



SAS Superstructure

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 22-Nov-14

Time 6:53 AM

Daily Diary Report by Bid Item

Contract No.: 04-0120F4

Diary #: 1218 Const Calendar Day: 791 Date: 04-Aug-2014 Monday
Inspector Name: Brignano, Bob Title: Transportation Engineer
Inspection Type:
Shift Hours: Break: Over Time:
Federal ID:
Location:
Reviewer: Schmitt, Alex Approved Date: Status: Submit

04-0120F4
04-SF-80-13.2/13.9
Self-Anchored
Suspension Bridge

Weather

Temperature 7 AM 12 PM 4PM
Precipitation Condition overcast am, partly cloudy pm

Working Day [checked] If no, explain:

Diary:

Dispute

General Comments

CCO 314, SAMPLING AND TESTING A354 GRADE BD MATERIAL:



ABF Engineer Kelvin Chen is working part time in the field and office on CCO 314.

There is work in the field on setup of TR's 18 & 19. Crews at the Pier 7 warehouse are working an 8-hour shift 0600 through 1430. Working on the CCO operation today are Laborer Carlos (Pedro) Garcia (~0745~0930, ~1200-1430), Ironworker Jared Garrett (0600-1430), Ironworker Jonathan Canites (~0930~1430, minus some time elsewhere on non-CCO 314 operations), Ironworker John Rocha (~0830~1100), and Operator John Sabatino (~0730~0800, ~0830~1230). The non-CCO 314 operations elsewhere at the Pier 7 warehouse area at other times in the day are not covered by this diary.

In the morning, the ironworker starts the shift by working on the 300-ton jacks at TR's 18 & 19. He starts by extending the jack pistons out by approximately 1" so that there is something to sit on the 1" deep lugs on the jacking beams. Then, he moves the jacks from the temporary timber (that was holding the jacks up high) to the lugs on the jacking beams and the end plates. Note that there is different timber left in place under the jacks to act as backup supports, but that timber is lower than the bottom of the jacks and does not interfere with the jacks sitting on the lugs. The ironworker is done with work on the jacks by about 0715.

Then, the ironworker begins work on the guide angles that were only roughly installed last week. The stainless steel slide plates and guide angles are adjusted transversely, and then the nuts are installed on the guide angles to tighten them down to the concrete slab. A main nut is fully tightened and a jam nut is also added to each rod at each guide angle at each test rig. This work is completed ~0800.

Later in the morning ~0745, the laborer arrives on site to begin work to prep the tents for installation at the test rigs. The tent frames were assembled previously, and this morning's work is to add the feet to the legs. Since the feet and legs were previously field drilled, not all feet will line up with all the legs, so there is some trial and error in the matching of the feet to the legs. Note that field drilling new holes is an option, but it is not needed. After fitting up the feet to the legs, the 1/4" bolt and nut are added to secure them together. This work is needed for the 2 tent frames that will be used at the 2 test rigs 18 & 19. This work is complete ~0930. The laborer leaves the test rig site after this work is complete to work elsewhere on other operations.

After the work on the guide angles this morning, the ironworker installs the spherical washer and spherical nut at the end of the rod, behind the jacking beam at each test rig.

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At about 0830, work starts on the crane mats, sandbags, k-rail, and steel plates at the north end of TR's 18 & 19. For this work, an operator assists the ironworkers, with up to 3 ironworkers and an operator working at the same time on this operation. Two crane mats (made from 12x12's) are added north of the test rigs and additional smaller 12x12's are placed where necessary for elevating k-rail. Pallets of sandbags are placed behind the jacking beam, k-rail is placed to the sides and behind the sand-bags, wedged steel plates are placed between the pair of k-rail to the north of each TR, sandbags are added to the area of the wedged steel plates to hold the wedged steel plates, and traffic plates added above the sandbags and supported by the k-rail. During this work, the hydraulic hoses are also connected to the jacks – hoses are connected by ~0900. One of the traffic plates is torch cut to expand a handhole to add a slot to provide wrench access (range of wrench motion) – slot complete by ~1015. All the crane mats/12x12's, sandbags, wedged steel plates, k-rail, and the traffic plate are complete to the north of TR 18 by 1020. All the crane mats/12x12's, sandbags, wedged steel plates, and k-rail are complete to the north of TR 19 by the 1100 start of the lunch break. After the lunch break, the traffic plate is added to TR 19N above the sandbags and supported by the k-rail, with this work complete by 1200.

After completing all the crane mats/12x12's, sandbags, wedged steel plates, k-rail, and the traffic plate, ABF begins work on the tents. The two previously assembled tent frames are moved over the test rigs. The laborer begins anchoring the tent legs/feet to the ground. The tent legs/feet either anchor to timber (12x12's) with nails or to a concrete slab (old TR 9 slab) with concrete expansion wedge anchors – only 3 of the 16 legs/feet anchor to the concrete slab with the rest of the legs/feet anchoring to timber. The anchoring to concrete involves using a rotohammer to drill holes in the concrete slab. The ironworkers with assistance from the laborer add the tarps to the tent frames. By the afternoon break start at 1330, 1 of 2 top tarps, 1 of 2 end (south) tarps, and 1 of 2 side (east/west) tarps are installed. After the afternoon break, by the end of the shift, the other end (south) tarp and other side (east/west) tarp are installed, but the last top tarp is not installed. By the end of the shift, all the tent legs/feet anchors to timber are complete but only about half of the anchors to concrete are complete because of the time it takes to drill holes with the rotohammer.

VGO continues work on site today. From VGO, Rob Rutledge and Pamela Wallace start work on site at 0830. Rob flew to the Bay Area yesterday, Sunday 8/3/2014, and Pamela flies to the site this morning. Rob picks up Pamela from the airport this morning and they arrive on site later in the morning. With ABF having completed work on the jacks this morning, VGO can add the displacement transducers, but ABF is working in the area on the crane mats, sandbags, k-rail, and steel plates, which would be a safety issue if VGO were working in the same area. VGO waits for ABF to take their morning break between ~0900 and ~0915 to install the displacement transducers at TR 18, with this being enough time to complete the installation but not all the QC and calibration checks. Then, VGO waits for ABF to take their lunch break between ~1100 and ~1130 to install the displacement transducers at TR 19, including all the QC and calibration checks. Then, with ABF working in the TR 19 area, VGO completes the QC and calibration checks at TR 18. VGO takes lunch between 1200 and 1300. At about 1500, VGO adds the ambient air thermocouple inside the tent that ABF placed today. During the day, VGO is also doing work on the program and setup of the plots for reporting the data. VGO leaves the site at 1600, but also does some data/report work from offsite.

Today VGO reports that there is an issue with one of the strain gauges. Last week VGO installed all the strain gauges at TR's 18 & 19. All the strain gauges passed the multiple QC tests during and after installation. The final QC check was a longer term, low speed data check over the weekend after the strain gauges were connected to the data logger (eDAQ). This morning, VGO examined the data from this weekend and determined that one strain gauge has some data drift - this data is unreliable, so this data will not be included in the VGO reports. This single strain gauge with an issue is at TR 19, at the southern strain gauges which are the secondary strain gauge array, and is the strain gauge at the bottom.

For this issue with TR 19, it would delay the first tensioning step by a week to replace the strain gauge. The rod would have to be rotated, which means taking off the south end plate to remove the already epoxied AE sensor on the coupler. We decide not to do this work because there is another strain gauge in the same area (the primary to this failed secondary), and we are proceeding with the tensioning steps on schedule.



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Between ~1430 and ~1530, CT-METS Elijah Turner works on the power and network wire runs for the AE system. He also does some checks of the system. The wires are run in timber wire protection segments previously fabricated by ABF. The network connection and power source are at the BayView Trailer next to the test rig setup.

A 7kW generator – Whisperwatt 7000 – ABF ID 002343 is used some of the time the laborer is on the site and is on idle/standby at the test rig work area the remainder of the day. A 40kW generator – MQ Power 40 – ABF ID 002051 is used briefly in the morning and is on idle/standby at the test rig work area the remainder of the day. A Hydraulic Pump for running the jacks is used briefly in the morning and is on idle/standby at the test rig work area the remainder of the day. An oxyacetylene torch is used briefly and is on idle/standby at the test rig work area the remainder of the day. Various forklifts are used at the test rigs at different times – ABF's Hyster 155 forklift (ABF ID 002375), Hyster 80 forklift (ABF ID 002306), and extendable forklift (Gradall 544D - ABF ID 002005). A Kubota Cart is used by the laborer and another Kubota Cart is used at times by the ironworker at the test rig work area. A compressor - IR 185 ABF ID 002039 - is brought to the site about 0730, is used briefly, and is on idle/standby at the test rig work area the remainder of the day.

Note that there is k-rail at this work area. All the remaining k-rail at the CCO 314 test rig site is State owned. There are 20 pieces of 10' bought k-rail. Only some of this k-rail was in a test rig setup (8 pieces installed previously) with more k-rail installed in a test rig today (8 pieces) and some spare/extra k-rail that are set aside (4 pieces).

To elevate k-rail and sandbags, crane mats (built from 12x12's) and timber blocking (12x12's) are used. The crane mat and 12x12's quantities from installation prior to today are as follows:

1 each 4'x20' crane mat (1 x 80 LF)

1 each 5'x19' crane mat (1 x 95 LF)

2 each 5'x20' crane mats (2 x 100 LF)

~4x2x4 = 32 LF additional 12x12's

Total 12x12's quantity = 407 LF (installed prior to today)

The crane mat and 12x12's quantities installed today are as follows:

2 each 5'x16' crane mat (2 x 80 LF)

32 LF additional 12x12's

Total 12x12's quantity = 192 LF (installed today)

Total 12x12's quantity = 407 + 192 = 599 LF ~ 600 LF

The agreed extra work with ABF is as follows:

Ironworker Jared Garrett - 8 hrs

Ironworker Jonathan Canites - 3 hrs

Ironworker John Rocha - 2 hrs

Laborer Carlos (Pedro) Garcia - 4 hrs

Operator John Sabatino - 4 hrs

Hyster 80 Forklift - 4 hrs

Extendable Forklift - 4 hrs

Kubota Cart - 4 hrs

12x12 timber - 600 LF

See the attached Extra Work Order - Signed with ABF for CCO 314 work

INSPECTOR OT REMARK:

Field and Office 4 hours: ABF's shift is 0600 to 1430. VGO's shift is 0830 to 1600 in the field (travel prior and work from hotel after). I am in the field for ABF's work most of the time between 0600 and 1430. I am also in the field some of the time later in the day when CT-METS is working on AE instrumentation installation (~1430~1530). I am also assisting CT-METS and the DJV with various requested info on A354 Grade BD bolts and rods late in the day, and addressing issues related to the scheduled start of loading of

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2 new test rigs tomorrow. My shift is 0600 to 1830, with the OT between 1430 and 1830.

