

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017075**Date Inspected:** 28-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Jim Cunningham and Tom Pasqua			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 7E/8E top deck plate 'A' outside, ABF welder Rick Clayborn and his company was observed grinding/cleaning the bevel and base metal adjacent to the weld in preparation for the splice butt welding of the joint. During the shift, after the grinding/cleaning of the bevel and the plate was complete welder Rick Clayborn started tack welding fitting gear/temporary attachment to the top deck plate on the north (A5) and south (A1) ends. Welding of the fitting gear was completed and Rick Clayborn started inserting the insert rod and pushing the plate to acceptable alignment. At the end of the shift, aligning of the plates at A1 was still continuing and should remain tomorrow.

At OBG 6W/7W edge plate 'B' outside, QA randomly observed ABF/JV qualified welder Yao Xin Liang ID #7238 continuing to perform cover pass on the Complete Joint Penetration (CJP) splice butt joint. The welder was observed manually welding in the 3G (vertical) position utilizing a Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1040B. The joint being welded has a single V-groove butt joint with copper backing bar that will be removed and back gouged. During welding, ABF Quality Control (QC) Jim Cunningham was noted monitoring the welding parameters of the welder. During the shift, cover pass SMAW welding was completed and the welder started flush grinding the weld cover reinforcement as required. The welder was using a 9" disc grinder with grinding cut to the edge plate parallel to the bridge complying with the code requirements. Flush grinding was still

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continuing at the end of the shift and should continue tomorrow.

At OBG 6W/7W edge plate 'F' outside, QA randomly observed ABF/JV qualified welder Jin Pei Wang ID #7299 continuing to perform cover pass on the Complete Joint Penetration (CJP) splice butt joint. The welder was observed manually welding in the 3G (vertical) position utilizing a Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1040B. The joint being welded has a single V-groove butt joint with copper backing bar that will be removed and back gouged. During welding, ABF Quality Control (QC) Jim Cunningham was noted monitoring the welding parameters of the welder. During the shift, cover pass SMAW welding was completed and the welder started flush grinding the weld cover reinforcement as required. The welder was using a 9" disc grinder with grinding cut to the edge plate parallel to the bridge complying with the code requirements. Flush grinding was still continuing at the end of the shift and should continue tomorrow.

At OBG 2W side plate 'E' north/outside (panel point PP18), QA randomly observed ABF welder Eric Sparks perform fillet and partial joint penetration (PJP) welding in 2F/2G position using Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode. The welder was welding on 2 1/4" wide x 3/8" thick drip plate to the side plate of the OBG. The drip plate and the surface of the side plate (where the drip plate was welded) were noted ground and the paint coating removed. ABF QC Mike Johnson was noted monitoring the welding and its parameters. At the end of the shift, fillet and PJP welding were still continuing and should continue tomorrow.

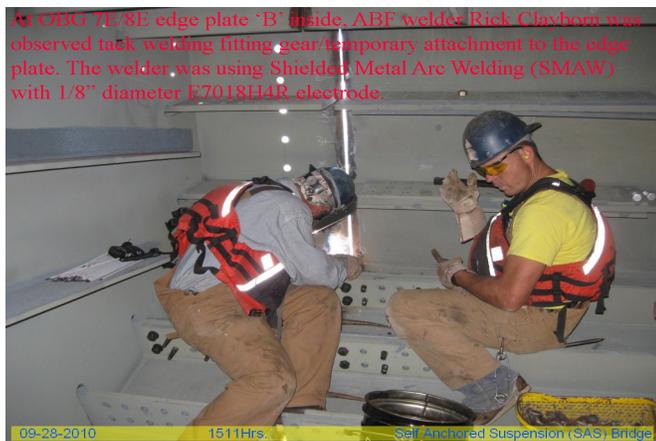
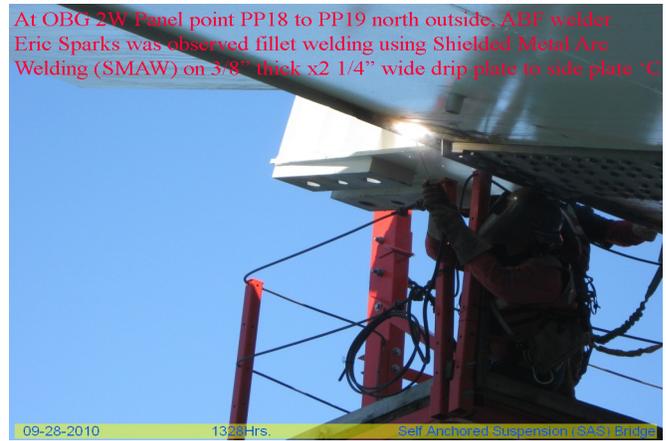
At OBG 6W/7W top deck plate 'A' outside, ABF QC Tom Pasqualone was observed performing Ultrasonic Testing (UT) on the welded splice butt joint. QC was using General Electric USM35 ultrasonic machine. QC was also observed scanning from both sides of face 'A' of the joint. During the shift, ultrasonic testing on the butt joint was still continuing and should remain tomorrow.

At OBG 6E/7E top deck plate 'A' and 6W/7W top deck plate 'A' outside; this QA performed 10% Magnetic Particle Testing (MT) verification on the welded splice butt joints. QA was using Parker Contour Probe Model DA 400 with serial number 16989 electromagnetic yoke with red magnetic powder as detecting media. QA found no significant indications during the verification. Please see TL-6028 report for more information.

At OBG 7E/8E edge plate 'B' inside, QA randomly observed ABF welder Rick Clayborn tack welding fitting gear/temporary attachment for the fit up alignment of the splice butt joint. The welder was using SMAW with 1/8" diameter E7018H4R electrode. QA noted ABF QC William Sherwood monitoring the welder and his welding parameters.

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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 Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer