

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-017023**Date Inspected:** 27-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**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:** SAS OBG**Summary of Items Observed:**

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above. The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified and hole restoration, and the following observations were made:

1E-PP-11-E3-2

The QA Inspector randomly observed Darcel Jackson performing grinding tasks of ultrasonic testing rejects in the above identified lifting lug deck hole restoration. The QA Inspector randomly observed the ABF welder had excavated the UT reject for the second time after the first repair was rejected. The QA Inspector noted the ABF welder is currently performing a R2 repair for a second time excavation. The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector Steve McConnell was on site to monitor and record the in process welding parameters. The QA Inspector noted the ABF welder was utilizing the SMAW process with 5/32" E7018 low hydrogen electrodes. The QA Inspector randomly observed the ABF welder was utilizing 213 Amps while performing the SMAW repair. The QA Inspector performed a random visual inspection of the previously excavated area and noted it had been ground and blended to a boat shaped weldable profile. The QA Inspector randomly observed and noted the ABF welder was preheating the material to approximately 150°F prior to making the SMAW repairs. The QA Inspector noted the SMAW repairs appeared to be in general compliance with ABF-WPS-1001 repair. The QA Inspector noted the repair welding was completed on the QA Inspectors shift. After the ABF welder completed the welding, he performed grinding tasks while removing the weld reinforcement flush with the top deck base material.

1E-PP-8.5-E3-4

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The QA Inspector randomly observed Jin Pei Wang performing grinding tasks of ultrasonic testing rejects in the above identified lifting lug deck hole restoration. The QA Inspector randomly observed the ABF welder had excavated all 5 of the UT rejections located in the above identified hole. The QA Inspector randomly observed the ABF welder had previously completed 3 of the 5 excavations and two of the five were currently in process. The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector Steve McConnell was on site to monitor and record the in process welding parameters. The QA Inspector noted the ABF welder was utilizing the shielded metal arc welding process with 1/8" E7018 low hydrogen electrodes. The QA Inspector randomly observed the ABF welder was utilizing 127 Amps while performing the SMAW repair. The QA Inspector performed a random visual inspection of the previously excavated areas and noted they had been ground and blended to a boat shaped weldable profile. The QA Inspector randomly observed and noted the ABF welder was preheating the material to approximately 150°F prior to making the SMAW repairs. The QA Inspector noted the SMAW repairs appeared to be in general compliance with ABF-WPS-1001 repair. The QA Inspector noted the repair welding was completed on the QA Inspectors shift. After the ABF welder completed the welding, he performed grinding tasks while removing the weld reinforcement flush with the top deck base material.

1E-PP-9.5-E4-4

The QA Inspector randomly observed two ABF representatives performing grinding tasks ultrasonic testing rejects in the above identified lifting lug deck hole restoration. The QA Inspector noted no welding was performed only excavations of previously tested welds.

The QA Inspector performed a job walk of the East and West bound bridge decks and updated the QA NDT and production log book and chart. In addition the QA Inspector updated and generated a QA NDT spreadsheet and production checklist for the in process production welding and repairs of the top deck plate lifting lug hole restoration.



Summary of Conversations:

The ABF Project Engineer John Callaghan informed the QA Inspector on Tuesday 9/28/10 or Wednesday 9/29/10 ABF erection personnel will begin the fit up and welding of the 7E/8E transverse weld joint beginning with the "A" and "D" face transverse weld joints. In addition Mr. Callaghan informed the QA Inspector ABF erection personnel will lift and set one of the four "K" hinges on 9/28/10.

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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:	Bettencourt,Rick	Quality Assurance Inspector
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Reviewed By:	Levell,Bill	QA Reviewer
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