

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017358**Date Inspected:** 05-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

- 1). OBG Field Splice 6W/7W weld ID: A2, A4 & A5, Face A (SMAW R-1 and R-2 Repairs)
- 2). OBG Field Splice 6W/7W Weld ID: E1 & E2, Face A

- 1). OBG Field Splice 6W/7W weld ID: A2, A4 & A5, Face A (SMAW R-1 and R-2 Repairs)

The QAI periodically observed AB/F approved welder Bryce Howell (ID 5591) performing grinding from face A to excavate QC Ultrasonic Testing (UT) R-1 and R-2 repair areas at OBG Field Splice 6W/7W weld ID: A2, A4 and A5. Mr. Howell excavated three (4) R-1 repair areas in weld A2 labeled on the steel as indications (1), (2), (3) & (4), with the following locations and dimensions: indication 1) - Length = 90mm, depth = 12mm and Y = 705mm, indication 2) - Length = 90mm, depth = 13mm and Y = 2560mm, indication 3) - Length = 90mm, depth = 14mm and Y = 4335mm & indication 4) - Length = 90mm, depth = 14mm and Y = 5165mm. Mr. Howell also excavated one (1) R-1 repair areas in at the junction of welds A4 and A5 with the following location and dimensions: Length = 100mm, depth = 14mm and A4- Y = 5450mm. Mr. Howell also excavated three (3) R-2 repair areas in weld A5 with the following locations and dimensions: 1st indication - Length = unknown, depth = 13mm and Y = 690mm, 2nd indication Length = 90mm, depth = 14mm and Y = 1420mm & 3rd indication Length = 160mm, depth = 20mm and Y = 4310mm. The QAI periodically observed AB/F approved welder Fred Kaddu performing repair welding of excavated areas per the SMAW process in the 1G (flat) position at all Y locations described above. The QAI periodically observed QC Inspectors Tom Pasqualone and Steve McConnell performing Magnetic Particle Testing (MT) of excavated UT repair areas prior to welding. The QAI observed that

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the performance and evaluation of the MT appeared to comply with the MT procedure identified as SE-MT-CT-D1.5-101 Rev. 4. The QAI periodically observed QC Inspector Tom Pasqualone was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1000-Repair. See photos below. Repair welding was in process at this location and the work at this location appeared to be in general compliance with contract documents.

2). OBG Field Splice 6W/7W Weld ID: E1 & E2, Face A

The QAI periodically observed AB/F approved welder Song Tao Huang (ID 3794) setting up and preparing to perform welding per the Flux Cored Arc Welding (FCAW-G) process in the 3G (vertical) position of root passes on weld ID: E1 & E2. The QAI observed QC Inspector John Pagliero was present to monitor the progress and verify that the welding parameters were within the limits established by the approved Welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-3042B-1. The QAI did not observed welding at this location on this date.



Summary of Conversations:

In a conversation with QC Inspector Jesse Cayabyab, the QAI inquired as to the status of the QC UT confirmation of the rejectable Class A indication observed by the QAI in weld D1 at OBG Field Splice 5E/6E on 10-04-10. Mr. Cayabyab stated that he had confirmed that the indication was rejectable and stated that he had found it to be a Class A with a rating of +10.

Other conversations on this date with Quality Control Inspectors were general in nature and pertained to locations of welding and QC activities.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammed Fatemi (916) 813 3677, who represents the Office of Structural Materials for your project.

Inspected By: Madison, Bert

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer