



SAS Superstructure

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 21-Nov-14

Time 10:04 AM

Daily Diary Report by Bid Item

Contract No.: 04-0120F4

Diary #: 064 Const Calendar Day: 248 Date: 14-May-2010 Friday
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

Working Day [checked] If no, explain:

Diary:

Dispute

General Comments

ITEM 52 FURNISH STRUCTURAL STEEL (BRIDGE)(TOWER);
TOWER HEAD BOLT TESTING IN DRILL AND TAP HOLES:



Today's work is necessary because of an issue with the Tower Head where some bolts will be tightened into drill and tap holes. The plan is to test to full rocap turns without stripping the drill and tap holes in the soft steel plates (not the same as the hardened nuts used in a bolt assembly) to qualify normal turn of the nut installation of the bolts into drill and tap holes for the full clamping force of tensioned slip critical bolts. Previous tests on 5/4/2010 were per the CT response to ABF-RFI-002067R01. Today's tests are a follow up on the issue and are some of the tests per the CT response to ABF-RFI-002067R02.

For ABF, engineers Scott Yeager and Paul Fikse are present. For CT, Bob Brignano and Saman Soheilifard are present. Work happens at Bolt Testing Conex ABF ID 002079 with Skidmore Model HT 4000 ABF ID 000612 in the warehouse. Testing and discussion of test results in the field today is 0915 to 0945.

The bolts for today's tests are mechanically galvanized M24x100. The long length is needed to get through the Skidmore and fully engage the longer threaded length of bolts over 100mm long (per ANSI) into the thick plates with drill and tap holes behind the Skidmore. The plates are drilled and tapped with standard M24 threads without tapping oversized for galvanized bolts. Three tests are performed with 35mm thick plates with 35mm deep drill and tap holes that have been solvent cleaned to remove tap oil.

See the attached Bolt Test Form for details of the testing.

The torque values from today's testing with cleaned holes are similar to the previous testing (5/4/2010) with oily holes - we discuss that this may be because the critical factor is the friction between the bolt head and the washer, neither of which are lubricated. This is not the final testing on this issue, because per the CT response to ABF-RFI-002067R02 samples with weathered holes need to be testing - that testing will happen at a later date after the material has weathered.

CCO 140 WABO TRANSFLEX SAMPLE

The requested sample Wabo TransFlex 900 arrives today. It is offloaded in the warehouse by ABF's Robert Landers (salaried). ABF's Jim Davidson and I examine the sample around 1130.

