

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 #: 1x.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012971**Date Inspected:** 08-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1100**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Tom Pasqualone and Jesse Cayata			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:	Orthotropic Box Girder		

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 L3E/L4E plate 'E1' inside (300mm long), ABF welder Chun Fai Tsui (ID # 3426) was noted welding in vertical (3G) position using Shielded Metal Arc Welding (SMAW). QA randomly observed the welder perform Complete Joint Penetration (CJP) groove (splice) welding root to fill pass. The welder was using E7018H4R; 1/8" diameter electrode implementing Caltrans approved ABF-WPS-D15-1040B. Welding parameter measured during welding was 126 amperes which is deemed in compliance to contract requirements. The short length of weld being welded is done due to the Bug-o machine cannot reach the area.

At OBG L2E/L3E plate 'E2' inside, (7800mm to 10200mm), ABF welders Mitch Sittinger and Sungtao Huang have completely welded the cover in this area prior arrival. QA noted that QC Tom Pasqualone has visually accepted the area just welded. During conversation with the QC, he mentioned about 400mm length of weld still to be welded at the bottom area corner of 'D' plate. According to QC, it was upon the instruction of Superintendent Dan Ieraci to leave the area and to weld that later.

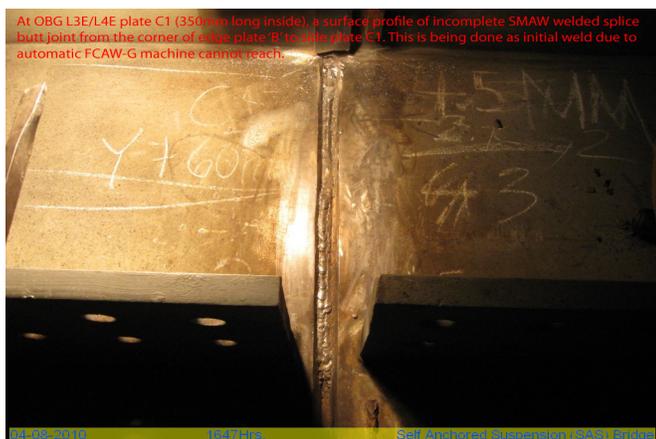
At OBG L3E/L4E side plate 'E' inside, ABF welders Mitch Sittinger and Sungtao Huang have been noted preparing their welding equipment and some other paraphernalia to weld in this splice butt joint. The joint to be welded is a single V-groove butt joint with backing bar. The splice joint is also being preheated to greater than 150 degree Fahrenheit using electric resistance heating bands attached to the other side of the plate. At the other side of

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the splice joint, edge plate 'B' (25mm plate thickness), ABF welder James Zhen was also noted preparing to weld in this area. After completing preparing wind protection and wire brushing the bevel surfaces, ABF personnel realized that they need a heater blanket to preheat and maintain the temperature to 200 degree Fahrenheit since the plate thickness is 25mm. And after completing the welding they also need the 3-hour post weld maintenance. Due to unavailability of heater blankets to use at this time, ABF Superintendent has cancelled the welding of the splice joint and rescheduled it to Monday April 12, 2010.

In another OBG location, OBG L1E/L2E plate 'C', QA observed ABF QC personnel Jesus Cayabyab perform Magnetic Particle Testing (MT) on the gouged and ground splice joint that was left previously due to backing bar still not gouged. The length of the area was 3000mm from the corner of 'D' plate to the top of 'C'. The ABF QC was using a Magnaflux AC/DC electromagnetic yoke with serial number 517750 and red magnetic powder as detecting media. QA noted that as QC finds indication, the welder immediately ground the indication and at the end of the MT, QC informed QA that the MT of the gouged and ground backing bar removal was acceptable.



Summary of Conversations:

As stated above.

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 Mohammad Fatemi (916) 227-5298, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer
