



SAS Superstructure

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 21-Nov-14

Time 11:13 PM

Daily Diary Report by Bid Item

Contract No.: 04-0120F4

Diary #: 613 Const Calendar Day: 28 Date: 02-Jul-2012 Monday

Inspector Name: Bruce, Matt Title: Transportation Engineer

Inspection Type: Intermittent

Shift Hours: 05:30 am 05:00 pm Break: 00:30 Over Time: 03:00

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 60 - 70 4PM 60 - 70

Precipitation 0.00"

Condition Overcast in the AM to sunny in the PM

Working Day If no, explain:

Diary:

Dispute

Work description.

- Assisted District 4 scanners Robert Dolan, Randall Wigton, Jeremiah Bean, and Paul Rogers with the pre Load Transfer scanning survey conducted on the temporary trusses. The scanning survey started near the tower and proceeded east stopping on the east side of the E2 cap beam. To reiterate the following are general comments related to the truss scan:



- 1.) All scan control points were on the inboard side of the truss and bridge.
- 2.) The intent of scanning from the temporary trusses is to capture mainly the vertical displacement of the truss and OBG due to load transfer. Also to observe the change in transverse lateral movement of the bridge.
- 3.) All scans on the truss are being conducted early in the morning around sunrise starting the shift at 6:00am.
- 4.) To mitigate the effects of steel thermal expansion, point clouds obtained from the truss will be merged with the control scan done on June 17th and 18th under ambient conditions and with an additional east end control scan for a date yet to be determined.
- 5.) A recent survey found that the OBG expands approximately 1" at or around 10:00am. This is the approximate cut-off time where the scanning survey will be stopped to keep any horizontal point cloud offsets consistent.

The pre Load Transfer scanning survey was started at 6:30am and was completed at 11:35am. The scanning survey was extended past the 10:00am deadline since the conditions were overcast. The ambient temperature range during the scanning survey was 56F to 59F. The steel temperature at the start of the survey was 54F measured on the W-Line OBG top deck near the tower. By the end of the survey the steel temperature measured at the same location was 100F. The bottom/side panels of the OBG and temporary truss steel remained consistent at a range of 56F to 59F.

- Used the Trimble S8 total station to provide SFOBB project control coordinates to scan control points 406, 407, 409, 410, 506, 507, 508 and 509 with the assistance of Paul Rogers. The control point occupied for shots in the 400 series was SAS-E2NW. Similarly the control point used for the 500 series was SAS-E2SW. For both setups the backsight used was MB007 located on the Treasure Island Navy Pier. The measure rounds function on the total station was used to establish accurate (mostly horizontal) coordinates on the scan control points.



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Job Name: 04-0120F4

Inspector Name Bruce, Matt

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Date: 02-Jul-2012

Monday

The survey conducted with the total station began at 6:50am and was completed at 8:00am. The ambient temperature at the time of the survey was 56F and cloudy conditions were observed. Wind speed measured at the new E2 foundation was from the west southwest direction at 9mph. The atmospheric pressure was 29.90"Hg. The official time of sunrise was 5:51am per weather.com.

- Continued to review survey data for the Hinge A pipe beams and sleeves inside OBG lifts 14E/W. Discussed in details the particular issues with Bob Brignano.
- Continued to process all of the survey data for the Shear Keys, Bearings, and OBG top deck control points. This information is critical since there are a few submittals pending prior to load transfer of the SAS bridge.
- Continued to process the cable rotation or twist data after swing out and emailed a draft to Warren Collins for review and analysis.

Attachment



Leica C10 scanner performing a fine scan on the Shear Keys and Bearings on the W-Line truss.



The Trimble S8 Total station occupying ABF control point SAS-E2NW shooting scan control points in the 400 series along the E-Line temporary truss.