DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-027739
Date Inspected: 09-Jun-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Job Site

CWI Name:	As noted 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:

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:

Orthotropic Box Girder (OBG) section: The QC Documents observed being used by this QA Inspector for the following weld joints appeared to be designated as Seismic Performance Critical Members (SPCM).

13E PP122.2-LS3 (Interior)

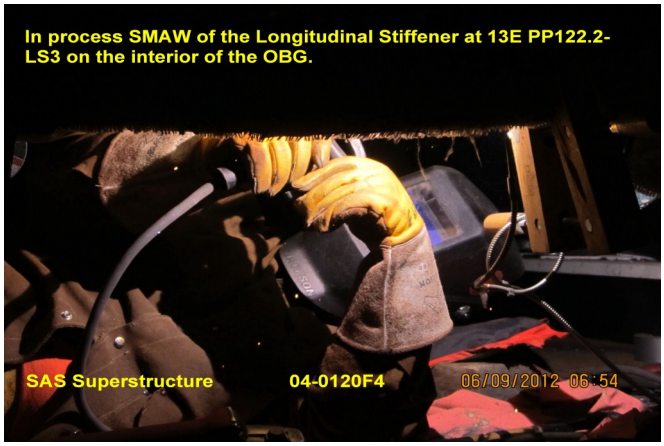
This QA Inspector made random observations of ABF welder Edward Brown (ID 9331) performing Shielded Metal Arc Welding (SMAW) in the 3G vertical position on the longitudinal Stiffener located at 13E PP122.2-LS3 on the interior of the OBG. The welder was observed pre-heating the B-U3b CJP joint with the ProHeat 35 thermal blankets and QC Inspector Salvador Merino verified the minimum temperature requirements as pertaining to ABF-WPS-D1.5-1012-3. E9018-H4R electrodes were observed in use and were drawing amperage of 132. It was noted that between passes the welder ground the stop/start edges of the work for a smooth transition as QC was present to measure inter-pass temperatures. Upon completion of the back gouging operation, QC inspector Salvador Merino performed MT on the root side of the joint to ensure soundness of the metal and found no relevant indications. This QA Inspector randomly observed the welder commence work on the second side of the joint. On a subsequent observation, the work progressed without incident and was completed on this date. The work at this location was completed and appeared to be in general compliance with the contract specifications.

13E PP123.5-E2.1-BW1 (Interior)

This QA Inspector randomly observed ABF welder Khit Lounechaney (ID 4985) initiate welding operations on the Complete Joint Penetration (CJP) joint on 13E PP123.5-E2.1-BW1 on the interior of the OBG. The welder was observed pre-heating the joint prior to welding in the 3G vertical position utilizing E7018-H4R electrodes drawing amperage of 137. QC Inspector Salvador Merino was present to monitor the welding and the parameters as they pertain to ABF-WPS-D1.5-1030. Between passes the welder was observed cleaning the work using a small disc grinder as QC measured the inter-pass temperatures with Tempilstik Heat Indicators. On a subsequent observation, it was noted that the welder had completed face “A” of the web and began work on BF1 at this location. This QA Inspector noted that the 3.2mm electrodes were stored in 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. The welding parameters and surface temperatures were verified by the QC inspector's utilizing a Fluke 337 clamp meter to measure the electrical welding parameters. It was noted by this QA Inspector 13E PP123.5-E2.1-BW1 and BF1were 50% complete and appeared to be in general conformance with the contract specifications.

Summary of Conversations:

This QA Inspector discussed welder assignments and locations in the Drop-In panels with QC Inspector Salvador Merino.



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 your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer