



SAS Superstructure

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 21-Nov-14

Time 11:02 PM

Daily Diary Report by Bid Item

Contract No.: 04-0120F4

Diary #: 679 Const Calendar Day: 115 Date: 27-Sep-2012 Thursday

Inspector Name: Bruce, Matt Title: Transportation Engineer

Inspection Type: Continuous

Shift Hours: 06:00 am 07:30 pm Break: 01:30 Over Time: 04:00

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 50 - 60 12 PM 50 - 60 4PM 50 - 60

Precipitation 0.00"

Condition Dense fog to partly sunny to dense fog

Working Day If no, explain:

Diary:

Dispute

Work description.

- Measured the axial compression of the OBG deck at the E2 cap beam first since there was dense fog that prevented the tower survey first thing before the shift started. The bipod was used with the mini prism tip to define the change in the offset distance. China 2.0m offset punchmarks were used as reference on the OBG at the following locations:

B1W, B3W, B2W, and S2W

The average delta from the 1.781m West offset marks placed on the E2 concrete cap beam surface from punchmarks for the points above was 250mm west. The survey was done at the end of Phase 1 of Load Transfer. The final theoretical distance from the Pier E2 CL at this stage of load transfer is 21mm East. The actual distance measured is -9mm West.

The survey was done under uniform ambient conditions where the time of survey was conducted from 7:15am to 7:30am. The official time of sunrise per weather.com was 7:02am. The ambient temperature during the measurements was 50F under mostly cloudy skies at this time. Steel temperature was taken immediately after the measurements at WPP8.5CL which was 54F. This indicates that the measurements were done under uniform ambient conditions before the sun heats up the steel causing thermal expansion/elongation.

- Met with ABF engineer Levi Gatsos, CMC-Rebar superintendent Jacob (last name unknown), and Jason Wilcox regarding the rebar placement at the jacking saddle pourback at 9:00am. The intent of this meeting was to address the issues associated with this operation. The location and placement of the male couplers was briefly inspected. It was agreed that the area would be fully inspected when the jacking saddle equipment, and temporary shims were removed. Details of the plans were discussed so that rebar orders could be made. It was made clear to the Contractor that some rebar would have to be drilled and bonded, ironworkers would have to be pre-qualified for using the torque wrench, and a thread chaser would be needed to remove rust in the female coupler. It should be noted that Jason Wilcox and Pamela Gagnier will handle this operation to install rebar at this location.

- Surveyed the tower after taking OBG measurements of the axial compression at the E2 cap beam. The survey didn't begin until 10:00am due to the dense fog. The tower was released and current deflection was 5mm to the west. The theoretical deflection of the tower tie back system at this point of load transfer is supposed to be plumb.

The survey was considered to be done under uniform ambient conditions since the sunlight had not heated up the steel. The survey was conducted was conducted from 10:10am to 10:20am. The ambient



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temperature during the survey was 51F under cloudy skies. The wind speed was measured from the west northwest direction at 6mph with a barometric pressure of 29.93"Hg.

- Processed the surveying data for today's measurements taken of the tower tie-back release and the OBG axial compression .

- Measured the bolt elongations with the Caltrans CT-1 Extensometer for the following cable bands:

16S, 18S, 34S, 36S, 38S, 46S, 48S, 50S, 70S, 72S, 80S, 82S

16N, 18N, 36N, 38N, 46N, 48N, 70N, 72N, 80N, 82N

The measurements were taken by myself, John Lyons, Doug Wright, Alex Schmitt and Victor Pereyra. John took all of the readings on the digital dial and recorded the number. Doug, Alex, and myself positioned/handled the Extensometer on most of the cable band bolts. Victor was brought to project to assist measuring cable band bolt elongations with the Extensometer. Victor helped out after witnessing the task and receiving instruction from Doug. Victor took over Doug's responsibilities after awhile and helped myself and Alex perform the measurements.

Cable band 34S was done after immediately ABF crews tensioned the cable band bolts. The bolts in cable band 48N and 48S were measured since the bolts were stressed for the first time ever. These measurements done for 50S were done at the request of Tai-Lin Liu for verification of certain elongation values.

Attachment



The measured distance (D2) from the bipod to the 1.781m west mark on the E2 concrete cap beam surface.



View of the W-Line OBG from the W2 cap beam, note the counterweight profile past the tower.



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Steel temperature after the OBG axial compression measurements were taken of 54F at WPP8.5CL



A bearing lower housing hole in relation to a anchor rod breakout hole in the E2 concrete cap beam.



The measured distance (D1) from the bipod to the 2.0m west China offset mark. The D1 distance is an offset from the 1.781m west mark on the concrete.



Shear Key S4 lower housing holes in relation to the anchor rod breakout holes after axial compression on the OBG to the west.



The W-Line OBG lift off from the cradle supports set on the temporary truss.