

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-024265**Date Inspected:** 03-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:** Tower**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor American Bridge/Fluor (ABF) welding operations. This Quality Assurance (QA) Inspector, Craig Hager observed the following.

51 Meter elevation – East Tower – Splice Plates

This QA Inspector was informed by QC Inspector Tony Sherwood he had performed and accepted the Magnetic Particle Testing (MT) of the Splice Plate welds identified as 161-East, 162-East, 161-Southeast and 162-Southeast. This QA Inspector performed a random visual verification and MT verification inspection of the welds noted above. The work appeared to comply with the contract requirements.

114 Meter elevation – South Tower – Splice Plates

This QA Inspector observed welding did not start as early as anticipated this date to various welding equipment issues. This QA Inspector observed welding did not start until approximately 0815 this date.

Prior to the start of welding this QA Inspector observed induction heating blankets had been positioned over the areas to be welded in order to start the preheating process, gas troches were used to bring the preheat temperature to be within the range specified in the Welding Procedure Specification.

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This QA Inspector observed ABF welding personnel Salvador Sandoval (#2202) using the Flux Cored Arc Welding (FCAW) process at weld joint #165-Southwest, the bottom half of the splice plate. This QA Inspector was present and randomly observed as QC Inspector Steve Jensen verified the following welding parameters; 273 amperes and 22.1 volts at a travel speed of 90 mm per minute to produce a heat input of 4.02 Kj per mm. The welding observed appeared to comply with Welding Procedure Specification (WPS) ABF-WPS-D15-F2200-2.

This QA Inspector observed ABF welding personnel Xiao Jian Wan (#9677) using the FCAW process at weld joint #166-South, the bottom half of the splice plate. This QA Inspector was present and randomly observed as QC Inspector Steve Jensen verified the following welding parameters; 252 amperes and 21.6 volts at a travel speed of 85 mm per minute to produce a heat input of 3.84 Kj per mm. The welding observed appeared to comply with Welding Procedure Specification (WPS) ABF-WPS-D15-F2200-2.

This QA Inspector made multiple trips to the location where welding was being performed above and observed QC Inspector Steve Jensen periodically monitoring the welding. The work observed by this QA Inspector appeared to comply with the contract requirements.

Summary of Conversations:

This QA Inspector had general conversations with American Bridge/Fluor (ABF) and Caltrans personnel during this shift. Except as described above and noted below there were no notable conversations.

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:	Hager,Craig	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
