

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-020320**Date Inspected:** 02-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Fred Von Hoff and Jesse Cayabyab			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 9E/10E side plate 'C2' (5277mm to 7900mm) inside, QA randomly observed ABF/JV qualified welder Sungtao, Huang ID # 3794 perform CJP groove (splice) welding root pass to fill pass on the splice butt joint. The welder was observed perform automatic welding in the 3G (vertical) position utilizing a dual shield Flux Cored Arc Welding (FCAW-G) with E71T-1M, 1/16" diameter wire electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3042B-1. The joint being welded has a single V-groove butt joint with backing bar. The splice joint was preheated and maintained to greater than 150 degrees Fahrenheit using Miller Proheat 35 Induction Heating System heater blankets located at the opposite side of the plate prior/during welding. During welding, ABF Quality Control (QC) Fred Von Hoff was noted monitoring the welding parameters of the welder. At the end of the shift, fill pass welding was still continuing and should remain tomorrow.

At OBG 8W/9W edge plate 'F' outside, QA randomly observed ABF/JV qualified welder Fred Kaddu perform CJP repair welding. The welder was noted welding in 3G (vertical) position utilizing SMAW with 1/8" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1001 Repairs. The welding repair located at Y=100mm and having excavation profile of 260mm long x 25mm wide x 13mm deep was excavated to a boat shape profile and was tested with MT prior welding. During welding, ABF QC Jesse Cayabyab was noted monitoring the welder and his welding parameters. At the

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end of the shift, repair welding at this location was completed.

At OBG 9W/10W edge plate 'F' outside, QA randomly observed ABF/JV qualified welder Jorge Lopez perform fill pass welding on the 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 steel backing bar. During welding, ABF Quality Control (QC) Jesse Cayabyab was noted monitoring the welding parameters of the welder. QA randomly monitored the welding parameter with reading of 125 amperes which appears in conformance to the contract requirements. At the end of the shift, SMAW fill pass welding was still continuing and should remain tomorrow.

At OBG 6W edge plate 'B' (panel point PP47) outside, QA randomly observed ABF Darcel Jackson perform 4G (overhead) position CJP welding 3/8" thick x 3 5/8" wide counter weight connection plate to the edge plate 'B'. The welder was using SMAW with 1/8" diameter electrode implementing Caltrans approved welding procedure specification (WPS) ABF-WPS-D1.5-D1080 Rev. 1. The connection plate has a 45 degree bevel that is being welded from one side and then to be back gouged and back welded from the other side. At the end of the shift, the welder has not completed the welding of the top counter weight connection plate and should remain tomorrow.

Per instruction of Lead QA Rick Bettencourt, the north and south fillet welds of the west jacking saddle were verified with Magnetic Particle Testing (MT) after more than 48 hours waiting period. During the test, it was noted that there was no change on the fillet welds after the 48 hours waiting period since the initial MT was done. There were also no other indications noted during the test and therefore these fillet welds are deemed in compliance to the contract requirements.



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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 Sang Le 916-764-5650, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer