

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015197**Date Inspected:** 25-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Listed 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:** Orthotropic Box Girders**Summary of Items Observed:**

The Quality Assurance Inspector (QAI), Scott Croff, was present at the Self Anchored Span (SAS) job site to observe the scheduled fabrication and welding of components for the SFOBB project. The following observations were made:

- 1) OBG Lifts 4W/5W - plate A inspection
- 2) OBG Lifts 4E/5E - plate C field splice welding
- 3) OBG Lifts 1W/2W - plate F inspection
- 4) Pier 7 activities

1) The QAI observed Quality Control (QC) Inspector Jesus Cayabyab conducting magnetic particle testing (MT) and ultrasonic testing (UT) on repairs in weld segments A2, A3 and A4 on OBG lifts 4W/5W complete joint penetration (CJP) field splice weld. The QAI was informed that repair welding was completed on 6.24.2010. The QAI noted that the weld surface appeared to be ground flush and smooth with the OBG deck plates. The QC Inspector informed the QAI that additional repairs were still pending on weld segment A5. As the inspections were performed, the QAI was also informed that the repairs appeared to be acceptable to the QC Inspector. See the attached photo.

2) The QAI observed ABF personnel welding the inside of plate C at OBG lifts 4E/5E field splice. The QAI noted that this vertical (3G) CJP weld is being made in segment C2. The QAI noted that the QC Inspector Bernie Docena is monitoring this welding. The QAI observed ABF workers Jin Quan Huang, ID 9340, and Song Tao Huang, ID 3794, making the welds with gas shielded flux cored arc welding (FCAW-G). The QAI was informed

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that welding procedure specification (WPS) ABF-WPS-D15-3040A-1 is being used for this welding. The QAI randomly measured the preheat, interpass temperature and welding parameters and noted that they appeared to be conforming to the WPS requirements. See the attached photo.

3) The QAI met with the QC Inspector Tom Pasqualone and was shown the completed field splice weld F (internal face) on OBG lifts 1W/2W. The QAI was informed that a visual examination of the weld was not acceptable and the weld would be repaired. The QAI made general observations of the weld profile, using a flashlight and weld measuring tools. The QAI noted that the weld appeared to have non-conforming undercut and other portions of the weld appeared to have non-conforming profiles, per the contract requirements. The QAI agreed with the QC Inspector that the weld did not appear to be visually acceptable at this time.

4) The QAI observed ABF activities at the Pier 7 location. The QAI did not observe any Quality Control (QC) Inspectors present. The QAI noted that ABF personnel are welding on barges and other job related equipment. The QAI also noted that the contractor is assembling parts of the temporary trestle and Favco crane on the barges at Pier 7. The QAI did not observe any personnel welding on bridge components (OBG 6W). The QAI noted that this work was in progress until the end of the shift.

The QAI reviewed contract related documents including the submitted and approved Welding Quality Control Plan (WQCP) and approved revisions to the WQCP and newly issued ABFJV non-conformance reports. The QAI continued reviewing the contractor's welding reports, submittal # 1536 Revision 8, for conformance to the contract special provisions. The review was in progress at the end of this shift.



Summary of Conversations:

As noted above, the QAI was informed by the QC Inspector Jesus Cayabyab when 4W/5W deck plate (A) weld repairs were acceptable. The QAI had additional conversations regarding the pending repair of 4W/5W weld A5. The QC Inspector was not able to provide information as to when the repair will be made.

As noted above, the QAI had a conversation with the QC Inspector Tom Pasqualone regarding the condition of 1W/2W weld F. There was a general agreement that the weld was not visually acceptable and the QAI noted that the weld was marked for repairs by the QC Inspector.

The QAI also relayed the observations of OBG splice welding to the QAI Danny Reyes. The QAI generated a shift turn-over report with this information. The QAI relayed the observations at Pier 7 and the general status of

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work observed to the QAI Lead Bill Levell. Except as described above, there were no other notable observations or conversations during this shift.

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 Mohammad Fatemi, (916)813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Croff, Scott	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
