

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-029912**Date Inspected:** 06-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:	Jesse Cayabyab and Bernie Docena			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 and 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 the Tower Base Electro Slag Welding (ESW) V joint W-043 location Y=6200mm to Y=7000mm, 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 welder per the approved Request for Weld Repair (RWR) #201208-040 thru #201208-043. The welder was observed welding in the 3G (vertical) position utilizing Shielded Metal Arc Welding (SMAW) with 5/32" diameter E7018H4R electrode implementing the welding procedure ABF-WPS-D15-1000-R03 Repair. The repair excavation and the adjacent base metal was preheated to more than 350°F using Miller Proheat 35 Induction Heating System prior/during welding. During the shift, ABF QC Jesse Cayabyab was noted monitoring the workmanship and welding parameters of the welder. The measured welding parameter were recorded as 180 amperes on a 5/32" diameter E7018H4R electrode. At the end of the shift, 3G repair welding was completed and the welder performed the Post Weld Heat Treatment (PWHT) of 350 degrees Fahrenheit with holding time of three hours.

At the Tower Base Electro Slag Welding (ESW) Q joint E-043 location Y=5770mm, QA randomly ABF welder Donald Plum perform 3G SMAW welding repair on the Ultrasonic Testing (UT) detected reject on the vertical weld of the ESW. The welder was observed welding in the 3G (vertical) position utilizing the Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode as per the welding procedure

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

ABF-WPS-D15-1000-R03. The repair excavation and the adjacent base metal was preheated to more than 350°F using propylene Proheat 35 Induction Heating System prior/during welding. During the shift, ABF QC Jesse Cayabyab was noted monitoring the workmanship and welding parameters of the welder. Measured welding parameter during welding was 125 amperes on a 1/8” diameter E7018H4R electrode. At the end of the shift, 3G repair welding was completed and the welder performed the Post Weld Heat Treatment (PWHT) of 350 degrees Fahrenheit with holding time of three hours.

At Tower Base Electro Slag Weld (ESW) ‘G’ weld joint #S-045 face B, ABF welder Wai Kit Lai was observed continuing to perform excavation on welded ESW at location Y=9400 due to UT detected defects. The ABF personnel used carbon air arc gouging to excavate the defects. This excavation was performed per Caltrans approved Request for Weld Repair RWR#201307-005. ABF QC Jesse Cayabyab was noted on site monitoring the welder during the excavation. During the shift, excavation of the defect was completed with measured dimensions of 310mm long x 60mm wide x 30mm deep. The excavation was VT/MT tested by ABF QC Jesse Cayabyab with no relevant indications noted.

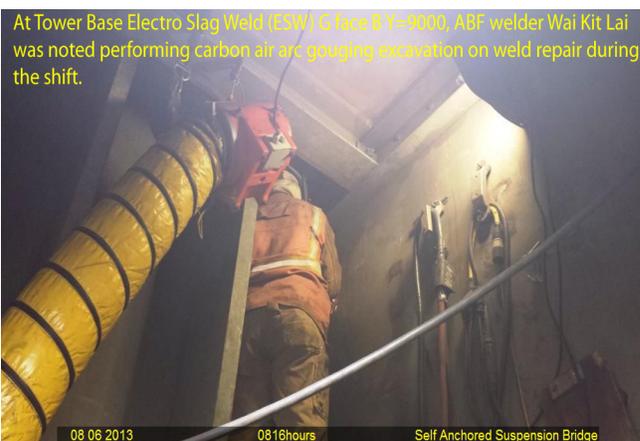
This QA together with SMR Laura Webb, Caltrans Engineer Thong Lee and two ABF Engineers performed punch list items inspection/verification after they were corrected. The following punch list items were verified corrected;

Punch List Item	Category	Location	Panel Point	Remarks
1099	Installation	West Bound	PP9	Replaced missing bolt.
4037	Installation	West Bound	PP27	Replaced missing bolt.
6066	Installation	West Bound	PP45	Replaced missing bolts per contract documents
10064	Installation	West Bound	PP91	Replaced short bolts on stiffeners.
10068	Installation	West Bound	PP93	Replaced missing bolts, and short bolts.
10072	Installation	West Bound	PP94	Replaced missing bolts.
11060	Installation	West Bound	PP98	Replaced missing bolts, short bolts and tightened loose bolts.
11064	Installation	West Bound	PP99	Replaced missing bolts.
11075	Installation	West Bound	PP101	Replaced missing bolt.
11113	Installation	West Bound	PP108	Replaced missing bolt.

At Tower Base Electro Slag Weld (ESW) V face B Y=6200 to Y=7000mm, ABF welder Mike Jimenez was noted using the Miller Proheat 35 Induction Heating System to preheat and maintain the weld repair during welding.



At Tower Base Electro Slag Weld (ESW) G face B Y=9000, ABF welder Wai Kit Lai was noted performing carbon air arc gouging excavation on weld repair during the shift.



Summary of Conversations:

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

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,Josecito	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer
