere, a portion of that thermal energy can be absorbed by the GHG molecule and/or re-radiated back toward the Earth’s surface. Both outcomes result in a “trapping” of heat within the Earth’s

<sup>48</sup> Ahrens, D. C. 2003. Meteorology Today: An Introduction to Weather, Climate, and the Environment. Brooks Cole Inc., Pacific Grove, CA.

atmosphere. This phenomenon, known as the “greenhouse effect,” is responsible for maintaining a habitable climate on Earth. Without the greenhouse effect, Earth would not be able to support life as we know it.

Aside from naturally occurring atmospheric water vapor, prominent GHGs contributing to the Earth’s greenhouse effect are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and high global warming potential (GWP) GHGs. Although high-GWP gases typically are emitted at lower rates than CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O, they still can make a significant contribution to climate change because they are more effective at absorbing outgoing infrared radiation than CO<sub>2</sub>. The concept of CO<sub>2</sub>e is used to account for the different potentials of GHGs to absorb infrared radiation. This potential, known as the global warming potential of a GHG, is dependent on the lifetime or persistence of the gas molecule in the atmosphere, its ability to absorb/trap infrared radiation, and the spectrum of light energy (i.e., range of wavelengths and frequencies) absorbed by the gas molecule. Every GHG’s GWP is measured relative to CO<sub>2</sub>, which has a GWP of 1. High-GWP GHGs include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Anthropogenic (i.e., caused by humans) emissions of these GHGs leading to atmospheric levels of GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the Earth’s atmosphere and oceans, with corresponding effects on global circulation patterns and climate.<sup>49</sup> CO<sub>2</sub> emissions associated with fossil fuel combustion for energy-related activities are the primary contributors to human-induced climate change.<sup>50</sup>

GHG emissions generated in the United States can contribute to climate change impacts in other countries or continents. The quantity of GHGs that it takes to ultimately result in climate change is not known precisely; it is suffice to say that the quantity is enormous, and no single project can be expected to measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or micro climate.

### **Methodology**

GHG emissions generated by construction of the proposed project were modeled using the same methods described in Section E.7, Air Quality. California Emission Estimator Model (CalEEMod) Version 2013.2.2

---

<sup>49</sup> Intergovernmental Panel on Climate Change (IPCC). 2007 (February). Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva, Switzerland.

<sup>50</sup> U.S. Environmental Protection Agency (USEPA). 2011. Basic Information. Available: <http://www.epa.gov/climatechange/basicinfo.html>. Accessed on March 10, 2012.

and EMFAC2011 provide emission factors for GHG emissions in addition to criteria air pollutant emissions.<sup>51</sup> Although the same modeling assumptions for the air quality analysis were used to develop GHG emission estimates, all GHG emissions were calculated for annual emissions in units of metric tons of carbon dioxide equivalent per year (MT CO<sub>2</sub>e/year). Lomita Park Regulator Station rebuild activities, which would start in the first phase of construction and include mobilization of equipment and materials, expansion work, pipe tie-in, and site grading and restoration, are anticipated to take approximately 28 weeks to complete. Pipeline replacement activities would occur in the second phase and include mobilization of equipment and materials, HDD construction work, pipe tie-in, and site grading and restoration. Line 101 upgrade activities are anticipated to take approximately 10 weeks to complete. For a conservative analysis, the entire 38-week duration of the proposed project construction activities was assumed to occur within one year; however, proposed project construction activities are anticipated to commence in 2014 and continue into 2015.

## IMPACT DISCUSSION

The CARB and BAAQMD have not published quantitative GHG emission thresholds for construction. On October 24, 2008, the CARB released its interim CEQA significance thresholds for GHGs. The guidance divides projects analyzed under CEQA into two categories—industrial and residential/commercial—and provides significance criteria for each. The proposed project qualifies as an industrial project; thus, impacts would be considered less than significant if the proposed project with mitigation would emit no more than approximately 7,000 MT CO<sub>2</sub>e/year from operation of non-transportation-related GHG sources.<sup>52</sup> This threshold is used in the analysis to evaluate the proposed project's GHG emissions.

The pipeline replacement and regulator station rebuild would require no change to existing operation and maintenance activities. Thus, impacts on GHG emissions resulting from operation of the proposed project would not change from existing conditions and no net increase in operation-related impacts would occur. Therefore, the impact analysis is limited to temporary and short-term impacts associated with the proposed project construction.

---

<sup>51</sup> South Coast Air Quality Management District (SCAQMD). 2013. California Emission Estimator Model. Available: <http://www.caleemod.com/>. Accessed on January 20, 2014.

<sup>52</sup> California Air Resources Board. 2008. Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act (Preliminary Draft Staff Proposal). Available: <http://www.arb.ca.gov/cc/localgov/ceqa/meetings/102708/prelimdraftproposal102408.pdf>. Accessed November 4, 2011.



**Impact C-GG-1: The project would generate greenhouse gas emissions, but not in levels that would result in a significant cumulative impact on the environment. The project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. (Less than Significant)**

During the proposed project construction, GHG emissions would be generated from a variety of sources such as construction worker vehicles, material haul trucks, and heavy-duty construction equipment. Table 10: Construction-related Greenhouse Gas Emissions presents the total GHG emissions associated with the proposed project construction activities. As shown in the table, total emissions over the anticipated total 38-week construction duration are estimated to be 494 MT of CO<sub>2</sub>e.

The total GHG emissions associated with the proposed project would be substantially less than the CARB significance threshold. Therefore, because the proposed project’s total GHG emissions from construction would be below the applicable CARB threshold of significance, the project’s GHG emissions would be considered to have a less-than-significant impact on the environment.

Implementation of the proposed project would cause temporary and short-term construction-related GHG emissions; however, the goal of the proposed project, to upgrade an existing pipeline and expand a regulator station for the purpose of an in-line inspection, is consistent with the natural gas efficiency GHG-reduction goals of CARB’s Climate Change Scoping Plan.<sup>53</sup> By replacing and inspecting existing pipelines, the proposed project would identify potential leaks in the system to be repaired, thereby reducing wasted natural gas resources. Natural gas efficiency is one of the Scoping Plan’s GHG reduction measures.

**TABLE 10: CONSTRUCTION-RELATED GREENHOUSE GAS EMISSIONS**

Construction Category	MT CO <sub>2</sub> e/year <sup>1</sup>
Total Construction Emissions	494

Notes: MT CO<sub>2</sub>e/year = metric tons of carbon dioxide equivalent per year

<sup>1</sup>For the purposes of a conservative estimate for a worst-case scenario, all project construction activities and GHG emissions were assumed to occur in one year.

Source: Compiled by TRC in 2014 using CalEEMod V 2013.2.2

<sup>53</sup> California Air Resources Board. 2008. Climate Change Scoping Plan. Available: <http://www.arb.ca.gov/cc/scopingplan/document/psp.pdf>. Accessed December 2013.

## E.9.WIND AND SHADOW

<i>Topics:</i> _____	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>9. WIND AND SHADOW – Would the project:</b>					
a) Alter wind in a manner that substantially affects public areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project would not substantially affect wind or create new shadows that would affect outdoor recreation facilities or public areas. The proposed project is located within 500 feet of three public parks – Lions Park, Marina Vista Park, and Bayside Manor Park – that may be temporarily affected by the proposed project. However, the proposed project would not create any new permanent structures significantly larger than what is existing; therefore, the project would have no impact on wind and shadow.

## E.10. RECREATION

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>10. RECREATION – Would the project:</b>					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Physically degrade existing recreational resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed project would not involve or require the construction or expansion of recreational facilities. Therefore, significance criteria E.10(b) above is not applicable to the proposed project.

## ENVIRONMENTAL SETTING

### *City of Millbrae*

*Marina Vista Park.* The existing Line 101 pipeline runs underneath Marina Vista Park, which is a public recreational facility managed by the City of Millbrae. The park is located at the end of Spruce Avenue at Bay Street and offers a basketball court, playground, open field, and barbeques and picnic areas.<sup>53</sup> All temporary and short-term construction activities for the project will take place outside of the park.

*Bayside Manor Park.* Bayside Manor Park is located at 110 Lerida Avenue in Millbrae. This neighborhood park was renovated in 2002, and offers a basketball court, playground, and open space area.<sup>54</sup> The existing Line 101 pipeline runs through the northeastern side of the park, but no areas of the park will be subject to ground disturbance from project construction activities.

### *City of San Bruno*

*Lions Park.* Lions Park is located at the terminus of 1<sup>st</sup> Avenue in San Bruno, directly east of the northern access point for the project (where 1<sup>st</sup> Avenue intersects the park parking lot). The park contains a new play structure, grass area, and baseball field, and is adjacent to the California National Guard Armory.<sup>55</sup>

<sup>53</sup> City of Millbrae 2014. Available: <http://www.ci.millbrae.ca.us/index.aspx?page=272>. Accessed May 2014.

<sup>54</sup> City of Millbrae 2014. Available: <http://www.ci.millbrae.ca.us/index.aspx?page=265>. Accessed May 2014.

<sup>55</sup> City of San Bruno 2014. Available: [http://www.sanbruno.ca.gov/parks\\_locations.html](http://www.sanbruno.ca.gov/parks_locations.html). Accessed May 2014.

## IMPACT DISCUSSION

**Impact RE-1: The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facilities would occur or be accelerated. (No Impact)**

Increases in overall permanent demand for recreational facilities typically are associated with substantial increases in population, either by the construction of new residences or the creation of a major job generator that would indirectly increase the number of residents in an area. The proposed project involves replacing an existing gas pipeline and expanding a regulator station that are located within an established utility corridor. Operation of the pipeline and station would not change from existing conditions. Therefore, implementation of the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facilities would occur or be accelerated. There would be no impact.

**Impact RE-2: The proposed project would not impede recreation access, disrupt recreational uses, or degrade existing recreational resources. (Less than Significant)**

As shown on Figure 3 (p. 1, 4, and 5 of 6), the proposed project is located within 500 feet of three public parks—Lions Park, Marina Vista Park, and Bayside Manor Park. However, construction activities would only occur within the parking lot of Lions Park, where some parking spaces would be utilized for the water storage tanks, as shown on Figure 3 (p. 1 of 6). No ground disturbance or staging would occur at Marina Vista Park and Bayside Manor Park. PG&E would implement **Improvement Measure I-TR-1: Best Management Practices for Work Zone Barriers**, and follow standard safety practices, including installing appropriate barriers between work zones and transportation facilities, posting adequate signage, establishing adequate on- and off-site parking and staging areas, and using proper construction techniques to manage traffic. Project-related impacts would be temporary and short-term; therefore, impacts would be less than significant.

**Impact C-RE-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not result in a significant cumulative impact on recreational resources. (Less than Significant)**

Cumulative recreation impacts could occur if the proposed project, in conjunction with other construction activities in the area, impeded recreation access or disrupted recreational uses, increased the use of recreational facilities that would accelerate their deterioration, or degraded recreational resources.



Development projects in the surrounding area would result in physical changes that would introduce new residences that may increase the use of park facilities. As previously described, the proposed project would not result in temporary impacts to Marina Vista Park and Bayside Manor Park, but would result in less-than-significant impacts to Lions Park due to use of some parking spaces in the parking lot during construction. No other projects in the project vicinity are expected to result in direct impacts to these parks during construction of the proposed project. The parking lot of Lions Park would be returned to normal operation after construction is completed. As a result, the proposed project's contribution to cumulative recreational impacts would be less than cumulatively considerable.

## E.11. UTILITIES AND SERVICE SYSTEMS

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>11. UTILITIES AND SERVICE SYSTEMS – Would the project:</b>					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed project involves the installation of pipeline and the minor expansion of a regulator station; no new stormwater drainage facilities or expansion of existing facilities, and no connection to existing water services or sanitary sewers would be required. During construction, water would be obtained from a municipal system or privately owned water supply well, and sanitary needs would be provided by portable sanitary equipment services by a contractor. Therefore, significance criteria E.11(b), E.11(c), and E.11(e) above are not applicable to the proposed project.

## ENVIRONMENTAL SETTING

Wastewater and stormwater treatment in the project vicinity is managed at a number of area facilities. The Mel Leong Treatment Plant, operated by the San Francisco Public Utilities Commission (SFPUC), processes industrial wastewater and stormwater runoff from airport facilities. The Millbrae Water Pollution Control Plant, operated by the City of Millbrae Public Works Department, processes sanitary sewage collected within City boundaries; wastewater is then transferred to South San Francisco's Water Quality Control Plant for dechlorination. Wastewater in the City of San Bruno is treated at South San Francisco's Wastewater Quality Control Plant. Treated wastewater from the plant is discharged to San Francisco Bay.

Stormwater drainage for the project area is managed in the north by the San Mateo County Flood Control District, in the central area by SFO, and in the south by the City of Millbrae. Stormwater in the north part of the project area flows to Cupid Row Canal, an open channel that drains stormwater from the BART/Caltrain tracks to U.S. Highway 101. Stormwater from the West-of-Bayshore property is collected into SFO's South Lomita Canal and discharged into the City of Millbrae's Highline Canal, which is located north of Millbrae Avenue.

Local solid waste disposal is managed by the San Bruno Transfer Station and the South San Francisco Scavenger Company.

The area's potable water supply comes from the SFPUC's Hetch Hetchy Regional Water System. Within their jurisdictions, water distribution is managed by the SFPUC, Millbrae Public Works Department, and San Bruno Public Services Department.

## IMPACT DISCUSSION

### **Impact UT-1: The proposed project would not exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board. (Less than Significant)**

Wastewater would be generated by dewatering of construction areas, hydrostatic testing, and sanitary services for construction workers. Surface water and groundwater encountered during construction would be pumped into liquid storage tanks and water quality testing would be conducted. If the water quality meets the requirements of the NPDES for construction activities, PG&E would discharge water into a sanitary sewer inlet. If the NPDES water quality requirements are not met, water would be discharged at a POTW, such as Seaport in Redwood City or the East Bay Municipal Utility District in West Oakland. A maximum of approximately 300 water tankers may be required to discharge water at a POTW. Water used

for hydrostatic testing of the new pipeline would be discharged on-site in accordance with the applicable requirements of the San Francisco Bay RWQCB, or collected for discharge at a POTW, as described above. Finally, a minimal amount of effluent would be temporarily generated by up to 20 workers during proposed project construction. Wastewater services for up to 20 project construction workers would be provided via portable sanitary equipment services by a contractor. The effluent would be disposed of via septic tank or at a POTW, in accordance with the requirements of the San Francisco Bay RWQCB. Because the construction workforce is relatively small in size, the amount of wastewater generated would be negligible. For these reasons, the proposed project would have a less-than-significant impact on wastewater treatment requirements of the San Francisco Bay RWQCB.

**Impact UT-2: The proposed project would have sufficient water supplies available to serve the project from existing entitlements and resources, and no new or expanded entitlements would be needed. (No Impact)**

Water would be used for hydrostatic testing of the pipeline. The construction contractor would identify an appropriate source water location prior to fill and it is anticipated to be obtained from a municipal system or privately owned water supply well (not surface waters). Existing water supplies would be sufficient to accommodate temporary, minor construction needs for the proposed project. Therefore, the proposed project would have no impact.

**Impact UT-3: The proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and would comply with federal, state, and local statutes and regulations related to solid waste. (Less than Significant)**

The proposed project would generate approximately 25 cubic yards of solid waste as result of demolition of facilities at the Lomita Park Regulator Station. The existing pipeline would be retired in place and the soil excavated during installation of the new pipeline would be stored on-site and, to the maximum extent possible, used as backfill to restore the area to approximate pre-project conditions. PG&E would implement best management practices for solid waste disposal, including recycling of construction waste to the maximum extent possible. Surplus excavated material generated from the proposed project would be stockpiled and tested for contamination. Non-hazardous spoils may be given to responsible third parties or disposed of in a PG&E-approved landfill. If the results of soil testing indicate the project spoils are hazardous, PG&E would manage and dispose of the waste through a separately contracted vendor (likely PSC).

Debris associated with the proposed project would be recycled wherever feasible in accordance with applicable laws, ordinances, and regulatory requirements. The volume of post-diversion demolition debris is not expected to be significant relative to existing annual disposal volumes, and is not expected to result in significant impacts on solid waste. Solid waste generated from the construction would not substantially affect the project life of regional landfills. Therefore, impacts from solid waste generation and impacts on solid waste facilities would be considered less than significant.

**Impact C-UT-1: The proposed project, in combination with other past, present, and reasonably foreseeable projects in the vicinity, would not result in a significant cumulative impact on utilities and service systems. (Less than Significant)**

The proposed project, when combined with other past, present, and reasonably foreseeable projects, would not result in incremental increased demand on utilities and service systems. The incremental demand placed on utilities and service systems is minor and limited to the period of construction, which would be short-term and temporary; therefore, the proposed project's contribution to cumulative utilities and service systems impacts would be less than cumulatively considerable.



## E.12. PUBLIC SERVICES

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
----------------	---------------------------------------	--	-------------------------------------	------------------	-----------------------

### 12. PUBLIC SERVICES – Would the project:

- |   |                          |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services such as fire protection, police protection, schools, parks, or other services? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|

## ENVIRONMENTAL SETTING

The proposed project is located within relatively undeveloped parcels (collectively known as the West-of-Baysshore property) that are owned by the CCSF. The parcels are within the County of San Mateo, City of Millbrae, and City of San Bruno, just west of U.S. Highway 101 and SFO. Fire protection services in the area are provided by the San Francisco Fire Department–Airport Division, San Mateo County Fire Department (in conjunction with the California Department of Forestry and Fire Protection), Millbrae Fire Department, and San Bruno Fire Department. Police services are provided by the San Francisco Police Department–Airport Bureau, San Mateo County Sheriff’s Office, and San Bruno Police Department. Public school districts in the area include the Millbrae School District, San Bruno Park School District, and San Mateo Union High School District. Parks and other public facilities in the area are managed by the cities of Millbrae and San Bruno and the County of San Mateo.

## IMPACT DISCUSSION

**Impact PS-1: The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services associated with fire protection, police protection, schools, parks, or other public facilities. (No Impact)**

*Police and Fire Protection.* Construction-related activities and equipment could temporarily cause a minor increase in traffic on the surrounding local road network; however, the types of activities and amount of equipment would not cause noticeable impacts to public services. The purpose of the proposed project is to upgrade existing gas infrastructure within the PG&E service area, and would not alter the location, distribution, density, or growth rate of the population. As the majority of the construction workers (a maximum of approximately 20 people) would be from the local population, existing fire, police, and medical services would be sufficient to respond to potential emergencies. Therefore, the proposed project would have no impact on police protection, fire, and emergency services during construction.

*Parks and Schools.* As described in Section E.10, Recreation, there are a total of three parks—Lions Park, Marina Vista Park, and Bayside Manor Park—located in the vicinity of the proposed project. Because the proposed project would not involve the construction or expansion of these or any new recreational facilities, there would be no increase in use of these parks. The proposed project would not result in any substantial population growth. The proposed project would not generate new students or increase the need for new or expanded school facilities. Therefore, the proposed project would have no impact on parks and school services.

**Impact C-PS-1: The proposed project, in combination with other past, present, or reasonably foreseeable projects, would not have a significant cumulative impact on public services. (No Impact)**

Cumulative development in the project area, including the proposed project, would not increase the demand for public services beyond levels anticipated and planned for by public service providers. The proposed project would not increase demand on fire, police, or emergency services, nor would it result in cumulative impacts on parks or recreational services. Furthermore, because the proposed project would not increase population within the area, schools in the surrounding area would not be affected. Therefore, the project would not contribute to cumulative public services impacts.

## E.13. BIOLOGICAL RESOURCES

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>13. BIOLOGICAL RESOURCES – Would the project:</b>					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## ENVIRONMENTAL SETTING

As shown on Figure 6: Habitat Types, the project area supports the following vegetation or cover types: developed, barren, ruderal, non-native annual grassland, upland ornamental, willow riparian, seasonal wetland, freshwater marsh, and open water.<sup>57</sup> Historically, the West-of-Bayshore property consisted of tidal salt marsh within the original San Francisco Bay tidelands. The property was separated from the bay by construction of the Old Bayshore Highway (now South Airport Boulevard) in the 1940s but persisted as a large salt marsh until the 1950s. In the late 1940s, the property was diked and formed into freshwater canals to drain stormwater from adjacent urban areas. With the exception of the BART extension in the late 1990s, the site has remained in essentially its present configuration since 1970.

*Developed.* Developed portions of the project area consist of access roads and the existing Lomita Park Regulator Station. Vegetation associated with these areas is limited to a thin covering of non-native annual grasses.

*Ruderal.* Ruderal habitat is found along the edges of dirt and graveled access roads, portions of the Lomita Park Regulator Station, and surrounding barren areas at the Aviator Avenue staging area. Ruderal vegetation types are disturbed areas exhibiting dominance by non-native species and/or other signs of anthropogenic disturbance, such as areas artificially cleared of vegetation (i.e., gravel lots, leveled parcels). Wild radish (*Raphanus sativus*) typically is dominant in these habitats, with buckhorn plantain (*Plantago coronopus*), English plantain (*P. lanceolata*), and red-stem filaree (*Erodium cicutarium*) also commonly occurring.

*Non-native Annual Grassland.* Non-native grassland is the dominant vegetation type in the project area, occurring in the pipe weld run-out location north of the BART overpass, around the Lomita Park Regulator Station, in the northern and southern HDD work areas, and adjacent to access roads. Near water bodies, the vegetation cover is dominated by velvet grass (*Holcus lanatus*). In upland areas, dominant species include slender wild oats (*Avena barbata*), wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), Bermuda grass (*Cynodon dactylon*), foxtail barley (*Hordeum murinum*), and small fescue (*Festuca microstachys*). These areas provide habitat for bird species that forage in open grasslands such as savannah sparrow (*Passerculus sandwichensis*), western meadowlark (*Sturnella neglecta*), killdeer (*Charadrius vociferus*), rock pigeon

---

<sup>57</sup> Swaim Biological Incorporated, *Final Biological Assessment for the Line 101 In-Line Inspection Upgrade and Lomita Park Regulator Station Rebuild Project*. Prepared for Pacific Gas and Electric Company, San Ramon, California. March 2013. This document is on file and is available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103, as part of Case File No. 2013.0522E.

(*Columba livia*), and mourning dove (*Zenaida macroura*). The grass areas also provide habitat for Botta's pocket gopher (*Thomomys bottae*) and California meadow voles (*Microtus californica*). These rodents provide prey resources for raptors such as white-tailed kite (*Elanus leucurus*), red-tailed hawk (*Buteo jamaicensis*), and American kestrel (*Falco sparverius*), and their underground burrows and "runways" through the grass provide suitable retreat habitat for San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) and California red-legged frog (*Rana draytonii*).

*Upland Ornamental.* Non-native tree and shrub species are present along the edge of the West-of-Bayshore property, and individual non-native trees are scattered throughout the project area. Large stands of mature eucalyptus (*Eucalyptus globulus*, *E. camaldulensis*, and *E. tereticornis*) are present along the Caltrain tracks west of the HDD run-out, and along the south edge of Cupid Row Canal. A dense stand of acacia (*Acacia dealbata*, *A. longifolia*, and *A. melanoxylon*) borders one of the potential access roads leading south from the southern HDD work location. These areas are typically used by nesting and roosting birds and common wildlife species.

*Willow Riparian.* Dense stands of arroyo willow (*Salix lasiolepis*) are found in the drip work location and along the edges of marshes and canals in the project area. This type of habitat is typically found in areas subject to regular saturation or inundation. Riparian habitat provides food, nesting habitat, cover, and wildlife corridors for birds such as black phoebe (*Sayornis nigricans*) and song sparrow (*Melospiza melodia*), and for amphibians such as California red-legged frog and Pacific treefrog (*Pseudacris regilla*).

*Seasonal Wetland.* Seasonal wetlands found in the project vicinity consist of three types: large seasonal wetlands found below the BART right-of-way, naturally formed seasonal wetlands located below the existing overhead electric transmission line, and small seasonal wetlands that likely receive urban runoff from the adjacent neighborhoods. The larger wetlands below the BART right-of-way receive direct precipitation and water from outfalls associated with the BART line. These large depressional wetlands have multiple topographic breaks, which result in monotypic stands of narrow-leaved cattail (*Typha angustifolia*) in the lowest topographic portions of the wetlands. Higher topographic areas are dominated by lady's thumb (*Persicaria maculosa*), brass buttons (*Cotula coronopifolia*), rabbitsfoot grass (*Polypogon monspeliensis*), and rough cocklebur (*Xanthium strumarium*). Wetlands under the transmission towers are small, and are likely supported by water intercepted by the transmission tower. These small wetlands are dominated by lady's thumb, rabbitsfoot grass, and pale spike rush (*Eleocharis macrostachys*).



Figure 6: Habitat Types



0 375 750 1,500 Feet

1 inch = 750 feet  
1:9,000

Source: AECOM, 2012

- |                     |                  |                               |                    |
|---------------------|------------------|-------------------------------|--------------------|
| --- New_Pipeline    | <b>Landcover</b> | ■ Ephemeral Drainage          | ■ Ruderal          |
| — Existing_Pipeline | ■ Barren         | ■ Freshwater Marsh            | ■ Seasonal Wetland |
| □ Work Area         | ■ Canal          | ■ Non-native Annual Grassland | ■ Willow Riparian  |
| □ Study Area        | ■ Developed      | ■ Perennial Drainage          |                    |

**Line 101 ILI Upgrade and Lomita Park Station Rebuild**

Case No. 2013.0522E





*Freshwater Marsh.* Freshwater marsh habitats are dominated by hydrophytes adjacent to and emergent from shallow water, of which cattails (*Typha* spp.) are the dominant species. These natural and constructed depressions typically hold water for three to six months, with ponding usually extending until mid-May.<sup>58</sup> Four freshwater marshes with a combined size of less than an acre are found in the immediate project vicinity: two adjacent to South Lomita Canal, one along U.S. Highway 101 in the Aviator Avenue staging area, and one on the southern end of the West-of-Bayshore property (see Figure 7 (p. 1 and 3 of 3)).

*Open Water.* Open water is found in the freshwater areas of Cupid Row Canal, South Lomita Canal, and in seasonal wetlands east of the Lomita Park Regulator Station where the depth or flow rate of water inhibits the growth of emergent vegetation. In the canals, open water is present in concrete-lined portions, in relatively deep areas, and in areas where emergent vegetation had been cleared for the purpose of enhancing habitat. Open water is present throughout much of the year in deeper portions of the seasonal wetlands east of the Lomita Park Regulator Station. Although work activities would not occur in open water habitat, open waters are important for California red-legged frog and San Francisco garter snake; thus, their proximity to work areas increase the likelihood that these species could move through the project area.

### **Special-status Species**

Special-status species potentially occurring in the vicinity of the project area were identified by reviewing the California Natural Diversity Database (CNDDDB)<sup>59</sup> and California Native Plant Society's Inventory of Rare and Endangered Plants<sup>60</sup> for records of special-status species within 10 miles of the project site, and an official online species list provided by the U.S. Fish and Wildlife Service's (USFWS) Sacramento Fish and Wildlife Office of Federal Endangered and Threatened Species that Occur in or may be affected by projects in the Hunters Point (448A), San Francisco South (448B), Montara Mountain (448C), and San Mateo (448D) U.S. Geological Survey 7.5-minute quadrangles.<sup>61</sup>

---

<sup>58</sup> LSA Associates. 2008. *Recovery Action Plan for the San Francisco Garter Snake, West-Of-Bayshore Property, San Francisco International Airport, San Mateo County, California ("Recovery Action Plan")*.

<sup>59</sup> California Department of Fish and Wildlife, California Natural Diversity Database, Biogeographic Data Branch, Commercial version dated March 28, 2013.

<sup>60</sup> California Native Plant Society, Inventory of Rare and Endangered Plants, Online edition v8 01a, 2011. Available online at: <http://www.rareplants.cnps.org>.

<sup>61</sup> Pacific Gas and Electric Company (PG&E). 2013. *Biologic Resources Constraints Analysis of the L101 ILI and Lomita Park Regulator Station Project – 30859799*. This document is on file and is available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103, as part of Case File No. 2013.0522E.

*Plants.* A total of 17 special-status plant species were evaluated for their potential to occur in the project area. Based on the literature and field surveys review, no species were determined to have a moderate or high potential to occur in the project area.

*Wildlife.* Of the 39 special-status wildlife species identified in the CNDDDB and the USFWS species list, five have either been observed within or adjacent to the project area, and could potentially occur based on the presence of suitable habitat. One special-status bird species, saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*; California Species of Special Concern), is known to occur in the freshwater marshes on-site. Based on the presence of suitable foraging and marginally suitable nesting habitat, two special-status raptor species could potentially occur: white-tailed kite (*Elanus leucurus*, California Fully Protected Species), and northern harrier (*Circus cyaneus*, California Species of Special Concern).

Both California red-legged frog (federally listed threatened) and San Francisco garter snake (federally and state-listed endangered; California Fully Protected Species) are known to occur on the West-of-Bayshore property.<sup>62</sup> California red-legged frog breeds in ponds and canals in the project area, and annual grassland provides suitable dispersal habitat and upland retreats. San Francisco garter snakes forage in ponds and canals in the project area and use adjacent uplands. The San Francisco garter snake population at the West-of-Bayshore property is one of six “significant” populations. This population was once thought be one of the largest populations, but by the late 1990s, populations had declined, accompanied by degradation of suitable habitat and encroaching development, leading the USFWS to partner with SFO to develop the 2008 Recovery Action Plan to improve habitat at the West-of-Bayshore site.

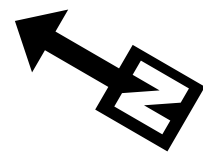
The 2008 Recovery Action Plan, for the San Francisco Garter Snake is a three-phase adaptive management plan to enhance habitat at the site. In Phase 1 (Years 1 to 3), the plan would expand and maintain open-water conditions at South Lomita Canal and Cupid Row Canal, remove invasive plants species, conduct fuel-abatement activities, deepen/enhance seasonal wetland and aquatic habitats adjacent to the canals, restore access roads, and monitor water quality in the canals and on-site wetlands. Phase 2 (Years 4 to 6) and Phase 3 (Years 7 to 10) habitat enhancements would be determined based on the results of monitoring and data collection following the implementation of Phase 1.

---

<sup>62</sup> USFWS. 2006. *San Francisco Garter Snake (Thamnophis sirtalis tetrataenia) 5-Year Review: Summary and Evaluation*. Available online at <http://www.fws.gov/cno/es/San%20Francisco%20Garter%20Snake%205%20Year%20Review.FINAL.pdf>.



Figure 7: Wetlands (p. 1 of 3)



0 175 350 700 Feet

1 inch = 350 feet  
1:4,200

Source:  
NGA 2004; AECOM, 2012-2013

- Jurisdictional Area
  - Willow Riparian
  - Existing Pipeline
  - New Alignment
  - Work Area
  - Access Road
  - Exclusionary Fence
  - Tree Removal
  - PI Meter
- \* Acreage in wetland study area

**Line 101 ILI Upgrade and Lomita Park Station Rebuild Project**

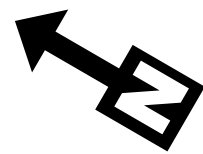
Case No. 2013.0522E







Figure 7: Wetlands (p. 2 of 3)



0 175 350 700 Feet

1 inch = 350 feet  
1:4,200

Source:  
NGA 2004; AECOM, 2012-2013

- |                                 |                    |
|---------------------------------|--------------------|
| Jurisdictional Area             | Work Area          |
| Willow Riparian                 | Access Road        |
| Existing Pipeline               | Exclusionary Fence |
| New Alignment                   | Tree Removal       |
| * Acreage in wetland study area | PI Meter           |

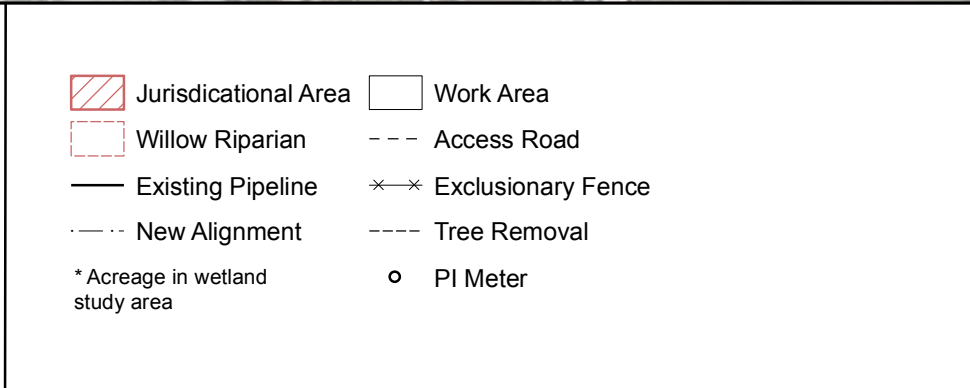
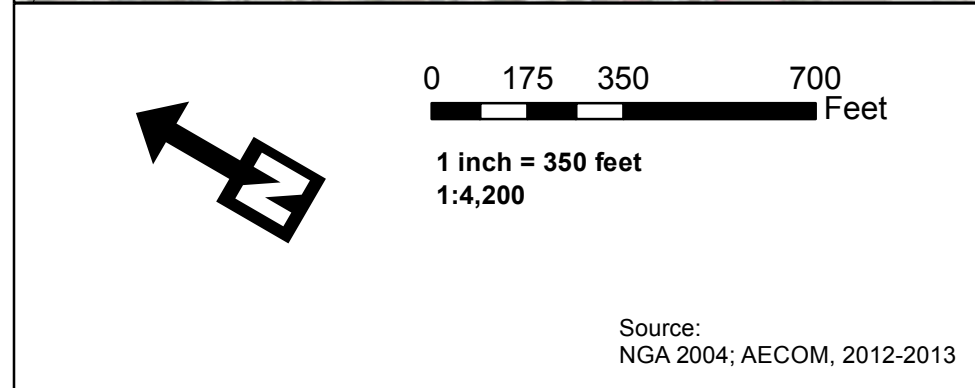
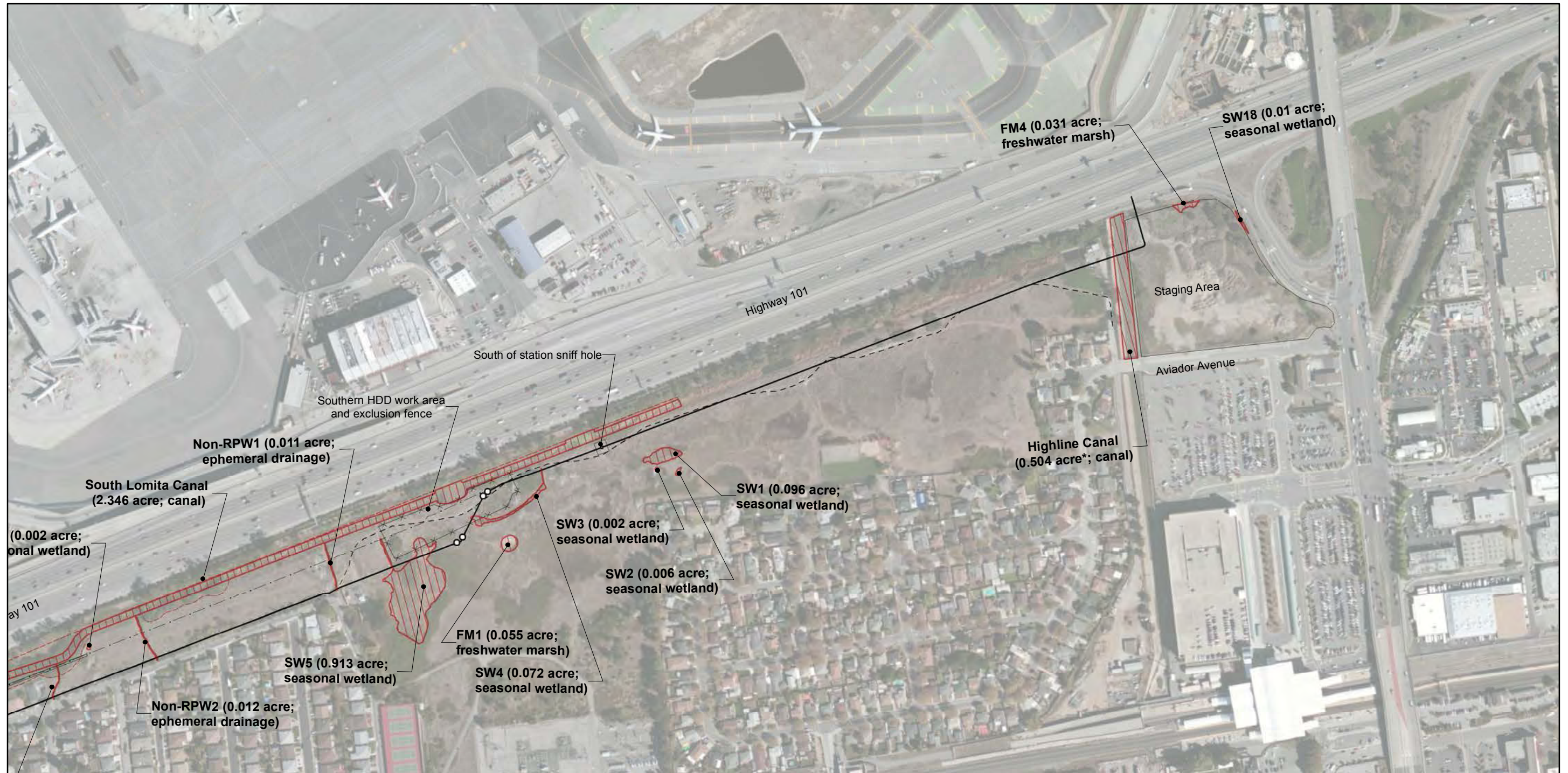
**Line 101 ILI Upgrade and Lomita Park Station Rebuild Project**

Case No. 2013.0522E





Figure 7: Wetlands (p. 3 of 3)



**Line 101 ILI Upgrade and  
Lomita Park Station Rebuild Project**

Case No. 2013.0522E





## ***Sensitive Habitats***

*Jurisdictional Waters.* Jurisdictional waters (i.e., wetlands and other waters of the United States under U.S. Army Corps of Engineers jurisdiction pursuant to Section 404 of the federal CWA) within the project area are two seasonal wetlands (SW12, SW25) that lie partially within the northern HDD work area, and two seasonal wetlands that lie partially within the southern HDD work area (SW4, SW5), as shown on Figure 7: Wetlands (p. 1 through 3). One freshwater marsh (FM4) is located in the Aviator Avenue staging area. Of these wetlands, less than approximately 0.01 (1/100<sup>th</sup>) acre of wetland would be subject to temporary fill in the northern HDD excavation area and an additional approximately 0.12 acre of seasonal wetland would be subject to temporary disturbance.

SW4 is a 0.07-acre seasonal wetland that lies within a linear topographic depression located within a floodway. It contains a mixture of wetland and upland vegetation, dominated by Bermuda grass and *lady's thumb*. SW4 connects to South Lomita Canal via a flapgate. The jurisdictional area of this wetland within the project area is 0.01 acre.

SW5 is a 0.91-acre seasonal wetland connected to South Lomita Canal on its east side via a vegetated swale and culvert. The vegetation cover is dominated by Bermuda grass and slender-leaved cattail. The jurisdictional area of this wetland within the project area is 0.03 acre.

SW12 is a 5.84-acre seasonal wetland with vegetation characteristic of a freshwater marsh in topographic lows. The center of the wetland is dominated by lady's thumb and rough cocklebur. *Typha* is more prevalent at the eastern edge of the wetland. The jurisdictional area of this wetland within the project area is 0.04 acre.

SW25 is a 0.07-acre seasonal wetland. The jurisdictional area of this wetland within the project area is 0.02 acre.

FM4 is a 0.03-acre freshwater marsh in a topographic low spot, which is likely supported by runoff from U.S. Highway 101. The dominant vegetation in the marsh is slender-leaved cattail. The jurisdictional area of this wetland within the project area is 0.03 acre.

*Sensitive Natural Communities.* Willow riparian is a sensitive habitat because of its jurisdictional designation as riparian habitat under California Department of Fish and Wildlife (CDFW) Codes §1600 through §1602. No additional sensitive natural communities, as identified in the CNDDDB, are found in the project area.

Sensitive natural communities occurring in the general vicinity of the project area include tidal marsh at the SFO airfield, termed northern coastal salt marsh by Holland (1986); northern maritime chaparral on Whiting Ridge and Montara Mountain; valley needlegrass grassland on Sawyer Ridge by the Lower Crystal Springs Reservoir; and serpentine bunchgrass at Buri Ridge southeast of San Andreas Lake. However, none of these communities are present in the project area due to its distance from the San Francisco Bay and the area's history of disturbance.

## IMPACT DISCUSSION

### **Impact BI-1: The proposed project would directly impact approximately 0.12 acre of upland habitat for the California red-legged frog and San Francisco garter snake. (Less than Significant with Mitigation)**

The expansion of the Lomita Park Regulator Station, use of the access road to the station from the north, and the realignment of the existing road west of the station would result in the loss of approximately 0.12 acre of upland habitat for the California red-legged frog and San Francisco garter snake. This amount is equal to 0.06 percent of the total upland habitat available within the West-of-Bayshore property. Implementation of **Mitigation Measure M-BI-1: Compensatory Upland Habitat Mitigation**, would reduce this impact to a less-than-significant level as it would require the enhancement of on-site habitat areas that have the potential to provide high-quality habitat for both species.

#### **Mitigation Measure M-BI-1: Compensatory Upland Habitat Mitigation**

To compensate for the loss of approximately 0.12 acre of upland habitat for California red-legged frog and San Francisco garter snake caused by the Lomita Park Regulator Station expansion and the necessary access road creation and relocation, PG&E shall implement mitigation in the form of on-site habitat enhancement in areas where non-native invasive plants, such as pampas grass and eucalyptus trees, threaten California red-legged frog and San Francisco garter snake upland habitat. PG&E shall develop an Upland Habitat Revegetation and Restoration Plan in coordination with SFO. The plan shall be consistent with the goals of the SFO San Francisco garter snake West-of-Bayshore Recovery Action Plan (LSA, 2008) and submitted to the USFWS for approval within 60 days of initial ground disturbance. The plan shall fully mitigate for both permanent and temporary impacts on habitat and shall include criteria to measure the success of restoration and enhancement activities. Restoration shall focus on areas located in close proximity to aquatic features that have the potential to provide high-quality habitat for both species. In the event that on-site restoration is not feasible or would not fully satisfy mitigation requirements, PG&E shall consult with the USFWS to determine a feasible mitigation plan that fully satisfies mitigation requirements.

**Impact BI-2: The proposed project could adversely affect California red-legged frog and San Francisco garter snake during project construction. (Less than Significant with Mitigation)**

As discussed above, known populations of California red-legged frog and San Francisco garter snake are present within the West-of-Bayshore property. The potential exists for these species to enter a work location or otherwise be impacted by the proposed project during construction. Impacts to these species can result from a temporary loss of upland vegetative habitat or through collisions with vehicles or construction equipment. **Mitigation Measure M-BI-2: Avoidance and Minimization Measures for California Red-legged Frog and San Francisco Garter Snake**, would be implemented during construction to avoid take of California red-legged frog and San Francisco garter snake, as well as avoid population-level impacts to these species. With implementation of **Mitigation Measures M-BI-1: Compensatory Upland Habitat Mitigation and M-BI-2: Avoidance and Minimization Measures for California Red-legged Frog and San Francisco Garter Snake**, impacts to California red-legged frog and San Francisco garter snake would be reduced to a less-than-significant level.

**Mitigation Measure M-BI-2: Avoidance and Minimization Measures for California Red-legged Frog and San Francisco Garter Snake**

To avoid and minimize potential impacts to California red-legged frog and San Francisco garter snake during construction, the following measures shall be implemented:

- At least 30 days before the start of any activities, PG&E shall submit the names and credentials of biologists proposed to perform preconstruction surveys and monitoring to the USFWS and CDFW for approval or identify biologists that have been previously approved by USFWS and CDFW. Only USFWS/CDFW-approved biologists shall participate in the capture, handling, or relocation of listed species, and in the hand-excavation of rodent burrows and other potential underground retreats.
- Before the start of construction, a qualified biologist shall conduct an environmental awareness training session for all construction workers; the training will be repeated as new workers join the project. A qualified biologist is defined as any person who has completed at least four years of university training in wildlife biology or a related science, and/or has demonstrated field experience in the identification of the California red-legged frog and San Francisco garter snake. The training shall include a description of the California red-legged frog and San Francisco garter snake (including photographs and their habitats), the general measures that shall be implemented to conserve these species as they relate to proposed project activities, penalties for non-compliance, and the limits of work locations. Interpretation shall be provided for non-English-speaking workers. Construction workers shall sign a log indicating that they have received this training. No work (including materials staging, fence installation, parking, excavation, driving or walking on-site, or any other project activities) shall be performed by individuals who have not received this training.
- A USFWS/CDFW-approved biologist shall be present on-site during all initial ground-disturbing activities. A qualified biologist who has been trained shall be designated to remain on-site during proposed project activities (biological monitor). The biological monitor shall have training in HDD and relevant experience related to the environmental issues as they pertain to this project,



such as frac-outs. The biological monitor shall have the authority to stop any action that may result in take of listed species or unanticipated impacts to their habitat, including drilling, provided that it does not risk the safety of the construction crews or the public.

- Before the start of work, a USFWS/CDFW-approved biologist shall identify acceptable locations to which California red-legged frog may be relocated if this species is encountered in a proposed project work location. Relocation areas shall be a minimum of 500 feet from the boundary of any active work locations, shall contain adequate cover and nearby aquatic habitat, and shall not include staging areas or roads.
- Each morning before the start of work, a biological monitor shall inspect proposed project work locations, including those for staged materials and equipment, excavations, and fencing, to verify that no listed species are present within designated work areas.
- No construction-related vehicles shall enter the West-of-Bayshore property without having a USFWS/CDFW-approved biologist present. The biologist shall check the area in front of vehicles as they drive on the road to access a work location, to verify that no San Francisco garter snake or California red-legged frog are present on the roadway. Motorized vehicles traveling in the project area shall not exceed 5 miles per hour.
- Before moving them, operators shall check underneath vehicles and equipment that have been parked on-site for more than 30 minutes and shall notify the biological monitor if any reptile or amphibian is observed.
- Before the start of any ground-disturbing activities, ground-level vegetation that may provide cover for California red-legged frog and San Francisco garter snake shall be removed within Lomita Park Regulator Station construction locations, the north and south HDD construction locations, and the pipe run-out location. Immediately before removal, the biological monitor shall visually survey the area. Vegetation then shall be cut to a lower height using hand tools (including weed whackers), and loose vegetation shall be removed to increase visibility. The biological monitor then shall visually survey the location a second time to verify that no listed species are present. The remaining vegetation then shall be removed using hand tools.
- Shrub and understory vegetation removal shall be done using hand tools, including weed eaters and chain saws, to prevent adverse impacts from mowers, excavators, and other heavy equipment. A USFWS/CDFW-approved biologist shall be present during any vegetation removal. Vegetation cleared from construction locations shall be loaded into containers and removed the same day. Chipping on-site may be allowed, subject to approval by the landowner. No cleared vegetation shall be stored on-site.
- Following the removal of vegetation in Lomita Park Regulator Station work locations and the north and south HDD work locations, all rodent burrows, soil crevices, and other potential subterranean retreats within the work locations shall be inspected for the presence of California red-legged frog and San Francisco garter snake. After inspection, a USFWS/CDFW-approved biologist shall excavate burrows, soil crevices, and other potential subterranean retreats by hand to verify that no California red-legged frog or San Francisco garter snake is present.
- Thirty days prior to commencement of project activities, a Wildlife Exclusion Fencing Plan shall be submitted to the CDFW for review. Project activities shall not proceed until the CDFW has accepted the Wildlife Exclusion Plan in writing.
- Following the excavation of potential subterranean retreats, temporary wildlife exclusion fencing shall be installed to completely enclose Lomita Park Regulator Station work locations and the north and south HDD work locations. Wildlife exclusion also may be installed around portions of the pipe weld run-out work location, if determined to be appropriate by the biological monitor.

The fencing, which can be made of wood, geotextile fabric, or other durable material, shall be a minimum of 3 feet in height and shall be buried at least 6 inches underground. Gates shall be installed to allow vehicles to enter from access roads. These gates shall be kept closed to the extent practicable during construction activities, and they shall be closed at the end of each workday. Exit funnels shall be installed every 100 feet or where appropriate (determined by qualified biologist) to allow small vertebrates to leave work locations unharmed. A qualified biological monitor shall be on-site during installation of the fencing to relocate any sensitive animals to outside the work area boundaries and to ensure that the fencing is installed, as required. Relocation of federally listed species can only be done if authorized by the USFWS. Relocation of state-listed species can only be done if authorized by the CDFW. There shall be no handling of or harm to the fully protected San Francisco garter snake. Once exclusion fencing is in place, it shall be maintained by PG&E via their contractor until all work within the enclosure has been completed. During construction activities, the biological monitor shall inspect the exclusion fencing each morning before the start of work and again at the end of each workday. Any damaged areas shall be reported to PG&E and shall be repaired by the contractor immediately on discovery. After construction is complete, the exclusion fencing shall be removed under supervision of a qualified biologist.

- Preconstruction surveys, vegetation removal, and hand-excavation of burrows shall take place before October 15, so that any San Francisco garter snake present can find a suitable alternative winter retreat before the onset of cold weather conditions. Once these activities are completed, temporary wildlife exclusion fencing shall be installed around work locations and shall be maintained to prevent the re-entry of California red-legged frog and San Francisco garter snake.
- If ground disturbance within aquatic habitats is required while water is present, then cofferdams or other measures shall be installed to allow for dewatering of the locations that are subject to disturbance. Before dewatering, these locations shall be visually surveyed for the presence of San Francisco garter snake and California red-legged frog adults, egg masses, and tadpoles by the biological monitor. Pumps used for dewatering shall be equipped with a mesh screen (0.25 inch or finer) to help prevent the entrainment of California red-legged frog and San Francisco garter snake. Dewatering shall not take place during the California red-legged frog breeding season (December through March), when egg masses are present in aquatic habitats. Thirty days prior to commencement of project activities, PG&E shall submit a plan detailing the water-diversion method to the CDFW for review. Water diversion shall not be allowed until the CDFW has accepted the Water Diversion Plan in writing.
- If any burrows or other potentially suitable underground refuges are found in the compacted areas adjacent to the access road during preconstruction surveys, these features shall be either flagged for avoidance or excavated by a USFWS/CDFW-approved biologist before the movement of vehicles or equipment that may result in soil disturbance.
- The limits of the access roads shall be staked and flagged or fenced so that vehicle traffic is confined to the designated areas.
- Speed limit signs shall be posted along the access roads and on the project area entry gate.
- Signs shall be posted notifying all personnel of the potential presence of California red-legged frog and San Francisco garter snake on the access roads.
- The total area of construction activities shall be limited to the minimum necessary to achieve the goal of the proposed project. All areas outside of the marked access roads and outside of designated work locations shall be designated as environmentally sensitive, and no construction activities shall take place in these areas.

- During project activities, all trash shall be contained and removed from the project area on a daily basis. All trash and construction-related debris shall be removed from the work areas following the end of construction.
- All steep-walled excavations more than 1 foot deep shall be either covered at the end of each work day or equipped with one or more escape ramps positioned at no greater than a 45-degree angle so that wildlife will not become entrapped. All open excavations shall be inspected for wildlife at the beginning of each day, before the start of work.
- Project construction activities shall be limited to daytime hours to the extent practicable.
- All fueling and maintenance of vehicles and other equipment shall occur at least 65 feet from any riparian habitat or water body. Before the start of project construction, PG&E shall develop a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and the appropriate measures to take if a spill occurs.
- Erosion control materials that do not pose an entrapment hazard to reptiles and amphibians shall be used. Plastic monofilament netting shall not be used. Loosely woven jute netting, fiber rolls, and similar natural materials shall be considered acceptable alternatives.
- No pets belonging to project personnel, firearms (other than firearms carried by authorized security personnel), or campfires shall be allowed anywhere in the project area during construction.
- Following the completion of construction activities, areas with listed species habitat subject to ground disturbance shall be re-vegetated pursuant to the Upland Habitat Revegetation and Restoration Plan identified in **Mitigation Measure M-BI-1: Compensatory Upland Habitat Mitigation**.
- If any San Francisco garter snake is found in work locations during proposed project activities, the following protocol shall be followed:
  - Any construction in the area that could result in direct injury, disturbance, or harassment of the individual shall cease.
  - The foreman, USFWS/CDFW-approved biologist, and PG&E biologist assigned to the proposed project shall be notified immediately.
  - The animal shall be allowed to move out of the area on its own volition, as determined and monitored by the USFWS/CDFW-approved biologist or biological monitor.
- If any California red-legged frog is found in work locations during proposed project activities, the following protocol shall be followed:
  - Any construction in the area that could result in direct injury, disturbance, or harassment of the individual shall cease.
  - The foreman, USFWS/CDFW-approved biologist, and PG&E biologist assigned to the proposed project shall be notified immediately.
  - If a California red-legged frog is found inside an exclusion fence or in another work location where it may be harmed, the California red-legged frog shall be moved to a previously identified relocation area. Only USFWS/CDFW-approved biologists shall be allowed to handle, transport, and relocate California red-legged frog.
  - The USFWS/CDFW-approved biologist shall ensure the translocated red-legged frog is relocated in an area that it is not imperiled by predators or other dangers.

**Impact BI-3: The proposed project could have an adverse effect on special-status birds during project construction. (Less than Significant with Mitigation)**

The proposed project could have temporary construction-related adverse impacts on saltmarsh common yellow-throat and other special-status bird species through increased levels of disturbance from increased human presence, noise and/or equipment vibrations, and expansion of the Lomita Park Regulator Station. Such disturbances may disrupt normal behavioral patterns of breeding, foraging, sheltering, and dispersal.

**Mitigation Measure M-BI-3: Nesting Bird Surveys**, would avoid potential impacts to white-tailed kite, northern harrier, or saltmarsh common yellow-throat potentially nesting in or adjacent to the work areas.

With implementation of **Mitigation Measure M-BI-3: Nesting Bird Surveys**, this impact would be reduced to a less-than-significant level.

**Mitigation Measure M-BI-3: Nesting Bird Surveys**

To avoid adverse impacts on special-status bird species, PG&E shall implement the following avoidance and minimization measures:

If work occurs during the bird nesting season (February 15 through August 31), a qualified biologist shall conduct a preconstruction survey for nesting birds before any potential nest-disturbing activities. The survey shall be conducted no more than one week before the start of work and shall include the project area and all suitable nesting habitats within a 500-foot buffer. If proposed project activities have ceased for more than two weeks during the nesting season, breeding bird surveys shall be performed again before recommencing activity.

If any protected nesting raptors or passerines are detected in the project area, a temporary disturbance buffer shall be established to prevent project activities from resulting in direct harm to the nest, or nest failure or abandonment. This buffer shall be established at a distance of 50 feet for passerines and 300 feet for raptors. To prevent encroachment, the established buffer(s) shall be clearly marked by high-visibility material. The project biologist shall perform at least two hours of preconstruction nest monitoring to characterize "normal" bird behavior. The biologist shall monitor the nesting birds and shall increase the buffer if the biologist determines the birds' behavior shows evidence of disturbance by project activities. The buffer shall remain in effect until the young have fledged or the nest has been abandoned. If proposed project activities cannot be avoided within the established buffer, the project biologist shall closely monitor the nest for signs of disturbance. Work may be allowed to proceed within the temporary nest disturbance buffer if birds are not exhibiting signs of agitated behavior, such as defensive flights at intruders, standing up from a brooding position, or excessively flying off the nest. Any sign of nest abandonment shall be reported to the CDFW within 24 hours.



**Impact BI-4: The proposed project would result in direct impacts to wetlands and other waters of the United States and waters of the State. (Less than Significant with Mitigation)**

The proposed project would result in temporary impacts to approximately 0.12-acre of federally protected seasonal wetlands, as defined by Section 404 of the CWA. Temporary impacts would occur at four seasonal wetlands and one freshwater marsh (see Table 11: Impacts to Wetlands and Other Waters).<sup>63</sup> Less than 0.01 (1/100<sup>th</sup>) acre of seasonal wetland would be subject to fill in the Northern HDD Excavation Area; approximately 0.02 acre of seasonal wetland vegetation would be removed along the new pipeline alignment to allow the contractor to track the HDD bore with an aboveground tracking wire. The remainder of the wetland area is located within temporary work or staging areas and thus subject to disturbance during construction.

**TABLE 11: IMPACTS TO WETLANDS AND OTHER WATERS**

Project Component	Wetland ID	Temporary Impact (acres)
<i>Freshwater Marsh</i>		
Aviador Avenue Staging Area	FM4	0.03
<i>Seasonal Wetland</i>		
Vegetation Removal	SW12	0.02
Northern Horizontal Directional Drilling (HDD) Work Area and Pipe Weld Pull Back	SW12	0.04
Northern HDD Work Area and Pipe Weld Pull Back	SW25	0.02
Southern HDD Work Area	SW4	0.01
Excavation Area	SW5	0.03
<b>Total</b>		<b>0.12</b>

Source: AECOM 2013

<sup>63</sup> AECOM. *Preliminary Delineation of Waters of the United States*. Prepared for Pacific Gas and Electric Company, San Ramon, California. March 2013. This document is on file and is available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103, as part of Case File No. 2013.0522E.

Proposed project-related impacts to federally protected wetlands would require authorization from the U.S. Army Corps of Engineers, in accordance with Section 404 of the CWA. Furthermore, **Mitigation Measure M-BI-4a: Avoidance and Minimization Measures for Wetlands and Aquatic Resources**, would be implemented in order to minimize impacts to wetlands and waters during construction. Following the completion of proposed project activities, construction-related fill would be removed and the disturbed area would be restored to pre-project conditions. **Mitigation Measure M-BI-4b: Wetland and Riparian Habitat Restoration Requirements for Temporary Impacts**, would be implemented to ensure that wetlands are restored following construction. With implementation of **Mitigation Measures M-BI-4a: Avoidance and Minimization Measures for Wetlands and Aquatic Resources** and **M-BI-4b: Wetland and Riparian Habitat Restoration Requirements for Temporary Impacts**, impacts to wetlands and other waters of the United States would be reduced to a less-than-significant level.

**Mitigation Measure M-BI-4a: Avoidance and Minimization Measures for Wetlands and Aquatic Resources**

PG&E shall ensure that the following measures are implemented by the contractor during construction to minimize impacts on wetlands and aquatic resources, including waters of the United States and waters of the State:

- Proposed project construction shall avoid direct and indirect impacts on wetland habitats.
- Construction within jurisdictional waters shall be confined to the work period of June 15 through October 31 or the first significant rainfall (0.25 inch or greater), whichever comes first. Per the project's Streambed Alteration Agreement, this work period may be extended at the discretion of the CDFW.
- All project activities within jurisdictional water shall cease 30 minutes before sunset and not resume until 30 minutes after sunrise.
- Construction activities shall be avoided in saturated or ponded wetlands and streams (typically during the spring and winter). Where wetlands or other water features must be disturbed as authorized by permitting resource agencies, the minimum area of disturbance necessary for construction shall be identified and the area outside of that necessary area shall be avoided.
- Silt fencing shall be installed along the construction work limits in areas within 50 feet of designated wetlands and drainages.
- To minimize the degradation of designated wetlands in the project vicinity, protective practices such as use of geotextile cushions or other materials (e.g., timber pads, prefabricated equipment pads, geotextile fabric, or other permeable material) or vehicles with balloon tires shall be employed.
- The contractor shall stabilize exposed slopes immediately upon completion of construction/installation activities. Erosion control measures shall be installed adjacent to suitable aquatic habitat to prevent soil from eroding or falling into these areas. Restoration shall be completed and monitored as described in **Mitigation Measure M-BI-4b: Wetland and Riparian Habitat Revegetation and Restoration Plan**.

- Natural/biodegradable erosion control measures (i.e., straw wattles and hay bales) shall be used. Plastic monofilament netting (erosion control matting) shall not be allowed because wildlife can become entangled in this type of erosion control material.

**Mitigation Measure M-BI-4b: Wetland and Riparian Habitat Revegetation and Restoration Plan**

A Wetland and Riparian Habitat Revegetation and Restoration Plan shall be developed to ensure that wetland and riparian habitats temporarily impacted by construction are restored with a mix of native plant species similar to those removed during construction. The plan shall be submitted to the CDFW for review and written acceptance prior to the commencement of project activities. Factors that shall be addressed in developing an effective Wetland and Riparian Habitat Revegetation and Restoration Plan shall include the following:

- Function and values—percentage of vegetation cover and/or density; approximate plant height; plant species diversity, root development, and canopy stratification.

PG&E shall retain a qualified restoration specialist to develop a Wetland and Riparian Habitat Revegetation and Restoration Plan that describes how wetland and riparian habitats shall be enhanced or recreated and monitored over a minimum period of five years. The Plan shall be consistent with the goals of the SFO San Francisco garter snake West-of-Bayshore Recovery Action Plan (LSA, 2008). PG&E shall be responsible for ensuring that the Wetland and Riparian Habitat Revegetation and Restoration Plan is implemented under the guidance of the restoration specialist. The plan shall be designed such that it meets the following success criteria, or other equally protective success criteria as approved by the resource agencies through the permitting process:

- The restored site is composed of a mix of appropriate native species.
- The restored site has at least 75 percent of the absolute cover of native vegetation present in areas immediately adjacent to the construction corridor.
- Plantings are self-sustaining without human support (e.g., weed control, rodent and deer control, irrigation).
- Functions and values of the restored habitat are comparable to those of adjacent undisturbed wetland or riparian habitat.

After revegetation and restoration are completed, monitoring shall be conducted by a restoration specialist or biologist for a minimum of five years to ensure that the success criteria, as identified in the Wetland and Riparian Habitat Revegetation and Restoration Plan above are met, and to identify any necessary remedial actions during the monitoring period. At a minimum, the success criteria shall be met, for the final two years of the monitoring period. Remedial action shall be required of PG&E if the restoration specialist finds that any of the above criteria are not met by the end of the monitoring period.

**Impact BI-5: The proposed project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (Less than Significant with Mitigation)**

To access the drip work locations, proposed project construction would remove approximately 0.24 acre of willow riparian vegetation, comprised mainly of arroyo willow, from along South Lomita Canal. No other habitat considered by the CDFW or USFWS to be a sensitive natural community has been identified in the

project area. Project-related impacts to willow riparian habitat would be coordinated with the CDFW in accordance with Fish and Game Code 1602. Implementation of **Mitigation Measure M-BI-4b: Wetland and Riparian Habitat Revegetation and Restoration Plan** would ensure that the riparian vegetation is restored following construction and would reduce project impacts to riparian vegetation to a less-than-significant level.

**Impact BI-6: The proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (Less than Significant)**

The proposed project would not interfere substantially with native resident fish and wildlife movement or with established wildlife corridors. Because the West-of-Bayshore property is an isolated patch of relatively undeveloped habitat surrounded by highly urbanized developments, the area does not serve as a migratory corridor for land-based wildlife. Historic hydrologic modifications to the area indicate that the project area is also not expected to support migratory fish corridors. Although the area provides temporary habitat for migrating birds, because the majority of the property would remain undisturbed, migratory bird species would be able to move around the proposed project construction. Therefore, the proposed project would have less-than-significant impacts on fish and wildlife movement and on native resident and migratory wildlife corridors.

**Impact BI-7: The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (No Impact)**

As detailed in Impact AE-3 of Section E.2 Aesthetics, vegetation, including willow riparian, toyon, and eucalyptus, would be removed from project areas located within the City of Millbrae and unincorporated San Mateo County. The City of Millbrae Tree Protection and Urban Forestry Program only protects street trees and, because the proposed project would not remove street trees, there would be no impact resulting from inconsistencies with local ordinances protecting trees within Millbrae city boundaries. Minor trimming and removal of willow riparian, toyon, and removal of eucalyptus at the project site in unincorporated San Mateo County would not conflict with the County's Significant Tree Ordinance. Therefore, the proposed project would have no impact on local policies or ordinances protecting biological resources.



**Impact BI-8: The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. (No Impact)**

No habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans are in place in the project area or would be affected by the proposed project, and thus, no conflicts would result. Therefore, the proposed project would have no impact on any adopted habitat conservation plan.

**Impact C-BI-1: The proposed project, combined with past, present, and reasonably foreseeable future projects in the vicinity, could result in significant cumulative biological impacts. (Less than Significant with Mitigation)**

Many past and present projects, along with ongoing operations and maintenance activities at the West-of-Bayshore property, have resulted in a relatively undeveloped but disturbance-prone setting for biological resources. Nonetheless, a significant population of San Francisco garter snake is found on-site. Activities associated with the Recovery Action Plan for the San Francisco garter snake are underway at the project site and are intended to restore and enhance habitat for the San Francisco garter snake and California red-legged frog. The proposed project's contribution to cumulative biological impacts would be cumulatively considerable. However, implementation of **Mitigation Measures M-BI-1: Compensatory Upland Habitat Mitigation, M-BI-2: Avoidance and Minimization Measures for California Red-legged Frog and San Francisco Garter Snake, M-BI-3: Nesting Bird Surveys, M-BI-4a: Avoidance and Minimization Measures for Wetlands and Aquatic Resources, and M-BI-4b: Wetland and Riparian Habitat Revegetation and Restoration Plan** would reduce the project's contribution to a less-than-cumulatively-considerable level.

## E.14. GEOLOGY AND SOILS

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant Impact with Mitigation Incorporated</u>	<u>Less than Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>14. GEOLOGY AND SOILS – Would the project:</b>					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Change substantially the topography of any unique geologic or physical features of the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Although the proposed project is located in a seismically active area, it is not located within an Alquist-Priolo Earthquake Fault Zone.<sup>64</sup> The nearest location of a fault zoned active in accordance with the State Geologist's standards is the San Andreas Fault in the Montara Mountain 7.5-minute topographic quadrangle, 1.6 miles southwest of the project site. The proposed project is located on level terrain approximately 0.5 mile east of steep terrain; thus, no conventional landslide is expected. Septic tanks or alternative wastewater disposal systems are not elements of the proposed project. Furthermore, while the proposed project may require grading for facility installation, there are no unique geologic or physical features at the site, and project grading would not substantially change the existing topography. For these reasons, significance criteria E.14(a)(i), E.14(a)(iv), E.14(e), and E.14(f) are not applicable.

## ENVIRONMENTAL SETTING

The typical stratigraphy under the project area consists of artificial fill over younger Bay Mud, Holocene-age levee deposits, and Pleistocene-age unconsolidated deposits of the Colma Formation (the upper layer of which frequently contains peat deposits) (see Figure 8: Geologic Formations). The soils that underlie the project site are classified as urban land-Orthents, reclaimed complex, with 0 to 2 percent slopes. Urban land consists of areas covered by asphalt, concrete, buildings, and other structures. The Orthents consist of soils in areas that have been filled. These soils are very deep and are made up of soil material, gravel, broken cement and asphalt, Bay Mud, and solid waste material.

## IMPACT DISCUSSION

**Impact GE-1: The proposed project could expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: strong seismic ground shaking; seismic-related ground failure, including liquefaction; or earthquake induced landslides. (Less than Significant with Mitigation)**

**ii.) Strong seismic ground shaking, and**

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

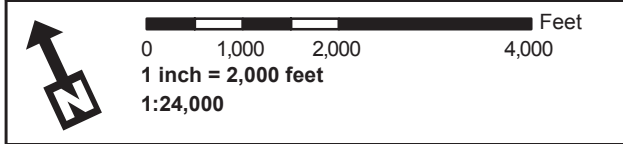
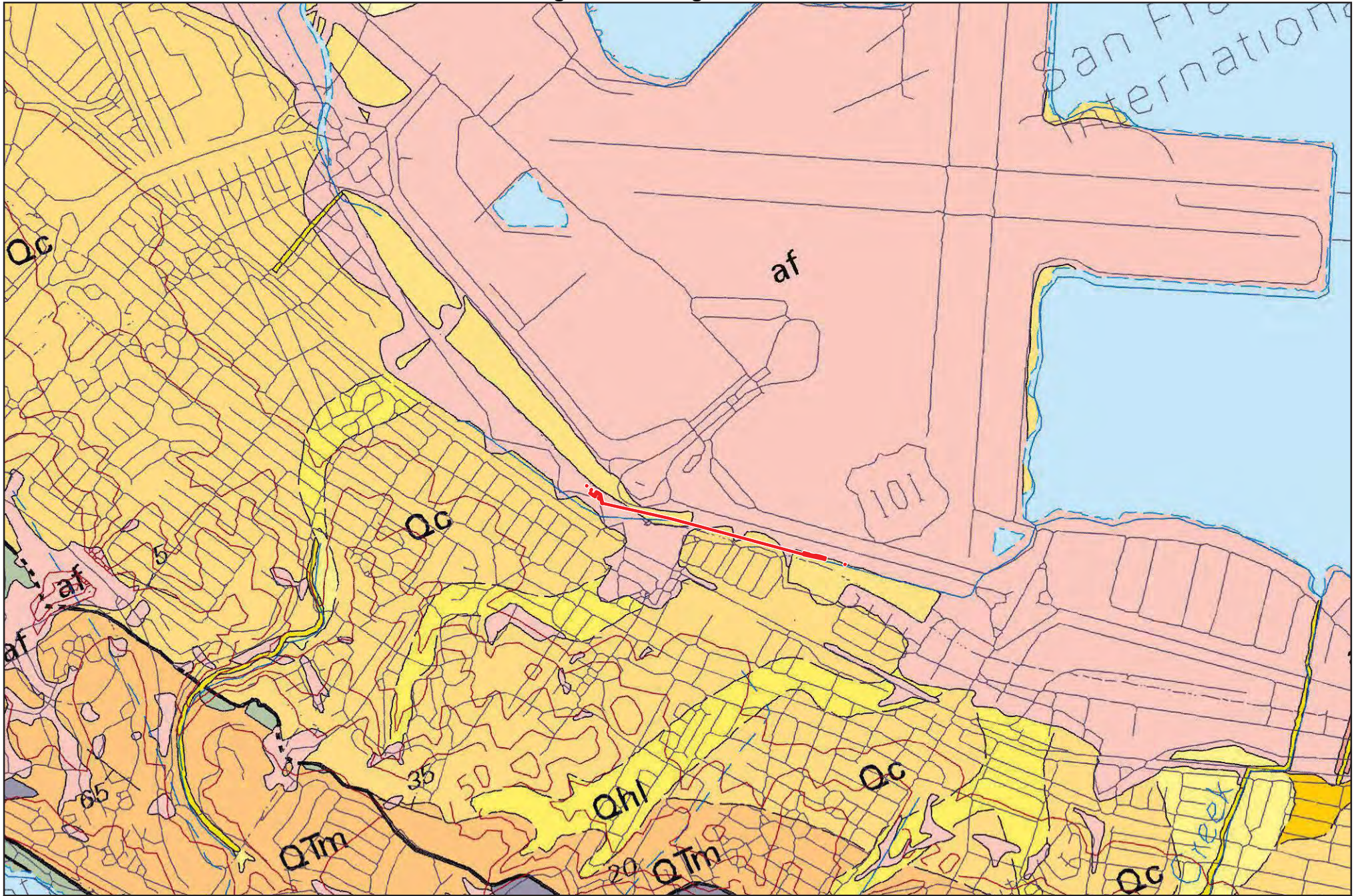
In the event of an earthquake on any of the San Francisco Bay Area faults, the project area would be subject to ground shaking. The proposed project would not include structures for human occupancy.

---

<sup>64</sup> California Geological Survey, Fault-Rupture Hazard Zones in California, Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zones Maps, Special Publication 42, Interim Revision, 2007. This document is on file and is available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103, as part of Case File No.2013.0522E.



Figure 8: Geologic Formations



— Ground Disturbance Study Area	
af	Artificial fill (historic)
Qc	Colma Formation (Pleistocene)
Qh	Natural levee deposits (Holocene)
Qm	Merced Formation (lower Pleistocene and upper Pliocene)
Qn	Sandstone
Qr	Sheared rock (melange)

Source: Brabb, Graymer, and Jones 1998; AECOM 2012

**Line 101 ILI Upgrade and Lomita Park Station Rebuild Project**

Case No. 2013.0522E





A Geotechnical Investigation Report was conducted by Kleinfelder (2013) to explore and evaluate the geologic and subsurface conditions near the proposed pipeline alignment and the Lomita Park Regulator Station to provide recommendations in support of the design and construction of the proposed improvements.<sup>64</sup> The main geotechnical considerations for the project include:

- The potential for differential settlement of the pipeline due to liquefaction; and
- The potential for differential settlement of the Lomita Park Regulator Station due to liquefaction.

In the event of strong seismic ground shaking or seismic-related ground failure, including liquefaction, there would be the potential for damage to the pipeline and regulator station. The design and construction of the foundation at the Lomita Park Regulator Station would be subject to the 2013 California Building Code. However, there are no applicable building codes which address seismic ground shaking or seismic-related ground failure for pipeline design. With implementation of **Mitigation Measure M-GE-1: Pipeline Design**, which would require the pipeline to be designed to accommodate differential settlement due to seismic-related liquefaction, impacts associated with strong seismic ground shaking or seismic-related ground failure, including liquefaction, would be reduced to a less-than-significant level.

#### **Mitigation Measure M-GE-1: Pipeline Design**

The potentially liquefiable layers encountered appear to be discontinuous. Therefore, differential settlement due to liquefaction along the pipeline alignment may be highly variable. Up to 7.5 inches of total settlement may be experienced at some locations along the pipeline. The pipeline above the liquefiable layers shall be designed to accommodate differential settlement. This type of settlement can cause tensile and compressive stresses in the pipeline, depending on its location relative to the liquefiable soils. These stresses shall be accounted for in pipeline design.

#### **Impact GE-2: The proposed project could result in substantial soil erosion or the loss of topsoil. (Less than Significant with Mitigation)**

Proposed project-related construction activities would expose disturbed areas to winter storm events. Rain of sufficient intensity could dislodge soil particles from the soil surface. If the storm is large enough to generate runoff, localized erosion could occur. Construction-related soil disturbance during the summer also could result in soil loss because of wind erosion. The Colma Formation is primarily composed of

---

<sup>64</sup> Kleinfelder, *Geotechnical Investigation Report, PG&E Line 101 North ILI Upgrade, MP 12.06 – 33.68 and Lomita Station Rebuild MP 33.68, San Mateo County, California*. This document is on file and is available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103, as part of Case File No.2013.0522E.

unconsolidated sand deposits, which are highly susceptible to erosion. Implementation of **Mitigation Measure M-HY-1a: Stormwater Pollution Prevention Plan** (see Section E.15 Hydrology and Water Quality for a detailed discussion), would reduce this impact to a less-than-significant level by requiring implementation of erosion and runoff control measures during construction.

**Impact GE-3: The proposed project would be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. (Less than Significant with Mitigation)**

It is anticipated that site grading at the Lomita Park Regulator Station can be performed with conventional grading equipment and techniques.<sup>65</sup> Considering site grades are presently well established, site grading is anticipated to be minimal and consist of backfilling excavations resulting from demolition, and minor grading for drainage and site access. Soft or loose areas may be encountered during construction that may be unsuitable for any type of foundations, and can cause buckling, surfacing, or displacement of pipelines. As described in **Mitigation Measure M-GE-3: Site Preparation**, PG&E would adopt appropriate measures to avoid, improve, replace, or overcome unstable soils. With implementation of **Mitigation Measure M-GE-3: Site Preparation**, the impact from risks related to unstable geologic units and soils would be reduced to a less-than-significant level.

#### **Mitigation Measure M-GE-3: Site Preparation**

Areas to receive fill and structures shall be stripped of existing surface vegetation, organic topsoil, debris, and any other deleterious materials prior to over-excavation or placement of engineered fill. Any stripped organic materials or debris should not be reused as engineered fill. Stripping and removals shall extend laterally a minimum of 5 feet beyond the perimeters of shallow foundations, concrete flatwork, and any other facilities supported on grade. Initial site grading shall include a reasonable search to locate soil disturbed by previous activity, undocumented fill soils, abandoned underground structures and/or existing utilities that may exist within the areas of construction. Any loose or disturbed soil, void spaces made by burrowing animals, or undocumented fill shall be over-excavated to expose firm soil. After stripping and performing any necessary removals, the bottoms of excavations shall be scarified to a depth of at least 8 inches, uniformly moisture conditioned to at least 2 percent above optimum moisture content, and compacted to at least 90 percent relative compaction. If soft or loose materials are encountered at the bottoms of footing excavations, they shall be removed and replaced with lean concrete or additional foundation concrete.

---

<sup>65</sup> Kleinfelder 2013

**Impact GE-4: The proposed project would be located on expansive soil, which could create substantial risks to life or property. (Less than Significant with Mitigation)**

Characteristics of the on-site soils are highly variable because of the differences in the kind and amount of fill material used, but are identified as having a moderate to high expansive potential. Appropriate measures to avoid, improve, replace, or overcome any expansive or unstable soils encountered during construction are described in **Mitigation Measures M-GE-1: Pipeline Design** and **M-GE-3: Site Preparation**. With implementation of these mitigation measures, impacts related to expansive soils would be reduced to a less-than-significant level.

**Impact C-GE-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, could result in a significant cumulative geology and soils impact. (Less than Significant with Mitigation)**

Geologic impacts are generally considered site-specific and depend on localized geology and soil conditions. Geologic and soil conditions inherent at the project site would not contribute to geologic and soil conditions or related hazards at other cumulative project sites. However, other planned and proposed projects at the West-of-Bayshore property could be affected by the proposed project if adverse geologic and soils conditions are not addressed. The project would, therefore, contribute to cumulative geology and soils impacts on the West-of-Bayshore property. However, implementation of **Mitigation Measures M-HY-1a: Stormwater Pollution Prevention Plan, M-GE-1: Pipeline Design** and **M-GE-3: Site Preparation** would address the site's expansive, erodible, and unstable soils, and would reduce the potential for impacts resulting from site-specific geologic and soil conditions. With implementation of these mitigation measures, the project's contribution to significant cumulative geology and soils impact would be reduced to a less-than-cumulatively-considerable level.



## E.15. HYDROLOGY AND WATER QUALITY

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>15. HYDROLOGY AND WATER QUALITY – Would the project:</b>					
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project does not include the construction of housing; therefore, significance criterion E.15(g) is not applicable.

## ENVIRONMENTAL SETTING

### ***Surface Water Hydrology***

The project is located within the U.S. Geological Survey San Francisco Bay Estuaries Hydrologic Unit Code (HUC) and Colma Creek-Frontal San Francisco Bay Estuaries HUC.<sup>67</sup> Specifically, the project is located within the Coyote Point watershed.<sup>68</sup> Rainfall and runoff in higher elevations to the west accumulate and flow east toward the lower elevations, where the project is located, and ultimately outflow east into the San Francisco Bay. The project area is a narrow, low-lying corridor of mostly undeveloped land, set between the cities of Millbrae and San Bruno to the west and U.S. Highway 101 to the east. Topographically, the project is located within the low-lying drainage basin where surface water runoff historically accumulated from the surrounding watersheds before ultimately flowing into the South San Francisco Bay.

A drainage system—composed of pipes, culverts, open channels, and detention basins—currently exists in the project area and is designed to direct flow from underground creeks and runoff from the urbanized areas to the east. East of the project, stormwater is collected in the urban drainage systems in the developed areas, and outflows via unknown drainage pipes and culverts into the project area in multiple locations. The largest portion of the project area, the West-of-Bayshore parcel, receives water from three sources, including direct precipitation, residential runoff, and overflow of trapezoidal channels after high-intensity storms. Cupid Row Canal briefly intersects the project area south of Lions Park, and flows out of a box culvert at 1<sup>st</sup> Avenue and along the southern portion of Lions Park until turning north. Cupid Row Canal is connected to the San Francisco Bay via a tide gate installed in 1948.<sup>69</sup>

At the northern end of Marina Vista Park, where the BART line intersects the Caltrain tracks, Lower Crystal Springs flows via four 36-inch-diameter culverts that are embedded within the wall that supports Caltrain; in this area, the feature is termed South Lomita Canal. Lower Crystal Springs flows out of San Andreas Lake, west of the project area, and a portion of the stream is piped underground beneath residential

---

<sup>67</sup> United States Geological Survey. 2011 (March 16). Science in your Watershed. Hydrologic Unit Code 18050004. Available: <http://water.usgs.gov/wsc/cat/18050004.html>. Accessed November 21, 2012.

<sup>68</sup> California Department of Conservation. 2013. *Watershed Browser*. Available: <http://www.conservation.ca.gov/dlrp/watershedportal/watershedbrowser/Pages/WatershedBrowser.aspx?idnum=02204.400201&name=&mode=>. Accessed January 29, 2013.

<sup>69</sup> LSA 2008

neighborhoods. South Lomita Canal is a natural-bottom channel in this location, but has concrete trapezoidal side slopes throughout much of the project area.

South Lomita Canal continues to flow in a southerly direction toward a culvert located within the West-of-Bayshore parcel, north of the intersection of Monterey and Madrone streets. Approximately 325 feet north of this culvert, most of the water in channelized South Lomita Canal flows through a box culvert under an access road and in an easterly direction, heading south near U.S. Highway 101. The Millbrae Pump Station pumps water from South Lomita Canal into the Highline Canal, just north of the southernmost portion of the project area. Water from these two canals is a tributary to the San Francisco Bay, which is the nearest tidally influenced traditionally navigable water to the project area. South Lomita Canal and Cupid Row Canal are both artificial, low-gradient streams that primarily convey runoff from surrounding urban and residential areas. Both streams are characterized by an abundance of vegetation. The low-gradient nature of these streams combined with the sediment trapping ability of the in-channel vegetation can significantly reduce flow capacity, culminating in channel overflow and flooding of adjacent lands. Flooding in either channel can result in saturation or surface water throughout much of the West-of-Bayshore property. The Highline Canal is also a trapezoidal concrete lined feature, but appears to be regularly maintained.

### ***Groundwater Hydrology***

The southernmost portion of the Westside Basin serves as the source aquifer for groundwater supply to the cities in the project area. The Westside Basin is part of the deep San Mateo Plain Aquifer, a 32.5-square-mile aquifer with a depth of 100 to 500 feet.<sup>70</sup> The San Mateo Plain Aquifer is considered part of the larger Santa Clara Valley Basin, which is a 580-square-mile basin. The project is not located within a groundwater recharge area. Beneath the project area, the aquifer is capped by a 100- to 150-foot layer of clay that acts as a barrier from saltwater intrusion from the San Francisco Bay, vertical flows from an upper shallow aquifer, and surface source contamination.

### ***Flood Potential***

Portions of the project area are located within the Federal Emergency Management Agency (FEMA) special flood hazard area, which is defined as an area subject to inundation by a 1 percent annual chance flood

---

<sup>70</sup> San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). 2011. Water Quality Control Plan of the San Francisco Bay Basin (Region 2). Available: [http://www.waterboards.ca.gov/rwqcb2/basin\\_planning.shtml](http://www.waterboards.ca.gov/rwqcb2/basin_planning.shtml). Accessed March 2, 2013.

event.<sup>71</sup> Additional flooding occasionally occurs due to a combination of heavy rainfall and high tides, caused by inadequate storm drains, low elevation, and silt and debris obstruction of the drainage system. Climate-driven sea level rise may affect the hydrology of the project area. According to the BCDC, the project area may be vulnerable to a 16-inch sea-level rise in the San Francisco Bay by mid-century and an approximately 55-inch sea-level rise in San Francisco Bay by the end of the century.<sup>72</sup> However, SFO provides a boundary to rising sea levels and mitigation strategies directed at the airport may also protect the project area.<sup>73</sup>

## IMPACT DISCUSSION

### **Impact HY-1: The proposed project could violate water quality standards or waste discharge requirements. (Less than Significant with Mitigation)**

Fluids, such as fuel or oils, leaking from vehicles and equipment used during construction could decrease water quality. The proposed project also is located in a low-lying area of land where the water table is shallow in some areas, and dewatering may be required in these areas during project construction (refer to Figure 7 (p. 1 through 3)).

For stormwater discharges associated with construction activity in the state of California, the State Water Resources Control Board (SWRCB) has adopted the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (SWRCB Order 2009-0009-DWQ; Construction General Permit) to avoid and minimize water quality impacts attributable to such activities. The Construction General Permit applies to all projects for which total construction activity disturbs 1 or more acres of soil. Construction activities subject to this permit include, but are not limited to, clearing, grading, stockpiling, and excavation. Among other provisions, the Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which would include and specify BMPs designed to prevent pollutants from contacting stormwater and keep all products of erosion from moving off-site into receiving waters. Because the project would disturb more than 1 acre of soil, PG&E would be required to seek coverage under the State's Construction General Permit from the SWRCB.

Proposed project construction activities, including clearing, grading, excavating, stockpiling, and placing of fill, could cause erosion of surface soils and sedimentation of water bodies. The use of HDD under

---

<sup>71</sup> Federal Emergency Management Agency (FEMA). 2013. Mapping Information Platform. Available: [http://map1.msc.fema.gov/idms/IntraList.cgi?displ=wsp/item\\_11089569.txt](http://map1.msc.fema.gov/idms/IntraList.cgi?displ=wsp/item_11089569.txt). Accessed January 31, 2013.

<sup>72</sup> San Francisco Bay Conservation and Development Commission (BCDC). 2011. Living with a Rising Bay: Vulnerability and Adaptation in San Francisco Bay and on its Shoreline. Available: <http://www.bcdc.ca.gov/BPA/LivingWithRisingBay.pdf>. Accessed March 2, 2013.

<sup>73</sup> BCDC 2011



seasonal wetlands and waters could frac-out and release HDD drilling mud (composed of bentonite clay and water slurry) into water bodies. **Mitigation Measures M-HY-1a: Stormwater Pollution Prevention Plan and M-HY-1b: Dewatering Plan** would require implementation of erosion control measures, BMPs, and pollution prevention and dewatering management plans to reduce the potential for water quality impacts from construction discharges. **Mitigation Measures M-HY-1c: HDD Drilling Mud Containment Measures and M-HY-1d: HDD Fluid Release Contingency Plan** would require implementation of HDD containment and frac-out contingency to reduce the potential for water quality impacts from HDD discharges. With implementation of these mitigation measures, water quality impacts would be reduced to a less-than-significant level.

#### **Mitigation Measure M-HY-1a: Stormwater Pollution Prevention Plan**

PG&E shall file a notice of intent with the SWRCB and the San Francisco Bay RWQCB for coverage under the General Construction Storm Water Permit and shall prepare and implement a SWPPP in accordance with General Order No. 2009-0009-DWQ. Implementation of the SWPPP shall help stabilize disturbed areas and reduce erosion and sedimentation. A monitoring program shall also be established to ensure that the prescribed BMPs are followed during proposed project construction. A qualified SWPPP practitioner shall oversee the implementation of the SWPPP and BMPs.

The following measures are generally drawn from that permit and shall be included in the SWPPP prepared for the construction of the proposed project:

- All BMPs shall be installed during the first day of construction mobilization.
- BMPs shall be developed to prevent the acceleration of natural erosion and sedimentation rates. Examples of BMPs include, but are not limited to, the following measures:
  - straw wattles, water bars, covers, silt fences, sensitive area access restrictions (e.g., flagging), or other sediment containment methods placed around and/or down slope of work areas before earth-disturbing activities and before the onset of winter rains or any anticipated storm events;
  - protection of drain inlets from receiving polluted stormwater through the use of filters such as fabrics, gravel bags, or straw wattles;
  - mulching, seeding, or other suitable measures to protect exposed areas during construction activities as necessary;
  - installation of additional silt fencing before construction to address unforeseen runoff into nearby wetlands and drainages;
  - installation of additional silt fencing prior to construction to address unforeseen runoff from the property;
  - use of brooms and shovels (as opposed to water) when possible to maintain a clean site;
  - construction of a stabilized construction entrance/exit to prevent tracking of dirt onto public roadways;

- establishment of a vehicle storage, maintenance, and refueling area, if needed, to minimize the spread of oil, gas, and engine fluids;
  - prohibition of overnight parking of mobile equipment within 100 feet of wetlands, culverts, or drainages;
  - use of oil pans under stationary vehicles;
  - positioning of stationary equipment (e.g., pumps, generators) within a secondary containment vessel when being used or stored within 100 feet of wetlands, culverts, or drainages; and
  - no overnight parking of mobile equipment within 100 feet of wetlands, culverts, or creeks.
- All BMPs shall be inspected before and after each storm event. BMPs shall be maintained regularly and replaced as necessary throughout the course of construction.
  - At no time shall silt-laden runoff be allowed to enter the stream or directed to where it may enter the stream.

**Mitigation Measure M-HY-1b: Dewatering Plan**

If dewatering is anticipated, PG&E shall prepare and implement a Dewatering Plan in consultation with the San Francisco Bay RWQCB prior to commencing dewatering activities. Dewatering activities shall comply with any applicable waste discharge requirements issued by the San Francisco Bay RWQCB. If the water quality meets the applicable Waste Discharge Requirements, it shall be discharged into adjacent seasonal wetlands and/or the South Lomita Canal. Alternatively, if the water quality does not meet the applicable Waste Discharge Requirements, the water shall be transported to and/or discharged at a POTW.

**Mitigation Measure M-HY-1c: HDD Drilling Mud Containment Measures**

To reduce impacts to water bodies from drilling pits, PG&E shall ensure:

- HDD entry and exit drilling pits shall be located a minimum of 300 feet from aquatic features.
- Drilling pits shall be appropriately sized to contain drilling fluids and cuttings. Control measures to ensure drilling mud is contained shall be monitored for effectiveness and repaired or replaced as needed.
- At no time shall drilling cuttings, drilling mud, and/or material or water contaminated with bentonite be allowed to enter the stream. Any contaminated water/materials from the drilling shall be transported to and/or discharged at a POTW.

**Mitigation Measure M-HY-1d: HDD Fluid Release Contingency Plan**

PG&E shall prepare and implement an HDD Fluid Release Contingency Plan. The plan shall include specific frac-out contingency measures, material required to contain a frac-out or fluid spill, and control measures to ensure that drilling mud is contained. PG&E shall submit the HDD Fluid Release Contingency Plan to the CDFW for review at least 30 days prior to the commencement of project activities. HDD-related project activities may not start until PG&E has received written notification from the CDFW that the HDD Fluid Release Contingency Plan has been accepted. PG&E shall ensure that all material necessary to contain a frac-out or fluid spill shall be on-site and immediately available prior to the commencement of HDD activities.

**Impact HY-2: The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. (Less than Significant)**

The southernmost portion of the Westside Basin serves as the source aquifer for groundwater supply to the cities in the project area. The Westside Basin is part of the deep San Mateo Plain Aquifer, a 32.5-square-mile aquifer with a depth of 100 to 500 feet.<sup>74</sup> The San Mateo Plain Aquifer is considered part of the larger Santa Clara Valley Basin, which is a 580-square-mile basin. The proposed project is not located within a groundwater recharge area. Beneath the project area, the aquifer is capped by a 100- to 150-foot layer of clay that acts as a barrier from saltwater intrusion from the San Francisco Bay, vertical flows from an upper shallow aquifer, and surface source contamination.

The proposed project is located in a low-lying area of land where the water table is shallow in some areas and dewatering may be required in these areas during proposed project construction. The dewatering process would be temporary and short-term in nature and is not expected to substantially deplete groundwater supplies or interfere substantially with groundwater recharge. Therefore, the proposed project's impact on groundwater supplies would be considered less than significant.

**Impact HY-3: The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site. (Less than Significant)**

The proposed project requires minor grading and excavation that would not result in the substantial alteration of existing drainage patterns. The majority of the proposed project footprint would be restored to approximate preconstruction conditions. The expansion of the existing Lomita Park Regulator Station would increase the impervious surface of the project site by approximately 3,490 square feet; this expansion is not anticipated to substantially alter the existing drainage pattern nor increase the rate or amount of surface runoff or erosion/siltation of the West-of-Bayshore property. Therefore, the proposed project would have a less-than-significant impact on the existing drainage pattern of the site or area.

---

<sup>74</sup> San Francisco Bay Regional Water Quality Control Board. 2011. *Water Quality Control Plan of the San Francisco Bay Basin (Region 2)*. Available online: [http://www.waterboards.ca.gov/rwqcb2/basin\\_planning.shtml](http://www.waterboards.ca.gov/rwqcb2/basin_planning.shtml).

**Impact HY-4: The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. (Less than Significant)**

The proposed project requires minor grading and excavation that would not result in the substantial alteration of existing drainage patterns. The majority of the proposed project footprint would be restored to approximate preconstruction conditions. The expansion of the existing Lomita Park Regulator Station would increase the impervious surface of the project site by approximately 3,490 square feet; this expansion is not anticipated to substantially alter the existing drainage pattern nor increase the rate or amount of surface runoff or erosion/siltation of the West-of-Bayshore property in a manner that would result in flooding. Therefore, the proposed project would have a less-than-significant impact on the existing drainage pattern of the site or area.

**Impact HY-5: The proposed project would not 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. (Less than Significant)**

Most of the proposed project alignment is located within the West-of-Bayshore property, which functions as a stormwater filtration area for the adjacent urban land uses. Stormwater conveyances are located within the residential areas near the access roads. South Lomita Canal also conveys stormwater during rain events. The small expansion of impervious surfaces for the Lomita Park Regulator Station would not be expected to contribute substantial additional amounts of runoff water that would exceed the capacity of existing or planned stormwater drainage systems in the area. Therefore, this impact would be considered less than significant.

**Impact HY-6: The proposed project would not otherwise substantially degrade water quality. (Less than Significant)**

No additional impacts on water quality beyond those previously described are anticipated to occur. Therefore, the proposed project would not otherwise substantially degrade water quality and this impact would be considered less than significant.



**Impact HY-7: The proposed project would not place within a 100-year flood hazard area structures which would impede or redirect flood flows. (No Impact)**

The existing Lomita Park Regulator Station is not located within a FEMA special flood hazard area (see Figure 9: Hydrology). The gas pipeline would cross underneath South Lomita Canal, which is a FEMA-designated special flood hazard area, but would not impede or redirect flood flows. Therefore, the proposed project would have no impact on flood flows.

**Impact HY-8: The proposed project would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. (No Impact)**

The expanded regulator station would not be located within a special flood hazard area. Thus, the proposed project would not expose people or structures to a significant risk of loss, injury, or death resulting from flooding, and no impact would occur.

**Impact HY-9: The proposed project would not cause inundation by seiche, tsunami, or mudflow. (No Impact)**

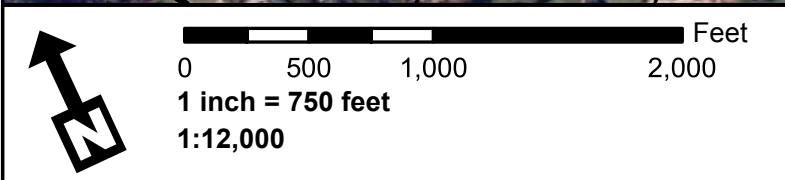
The proposed project would not affect the susceptibility of the project area to increased risk of inundation resulting from seiche, tsunami, or mudflow, and thus would have no impact.





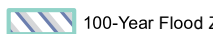
**Impact C-HY-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, could result in significant cumulative impacts to hydrology and water quality. (Less than Significant with Mitigation)**

Development projects at the West-of-Bayshore property and in its vicinity could result in temporary and permanent impacts to hydrology and water quality, and could potentially exceed applicable water quality standards. Permanent impacts may result from additional residential development on the west side of the property, which would contribute additional urban storm runoff to the site, and from projects on the site that require land clearing, site disturbance, and grading associated with construction activities and access road maintenance. The proposed project has the potential to adversely affect water quality during construction, resulting in a cumulatively considerable contribution to water quality impacts. However,



Figure 9: Hydrology



 Project Footprint	 Westside Groundwater Basin
 Watershed (HU12)	 Relatively Permanent Water
 100-Year Flood Zone	

**Line 101 ILI Upgrade and Lomita Park Station Rebuild Project**

Source: FEMA 2013; NRCS; AECOM 2012

Case No. 2013.0522E





implementation of **Mitigation Measures M-HY-1a: Stormwater Pollution Prevention Plan, M-HY-1b: Dewatering Plan, M-HY-1c: HDD Drilling Mud Containment Measures, and M-HY-1d: HDD Fluid Release Contingency Plan** would reduce the project's temporary contribution to water quality impacts to a less than cumulatively considerable level.



## E.16. HAZARDS AND HAZARDOUS MATERIALS

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>16. HAZARDS AND HAZARDOUS MATERIALS – Would the project:</b>					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed project is not located within the vicinity of a private airstrip; therefore, significance criterion E.16(f) is not applicable.

## ENVIRONMENTAL SETTING

The project site is located in northern San Mateo County, west of SFO and U.S. Highway 101, and east of the Caltrain right-of-way (i.e., railroad tracks owned and operated by the Peninsula Corridor Joint Powers Board) on relatively undeveloped parcels owned by the CCSF. Single-family homes are located immediately adjacent to the site. The area immediately surrounding the project site is characterized by highly urbanized development.

The term “hazardous materials” refers to both hazardous substances and hazardous wastes. Under federal and State laws, hazardous material means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety and/or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.<sup>75</sup>

A search of the SWRCB’s GeoTracker and California Department of Toxic Substances Control’s (DTSC) EnviroStor online databases was conducted to identify hazardous material sites within 1,000 feet of the proposed project site. The SWRCB’s GeoTracker and the DTSC’s EnviroStor databases did not indicate any open cases within 1,000 feet of the proposed project site.

## IMPACT DISCUSSION

### **Impact HZ-1: Construction of the proposed project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (Less than Significant with Mitigation)**

The proposed project would involve the storage, use, and transport of minor amounts of hazardous materials (e.g., fuels, oils, and lubricants) during construction activities, and small quantities of these could be stored on-site. Any hazardous material needed for construction would be stored and used in accordance with the applicable regulations that specify hazardous materials storage and handling requirements, such as proper container types, spill containment, and usage methods for minimizing the potential for release and harmful exposure. The use of any new or additional hazardous materials would require PG&E to obtain permits and comply with appropriate regulatory agency standards designed to avoid releases of hazardous waste. Furthermore, implementation of mitigation measures described below would further

---

<sup>75</sup> California Health and Safety Code, Chapter 6.95, Section 25501 (p).

reduce the risk of exposure of the environment, the public, or project workers to potentially hazardous materials during proposed project construction. Specifically, these measures would require proper equipment maintenance and refueling to ensure that no leaks of automotive fluids would occur and any accidental spills would be contained. With implementation of **Mitigation Measures M-HZ-1a: Equipment Maintenance and Refueling** and **M-HZ-1b: Spill Prevention Control and Countermeasures Plan and Hazardous Materials Business Plan**, impacts related to the routine, use, transport, or disposal of hazardous materials would be reduced to a less-than-significant level.

**Mitigation Measure M-HZ-1a: Equipment Maintenance and Refueling**

PG&E shall require that all equipment be maintained so that no leaks of automotive fluids—such as fuels, solvents, or oils—would occur. All refueling and maintenance of vehicles and other construction equipment shall be restricted to designated staging areas located at least 100 feet from any down-gradient aquatic habitat unless it is already otherwise isolated from such habitat. All hazardous or toxic materials that could be deleterious to aquatic life that could be washed into a stream shall be contained in water-tight containers.

**Mitigation Measure M-HZ-1b: Spill Prevention Control and Countermeasures Plan and Hazardous Materials Business Plan**

PG&E shall prepare and implement a Spill Prevention, Control, and Countermeasures (SPCC) Plan for the proposed project, as required by 40 Code of Federal Regulations Part 112. The SPCC Plan shall include engineered and operational methods for preventing, containing, and controlling potential releases, and provisions for quick and safe cleanup. The plan shall ensure that hazardous substances and materials are prevented from contaminating the soil or streams, and that all spills are cleaned up immediately. PG&E shall notify the CDFW immediately of any spills and shall consult with the CDFW regarding clean-up procedures. The plan shall be submitted to the appropriate agency for review and approval. PG&E shall also update the Hazardous Materials Business Plan for the existing Lomita Park Regulator Station, as needed, in accordance with Chapter 6.95 of the California Health and Safety Code and California Code of Regulations Title 22. Staging areas, along with the existing facility, shall be operated in compliance with all applicable federal, State, and local regulations.

**Impact HZ-2: Construction of the proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (Less than Significant with Mitigation)**

Proposed project construction would increase the potential for small accidental releases of hazardous materials (i.e., fuel, oil, and lubricant) associated with the use of motorized equipment. In addition, although regulatory agency databases did not indicate any known hazardous waste sites, demolition activities could result in exposure of workers and the environment to lead-based paint or polychlorinated biphenyls. Excavation would also be minimal, and the implementation of HDD drilling techniques would reduce the upset to soils. Nonetheless, the potential to encounter unanticipated hazardous materials during ground-disturbing activities exists. If any stained or odiferous soils are encountered during project-related

excavation activities, PG&E would implement **Mitigation Measure M-HZ-2: Treatment of Unanticipated Hazardous Materials**, requiring PG&E to halt work if any such soils are encountered during project-related excavation activities. As described previously, PG&E would also implement and comply with all existing federal and State hazardous materials regulations. Furthermore, as described in **Mitigation Measure M-HZ-1b: Spill Prevention Control and Countermeasures Plan and Hazardous Materials Business Plan**, PG&E would implement SPCC Plans for preventing, containing, and controlling potential releases. PG&E would also follow the Hazardous Materials Business Plan to ensure potential safety hazards are minimized and construction workers are trained in emergency procedures. Project compliance with existing hazardous materials laws and regulations, and implementation of **Mitigation Measures M-HZ-2** and **M-HZ-1b** would reduce hazardous materials impacts to a less-than-significant level.

**Mitigation Measure M-HZ-2: Treatment of Unanticipated Hazardous Materials**

If any stained or odiferous soils that may be considered hazardous materials are encountered during project-related excavation activities, PG&E shall immediately halt work and properly characterize the material and shall take appropriate measures specific to the materials to protect human health and environment.

**Impact HZ-3: Construction of the proposed project could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. (Less than Significant with Mitigation)**

Five schools are located within 0.25 mile of the proposed project, as measured from the nearest location of the school property to the project site. These schools and their locations are provided in Table 12: Schools within 0.25 Mile of the proposed project.



**TABLE 12: SCHOOLS WITHIN 0.25 MILE OF THE PROPOSED PROJECT**

School	Location	Proximity to Proposed Project
California Montessori School	480 Anselmo Avenue N San Bruno, CA 94066	Approximately 0.23 mile northwest of the staging area along 1 <sup>st</sup> Avenue
Belle Air Elementary	450 Third Avenue San Bruno, CA 94066	Adjacent to the staging area along 1 <sup>st</sup> Avenue
Happy Halls School	233 Santa Inez Avenue San Bruno, CA 94066	Approximately 0.05 mile from the Northern Horizontal Directional Drilling (HDD) Work Area
Lomita Park Elementary	200 St. Helena Ave San Bruno, CA 94066	Approximately 0.05 mile from the Northern HDD Work Area
Millbrae Nursery School	86 Center Street Millbrae, CA 94030	Approximately 0.05 mile from the Northern HDD Work Area

Construction activities would involve the use of minor amounts of hazardous materials (e.g., fuels, oils, and lubricants). These materials are commonly used during construction, are not acutely hazardous, and would be used in small quantities such that an accidental spill or release would be unlikely to result in significant impacts to the schools listed in Table 12. Nevertheless, implementation of **Mitigation Measure M-HZ-1b: Spill Prevention Control and Countermeasures Plan and Hazardous Materials Business Plan** would reduce the risk of impacts due to accidental spills or releases. Furthermore, implementation of **Improvement Measure I-HZ-3: Notify and Consult with Affected Schools**, would have PG&E notify the schools listed in Table 12 regarding potential project-related hazards and hazardous materials prior to the start of construction activities. With implementation of **Mitigation Measure M-HZ-1b**, impacts on schools from potential emissions of hazardous substances would be reduced to a less-than-significant level.

**Improvement Measure I-HZ-3: Notify and Consult with Affected Schools**

PG&E shall provide written notification of the proposed project to schools located within 0.25 mile of the project site, including California Montessori School, Belle Air Elementary, Happy Hall School, and Lomita Park Elementary in San Bruno and Millbrae Nursery School in Millbrae. PG&E also shall consult with appropriate school or district personnel about the types of construction activities that shall occur and the estimated timing of such activities, as well as provide examples of the types of hazardous materials that could be used during construction activities.

**Impact HZ-4: The proposed project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment. (Less than Significant)**

A review of information obtained from SWRCB,<sup>76</sup> DTSC,<sup>77</sup> and USEPA databases<sup>78</sup> indicates that the proposed project would neither be located on nor within 1,000 feet of a known hazardous material site compiled pursuant to California Government Code Section 65962.5. Due to the fact that there are no known hazardous material sites within the proposed project footprint, impacts associated with hazardous material sites that could result in a hazard to the public or the environment would be less than significant.

**Impact HZ-5: The proposed project would be located within 2 miles of a public airport or public use airport but would not result in a safety hazard for people residing or working in the project area. (Less than Significant)**

As identified in the Airport Land Use Compatibility Plan for SFO, the Lomita Park Regulator Station is located within an area in the vicinity of the airport where Federal Aviation Administration (FAA) notification requirements apply to structures exceeding the FAA Part 77 imaginary surfaces rule.<sup>79</sup> Specifically, the regulator station is located within an area in which structures 30 feet tall or greater would exceed the 100:1 slope imaginary surface within the project site and would require FAA notification and consultation. The rebuilding of the Lomita Park Regulator Station would involve the construction of a new building that is less than 10 feet tall, a 25-foot-tall replacement power pole, and a 20-foot-tall antenna. Because the new structures at the regulator station would be less than 30 feet tall, the FAA notification requirements would not be applicable to the proposed project. Furthermore, PG&E would notify and consult with the City/County Association of Governments of San Mateo County Airport Land Use Commission regarding the new structures that would be installed at the regulator station, to ensure that a safety hazard for people residing or working in the project area does not occur. Therefore, this impact would be less than significant.

---

<sup>76</sup> State Water Resources Control Board. 2012. GeoTracker. Available: <http://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=san+francisco%2C+ca+94128>. Last updated 2012. Accessed December 6, 2012.

<sup>77</sup> California Department of Toxic Substances Control. 2012. EnviroStor. Available: <http://www.envirostor.dtsc.ca.gov/public/>. Accessed December 6, 2012.

<sup>78</sup> U.S. Environmental Protection Agency. 2012. Cleanup Sites in California. Available: <http://www.epa.gov/region9/cleanup/california.html#s>. Last updated June 5, 2012. Accessed December 7, 2012.

<sup>79</sup> Rincondo & Associates. 2012. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. Prepared for the City/County Association of Governments of San Mateo County in its Designated Role as the Airport Land Use Commission for San Mateo County.

**Impact HZ-6: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (No Impact)**

The proposed project is located within relatively undeveloped parcels (collectively known as the West-of-Bayshore property) just west of U.S. Highway 101 and SFO. As noted in Section E.12, Public Services, the proposed project's types of activities and amount of equipment would not cause noticeable impacts to public services. Construction activities and facilities, including staging areas, would be located off of main roadways within the West-of-Bayshore property and would not block any local roadways, streets, or driveways. Therefore, the proposed project would not impair implementation of or physically interfere with any emergency response or evacuation plans, and there would be no impact.

**Impact HZ-7: The proposed project would not expose people or structures to a significant risk of loss, injury, or death involving fires. (Less than Significant)**

The project site is located within relatively undeveloped parcels collectively known as the West-of-Bayshore property that are adjacent to developed, highly urbanized areas. As identified by the California Department of Forestry and Fire Protection, the proposed project is located within a Local Responsibility Area that is not designated as a high fire hazard severity zone.<sup>80</sup> Although the project site itself is largely undeveloped, it is located in a developed and highly urbanized area, and is not within or adjacent to a wildland/urban interface. Thus, the project site is not at high risk for wildfire. In the unlikely event of fire, adequate fire protection services also are available within the City of San Bruno and County of San Mateo, as discussed in Section E.12, Public Services. Therefore, this impact would be less than significant.

The proposed project consists of replacement of existing underground natural gas pipeline and expansion of a regulator station. Natural gas pipelines are regulated by the U.S. Department of Transportation and the CPUC. In part, because of regulatory oversight, gas pipelines are not subject to frequent leaks. However, in rare instances, gas leaks can result in an explosion that could expose people or structures to significant risk of loss, injury, or death from fire. As described in Section A.2, Project Background and Purpose, the existing pipeline and regulator station would undergo upgrades to accommodate use of a pipeline inspection gadget. PIGs are used to conduct in-line inspections of natural gas pipelines, and can identify anomalies requiring remediation. They are used in conjunction with direct pipeline assessments and pipeline pressure tests to ensure constant pipeline safety and reliability, thus improving the safety and reliability of the existing pipeline system. Because the pipeline and regulator station would continue to be

---

<sup>80</sup> California Department of Forestry and Fire Protection. 2008. Very High Fire Hazard Severity Zones in Local Responsibility Area as Recommended by the California Department of Forestry and Fire Protection, San Mateo County.

subject to PG&E monitoring programs and regulatory oversight, as well as the enhanced inspection capability of PIGs, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving fires. Therefore, the proposed project would not have a significant impact due to risk from fire.

**Impact C-HZ-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the project site vicinity, could result in significant impacts related to hazards and hazardous materials. (Less than Significant with Mitigation)**

Impacts from hazards are generally site-specific and typically do not result in cumulative impacts. Any hazards at surrounding development sites would be subject to the federal, State, and local regulations and requirements similar to those for the proposed project. Nonetheless, construction sites typically involve the use of hazardous materials that could result in upset or accident conditions creating a significant hazard to the public or the environment, and unknown contamination could migrate down gradient to affect larger areas. As a result, the project would contribute to significant cumulative impacts related to hazardous materials. However, these cumulative impacts would be substantially reduced through compliance with applicable federal, State, and local regulations. Furthermore, implementation of **Mitigation Measures M-HZ-1a: Equipment Maintenance and Refueling, M-HZ-1b: Spill Prevention Control and Countermeasures Plan and Hazardous Materials Business Plan, M-HZ-2: Treatment of Unanticipated Hazardous Materials, and M-HZ-3: Notify and Consult with Affected Schools** would ensure that the proposed project's contribution to hazardous materials impacts would be reduced to a less-than-cumulatively-considerable level.



## E.17. MINERAL AND ENERGY RESOURCES

<i>Topics:</i> _____	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>17. MINERAL AND ENERGY RESOURCES – Would the project:</b>					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in wasteful manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project site is not located within any area classified as a mineral resource zone (MRZ) and would not result in the loss of availability of a locally important resource recovery site; therefore, significance criteria E.17(a) and E.17(b) are not applicable.

### IMPACT DISCUSSION

**Impact ME-1: The proposed project would not encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in wasteful manner. (Less than Significant)**

Minor quantities of fuel, water, and energy would be required for modifications and upgrades to an existing natural gas transmission line and associated facilities and to support ongoing operation and maintenance of the pipeline. Electrical power would be the primary power source for the regulator station. For these reasons, the project's use of fuel, water, and energy would be minimal, and would not be wasteful. Therefore, this impact would be less than significant.

**Impact C-ME-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not have cumulative impacts related to mineral and energy resources. (Less than Significant)**

The relevant area for cumulative energy impacts is the service area for the energy provider, which includes the geographic area of the identified cumulative projects (refer to Table 3 and Figure 4). All of the cumulative

projects would use some quantity of fuel, water, or energy, particularly large development projects, and would contribute to a cumulative impact on energy resources. The proposed project's incremental contribution to energy consumption would be less-than-cumulatively considerable, due to the short-term nature of construction and the minimal energy requirements for operation of the Lomita Park Regulator Station.

## E.18. AGRICULTURE AND FOREST RESOURCES

<i>Topics:</i> _____	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
----------------------	---------------------------------------	--	-------------------------------------	------------------	-----------------------

**18. AGRICULTURE AND FOREST RESOURCES:** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

**Would the project:**

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526),	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project is not located on any lands categorized as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. No Farmland exists on the project site and no conversion of Farmland would occur as a result of the proposed project. No agricultural zoning or uses occur on or within the vicinity of the project site and the proposed project does not cross any lands under a Williamson Act contract. Project construction would not alter the existing land use at the project site and no conversion of farmland or forest land would occur. For these reasons, significance criteria E.18(a), E.18(b), E.18(c), E.18(d), and E.18(e) are not applicable.

## E.19. MANDATORY FINDINGS OF SIGNIFICANCE

<i>Topics:</i>	<i>Potentially Significant Impact</i>	<i>Less than Significant Impact with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Not Applicable</i>
<b>19. MANDATORY FINDINGS OF SIGNIFICANCE – Would the project:</b>					
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### IMPACT DISCUSSION

**Impact MF-1: The proposed project could degrade the quality of the environment, substantially reduce the habitat or otherwise adversely affect a rare or endangered plant or animal species. (Less than Significant with Mitigation)**

The discussion in Section E, Evaluation of Environmental Effects, identifies potentially significant impacts on the environment related to cultural and paleontological resources, air quality, biological resources, geology and soils, and hydrology and water quality. However, mitigation measures have been provided to address these potentially significant project-level impacts. Implementation of the mitigation measures would reduce these impacts to a less-than-significant level.

As discussed in Impacts BI-1 and BI-2 in Section E.13, Biological Resources, project impacts on California red-legged frogs and San Francisco garter snakes and associated upland habitat would be reduced to a less-than-significant level with the implementation of **Mitigation Measures M-BI-1: Compensatory Upland Habitat Mitigation** and **M-BI-2: Avoidance and Minimization Measures for California Red-legged Frog and San Francisco Garter Snake**. In addition, impacts on special-status bird species (saltmarsh common



yellowthroat, white tailed kite, and northern harrier) would be reduced to a less-than-significant level with the implementation of **Mitigation Measure M-BI-3: Nesting Bird Surveys**. Wetland habitats would be protected with implementation of **Mitigation Measures M-BI-4a: Avoidance and Minimization Measures for Wetlands and Aquatic Resources, and M-BI 4b: Wetland and Riparian Habitat Revegetation and Restoration Plan**. Impacts related to reducing the number or restricting the range of a rare or endangered plant or animal would be reduced to a less-than-significant level with implementation of **Mitigation Measure M-BI-2: Avoidance and Minimization Measures for California Red-legged Frog and San Francisco Garter Snake**.

**Impact MF-2: The proposed project could eliminate important examples of the major periods of California history or prehistory. (Less than Significant with Mitigation)**

As discussed in Impact CP-1 in Section E.4, Cultural and Paleontological Resources, there would be no project-related impacts on historic architectural resources. As discussed in Impacts CP-2, CP-3, and CP-4 in Section E.4, construction activities associated with the proposed project could result in potential impacts on unknown paleontological resources, archeological resources, and human remains. These impacts would be reduced to a less-than-significant level with the implementation of **Mitigation Measures M-CP-2: Archeological Monitoring** and **M-CP-3: Unanticipated Discoveries for Paleontological Resources**.

**Impact MF-3: The proposed project could have impacts that would be individually limited, but cumulatively considerable. (Less than Significant with Mitigation)**

Section 15130 of the State CEQA Guidelines requires a reasonable analysis of the significant cumulative impacts of a proposed project. Cumulative impact refers to “two or more individual effects that, when considered together, are considerable or able to compound or increase other environmental impacts.” The individual effects may be changes resulting from a single project or an increase in the number of environmental impacts. The cumulative impact is the change in the environment that results when the incremental impact of the project is added to closely related past, present, or reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects that take place over a period of time (CEQA Guidelines Section 15355 (a)(b)).

For the purposes of this initial study, the geographic context for the proposed project’s cumulative impact assessment identified those projects identified by local planning agencies in the project vicinity (within 1.1 miles of the proposed project). A complete list of potential cumulative projects in the project vicinity is

presented in in Table 3. These projects include airport projects (runway reconstruction, terminal redevelopment, roadway development, and air traffic control tower relocation) and development projects (new residential construction and a Safeway store reconstruction).

The assessment of potential cumulative impacts for environmental resource areas are provided in the relevant subsections of Section E, Evaluation of Environmental Effects. However, for the reasons described in Sections E.1 through E.19, with implementation of mitigation measures to address potentially significant project-level impacts, the proposed project's contribution to all cumulative impacts on the environment would be less-than-cumulatively considerable.

**Impact MF-4: The proposed project could have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. (Less than Significant with Mitigation)**

The discussion in Section E, Evaluation of Environmental Effects identifies potentially significant impacts related to cultural and paleontological resources, air quality, biological resources, geology and soils, hydrology and water quality, and hazards and hazardous materials. Mitigation measures have been identified in this initial study to reduce all potentially significant impacts to a less-than-significant level. No impacts or less-than-significant impacts were identified for the following environmental issue areas: land use, aesthetics, population and housing, transportation and circulation, noise, greenhouse gas emissions, wind and shadow, recreation, utilities and service systems, public services, mineral and energy resources, and agriculture and forest resources. Therefore, with implementation of the mitigation measures specified in Sections E.1 through E.18, the proposed project would not result in substantial adverse effects, direct or indirect, on human beings.

## F. MITIGATION MEASURES AND IMPROVEMENT MEASURES

### F.1. MITIGATION MEASURES

The following mitigation measures have been adopted by PG&E and are necessary to avoid potential significant impacts of the proposed project.

#### **Mitigation Measure M-CP-2: Archeological Monitoring**

Based on the reasonable potential that archeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. PG&E shall retain the services of an archeological consultant from the rotational Qualified Archeological Consultants List (QACL) maintained by the Planning Department archeologist. PG&E shall contact the Department archeologist to obtain the names and contact information for the next three archeological consultants on the QACL. The archeological consultant shall undertake an archeological monitoring program. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for a maximum of four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less-than-significant level potential effects on a significant archeological resource as defined in CEQA Guidelines Sect. 15064.5 (a)(c).

*Archeological Monitoring Program (AMP)*. The archeological monitoring program shall minimally include the following provisions:

- The archeological consultant, PG&E, and ERO shall meet and consult on the scope of the AMP reasonably prior to any project-related soils-disturbing activities commencing. The ERO in consultation with the project archeologist shall determine what project activities shall be archeologically monitored. In most cases, any soils-disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring, etc.), site remediation, etc., shall require archeological monitoring because of the potential risk these activities pose to archeological resources and to their depositional context.
- The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archeological resource.
- The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with the archeological consultant, determined that project construction activities could have no effects on significant archeological deposits.
- The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis.
- If an intact archeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction crews and heavy equipment until the deposit is

evaluated. If in the case of pile driving activity (foundation, shoring, etc.), the archeological monitor has cause to believe that the pile driving activity may affect an archeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO and the PG&E Cultural Resource Specialist of the encountered archeological deposit. The archeological consultant shall, after making a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit, present the findings of this assessment to the ERO.

*Consultation with Descendant Communities.* On discovery of an archeological site<sup>81</sup> associated with descendant Native Americans or the Overseas Chinese, an appropriate representative<sup>82</sup> of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to consult with the ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the Final Archeological Resources Report shall be provided to the representative of the descendant group.

If the ERO in consultation with the archeological consultant determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of PG&E, either:

- the proposed project shall be re-designed so as to avoid any adverse effect on the significant archeological resource; or
- an archeological data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

If an archeological data recovery program is required by the ERO, the archeological data recovery program shall be conducted in accordance with an archeological data recovery plan (ADRP). The project archeological consultant, PG&E, and ERO shall meet and consult on the scope of the ADRP. The archeological consultant shall prepare a draft ADRP that shall be submitted to the ERO for review and approval. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.

---

<sup>81</sup> The term “archeological site” is intended here to minimally include any archeological deposit, feature, burial, or evidence of burial.

<sup>82</sup> An “appropriate representative” of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and, in the case of the Overseas Chinese, the Chinese Historical Society of America.



The scope of the ADRP shall include the following elements:

- *Field Methods and Procedures.* Descriptions of proposed field strategies, procedures, and operations
- *Cataloguing and Laboratory Analysis.* Description of selected cataloguing system and artifact analysis procedures
- *Discard and Deaccession Policy.* Description of and rationale for field and post-field discard and deaccession policies
- *Interpretive Program.* Consideration of an on-site/off-site public interpretive program during the course of the archeological data recovery program
- *Security Measures.* Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities
- *Final Report.* Description of proposed report format and distribution of results
- *Curation.* Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities

*Human Remains, Associated or Unassociated Funerary Objects.* The treatment of human remains and of associated or unassociated funerary objects discovered during any soils-disturbing activity shall comply with applicable State and federal laws, including immediate notification of the coroner of the City and County of San Francisco, along with the ERO and PG&E Cultural Resource Specialist, and in the event of the coroner's determination that the human remains are Native American remains, notification of the NAHC, who shall appoint an MLD (Pub. Res. Code Sec. 5097.98). The archeological consultant, PG&E, ERO, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines. Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, curation, possession, and final disposition of the human remains and associated or unassociated funerary objects.

*Final Archeological Resources Report.* The archeological consultant shall submit a Draft Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the draft final report.

Copies of the Draft FARR shall be sent to the ERO for review and approval. Once approved by the ERO copies of the FARR shall be distributed as follows: California Archeological Site Survey NWIC shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Environmental Planning Division of the Planning Department shall receive one bound, one unbound, and one unlocked, searchable PDF copy on CD of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the NRHP/CRHR. In instances of high public interest or interpretive value, the ERO may require a different final report content, format, and distribution than that presented above.

### **Mitigation Measure M-CP-3: Unanticipated Discoveries for Paleontological Resources**

If construction crews discover fossils or fossil-like material during excavation and/or earthmoving operations, all earthwork and other types of ground disturbance within 50 feet of the find shall stop

immediately until a qualified paleontologist, as defined by the Society of Vertebrate Paleontology guidelines, can assess the nature and importance of the find. Based on the uniqueness of the find, the qualified paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may also include preparation of a report describing the finds. Fossil remains collected during monitoring and/or salvage shall be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections, and a paleontological report shall be written. The paleontologist's recommendations shall be subject to review and approval by the ERO or designee.

**Mitigation Measure M-AQ-2a: Minimum USEPA Tier Standards for Construction Equipment**

All construction equipment used for project construction shall meet a minimum USEPA Tier II engine standard. All generators, including the power unit on the drill rig, shall meet a minimum USEPA Tier III engine standard. This mitigation would decrease average daily construction-related NO<sub>x</sub> emissions from 64 lbs./day to 49 lbs./day. This measure will be included in the construction contract specifications for the project.

**Mitigation Measure M-AQ-2b: BAAQMD Basic Construction Measures**

To limit dust and equipment exhaust emissions associated with project construction, the following BAAQMD-recommended Basic Construction Measures shall be included in the construction contract specifications for the project:

9. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
10. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
11. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day.
12. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
13. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
14. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. Clear signage shall be provided for construction workers at all access points.
15. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
16. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. The person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

### **Mitigation Measure M-BI-1: Compensatory Upland Habitat Mitigation**

To compensate for the loss of approximately 0.12 acre of upland habitat for California red-legged frog and San Francisco garter snake caused by the Lomita Park Regulator Station expansion and the necessary access road creation and relocation, PG&E shall implement mitigation in the form of on-site habitat enhancement in areas where non-native invasive plants, such as pampas grass and eucalyptus trees, threaten California red-legged frog and San Francisco garter snake upland habitat. PG&E shall develop a Revegetation and Restoration Plan in coordination with SFO. The plan shall be consistent with the goals of the SFO San Francisco garter snake West-of-Bayshore Recovery Action Plan and submitted to the USFWS for approval within 60 days of initial ground disturbance. The plan shall fully mitigate for both permanent and temporary impacts on habitat and shall include criteria to measure the success of restoration and enhancement activities. Restoration shall focus on areas located in close proximity to aquatic features that have the potential to provide high-quality habitat for both species. In the event that on-site restoration is not feasible or would not fully satisfy mitigation requirements, PG&E shall consult with the USFWS to determine a feasible mitigation plan that fully satisfies mitigation requirements.

### **Mitigation Measure M-BI-2: Avoidance and Minimization Measures for California Red-legged Frog and San Francisco Garter Snake**

To avoid and minimize potential impacts to California red-legged frog and San Francisco garter snake during construction, the following measures shall be implemented:

- At least 30 days before the start of any activities, PG&E shall submit the names and credentials of biologists proposed to perform preconstruction surveys and monitoring to the USFWS and CDFW for approval or identify biologists that have been previously approved by USFWS and CDFW. Only USFWS/CDFW-approved biologists shall participate in the capture, handling, or relocation of listed species, and in the hand-excavation of rodent burrows and other potential underground retreats.
- Before the start of construction, a qualified biologist shall conduct an environmental awareness training session for all construction workers; the training will be repeated as new workers join the project. A qualified biologist is defined as any person who has completed at least four years of university training in wildlife biology or a related science, and/or has demonstrated field experience in the identification of the California red-legged frog and San Francisco garter snake. The training shall include a description of the California red-legged frog and San Francisco garter snake (including photographs and their habitats), the general measures that shall be implemented to conserve these species as they relate to proposed project activities, penalties for non-compliance, and the limits of work locations. Interpretation shall be provided for non-English-speaking workers. Construction workers shall sign a log indicating that they have received this training. No work (including materials staging, fence installation, parking, excavation, driving or walking on-site, or any other project activities) shall be performed by individuals who have not received this training.
- A USFWS/CDFW-approved biologist shall be present on-site during all initial ground-disturbing activities. A qualified biologist who has been trained shall be designated to remain on-site during proposed project activities (biological monitor). The biological monitor shall have training in HDD and relevant experience related to the environmental issues as they pertain to this project, such as frac-outs. The biological monitor shall have the authority to stop any action that may result in take of listed species or unanticipated impacts to their habitat, including drilling, provided that it does not risk the safety of the construction crews or the public.

- Before the start of work, a USFWS/CDFW-approved biologist shall identify acceptable locations to which California red-legged frog may be relocated if this species is encountered in a proposed project work location. Relocation areas shall be a minimum of 500 feet from the boundary of any active work locations, shall contain adequate cover and nearby aquatic habitat, and shall not include staging areas or roads.
- Each morning before the start of work, a biological monitor shall inspect proposed project work locations, including those for staged materials and equipment, excavations, and fencing, to verify that no listed species are present within designated work areas.
- No construction-related vehicles shall enter the West-of-Bayshore property without having a USFWS/CDFW-approved biologist present. The biologist shall check the area in front of vehicles as they drive on the road to access a work location, to verify that no San Francisco garter snake or California red-legged frog are present on the roadway. Motorized vehicles traveling in the project area shall not exceed 5 miles per hour.
- Before moving them, operators shall check underneath vehicles and equipment that have been parked on-site for more than 30 minutes and shall notify the biological monitor if any reptile or amphibian is observed.
- Before the start of any ground-disturbing activities, ground-level vegetation that may provide cover for California red-legged frog and San Francisco garter snake shall be removed within Lomita Park Regulator Station construction locations, the north and south HDD construction locations, and the pipe run-out location. Immediately before removal, the biological monitor shall visually survey the area. Vegetation then shall be cut to a lower height using hand tools (including weed whackers), and loose vegetation shall be removed to increase visibility. The biological monitor then shall visually survey the location a second time to verify that no listed species are present. The remaining vegetation then shall be removed using hand tools.
- Shrub and understory vegetation removal shall be done using hand tools, including weed eaters and chain saws, to prevent adverse impacts from mowers, excavators, and other heavy equipment. A USFWS/CDFW-approved biologist shall be present during any vegetation removal. Vegetation cleared from construction locations shall be loaded into containers and removed the same day. Chipping on-site may be allowed, subject to approval by the landowner. No cleared vegetation shall be stored on-site.
- Following the removal of vegetation in Lomita Park Regulator Station work locations and the north and south HDD work locations, all rodent burrows, soil crevices, and other potential subterranean retreats within the work locations shall be inspected for the presence of California red-legged frog and San Francisco garter snake. After inspection, a USFWS/CDFW-approved biologist shall excavate burrows, soil crevices, and other potential subterranean retreats by hand to verify that no California red-legged frog or San Francisco garter snake is present.
- Thirty days prior to commencement of project activities, a Wildlife Exclusion Fencing Plan shall be submitted to the CDFW for review. Project activities shall not proceed until the CDFW has accepted the Wildlife Exclusion Plan in writing.
- Following the excavation of potential subterranean retreats, temporary wildlife exclusion fencing shall be installed to completely enclose Lomita Park Regulator Station work locations and the north and south HDD work locations. Wildlife exclusion also may be installed around portions of the pipe weld run-out work location, if determined to be appropriate by the biological monitor. The fencing, which can be made of wood, geotextile fabric, or other durable material, shall be a minimum of 3 feet in height and shall be buried at least 6 inches underground. Gates shall be installed to allow vehicles to enter from access roads. These gates shall be kept closed to the extent



practicable during construction activities, and they shall be closed at the end of each workday. Exit funnels shall be installed every 100 feet or where appropriate (determined by qualified biologist) to allow small vertebrates to leave work locations unharmed. A qualified biological monitor shall be on-site during installation of the fencing to relocate any sensitive animals to outside the work area boundaries and to ensure that the fencing is installed, as required. Relocation of federally listed species can only be done if authorized by the USFWS. Relocation of state-listed species can only be done if authorized by the CDFW. There shall be no handling of or harm to the fully protected San Francisco garter snake. Once exclusion fencing is in place, it shall be maintained by PG&E via their contractor until all work within the enclosure has been completed. During construction activities, the biological monitor shall inspect the exclusion fencing each morning before the start of work and again at the end of each workday. Any damaged areas shall be reported to PG&E and shall be repaired by the contractor immediately on discovery. After construction is complete, the exclusion fencing shall be removed under supervision of a qualified biologist.

- Preconstruction surveys, vegetation removal, and hand-excavation of burrows shall take place before October 15, so that any San Francisco garter snake present can find a suitable alternative winter retreat before the onset of cold weather conditions. Once these activities are completed, temporary wildlife exclusion fencing shall be installed around work locations and shall be maintained to prevent the re-entry of California red-legged frog and San Francisco garter snake.
- If ground disturbance within aquatic habitats is required while water is present, then cofferdams or other measures shall be installed to allow for dewatering of the locations that are subject to disturbance. Before dewatering, these locations shall be visually surveyed for the presence of San Francisco garter snake and California red-legged frog adults, egg masses, and tadpoles by the biological monitor. Pumps used for dewatering shall be equipped with a mesh screen (0.25 inch or finer) to help prevent the entrainment of California red-legged frog and San Francisco garter snake. Dewatering shall not take place during the California red-legged frog breeding season (December through March), when egg masses are present in aquatic habitats. Thirty days prior to commencement of project activities, PG&E shall submit a plan detailing the water-diversion method to the CDFW for review. Water diversion shall not be allowed until the CDFW has accepted the Water Diversion Plan in writing.
- If any burrows or other potentially suitable underground refuges are found in the compacted areas adjacent to the access road during preconstruction surveys, these features shall be either flagged for avoidance or excavated by a USFWS/CDFW-approved biologist before the movement of vehicles or equipment that may result in soil disturbance.
- The limits of the access roads shall be staked and flagged or fenced so that vehicle traffic is confined to the designated areas.
- Speed limit signs shall be posted along the access roads and on the project area entry gate.
- Signs shall be posted notifying all personnel of the potential presence of California red-legged frog and San Francisco garter snake on the access roads.
- The total area of construction activities shall be limited to the minimum necessary to achieve the goal of the proposed project. All areas outside of the marked access roads and outside of designated work locations shall be designated as environmentally sensitive, and no construction activities shall take place in these areas.
- During project activities, all trash shall be contained and removed from the project area on a daily basis. All trash and construction-related debris shall be removed from the work areas following the end of construction.

- All steep-walled excavations more than 1 foot deep shall be either covered at the end of each work day or equipped with one or more escape ramps positioned at no greater than a 45-degree angle so that wildlife will not become entrapped. All open excavations shall be inspected for wildlife at the beginning of each day, before the start of work.
- Project construction activities shall be limited to daytime hours to the extent practicable.
- All fueling and maintenance of vehicles and other equipment shall occur at least 65 feet from any riparian habitat or water body. Before the start of project construction, PG&E shall develop a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and the appropriate measures to take if a spill occurs.
- Erosion control materials that do not pose an entrapment hazard to reptiles and amphibians shall be used. Plastic monofilament netting shall not be used. Loosely woven jute netting, fiber rolls, and similar natural materials shall be considered acceptable alternatives.
- No pets belonging to project personnel, firearms (other than firearms carried by authorized security personnel), or campfires shall be allowed anywhere in the project area during construction.
- Following the completion of construction activities, areas with listed species habitat subject to ground disturbance shall be re-vegetated pursuant to the restoration and management plan identified above in Mitigation Measure BI-1: **Compensatory Upland Habitat Mitigation**.
- If any San Francisco garter snake is found in work locations during proposed project activities, the following protocol shall be followed:
  - Any construction in the area that could result in direct injury, disturbance, or harassment of the individual shall cease.
  - The foreman, USFWS/CDFW-approved biologist, and PG&E biologist assigned to the proposed project shall be notified immediately.
  - The animal shall be allowed to move out of the area on its own volition, as determined and monitored by the USFWS/CDFW-approved biologist or biological monitor.
- If any California red-legged frog is found in work locations during proposed project activities, the following protocol shall be followed:
  - Any construction in the area that could result in direct injury, disturbance, or harassment of the individual shall cease.
  - The foreman, USFWS/CDFW-approved biologist, and PG&E biologist assigned to the proposed project shall be notified immediately.
  - If a California red-legged frog is found inside an exclusion fence or in another work location where it may be harmed, the California red-legged frog shall be moved to a previously identified relocation area. Only USFWS/CDFW-approved biologists shall be allowed to handle, transport, and relocate California red-legged frog.
  - The USFWS/CDFW-approved biologist shall ensure the translocated red-legged frog is relocated in an area that it is not imperiled by predators or other dangers.

**Mitigation Measure M-BI-3: Nesting Bird Surveys**

To avoid adverse impacts on special-status bird species, PG&E shall implement the following avoidance and minimization measures:

If work occurs during the bird nesting season (February 15 to August 31), a qualified biologist shall conduct a preconstruction survey for nesting birds before any potential nest-disturbing activities. The survey shall be conducted no more than one week before the start of work and shall include the project area and all suitable nesting habitats within a 500-foot buffer. If proposed project activities have ceased for more than two weeks during the nesting season, breeding bird surveys shall be performed again before recommencing activity.

If any protected nesting raptors or passerines are detected in the project area, a temporary disturbance buffer shall be established to prevent project activities from resulting in direct harm to the nest, or nest failure or abandonment. This buffer shall be established at a distance of 50 feet for passerines and 300 feet for raptors. To prevent encroachment, the established buffer(s) shall be clearly marked by high-visibility material. The project biologist shall perform at least two hours of preconstruction nest monitoring to characterize "normal" bird behavior. The biologist shall monitor the nesting birds and shall increase the buffer if the biologist determines the birds' behavior shows evidence of disturbance by project activities. The buffer shall remain in effect until the young have fledged or the nest has been abandoned. If proposed project activities cannot be avoided within the established buffer, the project biologist shall closely monitor the nest for signs of disturbance. Work may be allowed to proceed within the temporary nest disturbance buffer if birds are not exhibiting signs of agitated behavior, such as defensive flights at intruders, standing up from a brooding position, or excessively flying off the nest. Any sign of nest abandonment shall be reported to the CDFW within 24 hours.

#### **Mitigation Measure M-BI-4a: Avoidance and Minimization Measures for Wetlands and Aquatic Resources**

PG&E shall ensure that the following measures are implemented by the contractor during construction to minimize impacts on wetlands and aquatic resources, including waters of the United States and waters of the State:

- Proposed project construction shall avoid direct and indirect impacts on wetland habitats.
- Construction within jurisdictional waters shall be confined to the work period of June 15 through October 31 or the first significant rainfall (0.25 inch or greater), whichever comes first. Per the project's Streambed Alteration Agreement, this work period may be extended at the discretion of the CDFW.
- All project activities within jurisdictional water shall cease 30 minutes before sunset and not resume until 30 minutes after sunrise.
- Construction activities shall be avoided in saturated or ponded wetlands and streams (typically during the spring and winter). Where wetlands or other water features must be disturbed as authorized by permitting resource agencies, the minimum area of disturbance necessary for construction shall be identified and the area outside of that necessary area shall be avoided.
- Silt fencing shall be installed along the construction work limits in areas within 50 feet of designated wetlands and drainages.
- To minimize the degradation of designated wetlands in the project vicinity, protective practices such as use of geotextile cushions or other materials (e.g., timber pads, prefabricated equipment pads, geotextile fabric, or other permeable material) or vehicles with balloon tires shall be employed.
- The contractor shall stabilize exposed slopes immediately upon completion of construction/installation activities. Erosion control measures shall be installed adjacent to

suitable aquatic habitat to prevent soil from eroding or falling into these areas. Restoration shall be completed and monitored as described in **Mitigation Measure M-BI-4b**.

- Natural/biodegradable erosion control measures (i.e., straw wattles and hay bales) shall be used. Plastic monofilament netting (erosion control matting) shall not be allowed because wildlife can become entangled in this type of erosion control material.

**Mitigation Measure M-BI-4b: Wetland and Riparian Habitat Revegetation and Restoration Plan**

A Revegetation and Restoration Plan shall be developed to ensure that wetland and riparian habitats temporarily impacted by construction are restored with a mix of native plant species similar to those removed during construction. The plan shall be submitted to the CDFW for review and written acceptance prior to the commencement of project activities. Factors that shall be addressed in developing an effective Wetland and Riparian Habitat Revegetation and Restoration Plan shall include the following:

- Function and values—percentage of vegetation cover and/or density; approximate plant height; plant species diversity, root development, and canopy stratification.

PG&E shall retain a qualified restoration specialist to develop a Wetland and Riparian Habitat Revegetation and Restoration Plan that describes how wetland and riparian habitats shall be enhanced or recreated and monitored over a minimum period of five years. PG&E shall be responsible for ensuring that the Wetland and Riparian Habitat Revegetation and Restoration Plan is implemented under the guidance of the restoration specialist. The plan shall be designed such that it meets the following success criteria, or other equally protective success criteria as approved by the resource agencies through the permitting process:

- The restored site is composed of a mix of appropriate native species.
- The restored site has at least 75 percent of the absolute cover of native vegetation present in areas immediately adjacent to the construction corridor.
- Plantings are self-sustaining without human support (e.g., weed control, rodent and deer control, irrigation).
- Functions and values of the restored habitat are comparable to those of adjacent undisturbed wetland or riparian habitat.

After revegetation and restoration are completed, monitoring shall be conducted by a restoration specialist or biologist for a minimum of five years to ensure that the success criteria, as identified in the Wetland and Riparian Habitat Revegetation and Restoration Plan above are met, and to identify any necessary remedial actions during the monitoring period. At a minimum, the success criteria shall be met, for the final two years of the monitoring period. Remedial action shall be required of PG&E if the restoration specialist finds that any of the above criteria are not met by the end of the monitoring period.

**Mitigation Measure M-GE-1: Pipeline Design**

The potentially liquefiable layers encountered appear to be discontinuous. Therefore, differential settlement due to liquefaction along the pipeline alignment may be highly variable. The pipeline above the liquefiable layers shall be designed to accommodate differential settlement near the southern and northern portion of the HDD bore.

Up to 7.5 inches of total settlement may be experienced at some locations along the pipeline. The pipeline above the liquefiable layers shall be designed to accommodate differential settlement. This



type of settlement can cause tensile and compressive stresses in the pipeline, depending on its location relative to the liquefiable soils. These stresses shall be accounted for in pipeline design.

### **Mitigation Measure M-GE-3: Site Preparation**

Areas to receive fill and structures shall be stripped of existing surface vegetation, organic topsoil, debris, and any other deleterious materials prior to over-excavation or placement of engineered fill. Any stripped organic materials or debris should not be reused as engineered fill. Stripping and removals shall extend laterally a minimum of 5 feet beyond the perimeters of shallow foundations, concrete flatwork, and any other facilities supported on grade.

Initial site grading shall include a reasonable search to locate soil disturbed by previous activity, undocumented fill soils, abandoned underground structures and/or existing utilities that may exist within the areas of construction. Any loose or disturbed soil, void spaces made by burrowing animals, or undocumented fill shall be over-excavated to expose firm soil.

After stripping and performing any necessary removals, the bottoms of excavations shall be scarified to a depth of at least 8 inches, uniformly moisture conditioned to at least 2 percent above optimum moisture content, and compacted to at least 90 percent relative compaction. If soft or loose materials are encountered at the bottoms of footing excavations, they shall be removed and replaced with lean concrete or additional foundation concrete.

### **Mitigation Measure M-HY-1a: Stormwater Pollution Prevention Plan**

PG&E shall file a notice of intent with the SWRCB and the San Francisco Bay RWQCB for coverage under the General Construction Storm Water Permit and shall prepare and implement a SWPPP in accordance with General Order No. 2009-0009-DWQ. Implementation of the SWPPP shall help stabilize disturbed areas and reduce erosion and sedimentation. A monitoring program shall also be established to ensure that the prescribed BMPs are followed during proposed project construction. A qualified SWPPP practitioner shall oversee the implementation of the SWPPP and BMPs.

The following measures are generally drawn from that permit and shall be included in the SWPPP prepared for the construction of the proposed project:

- All BMPs shall be installed during the first day of construction mobilization.
- BMPs shall be developed to prevent the acceleration of natural erosion and sedimentation rates. Examples of BMPs include, but are not limited to, the following measures:
  - straw wattles, water bars, covers, silt fences, sensitive area access restrictions (e.g., flagging), or other sediment containment methods placed around and/or down slope of work areas before earth-disturbing activities and before the onset of winter rains or any anticipated storm events;
  - protection of drain inlets from receiving polluted stormwater through the use of filters such as fabrics, gravel bags, or straw wattles;
  - mulching, seeding, or other suitable measures to protect exposed areas during construction activities as necessary;
  - installation of additional silt fencing before construction to address unforeseen runoff into nearby wetlands and drainages;

- installation of additional silt fencing prior to construction to address unforeseen runoff from the property;
  - use of brooms and shovels (as opposed to water) when possible to maintain a clean site;
  - construction of a stabilized construction entrance/exit to prevent tracking of dirt onto public roadways;
  - establishment of a vehicle storage, maintenance, and refueling area, if needed, to minimize the spread of oil, gas, and engine fluids;
  - prohibition of overnight parking of mobile equipment within 100 feet of wetlands, culverts, or drainages;
  - use of oil pans under stationary vehicles;
  - positioning of stationary equipment (e.g., pumps, generators) within a secondary containment vessel when being used or stored within 100 feet of wetlands, culverts, or drainages; and
  - no overnight parking of mobile equipment within 100 feet of wetlands, culverts, or creeks.
- All BMPs shall be inspected before and after each storm event. BMPs shall be maintained regularly and replaced as necessary throughout the course of construction.
  - Prior to conducting clearing activities during the wet season and before the onset of winter rains
  - At no time shall silt-laden runoff be allowed to enter the stream or directed to where it may enter the stream.

**Mitigation Measure M-HY-1b: Dewatering Plan**

If dewatering is anticipated, PG&E shall prepare and implement a Dewatering Plan in consultation with the San Francisco Bay RWQCB prior to commencing dewatering activities. Dewatering activities shall comply with any applicable waste discharge requirements issued by the San Francisco Bay RWQCB. If the water quality meets the applicable Waste Discharge Requirements, it shall be discharged into adjacent seasonal wetlands and/or the South Lomita Canal. Alternatively, if the water quality does not meet the applicable Waste Discharge Requirements, the water shall be transported to and/or discharged at a POTW.

**Mitigation Measure M-HY-1c: HDD Drilling Mud Containment Measures**

To reduce impacts to water bodies from drilling pits, PG&E shall ensure:

- HDD entry and exit drilling pits shall be located a minimum of 300 feet from aquatic features.
- Drilling pits shall be appropriately sized to contain drilling fluids and cuttings. Control measures to ensure drilling mud is contained shall be monitored for effectiveness and repaired or replaced as needed.
- At no time shall drilling cuttings, drilling mud, and/or material or water contaminated with bentonite be allowed to enter the stream. Any contaminated water/materials from the drilling shall be transported to and/or discharged at a POTW.

#### **Mitigation Measure M-HY-1d: HDD Fluid Release Contingency Plan**

PG&E shall prepare and implement an HDD Fluid Release Contingency Plan. The plan shall include specific frac-out contingency measures, material required to contain a frac-out or fluid spill, and control measures to ensure that drilling mud is contained. PG&E shall submit the HDD Fluid Release Contingency Plan to the CDFW for review at least 30 days prior to the commencement of project activities. HDD-related project activities may not start until PG&E has received written notification from the CDFW that the HDD Fluid Release Contingency Plan has been accepted. PG&E shall ensure that all material necessary to contain a frac-out or fluid spill shall be on-site and immediately available prior to the commencement of HDD activities.

#### **Mitigation Measure M-HZ-1a: Equipment Maintenance and Refueling**

PG&E shall require that all equipment be maintained so that no leaks of automotive fluids—such as fuels, solvents, or oils—would occur. All refueling and maintenance of vehicles and other construction equipment shall be restricted to designated staging areas located at least 100 feet from any down-gradient aquatic habitat unless it is already otherwise isolated from such habitat. All hazardous or toxic materials that could be deleterious to aquatic life that could be washed into a stream shall be contained in water-tight containers.

#### **Mitigation Measure M-HZ-1b: Spill Prevention Control and Countermeasures Plan and Hazardous Materials Business Plan**

PG&E shall prepare and implement a Spill Prevention, Control, and Countermeasures (SPCC) Plan for the proposed project, as required by 40 Code of Federal Regulations Part 112. The SPCC Plan shall include engineered and operational methods for preventing, containing, and controlling potential releases, and provisions for quick and safe cleanup. The plan shall ensure that hazardous substances and materials are prevented from contaminating the soil or streams, and that all spills are cleaned up immediately. PG&E shall notify the CDFW immediately of any spills and shall consult with the CDFW regarding clean-up procedures. The plan shall be submitted to the appropriate agency for review and approval. PG&E shall also update the Hazardous Materials Business Plan for the existing Lomita Park Regulator Station, as needed, in accordance with Chapter 6.95 of the California Health and Safety Code and California Code of Regulations Title 22. Staging areas, along with the existing facility, shall be operated in compliance with all applicable federal, State, and local regulations.

#### **Mitigation Measure M-HZ-2: Treatment of Unanticipated Hazardous Materials**

If any stained or odiferous soils that may be considered hazardous materials are encountered during project-related excavation activities, PG&E shall immediately halt work and properly characterize the material and shall take appropriate measures specific to the materials to protect human health and environment.

## **F.2. IMPROVEMENT MEASURES**

The following improvement measure has been adopted by PG&E and are recommended to further minimize impacts of the proposed project.

#### **Improvement Measure I-TR-1: Best Management Practices for Work Zone Barriers**

PG&E shall require the contractor to implement best management practices for work zone barriers, including, but not limited to the installation of appropriate barriers between work zones and transportation facilities, posting of adequate signage, establishment of adequate on- and off-site

parking and staging areas, posting of construction management contact information, and notification to local businesses/residences regarding construction phases and scheduling.

**Improvement Measure I-HZ-3: Notify and Consult with Affected Schools**

PG&E shall provide written notification of the proposed project to schools located within 0.25 mile of the project site, including California Montessori School, Belle Air Elementary, Happy Hall School, and Lomita Park Elementary in San Bruno and Millbrae Nursery School in Millbrae. PG&E also shall consult with appropriate school or district personnel about the types of construction activities that shall occur and the estimated timing of such activities, as well as provide examples of the types of hazardous materials that could be used during construction activities.



## **G. PUBLIC NOTICE AND COMMENT**

### **G.1. COMMENTS RECEIVED IN RESPONSE TO NOTIFICATION OF PROJECT RECEIVING ENVIRONMENTAL REVIEW**

A “Notification of Project Receiving Environmental Review” was mailed on December 13, 2013 to property owners and residents of property within 300 feet of the project site, responsible and trustee agencies, local jurisdictions, media, and interested parties. The following comment in response to the notification was received:

- City of San Bruno Community Development Department – Requested to be added to the distribution list for future project documents.
- San Francisco International Airport Planning and Environmental Affairs – Commented that they have communicated with PG&E with regard to Airport permits and authorizations and requested a copy of the Initial Study.

**H. DETERMINATION**

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.



Sarah B. Jones  
Environmental Review Officer  
for

John Rahaim  
Director of Planning

Date May 21, 2014

## **I. INITIAL STUDY AUTHORS AND PROJECT SPONSOR TEAM**

### **INITIAL STUDY AUTHORS**

Planning Department, City and County of San Francisco  
Environmental Planning  
1650 Mission Street, Suite 400  
San Francisco, CA 94103

Environmental Review Officer: Sarah B. Jones  
Project Supervisor: Nannie Turrell  
Environmental Coordinator: Brett C. Becker, AICP  
Air Quality: Wade Wietgreffe, AICP  
Archeology: Randall Dean  
Transportation: Susan Mickelsen

### **INITIAL STUDY CONSULTANTS**

TRC Solutions  
101 2<sup>nd</sup> Street, Suite 300  
San Francisco, CA 94105  
Project Manager: Gretchen Taylor

### **PROJECT SPONSOR**

Pacific Gas and Electric Company  
245 Market Street  
San Francisco, CA 94105  
Land Planner: Mallory Clay

### **PROJECT SITE OWNER**

San Francisco International Airport  
Environmental Affairs Manager: Nixon Lam