

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-028439
Date Inspected: 17-Sep-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: 1930
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:

12E PP112-BW2 (Interior)

This QA Inspector made random observations of ABF/JV qualified welder Jacob Stafford #8020 performing the ongoing (SMAW) process in the 3G vertical position utilizing E7018-H4R electrodes on the beam web located at 12E PP112-BW2 on the interior of the OBG. QC Inspector Bernie Docena verified the temperature and recorded the parameters as acceptable and within the requirements of ABF-WPS-D1.5-1040A-CU-Revision 2. The welder was observed welding the height of the joint followed by grinding and blending of the work utilizing a small disc grinder. On a subsequent observation, this QA Inspector noted that the welding was performed in the 3G vertical position utilizing the E7018-H4R low hydrogen electrodes. 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 and Tempilstik Heat Indicators for verifying the preheat and inter-pass temperatures. At the time of the observation no issues were noted by the QA. On subsequent observations throughout the shift to monitor quality, it was noted that the work was completed on this date and appeared to be in general conformance with the contract documents.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

12E PP111.5-PS1 (Interior)

This QA Inspector made random observations of ABF/JV qualified welder Deli Zhang #4735 performing the SMAW process in the 2G horizontal position utilizing E7018-H4R electrodes on the beam web located at 12E PP111.5-PS1 on the interior of the OBG. QC Inspector Salvador Merino verified the temperature and recorded the parameters as acceptable and within the requirements of ABF-WPS-D1.5-1040A-CU-Revision 2. The welder was observed welding the length of the joint followed by grinding and blending of the work utilizing a small disc grinder. On a subsequent observation, this QA Inspector noted that the welding was performed in the 4G horizontal position utilizing the E7018-H4R low hydrogen electrodes. 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 and Tempilstik Heat Indicators for verifying the preheat and inter-pass temperatures. At the time of the observation no issues were noted by the QA. On subsequent observations throughout the shift to monitor quality, it was noted that the work was in progress and appeared to be in general conformance with the contract documents.

12E-E2.1 (Interior)

This QA Inspector randomly observed the Visual Testing (VT) indication repairs conducted by ABF/JV qualified welders Deli Zhang #4735 and Xiao Hua Luo #1291 on the overhead weld seam at 12E-E2.1 on the interior of the OBG. Welder Zhang performed SMAW to fill low spots followed by grinding and blending to provide a smooth consistent surface area on E2.1 between PP111.1 to PP111.5. Welder Luo performed SMAW to fill low spots followed by grinding and blending to provide a smooth consistent surface area on E2.1 between PP112 to PP112.5. QC Salvador Merino verified the temperature and recorded the parameters as acceptable and within the requirements of ABF-WPS-D1.5-1001-Repair. The welders were observed welding the joint followed by grinding and blending of the work utilizing a small disc grinder. On a subsequent observation, this QA Inspector noted that the welding was performed in the 4G horizontal position utilizing the E7018-H4R low hydrogen electrodes. 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 and Tempilstik Heat Indicators for verifying the preheat and inter-pass temperatures. At the time of the observation no issues were noted by the QA. On subsequent observations throughout the shift to monitor quality, it was noted that the work was in progress and appeared to be in general conformance with the contract documents.

Summary of Conversations:

Conversation with Quality Control Inspector Salvador Merino on welder locations and required testing for the shift.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



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 Gary Thomas 916-764-6027 , who represents the Office of Structural Materials for your project.

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