



SAS Superstructure

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 21-Nov-14

Time 11:27 PM

Daily Diary Report by Bid Item

Contract No.: 04-0120F4

Diary #: 519 Const Calendar Day: 906 Date: 02-Mar-2012 Friday
Inspector Name: Bruce, Matt Title: Transportation Engineer
Inspection Type: Intermittent
Shift Hours: 04:30 am 04:00 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 40 - 50 12 PM 50 - 60 4PM 50 - 60
Precipitation 0.00" Condition Sunny

Working Day [] If no, explain:

Diary:

Dispute

Work description.

- Phil Latasa, Sami Dauok, Alex Schmitt, Daryoush Bahar, and myself checked the out to out distance for the cable strands today as Daryoush's and my measurements are tabulated below. Daryoush and I were responsible for both the north/south sidespans today. Similarly Sami and Phil were responsible for checking the north/south mainspans. Daryoush assisted me with the measurements and tabulating the data as I took all of the measurements unless otherwise noted. I used the Maletic gauge (#1) to take the out to out measurements of the cable strands.

All measurements by both crews were reported to Alex who was stationed in the Caltrans Connex recording and analyzing the data. When all of the measurements were completed, Alex was responsible for reviewing the measurements with ABF engineer Zach Lauria. See Alex's diary for more details related to the acceptance or rejection of cable strand sag adjustment.

The battery for the red temperature gauge was not charged. Therefore the ambient temperature was obtained from weather.com at the time of the measurements. Wind speeds were obtained from weather.com at the time of the measurements. The steel temperature measurements were taken with the digital thermometer placed on the outer cable strand wires.

The official sunrise time per weather.com for San Francisco today was at 6:39am. The following measurements were taken of the relative sag from cable strand number 1 at the given times below:

// South Sidespan //

Time = 4:45am
Ambient Temperature = 42F
Condition = Clear
Wind = NNE @ 5mph
ABF Surveyor(s) = None at this time
Caltrans Engineer(s) = Matt Bruce and Daryoush Bahar

Table with 5 columns: Cable Strand (mm), Steel Temperature (F), O-O (#1) CT (mm), Theor (mm), CT Delta. Rows include strand 1, 66, and 69 with their respective measurements.

Comments: All cable strands were considered to be free-hanging at the time of measurement on the south sidespan. I took all of the measurements while Daryoush assisted me with setting up the targets, being



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level, normal to cable, etc. A timber block was used on cable strand number 1 to obtain all of the measurements where the dimension is in () millimeters.

// North Sidespan //

Time = 5:08am

Ambient Temperature = 42F

Condition = Clear

Wind = NE @ 6mph

ABF Surveyor(s) = None at this time

Caltrans Engineer(s) = Matt Bruce and Daryoush Bahar

Cable Strand (mm)	Steel Temperature (F)	O-O (#1) CT / ABF (mm)	Theor (mm)	CT Delta
1	45.9	Baseline or Zero	78	0
63	45.9	731, 730 - Ave = 731 (-61) = 670	680	- 10
69	45.9	614, 616 - Ave = 615 (-61) = 554	489	+ 65

Comments: All cable strands were considered to be free-hanging at the time of measurement on the north sidespan. I took all of the measurements while Daryoush assisted me with setting up the targets, being level, normal to cable, etc. A timber block was used on cable strand number 1 to obtain measurements where the dimension is in () millimeters.

// North West-Loop //

Time = 5:36am

Ambient Temperature = 42F

Condition = Clear

Wind = NE @ 7mph

ABF Engineer(s) or Surveyor(s) = None at this time

Caltrans Engineer(s) = Matt Bruce and Daryoush Bahar

Cable Strand (mm)	Steel Temperature (F)	O-O (#1Y) CT (mm)	Theor (mm)	CT Delta
1	47.1	Baseline or Zero	80	0
70	46.7	676 (-126) = 550	552	- 2

Comments: Cable strand number 70 was considered to be free-hanging at the time of measurement on the north west-loop. Daryoush took the measurement at this location. I recorded the data while the measurement was being taken. The () denotes the fixed timber block (by ABF) to cable strand number 1 dimension in millimeters.

// South West-Loop //

Time = 5:39am

Ambient Temperature = 42F

Condition = Clear

Wind = NE @ 7mph

ABF Engineer(s) or Surveyor(s) = None at this time

Caltrans Engineer(s) = Matt Bruce and Daryoush Bahar

Cable Strand (mm)	Steel Temperature (F)	O-O (#1Y) CT (mm)	Theor (mm)	CT Delta
1	47.1	Baseline or Zero	80	0
70	46.9	673 (-121) = 547	552	- 5

Comments: Cable strand number 70 was considered to be free-hanging at the time of measurement on the south west-loop. Daryoush took the measurement at this location. I recorded the data while the measurement was being taken. The () denotes the fixed timber block (by ABF) to cable strand number 1



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dimension in millimeters.

- All of the prescribed measurements were completed at 6:00am and conveyed to Alex. At or around this time I verbally compared numbers with ABF surveyor Terry Denis. I mentioned to and warned Alex of the discrepancies amongst the ABF surveyors and I went ahead and remeasured cable strand number 66 on the south side span.

// South Sidespan //

Time = 6:09am

Ambient Temperature = 45F

Condition = Clear

Wind = NE @ 6mph

ABF Surveyor(s) = None at this time

Caltrans Engineer(s) = Matt Bruce and Daryoush Bahar

Cable Strand (mm)	Steel Temperature (F)	O-O (#1) CT (mm)	Theor (mm)	CT Delta
1	45.6	Baseline or Zero	78	0
66	44.8	347, 354, 353 - Ave = 351 (-61) = 290	286	+ 4

Comments: All cable strands were considered to be free-hanging at the time of measurement on the south sidespan. I took all of the measurements while Daryoush assisted me with setting up the targets, being level, normal to cable, etc. A timber block was used on cable strand number 1 to obtain all of the measurements where the dimension is in () millimeters. The possible difference between my sets of measurements was unknown, however the timber block placement/bearing was suspected. Also the cable strand oscillations were +/- 4mm.

- Emailed the survey report to pertinent personnel related to the construction of Hinge K of the counterweight placed at the end of YBITS W-Line bridge cantilever.

- Attended OSC Winter Training in San Leandro.