

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-029916**Date Inspected:** 12-Aug-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:	Bernie Docena and William Sherwood			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		

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 Tower Base Electro Slag Weld (ESW) 'V' weld joint #W-043 face B, QA randomly observed the ABF welder Mike Jimenez continuing to perform 3G SMAW welding repair on the Ultrasonic Testing (UT) detected reject on the vertical weld of the ESW. The repair excavation is being welded per the approved Request for Weld Repair (RWR) #201305-009. The welder was observed welding in the 3G (vertical) position utilizing the Shielded Metal Arc Welding (SMAW) process using a 1/8" diameter E7018H4R electrode as per the welding procedure ABF-WPS-D15-1000-R03 Repair. The repair excavation and the adjacent base metal were preheated to more than 350°F using Miller Proheat 35 Induction Heating System prior/during welding. During this shift, ABF QC William Sherwood was noted monitoring the workmanship and the welding parameters. The measured welding parameters were recorded as 130 amperes on the 1/8" diameter E7018H4R electrode. At the end of the shift, 3G repair welding was still continuing and should remain tomorrow.

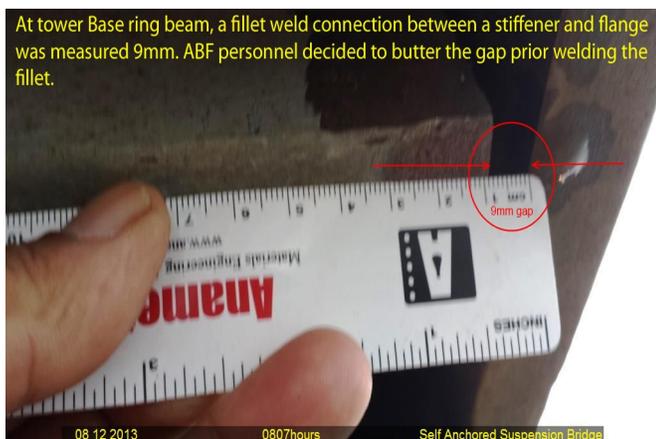
At Tower Base Electro Slag Welding (ESW) F joint E-045 location Y=8530mm to Y=8650mm, this QA performed 100% MT verification on the excavation of the toe crack that was previously noted. This QA utilized the Parker Contour Probe Model DA 400 with the serial number 18033 electromagnetic yoke with red magnetic powder as a detecting media. This QA found no rejectable indications during the verification. Please see TL-6028 report for more information.

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After the QA and QC acceptance of the excavation mentioned above, QA randomly ABF welder Wai Kit Lai perform 3G SMAW welding repair on the Magnetic Particle Testing (MT) detected linear indication on the toe of the vertical weld of the ESW. The repair excavation is being welded per the approved Request for Weld Repair (RWR) #201308-001. The welder was observed welding in the 3G (vertical) position utilizing Shielded Metal Arc Welding (SMAW) process using a 1/8" diameter E7018H4R electrode as per the welding procedure ABF-WPS-D15-1000-R03 Repair. The repair excavation and the adjacent base metal were preheated to more than 350°F using Miller Proheat 35 Induction Heating System prior/during welding. During the shift, ABF QC William Sherwood was noted monitoring the workmanship and the welding parameters. The measured welding parameters noted as 130 amperes on the 1/8" diameter E7018H4R electrode. At the end of the shift, 3G repair welding was still continuing and should remain tomorrow.

At the northeast corner of the tower, ABF personnel were noted fitting the corner joint connection of the tower skirt ring beam. During the fit up, this QA noted that there was a considerable gap at the 9mm elevation between the flange to the stiffener that requires fillet welding. This information was passed on to ABF QC William Sherwood who also informed the welding foreman Richard Chouinard about the gap. Due to this measured gap, ABF personnel unbolted one of the ring beams and performed buttering on the stiffener plate where it connects to the flange.



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