

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-020432**Date Inspected:** 08-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1630**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Steve Mc Connell and Steve Jensen			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 'E1' inside, QA randomly observed ABF/JV qualified welder Sungtao, Huang ID # 3794 perform CJP groove (splice) welding root pass on the splice butt joint. The welder was observed perform manual 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 propane gas torch prior welding. During welding, ABF Quality Control (QC) Steve Jensen was noted monitoring the welding parameters of the welder. Prior welding, ABF QC William Sherwood informed this QA that he has marked two locations which were having unacceptable offset. The first offset of 2mm to 8mm was located at 0mm – 150mm and the second offset of 3mm was located at 10155mm. According to QC Supervisor Bonifacio Daquinag, the two unacceptable offsets were recorded and submitted to ABF for review and approval.

At OBG 6W-PP44-E3-#1 & #3 lifting lug access holes to top deck plate inside - ABF welder Sal Sandoval was observed back gouging using carbon air arc on the welded butt joints. After completing the gouging on the two access hole butt joints, the welder performed grinding on the groove of the gouged weld which the welder has also both completed. The welder was later seen back welding access hole #2. The welder was noted using 1/8" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification (WPS)

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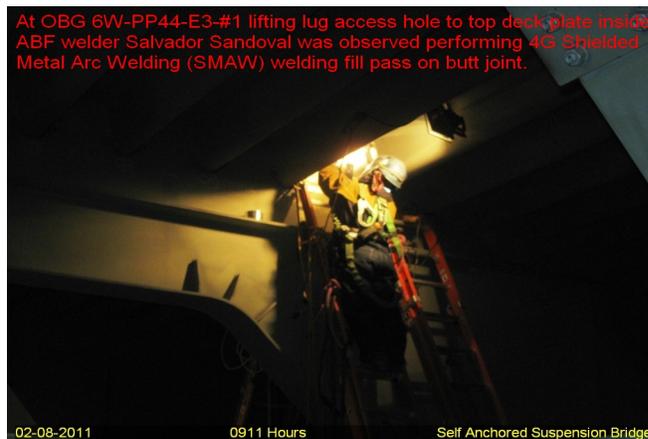
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ABF-WPS-D15-1110A. During welding, ABF QC Steve Mc Connell was noted monitoring the welder's welding parameters. At the end of the shift, fill pass welding on this location was still continuing and should remain tomorrow.

At OBG 8E/9E bottom plate 'D' inside, ABF QC John Pagliero 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 the request of Quality Control Field Supervisor, Bonifacio Daquinag, QA has randomly verified the QC MT of the Complete Joint Penetration (CJP) welding of the three deck access holes and two longitudinal stiffeners butt joint. The QA verification was performed to verify that the welding and the MT inspection performed by the QC inspector meet the requirements of the contract documents. At the conclusion of the QA verification it appeared that the welds and the QC inspection complied with the contract documents.

1. 9E/10E LS1 longitudinal stiffener inside – QA MT verified
2. 9E/10E LS2 longitudinal stiffener inside – QA MT verified
3. 1W-PP10.5-W2-LSW deck access hole longitudinal stiffener inside – QA MT verified
4. 1W-PP10.5-W2-LSE deck access hole longitudinal stiffener inside – QA MT verified
5. 5E-PP31-E3-#1 to #4 lifting lug access holes – QA MT verified



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 Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

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Reviewed By: Levell,Bill

QA Reviewer