

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-028945
Date Inspected: 04-Jan-2013

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:	William Sherwood Fred Michels			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 Tower and 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 12W-W2.1-C1 side plate inside, QA randomly observed ABF/JV welder Erick Sparks perform CJP groove welding second time repair on a Seismic Performance Critical Member (SPCM) due to Ultrasonic Testing (UT) detected defect on welded splice butt joint. The welder excavated the defect using a die grinder and after its completion, ABF QC Salvador Merino performed Magnetic Particle Testing (MT) on the removal of the defects with no relevant defect noted during the test. The welder was noted using propylene gas torch to preheat the repair area and its vicinity to 325°F and as soon as the required temperature was attained the welder started performing the welding repair. Welder Erick Sparks was observed manually welding in 1G (flat) position utilizing Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode implementing Caltrans welding procedure ABF-WPS-D15-1004 Repair. Welder Erick Sparks was also noted welding at location Y=12180mm with excavation profile of 105mm long x 30mm wide x 8mm deep and approved Request for Weld Repair (RWR)#201212-042. During welding, ABF QC Salvador Merino was noted monitoring the welder's welding parameter with measured working current of 132 amperes on the 3.2mm diameter E7018H4R electrodes. During the shift, the second time repair welding mentioned above was completed and the welder performed the Post Weld Heat Treatment (PWHT) of 450°F using propylene gas torch as required.

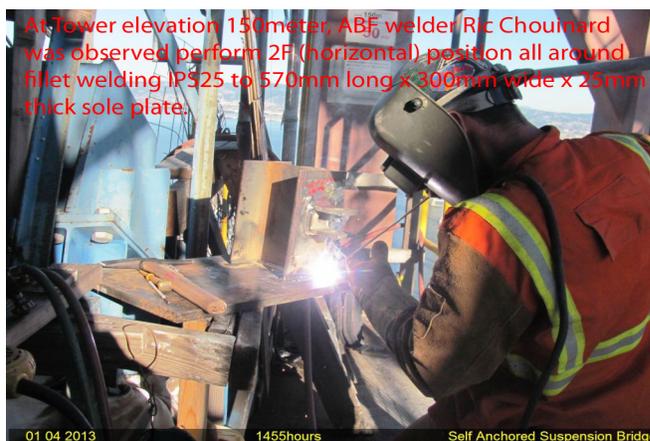
At Tower elevation 157.789meter, ABF welder Ric Chouinard was observed continuing to perform all around 8mm fillet welding on two (2) 3" x 3" x 6 1/4" long angular shape brackets to previously welded sole plate at South

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shaft skin plate 'D'. The welder was noted using Shielded Metal Arc Welding (SMAW) with 3.2mm E7018H4R electrode implementing ABF-WPS-D1.5-F1200A. The brackets being welded are pipe supports for the domestic water and compressed air lines and per CCO 203. After the completion of the fillet welding on the 3" x 3" x 6 1/4" long angular shape brackets to the tower head, the welder also started all around fillet welding IPS25 to 570mm long x 300mm wide x 25mm thick sole plate. The welder was noted using the same process at 2F position. At the end of the shift, two (2) IPS25 was welded to the sole plate per Request for Information RFI#3056.

At Tower North shaft elevation 145mm to 89meters inside, this QA together with fellow QA Charlie Stewart performed punch items inspection inside the tower shaft. Various punch items noted include missing chain on every tower diaphragm level, rusty bolt heads and ends, rusty spots on skin plates and many others. The punch items inspection is being performed on a daily basis for two hours per day.



Summary of Conversations:

No significant conversation occurred today.

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.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Reyes, Danny

QA Reviewer