



235 Montgomery Street, Suite 935, San Francisco, CA 94104
Tel. 415-955-4775, Fax 415-955-4776, 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: April 3, 2015

Subject: Monitoring Report #28 – March 23, 2015 to March 29, 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 March 25th.

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. PSC conducted housekeeping and dust control activities on Wednesday through Friday.
3. PSC hauled off excavated material for disposal Tuesday through Friday.
4. Proven conducted excavation activities and removed old underground duct bank Monday through Friday.
5. Street sweeping occurred Monday through Friday.
6. At the time of the CPUC EM site visit on Thursday, March 25th, excavation activities were occurring (see Figure 1).
7. No construction activities occurred Saturday or Sunday.

Environmental Compliance:

1. Air quality monitoring was conducted by ERM Monday through Friday.
2. Cultural monitoring was conducted Monday through Friday. Cultural constituents were observed, documented, and collected on March 24th – 27th.
3. PG&E's Environmental Inspector conducted monitoring of this area Monday through Friday, including SWPPP inspections.
4. Nesting bird surveys were conducted on Monday and nesting bird sweeps were conducted Tuesday through Friday.



5. PG&E's Environmental Inspectors noted no compliance issues at this location.
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. Underground Construction Co. conducted duct bank trench excavation and installed shoring in the duct bank trench Monday through Friday.
2. Underground Construction Co. dewatered the duct bank trench Monday through Saturday.
3. Underground Construction installed pipe in the duct bank trench and poured concrete in the duct bank trench on Monday.
4. Underground Construction Co. removed shoring in the duct bank trench on Tuesday.
5. Underground Construction Co. potholed for utilities along the duct bank trench Monday through Saturday.
6. Underground Construction Co. installed shoring in the potholes along the duct bank trench on Thursday.
7. Underground Construction Co. conducted housekeeping activities at the duct bank trench on Saturday
8. Street sweeping occurred Monday through Saturday.
9. At the time of the CPUC EM site visit on Thursday, March 25th, the excavation work on Folsom Street had stopped due to encountering further remnants of an old pier structure (see Figures 2 and 3). The Cultural Monitor was documenting the discovery. Crews were also potholing at the corner of Folsom Street and Spear Street.

10. No construction activities occurred on Sunday.

Spear Street

1. PSC installed particulate filtration system for dewatering at the vault excavation on Tuesday.
2. Underground Construction Co. dewatered the vault excavation on Thursday.
3. Underground Construction Co. and Sheedy installed the base slab foundation in the vault excavation on Friday.
4. Underground Construction Co. potholed for utilities at the HDPE transition on Monday.
5. Underground Construction Co. dewatered at the HDPE transition on Tuesday and Wednesday.
6. Underground Construction Co. excavated the HDPE transition on Tuesday, Wednesday, Friday and Saturday.
7. Underground Construction Co. installed pipe at the HDPE transition on Tuesday.
8. Underground Construction Co. backfilled at the HDPE transition on Thursday.
9. Underground Construction Co. poured concrete at the HDPE transition on Thursday.
10. Underground conducted pavement removal at the HDPE transition on Saturday.
11. Underground Construction Co. conducted housekeeping at the HDPE transition area on Saturday.
12. Street sweeping occurred Monday through Saturday.
13. At the time of the CPUC EM site visit on Thursday, March 25th, excavation was being conducted at the HDPE connection area on Spear Street, where more old pier structures were encountered.
14. No construction activities occurred on Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Monday through Saturday. At the North Underground Duct Bank HDPE Transitions on Spear Street, cultural constituents were observed, documented, and some collected March 24th through 28th. At the North Underground Duct Bank on Folsom Street, cultural constituents were observed and documented on March 25th.
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. The Anna's hummingbird nest on Spear Street near the HDD North area was confirmed to be no longer active on March 24th and the buffer was removed. The juvenile hummingbirds successfully fledged.
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. removed old pipe for water line replacement on Monday and installed new pipe Monday through Wednesday.
2. Underground Construction Co. removed shoring for water line replacement and backfilled the trench on Tuesday.

3. Underground Construction Co. excavated for water line replacement and installed shoring on Wednesday.
4. Underground Construction potholed for utilities for water line replacement Thursday and Friday, and saw-cut pavement on Friday.
5. West Coast Drilling drilled pier holes at the vault location on Monday.
6. Underground Construction Co. installed shoring in the vault excavation on Tuesday.
7. Underground Construction Co. conducted vault excavation Tuesday through Friday.
8. Underground Construction Co. off hauled spoils from vault excavation Thursday and Friday.
9. Underground Construction Co. dewatered the vault excavation and set up a concrete form on Saturday
10. Street sweeping occurred Monday through Saturday.
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 Thursday, March 25th, crews were installing the new water line pipe and connecting it to a fire hydrant. Another crew was excavating the vault pit (see Figure 4).
13. No construction activities occurred on Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Monday through Saturday. PAR Environmental conducted cultural investigation of Station A on Wednesday (see Figure 5). Cultural constituents were observed and documented, and some collected on March 24th and 27th.
2. Air quality monitoring was conducted by ERM Monday through Saturday.
3. PG&E's Environmental Inspector conducted monitoring of the work area and activities on Monday through Saturday, including SWPPP inspections.
4. Nesting bird sweeps were conducted Monday through Saturday.
5. PG&E's Environmental Inspectors noted no compliance issues at this location.
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 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. Underground Construction Co. placed secondary containment under the two trailer sewage storage units on Friday.
4. Clean Harbors removed a roll-off bin containing sediment for disposal and delivered a new roll off bin on Wednesday.
5. At the time of the CPUC EM site visit on Thursday, March 25th, equipment and materials were in use and being stored at the site. Office trailers were in use at the site as well.
6. 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 Saturday, including SWPPP inspections.
2. Nesting bird surveys were conducted on Monday and Friday, and nesting bird sweeps were conducted Tuesday through Saturday.
3. An injured Canada goose was observed on March 25th near the retention pond. The goose had a visible open wound and 2 large swollen lumps on its leg and could not fly long distances. The goose was captured and transported to the SPCA Wildlife Care Center in Burlingame.
4. On March 25th a PG&E Environmental Inspector (EI) noted that liquid from a sewage storage tank under the Underground Construction trailer was leaking onto the ground (gravel and dirt). An approximation of 50 gallons was observed on the ground at this time. The PG&E EI informed the Black & Veatch Inspector at 3 p.m. The Black & Veatch Inspector notified the PG&E EI that it was no longer leaking at around 5:30 p.m. and that he requested Underground Construction have the tank emptied the following morning, and that it be emptied more often so it does not occur again. On March 26th, the PG&E EI confirmed that the sewage storage tank was emptied with no subsequent leaking observed. Marc Morolla (PG&E) requested that Black & Veatch 1) place secondary containment under all sewage storage tanks in the Amador Yard, and 2) restrict access to the spill area for 3-5 days to allow any bacteria to die off. Black & Veatch confirmed that this was done. On March 27th, the PG&E EI observed that secondary containment units had been constructed by Underground Construction Co. under the two sewage storage tanks, and that delineators with "Caution" tape had been hung to restrict access to the area that was impacted by the leak.
5. The CPUC EM noted a few things that should be addressed. A substantial amount of visible dust was observed by vehicles and equipment moving around the yard. Lowering vehicle speeds and watering or stabilizing the soil could prevent this issue. Also, the containment area around the cutback pile was damaged and should be repaired. Lastly, the secondary containment units around the staged vehicles were in disarray and the plastic should be wrapped over the fiber rolls so they are not exposed.

All other observed work activities were in compliance with the mitigation measures (MMs), Applicant Proposed Measures (APMs), and other permit requirements.

Notices to Proceed

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

Table 1
Notice to Proceeds (NTPs)
(Updated 04/03/15)

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 230 kV/115 kV 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	Under Review	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 04/03/15)

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 – Excavating at Potrero Switchyard, view southeast, March 25, 2015.



Figure 2 – Underground duct bank work on Folsom Street. View north, March 25, 2015.



Figure 3 – Remnants of old pier structure on Folsom Street. View west, March 25, 2015.



Figure 4 – Vault pit excavation on 23rd Street. View east, March 25, 2015.



Figure 5 – Second room of underground water circulation feature exposed on 23rd Street. View southwest, March 25, 2015.