

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029524**Date Inspected:** 03-Apr-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**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:** OBG**Summary of Items Observed:**

At the start of shift, this Quality Assurance Inspector (QAI) traveled to the project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) personnel. The inspection was performed on the various Complete Joint Penetration (CJP) groove welds of the East and West Orthotropic Box Girders (OBG's).

The welding was performed utilizing Shielded Metal Arc Welding (SMAW) process as per the Welding Procedure Specifications (WPS's).

At the start of the shift this QAI observed the following:

This QAI witnessed the Magnetic Particle Testing (MPT) and inspections of the lifting rod closure plate welds at the locations WB-SLLH-7 and WB-SLLH-6 as performed by the AB/F Quality Control (QC) Inspector William Sherwood. This QAI performed the MT verification inspections of these same welds and at the conclusion of the QA verification there were no rejectable indications noted at this time. See the attached TL-6028 MT report for details.

This QAI witnessed the Ultrasonic Testing (UT) performed by the AB/F Quality Control (QC) Inspector Bernard Docena of the lifting rod closure plate welds at locations WB-SLLH-6 and WB-SLLH-7. This QAI performed the UT verification inspections of these same welds. See the attached TL-6027 UT report for details.

This QAI performed the Ultrasonic Testing (UT) verification inspection of the 2 (two) R1 repair areas of Deck Access Hole (DAH) closure plate weld at location 12W-PP116.5-W2. There were no rejectable indications noted

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at this time. See the attached TL-6027 UT report for details.

This QAI verified the bevel preparation, fit up, preheat of 150F and the 1G welding performed on the lifting rod closure plate at location WB-SLLH-3 by the welder Wai Kit Lai #2953. The E7018 electrodes were utilized as per the Weld Procedure Specification (WPS) ABF-WPS-D15-1030. The AB/F Quality Control (QC) Inspector William Sherwood was present and monitoring the welding parameters per the WPS requirements. The backgouging to sound metal of the weld root has not yet been performed as of this time. The welding performed on this date appears to conform with the contract documents.

This QAI verified the bevel preparation, fit-up, preheat and the 1G (flat position) welding of the lifting rod closure at the location WB-SLLH-4. The welding was performed by Wai Kit Lai #2953 utilizing the E7018 electrodes as per the Weld Procedure Specification (WPS) ABF-WPS-D15-1030. The AB/F Quality Control (QC) Inspector William Sherwood was present to monitor the welding parameters as per the WPS requirements.

This QAI verified the bevel preparation, fit-up, preheat and the performance of the 1G (flat position) welding of the lifting rod closure plate weld WB-SLLH-10. The welder, Mike Jimenez #4671, performed the welding utilizing the E7018 electrodes as per the WPS ABF-WPS-D15-1030. The AB/F Quality Control (QC) Inspector William Sherwood was present to monitor the in-process welding parameters per the WPS requirements.

This QAI verified the bevel preparation, fit-up, preheat of 150F and the performance of 1G (flat position) welding of the lifting rod closure plate weld at location WB-SLLH-9. The backgouging of the weld root to sound metal was not yet performed at this time. The welder, Mike Jimenez #4671, performed the welding utilizing the E7018 electrodes as per WPS ABF-WPS-D15-1030. The AB/F Quality Control (QC) Inspector William Sherwood was present and monitoring and verifying the welding parameters per the WPS.

This QAI verified the preheat of 150F and performance of 1G (flat position) welding of the lifting rod closure plate weld WB-SLLH-13. The backgouging of the weld root was not performed at this time. The welder, Mike Jimenez #4671, performed the welding utilizing E7018 electrodes as per WPS ABF-WPS-D15-1030. The AB/F Quality Control (QC) Inspector William Sherwood was present to monitor and verify the welding parameters per the WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.

The digital photographs below illustrate some of the work activities observed on this date:

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## Summary of Conversations:

No significant conversations took place.

## 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 SMR Gary Thomas (916) 724-6027, who represents the Office of Structural Materials for your project.

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**Inspected By:** Morris, Monty

Quality Assurance Inspector

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**Reviewed By:** Reyes, Danny

QA Reviewer