

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-016710**Date Inspected:** 07-Sep-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 joints E4/E5 - LS-4, 5 and 6: ABF welding personnel Xiao Jian Wan (#9677) was grinding the back gouged areas of LS-5 and 6. QC Inspector John Pagliero performed and accepted the visual inspection and Salvador Merino performed and accepted the Magnetic Particle Testing (MT) after grinding was completed.

2) At weld joints E3/E4 - LS-1, 2 and 3: ABF welding personnel Hua Qiang Hwang (#2930) was performing Shielded Metal Arc Welding (SMAW) to fill various low areas marked by QC Inspector John Pagliero.

3) At weld joints E5/E6 - D1 and D2, inside the OBG section: ABF welding personnel Fred Kaddu (#2188) and Todd Jackson (#4639) were setting up to start the excavation of a second time repair area. QC Inspector Steve McConnell was present.

4) At weld joints E6/E7 - D1 and D2, inside the OBG section: ABF personnel had the backing bar in place and were setting up to begin tack welding. QC Inspector Tony Sherwood was present.

5) At weld joint E6/E7 - F, inside the OBG section: ABF welding personnel Rick Clayborn (#2773) was grinding

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the base material adjacent to the weld joint in preparation to fit up a 25 mm thick, 50 mm wide, 1,300 mm long backing bar, please note the backing bar appeared to copper.

At weld joints E4/E5 - LS-4,5 and 6 this QA Inspector observed ABF welding personnel Xiao Jian Wan (#9677) was grinding the back gouged areas of LS-5 and 6 in preparation for QC personnel to perform a visual and MT inspection prior to proceeding with production welding. This QA Inspector randomly observed QC Inspector John Pagliero perform and accept the visual inspection of the back gouge for LS-5 and 6. This QA Inspector randomly observed QC Inspector Salvador Merino perform and accepted the MT inspection on LS-5 and 6 after the visual inspection. This QA Inspector performed a random visual verification and the work observed appeared to comply with the contract requirements.

At weld joints E3/E4 - LS-1, 2 and 3 this QA Inspector observed ABF welding personnel Hua Qiang Hwang (#2930) was performing Shielded Metal Arc Welding (SMAW) to fill various low areas previously marked by QC Inspector John Pagliero. This QA Inspector randomly observed as QC Inspector John Pagliero verified the following SMAW welding parameters: 125 amperes using a 3.2 mm diameter E9018H4R electrode. The welding observed appeared to comply with ABF-WPS-D15-1012-3. This QA Inspector observed the electrodes were removed from a heated storage container at the location of welding. This QA Inspector was later informed by ABF welding personnel Hua Qiang Hwang (#2930) he had been requested by ABF welding supervisor Danny Ieraci (#3232) to stop work at this location (prior to completion of the work) and relocate to weld joint E6/E7 – D1 and D2, inside the OBG section, to begin setting up equipment and ventilation to start tack welding the backing bar.

At weld joints E6/E7 – D1 and D2, inside the OBG section this QA Inspector observed ABF welding personnel Hua Qiang Hwang (#2930) setting up welding equipment and ventilation equipment in preparation to begin tacking the backing bar. QC Inspector Tony Sherwood was present and confirmed the initial fit up of the weld joint had previously been inspected and accepted. This QA Inspector confirmed via phone this date with Lead QA Inspector Rick Bettencourt that QA had previously verified the fit up and requested this QA Inspector verify all conditions had remained the same. This QA Inspector performed a random visual verification of the fit up and the work appeared to comply except for the thin layer of rust now covering the E6 face of the weld joint. This QA Inspector observed QC Inspector Tony Sherwood was present to provide QC coverage and informed him of the observation, later in the this QA Inspector observed ABF welding personnel Hua Qiang Hwang (#2930) using a power wire brush to clean the weld joint face.

At weld joints E5/E6 – D1 and D2, inside the OBG section this QA Inspector observed ABF welding personnel Fred Kaddu (#2188) and Todd Jackson (#4639) were setting up to start the excavation of a repair. This QA Inspector later observed ABF welding personnel Todd Jackson (#4639) grinding an area that appeared to have been previously repaired (due to the width of the weld). QC Inspector Steve McConnell was present and confirmed this was a second time repair. This QA Inspector noted that 3 areas had been rejected by Ultrasonic Testing (UT) and that all 3 areas had been incorporated into one single area of excavation. This QA Inspector only observed grinding at this location during the shift this date.

At weld joint E6/E7 – F, inside the OBG section, this QA Inspector observed ABF welding personnel Rick Clayborn (#2773) was grinding the base material adjacent to the weld joint. ABF welding personnel Rick Clayborn (#2773) informed this QA Inspector it was in preparation to fit up a 25 mm thick, 50 mm wide, 1,300

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mm long backing bar made of copper. Lead QA Inspector Rick Bettencourt was informed of this observation.

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

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