

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-028644**Date Inspected:** 22-Oct-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	William Sherwood and Steve Jensen			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:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 12E-E2.1-C corner drop-in side plate outside, QA randomly observed ABF/JV qualified welder Ric Chouinard continuing to perform CJP groove welding repair at location Y=4000mm to Y=5000mm with excavation profile of 1000mm long x 60mm wide x 10mm deep. The repair welding is being performed per Caltrans approved Request for Weld Repair (RWR) #201210-013. The welder was observed manually welding in the 4G (overhead) position utilizing Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode implementing Caltrans approved welding procedure ABF-WPS-D15-1004 Repair. The second time repair excavation was preheated to more than 225 degree Fahrenheit using Miller Proheat 35 Induction Heating System with the heater blanket put in place on top of the side plate prior excavation. During the shift, ABF QC William Sherwood was noted monitoring the welder with measured working current of 136 amperes on the 3.2mm E7018H4R electrode and adjusted preheat temperature of 325°F during welding. The welder has not completed the weld repair mentioned above during the shift but performed the Post Weld Heat Treatment (PWHT) of 450°F and held it for one (1) hour after welding as required. Repair welding at location mentioned above should continue tomorrow.

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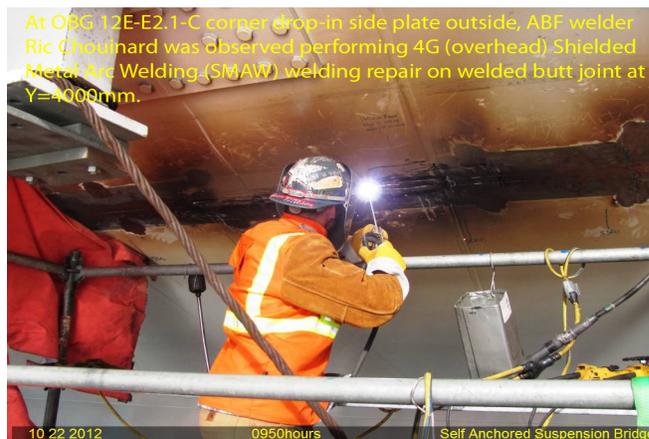
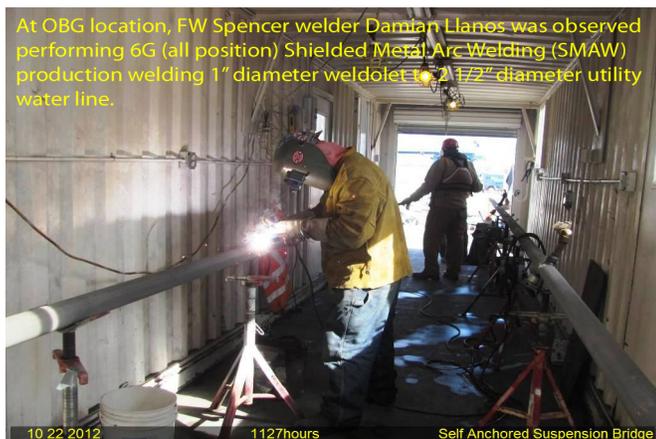
At OBG 13W-PP122-W2.5 BF1 drop-in floor beam inside, QA randomly observed ABF/JV qualified welder Wai Kit Lai continuing to perform CJP groove welding cover repair on a flange splice butt joint due to excessive grinding on welded splice joint. The welder preheated the repair area and its vicinity to >150°F using propylene gas torch prior welding. During the shift, ABF QC Fred Michels was noted monitoring the welder.

FW Spencer:

At OBG location Panel Point PP13.5 through PP16.5 Bikepath, this QA randomly observed FW Spencer qualified welder Damian Llanos continuing to perform Complete Joint Penetration (CJP) 6G (all position) Shielded Metal Arc Welding (SMAW) welding root pass to cover pass on 1" diameter weldolet to 2 1/2" diameter domestic utility water line. The welder was noted welding the root pass with 3/32" diameter E6010 electrode and followed by fill pass to cover pass using 3/32" diameter E7018H4R electrode implementing Caltrans approved procedure FW Spencer WPS 1-12-1. The welder was noted preheating and removing the moisture of the joint using a portable propane gas torch prior welding. During welding, ABF QC Steve Jensen was noted monitoring the parameters of the welder. At the end of the FW Spencer shift, CJP welding on four (4) 1" weldolet to 2 1/2" diameter utility water line was completed.

Line Service Weldolet/Pipe Size Panel Point Location Joint Designation

1 Domestic Water	1"	13.5 Bikepath	1/DW1/13.5/BE
2 Domestic Water	1"	14.5 Bikepath	1/DW1/14.5/BE
3 Domestic Water	1"	15.5 Bikepath	1/DW1/15.5/BE
4 Domestic Water	1"	16.5 Bikepath	1/DW1/16.5/BE



Summary of Conversations:

The weather at the job site was windy and rainy and due to this weather condition the welders were confined inside the OBG or they were protected from water and rain.

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

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Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
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Reviewed By:	Reyes, Danny	QA Reviewer
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