

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-024525**Date Inspected:** 21-Jun-2011**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:** Job Site**CWI Name:** Steve Jensen**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:** S.A.S. components**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) North Tower field splice welding
- 2) East Tower field splice fit-up
- 3) Post Arrival Inspections at Pier 7

1) The QAI observed ABF personnel welding field splice closure plates inside the North tower shaft at field splice #3. The QAI observed Salvador Sandoval, ID 2202, at the North-East lower plate (weld NE166). The QAI noted that the welder is making vertical fillet welds (3F) using self shielded flux cored arc welding (FCAW-S) with 1.8mm diameter E71T-8-H16 electrode (NR-232). The QAI observed that Quality Control Inspector (QCI) Steve Jensen is monitoring this welding. The QAI was informed that welding procedure specification ABF-WPS-D15-F2200-3 is being used for this welding. The QAI randomly measured the preheat, interpass temperature and welding parameters, with the exception of travel speed, and noted that they appeared to be conforming to the WPS requirements. At the North lower plate (weld N166), the QAI observed ABF welder Xiao Jian Wan, ID 9677, in the process of grinding off temporary welds from fit-up gear. The QAI reported yesterday that several of these temporary welds were partially incorporated into field splice closure plate fillet welds and would be removed. This work was in progress and being monitored by the QCI. The QAI was informed that magnetic particle testing (MT) will be performed on the base metal after all the welds are satisfactorily removed. The QAI relayed this information to the QAI Joselito Lizardo, who was monitoring the work in the afternoon of

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this day. See the attached photos.

2) The QAI observed ABF personnel preparing and fitting up the field splice closure plates inside the East tower shaft at field splice #3. The QAI observed Mike Jininez, ID 4671, using chain hoists and temporary attachments to install and fit-up the closure plates. The QAI noted that the temporary attachments are welded using shielded metal arc welding (SMAW) with E7018-H4R electrodes. The QAI was informed that ABF-WPS-D15-1200A-4 is the WPS being utilized for this work. The QAI noted that the QCI Steve Jensen is monitoring this work. At the time of the QAI's observations, there was no welding in progress and no welding parameters were verified. The QCI informed the QAI that final fit-up will be measured after all plates are installed. This work was in progress at the end of the shift. See the attached photo.

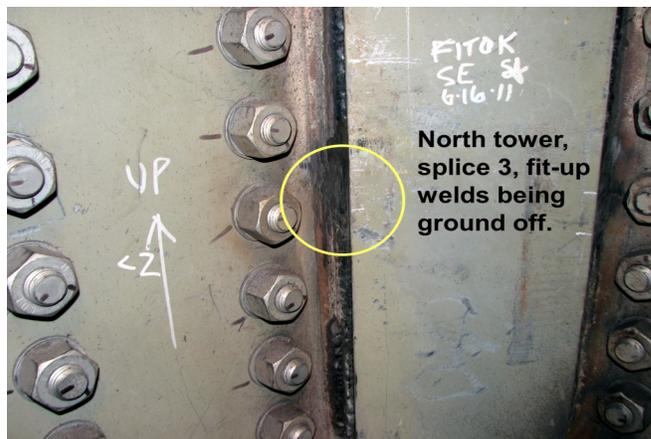
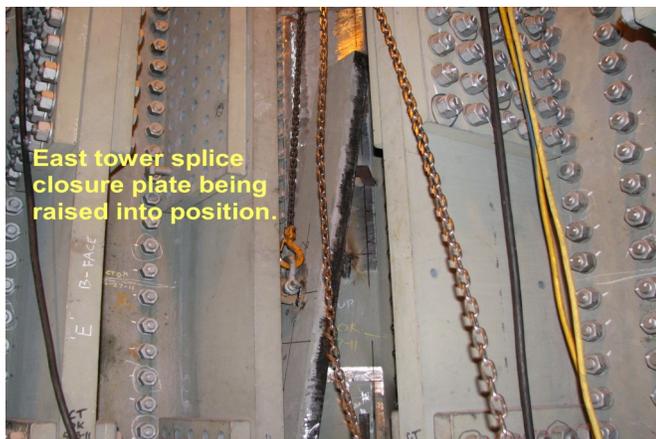
3) At Pier 7, the QAI accompanied Caltrans representatives Jason Wilcox, Doug Wright, Ae Tern, Sanny Khaw, ABF representatives Chuck Kanapicki and Mike Johnson in conducting the post arrival inspection of voyage 8 components. During the inspection, the QAI noted that painted surfaces have been marred from general shipping and handling. The QAI noted there does not appear to be other shipping related damage on OBG 12W, Crossbeam 17, the main Tower Head segments, Tower skirt sections and bikepath panels. The QAI noted there are minor components that have not been examined for post arrival at this time. See the attached photos.

While the QAI was traveling to the post arrival inspection area at Pier 7, the QAI noted that other ABF personnel are in the process of fitting up and tack welding service platform #5 repair pieces. The QAI was with ABF's Quality Control Manager (QCM) Chuck Kanapicki when these observations were made. The QAI noted that no QCIs were present and Mr. Kanapicki asked the welding crew what was scheduled for the repairs of service platforms. The QAI noted that minor tack welding has been performed and did not recognize the welder. The QAI was later informed that the welder was not certified or approved by the Engineer. The QAI was also informed that additional work will be monitored by a QCI and that all welds made by the uncertified welder will be removed.



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Summary of Conversations:

The QAI had general conversations with ABF and Caltrans personnel during this shift. As noted above, the QAI had a conversation with the QCI Steve Jensen, regarding the temporary welds being removed at tower splice #3, N-165. The QAI relayed the progress and status of the weld removal to the QAI Joselito Lizardo. The QAI also relayed general observations of work to the QAI Danny Reyes. The QAI relayed the status of work and observations from post arrival inspections to the QAI Lead Bill Levell. Except as described above, there were no other notable conversations or observations.

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 Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Croff, Scott

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer