

**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-018904**Date Inspected:** 28-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1100**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** John Pagliero**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:** OBG Section**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 to monitor American Bridge/Fluor (ABF) welding operations.

The following observations were made:

1) At weld joint 8E/9E-E-2, inside the OBG section: ABF welding personnel Sang Tao Huang (#3794) was using the Flux Cored Arc Welding (FCAW) process on a track system for production welding. QC Inspector Fred Von Hoff was monitoring the work.

2) At weld joint 8E/9E-LS-1, inside the OBG section: ABF welding personnel Xiao Jian Wan (#9677) was using the Shielded Metal Arc Welding (SMAW) process for repair welding. QC Inspector John Pagliero was monitoring the work.

3) At weld joint 7E/8E-C 1 and 2, inside the OBG section: ABF welding personnel Fred Kaddu (#2188) was in the process of using a grinder to excavate an area for repair welding.

4) This QA Inspector observed OBG section 10E had been lifted onto the temporary platform and was in the process of being aligned with OBG section 9E. Multiple ABF personnel were preparing the transverse weld seams on OBG section 9E and moving welding and ventilation equipment.

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## WELDING INSPECTION REPORT

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At weld joint 8E/9E-E-2, inside the OBG section this QA Inspector observed ABF welding personnel Sang Tao Huang (#3794) using the FCAW process on a track system for production welding. This QA Inspector observed as QC Inspector Fred Von Hoff verified the following welding parameters; 250 amperes and 24 volts at a travel speed of 170 mm per minute. The work observed appeared to comply with ABF-WPS-D15-3040A-3.

At weld joint 8E/9E-LS-1, inside the OBG section this QA Inspector observed ABF welding personnel Xiao Jian Wan (#9677) using the SMAW process for repair welding. This QA Inspector observed QC Inspector John Pagliero was monitoring the work. This QA Inspector performed a verification of welding parameters observing the following; 127 amperes using a 3.2 mm diameter E9018H4R electrode. This QA Inspector observed preheating was being achieved by using a gas torch and verified the preheat temperature was greater than 100°C (212°F) by using a temperature indicating marker. This QA Inspector observed the defect location was Y-100 and the repair excavation was 80 mm long, 30 mm wide and 15 mm deep centered over the defect area.

At weld joint 7E/8E-C 1 and 2, inside the OBG section this QA Inspector observed ABF welding personnel Fred Kaddu (#2188) was in the process excavating a weld defect. This QA Inspector observed both the carbon arc process and a power grinder were being used. The work was in progress and not completed during this QA Inspectors' shift, therefore a turnover of the work was provided to QA Inspector Jojo Lizardo.

This QA Inspector observed OBG section 10E had been lifted onto the temporary platform and was in the process of being aligned with OBG section 9E. Multiple ABF personnel were preparing the transverse weld seams on OBG section 9E and moving welding and ventilation equipment.

### **Summary of Conversations:**

As noted above.

### **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.

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<b>Inspected By:</b>	Hager,Craig	Quality Assurance Inspector
<b>Reviewed By:</b>	Mertz,Robert	QA Reviewer

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