

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012371**Date Inspected:** 25-Feb-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:	Mike Johnson, Jesse Cayabayab	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 1E/2E-D	

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 joint restoration and welding of the 1E/2E-D.

The following observations were made:

1.) In process welding of 1E/2E-D

1E/2E-D

Upon the arrival of the QA Inspector at 0700 on the job site, no access was granted due to the confined space was not sniffed for entry. The QA Inspector noted access was not gained until approximately 0745. Upon gaining access to the above identified area, the QA Inspector and the Smith Emery (SE) Quality Control (QC) Inspector Jesse Cayabayab performed MT of the entire weld joint. The QA Inspector noted no relevant indications were located at the time of the testing.

1E/2E-D8

The QA Inspector randomly observed the ABF welder identified as Jordan Hazelaar begin performing flux cored arc welding (FCAW) of the above identified section of the complete joint penetration (CJP) groove weld. The QA Inspector randomly verified the minimum required preheat utilizing a temperature indicating marker. It was noted the minimum required preheat was maintained above 200°F at the commencement of welding. The QA Inspector randomly observed the SE QC Inspector set the FCAW machine to 253 Amps, 23.3 Volts and a travel speed of 318mm/min. The QA Inspector noted the ABF welder was utilizing the established welding parameters from the ABF WPS designated D1.5-3110-1. The QA Inspector noted the above identified section was approximately 60%

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complete and the end of the QA Inspectors shift. The QA Inspector Danny Reyes relieved the QA Inspector Rick Bettencourt at 1330.

1E/2E-D13

The QA Inspector randomly observed the ABF welder identified as Jeremy Doleman begin performing FCAW of the above identified section of the CJP groove weld. The QA Inspector randomly verified the minimum required preheat utilizing a temperature indicating marker. It was noted the minimum required preheat was maintained above 200°F at the commencement of welding. The QA Inspector randomly observed the SE QC Inspector set the FCAW machine to 250 Amps, 23.2 Volts and a travel speed of 375mm/min. The QA Inspector noted the ABF welder was utilizing the established welding parameters from the ABF WPS designated D1.5-3110-1. The QA Inspector noted the above identified section was approximately 50% complete and the end of the QA Inspectors shift. The QA Inspector Danny Reyes relieved the QA Inspector Rick Bettencourt at 1330.

1E/2E D9-D10

The QA Inspector randomly observed the above identified sections of the CJP groove weld appeared to be approximately 90% completed at the time of the commencement of welding at the other locations identified in the above report. The QA Inspector noted sections D9/D10 were incomplete and did not maintain the minimum required preheat on the previous day shift. The QA Inspector previously wrote and submitted an Incident Report for the contractor's failure to maintain the minimum required preheat. The QA Inspector randomly observed the sections identified as D9/D10 were being heated up and cooled down inadvertently by in process welding on either sides of the sections. It appeared D9/D10 were being cycled between 255°F and 130°F. The QA Inspector informed the QC Inspector Mike Johnson of the above described issue, and added it was required to maintain the minimum required preheat until completion of the welds. Mr. Johnson informed the QA Inspector he would need to consult with the Welding Quality Control Manager (WQCM) Jim Bowers. Mr. Johnson later informed the QA Inspector, the WQCM instructed him an Incident Report was previously written and the areas identified as D9/D10 would not be intentionally heated until ABF was ready to complete them.

It was noted by the QA Inspector it appears the the contractor is in general conformance with the field erection sequence plan, submittal number ABF-SUB-001135.

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