



5020 Chesebro Road, Suite 200, Agoura Hills, CA 91301-2285
Tel. 818-597-3407, Fax 818-597-8001, www.aspeneg.com

PROJECT MEMORANDUM

PG&E EMBARCADERO-POTRERO 230 kV TRANSMISSION PROJECT

To: Billie Blanchard, Project Manager, CPUC
From: Vida Strong, Aspen Project Manager
Date: May 13, 2015
Subject: Monitoring Report #34 – May 4 to May 10, 2015

This report provides a summary of the construction and compliance activities associated with the PG&E Embarcadero-Potrero (E-P) 230 kV Transmission Project.

A summary of the Notices to Proceed (NTPs) for construction and Minor Project Change (MPC) activities are provided in Tables 1 and 2, respectively (below).

CPUC Environmental Monitor (EM): Jody Fessler was on site May 7th.

CPUC NTPs

E-P Potrero Switchyard Site Preparation

NTP #1 was issued on August 21, 2014 for the site preparation of the Potrero Switchyard on 23rd Street adjacent to the existing Potrero Substation on the corner of 23rd Street and Illinois Street in San Francisco. NTP #1 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity:

1. Overaa conducted housekeeping and dust control activities Monday through Friday.
2. Overaa conducted repairs on piles (drill displacement columns - DDCs) on Monday and Tuesday, excavated to expose DDCs on Tuesday, and cleaned low DDCs on Wednesday and Thursday.
3. Overaa broke off high DDCs and removed rebar on Wednesday, and poured grout to raise low DDCs Wednesday through Friday.
4. Proven excavated to expose DDCs on Wednesday and Thursday (see Figure 1).
5. PSC hauled off excavated materials on Thursday.
6. Street sweeping occurred Monday through Friday.
7. At the time of the CPUC EM site visit on May 7th, Proven was excavating around exposed DDCs.
8. No construction activities occurred on Saturday or Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Tuesday through Thursday. On May 6th and 7th, cultural constituents were observed, documented, and some collected.
2. Air quality monitoring was conducted by ERM Monday through Friday.
3. PG&E's Environmental Inspector conducted monitoring of this area Monday through Friday, including SWPPP inspections.
4. Nesting bird sweeps were conducted Monday through Friday.

5. PG&E's Environmental Inspectors noted one compliance issues at this location. On May 4th, an open garbage bag with trash inside was observed by the PG&E Environmental Inspector among the PSC filtering system equipment. The trash bag was not contained in a covered trash can. The PG&E Environmental Inspector informed PG&E that a lidded trash can is required to house trash bags.
6. The CPUC EM noted that the site was neat and clean and that SWPPP measures were in place. All observed work activities were in compliance with the mitigation measures (MMs), Applicant Proposed Measures (APMs), and other permit requirements.

E-P Horizontal Directional Drill (HDD) Construction

NTP #2 was issued on August 28, 2014 for the HDD Construction on Spear Street, at the northern end of the project, and 23rd Street, at the southern end of the project, in San Francisco. Both HDDs would terminate within the San Francisco Bay and will be tied together in the future via a subsea cable. NTP #2 included conditions that had to be satisfied prior to the start of construction, as well as prior to the start of any work in the Bay.

Summary of Activity at the Northern Bore (Spear Street):

1. The HDD work is complete and HDD Company demobilized from the site during Week #26.

Summary of Activity at the Southern Bore (23rd Street):

1. The HDD work is complete and HDD Company demobilized from the site during Week #26.

E-P Underground Duct Bank Construction

NTP #3 was issued on October 9, 2014 for the underground duct bank and vault installation component of the Embarcadero-Potrero 230 kV Transmission Project between the horizontal directional drill (HDD) transition on Spear Street to the Embarcadero Substation on Folsom Street in the northern section, and between the HDD transition on 23rd Street to the Potrero Switchyard in the southern section, in the City of San Francisco. NTP #3 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity for the Duct Bank North (Folsom St. and Spear St.):

Folsom Street

1. PG&E inspected a pipe to confirm abandonment on Monday.
2. Underground Construction Co. inspected previously dug excavations on Monday.
3. Underground Construction Co. conducted excavation of duct bank trench on Monday and saw cut pavement on Tuesday.
4. Underground Construction Co. installed shoring in the duct bank trench on Saturday.
5. At the time of the CPUC site visit on Thursday, May 7th, no work was taking place on Folsom Street.
6. Street sweeping occurred Monday through Saturday.
7. No construction activities occurred on Sunday.

Spear Street, Duct Bank

1. Underground Construction Co. saw cut and removed pavement on Monday.
2. Underground Construction Co. conducted excavation of duct bank trench Monday through Saturday (see Figure 2).

3. Underground Construction Co. installed shoring on Monday.
4. Underground Construction Co. installed the fiber optic vault on Monday.
5. Underground Construction Co. installed conduit on Monday and Friday.
6. Underground Construction Co. backfilled the duct bank trench Monday through Wednesday and Friday.
7. Underground Construction Co. and Oldcastle installed a submarine cable pull box on Monday and Underground Construction Co. backfilled around pull box on Thursday (see Figure 3).
8. Underground Construction Co. removed shoring on Tuesday and Wednesday.
9. Underground Construction Co. cut conduit on Wednesday and Thursday, and fused conduit on Thursday.
10. Clean Harbors hauled off excavated sediment for disposal Monday through Saturday.
11. Street sweeping occurred Monday through Saturday.
12. At the time of the CPUC EM site visit on Thursday, May 7th, one crew was backfilling around the pull vault west of large vault, and another crew was excavating east of the large vault on Spear Street.
13. No construction activities occurred on Sunday.

Spear Street, Vault

1. Underground Construction Co. dewatered the vault Monday through Friday.
2. Underground Construction Co. cleaned the vault on Monday and Wednesday.
3. Underground Construction Co. applied mortar for waterproofing the vault on Tuesday and welded brackets on Thursday and Friday.
4. Underground Construction Co. conducted housekeeping activities on Saturday.
5. At the time of the CPUC EM site visit on Thursday, May 7th, a crew was welding brackets inside the vault.
6. No construction activities occurred on Sunday.

Spear Street, HDPE Transition

1. Underground Construction Co. excavated the duct bank trench and installed shoring on Monday.
2. Clean Harbors hauled off excavated sediment for disposal Monday through Saturday.
3. Street sweeping occurred Monday through Saturday.
4. At the time of the CPUC EM site visit on May 7th no work was taking place at the HDPE transition.
5. No construction activities occurred on Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Monday through Saturday. From May 4th through May 7th, cultural constituents were observed, documented, and some collected.
2. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Saturday, including SWPPP inspections.
3. Nesting bird sweeps were conducted Monday through Saturday.
4. PG&E's Environmental Inspectors noted no compliance issues at this location.

5. The CPUC EM noted that the site was neat and clean and that SWPPP measures were in place. All observed work activities were in compliance with the mitigation measures (MMs), Applicant Proposed Measures (APMs), and other permit requirements.

Summary of Activity for the Duct Bank South (23rd Street):

1. Underground Construction Co. conducted housekeeping activities on Monday.
2. Underground Construction Co. conducted jackhammering of pavement for the duct bank trench on Monday and installed shoring Tuesday through Friday.
3. Underground Construction Co. installed conduit in the duct bank trench on Tuesday through Thursday (see Figure 4).
4. Underground Construction Co. laid base rock and plastic in the duct bank trench on Thursday.
5. Underground Construction Co. excavated and installed pipe for the water line relocation on Monday and Tuesday.
6. Underground Construction Co. removed shoring from the waterline relocation trench and backfilled Wednesday through Friday.
7. Clean Harbors hauled off excavated materials Tuesday, Thursday, and Friday.
8. Clean Harbors cleaned up a hydraulic fluid spill on Tuesday.
9. Underground Construction Co. set up used hazardous waste storage drums over containment on Tuesday.
10. Street sweeping occurred Monday through Friday.
11. Fencing was installed around the open trench at the end of each day.
12. At the time of the CPUC EM site visit on May 7th a crew was installing conduit on east side of vault and another crew was backfilling the waterline trench.
13. No construction activities occurred on Saturday or Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted by Far Western Monday through Friday and cultural constituents were observed, documented, and some collected.
2. Air quality monitoring was conducted by ERM Monday through Friday.
3. PG&E's Environmental Inspector conducted monitoring of the work area and activities on Monday through Friday, including SWPPP inspections.
4. Nesting bird sweeps were conducted Monday through Friday.
5. PG&E's Environmental Inspectors noted a couple of compliance issues at this location.
 - On May 5th, a Clean Harbors truck had a hydrolytic hose break while handling roll off bins. Approximately 25 gallons of fluid spilled onto the pavement, backfill trench dirt, and within a roll of bin secondary containment unit. A Clean Harbors clean-up crew responded to clean up the spill. All spill kit materials used for cleanup (e.g. kitty litter and oil absorbent rags), contaminated sediment, and the contaminated secondary containment unit were stored in 55 gallon drums and removed from the site for disposal by Clean Harbors. The truck was repaired onsite prior to removal. On May 7th, excess white oil absorbent powder was observed around the bin, and accumulating against the brick wall just south of the bin. The PG&E Inspector informed the PG&E Environmental Inspector that it was left over from additional oil spill cleanup activities

conducted. Most of the powder was cleaned up with a shovel, but some was left on site. The CPUC EM was on site in the afternoon and observed the residual powder that was left and informed the PG&E Environmental Inspector that additional cleanup of the powder should be conducted. Clean Harbors was contacted about the additional cleanup.

- On May 7th, the CPUC EM informed the PG&E Environmental Inspector of a small oil spot (approximately ¼ cup) on the pavement in the Underground Construction Co. work area near the east end of 23rd Street. Underground Construction Co. cleaned up the oil with spill kit materials and disposed of them in hazardous waste storage drums onsite at Duct Bank South.
6. Besides the two issues identified above, the CPUC EM noted that the site was neat and clean and that SWPPP measures were in place. All observed work activities were in compliance with the mitigation measures (MMs), Applicant Proposed Measures (APMs), and other permit requirements.

E-P Submarine Rock and Debris Removal

NTP #4 was issued on November 21, 2014 for the rock removal obstructing the path of the submarine cable component of the Embarcadero-Potrero 230 kV Transmission Project along the submarine cable line and off shore of Pier 50 in the San Francisco Bay. NTP #4 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity:

1. No construction activity related to NTP #4 occurred during the subject week. Manson crews completed rock and debris removal during Week #14, except for several debris items that were too near the north end exit pits and the HDD work. These few items will be removed when the submarine cable installation begins June 1, 2015.

Environmental Compliance:

1. No compliance monitoring was conducted during the subject week.

Amador Staging and Laydown Yard

A Minor Project Change #1 was issued on July 23, 2014 for the use of the Amador Staging and Laydown Yard on Amador Street, San Francisco. The Minor Project Change #1 included conditions that had to be satisfied prior to the staging of equipment and materials at the yard.

Summary of Activity:

1. Office trailer use occurred Monday through Saturday at the yard.
2. Tailboard meetings occurred at the yard Monday through Saturday.
3. Equipment and materials were stored at the yard throughout the week.
4. No work occurred at the yard on Sunday.

Environmental Compliance:

1. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Friday, including SWPPP inspections.
2. Nesting bird sweeps were conducted Monday through Friday.
3. PG&E's Environmental Inspectors noted no compliance issues at this location.

Notices to Proceed

Table 1 summarizes the Notices to Proceed (NTP) for the Embarcadero-Potrero Project.

Table 1
Notice to Proceeds (NTPs)
 (Updated 05/13/15)

NTP #	Date Requested	Date Issued	Phase	Description
NTP #1	6/23/14	8/21/14	Potrero Site Preparation	Site preparation and excavation of the 230 kV Potrero Switchyard site on 23 rd St., SF.
NTP #2	7/31/14	8/28/14	HDD	Horizontal directional drilling on Spear St. and 23 rd St. connecting to the SF Bay.
NTP #3	9/18/14	10/09/14	Underground Duct Bank and Vaults	Underground duct bank and vault installation between the HDD transition on Spear St. to the Embarcadero Substation on Folsom St. in the northern section, and between the HDD transition on 23 rd St. to the Potrero Switchyard in the southern section, SF.
NTP #3 MOD	11/13/14	11/14/14	Underground Duct Bank and Vaults	Trench from the new Potrero Switchyard to the existing switchyard for the 230kV/115kV connections across the Trans Bay Cable.
NTP #4	11/19/14	11/21/14	Subsea Cable	Rock and debris removal along subsea cable route.
NTP #5	2/19/15	3/27/15	Potrero GIS Switchgear Building	Construction of 230 kV Potrero gas-insulated switchgear (GIS) building and cable tie-in component at Potrero Switchyard.
NTP #6	2/19/15	4/07/15	Submarine Cable	Site preparation for submarine cable installation, laying the cable, and pulling the cable to land at either end.

Minor Project Changes

Table 2 summarizes the Minor Project Changes submitted for the Embarcadero-Potrero Project.

Table 2
Minor Project Changes (MPCs)
 (Updated 05/13/15)

MPC #	Date Requested	Date Issued	Phase	Description
MPC #1	7/16/14	7/23/14	Amador Staging and Laydown Yard	Use of an existing staging and laydown yard adjacent to Alternate Staging Area #3 (as identified in the IS/MND) on Amador St., SF.
MPC #2	12/31/14	1/5/15	Staging and Laydown Yard	Use of an existing paved staging and laydown yard at 1215 Michigan Street, SF, two blocks from the Potrero Switchyard.

PROJECT PHOTOS



Figure 1 – Drill displacement columns (DDCs) exposed at Potrero Switchyard. View north, May 7, 2015.



Figure 2 – Excavating duct bank trench on Spear Street east of vault. View east, May 7, 2015.



Figure 3 – Backfilling around pull box on Spear St. west of vault. View north, May 7, 2015.



Figure 4 – Installing conduit in duct bank trench on 23rd Street east of vault. View east, May 7, 2015.