

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-027623**Date Inspected:** 17-May-2012**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:** Job Site

CWI Name:	As noted below		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	Yes	No	N/A
Verified Joint Fit-up:	Yes	No	N/A
Approved WPS:	Yes	No	N/A
Delayed / Cancelled:	Yes	No	N/A
Component:	SAS OBG		

Bridge No: 34-0006**Summary of Items Observed:**

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

13E Drop-In Panels (Interior)

This QA Inspector observed ABF welders noted below performing 4G (overhead position) Shielded Metal Arc Welding (SMAW) on the Seismic Performance Critical Member (SPCM) Complete Joint Penetration (CJP) splice butt joint using 3.2mm E7018-H4R electrodes with amperage of 125. This welding was in progress for the duration of the shift. The welding consists of back fill passes at the 13E-A.1 location by Edward Brown (ID 9331) 13E-A2.1 by Salvador Sandoval (ID 2202) 13E-E2.3 by Khit Lounechaney (ID 4985) and 13E PP122.2 by Steven Davis (ID 7889). QC Inspector Sal Merino was observed monitoring the welding parameters for compliance to ABF-WPS-D1.5-1040C-CU Revision 0 and measuring inter-pass temperatures between passes. This QA Inspector verified that the electrodes were stored in electric rod ovens and appeared to be in accordance with AWS D1.5 Section 4.5.2 and exposure rates appeared to be in accordance with AWS D1.5 Table 4.7. During subsequent observations it was noted that the welders were using a power disc grinder and/or rotary die grinders at weld starts and stops as needed and were cleaning between weld passes with power wire wheel brushes. It was noted that the work on 13E-A2.1 and 13E-A.0 was completed on this date and appeared to be in general conformance with the contract specifications.

6E PP46.5 E5-DAH (Interior)

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This QA Inspector randomly observed SMAW in the 4G overhead position on the Deck Access Hole (DAH) at 6E PP46.5 E5 on the interior of the OBG. ABF welder Mike Jimenez (ID 4671) was completing the final fill passes on the back-gouge of the joint using E7018-H4R 4.0mm electrodes drawing amperage of 140. QC Inspector Andrew Keech verified the welding parameters and surface temperatures utilizing a Fluke 337 clamp meter to measure the electrical welding parameters and Tempilstik Heat Indicators for verifying the preheat and inter-pass temperatures. This QA Inspector noted that the electrodes were stored in an electrically heated, thermostatically controlled oven after removal from the sealed containers. The exposure limits of the electrodes appeared to comply with the minimum storage oven temperature of 120 degrees Celsius as per the contract documents. This QA Inspector noted that the welding by Mr. Jimenez was completed on this date and clean-up of the excessive reinforcement commenced utilizing a small disc grinder and a rotary drill. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work at this location was in progress and appeared to be in general conformance with the contract documents.

PS-5 Bracket welding (Exterior)

This QA Inspector made random observations of FW Spencer welder Damian Llanos performing SMAW on PS-5 Pipe Support brackets to the deck at the following locations; 13E PP119.2 E5, 13E PP121.1 E5 and 13E PP122.2 E5 and 13E PP123.7 E5. The brackets required 6mm fillet all around and QC Inspector Steve Jensen monitored the welding and the parameters as they pertained to WPS-FWS Fillets Murex SFOBB Revision 1. The welder was observed implementing E7018-H4R Murex electrodes which this QA Inspector verified that they were obtained from a new container. This QA Inspector made subsequent observations throughout the shift for quality and noted that the work at the above locations was completed on this date and the weld numbers were recorded as; 120516-01- 02, 03- 04, 05-06 and 07-08.

Summary of Conversations:

This QA Inspector met with QC Inspector Sal Merino pertaining to 13E Drop-In Panels progress and required testing for the shift.



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

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your project.

Inspected By: Frey,Doug

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer