

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-027177**Date Inspected:** 10-Feb-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Steve Jensen and Chuck Storer**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**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 6W PP46.5 W2 deck access hole infill plate to top deck plate outside, QA randomly observed ABF/JV qualified welder Todd Jackson continuing to perform CJP groove welding fill pass then cover pass on the straight and radius portion of the butt joint after taking over from welder Wai Kitlai. The welder was observed perform automatic welding in the 1G (flat) position utilizing a Bug-o track mounted 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-D15-3030-1. The joint being welded had a single V-groove butt joint that has been root welded without backing bar. The splice joint was preheated to greater than 150 degrees Fahrenheit using propane gas torch prior welding. During welding, ABF Quality Control (QC) Chuck Storer was noted monitoring the welding parameters of the welder. At the end of the shift, cover pass welding on east radius and straight portions of the butt joint while the west radius was still continuing.

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 top deck plate splice butt joints. 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 weld and the QC inspection complied with the contract documents.

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1. OBG 12E13E A1.2 top deck plate Y=580mm to Y=1350mm outside - QA MT verified
2. OBG 12E/13E A2 top deck plate Y=0mm to Y=1300mm outside - QA MT verified

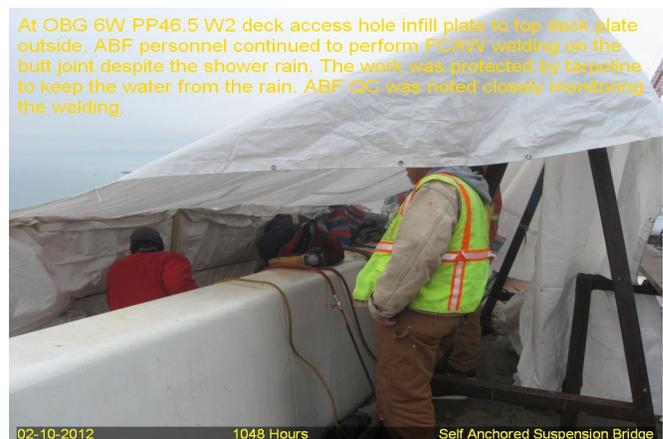
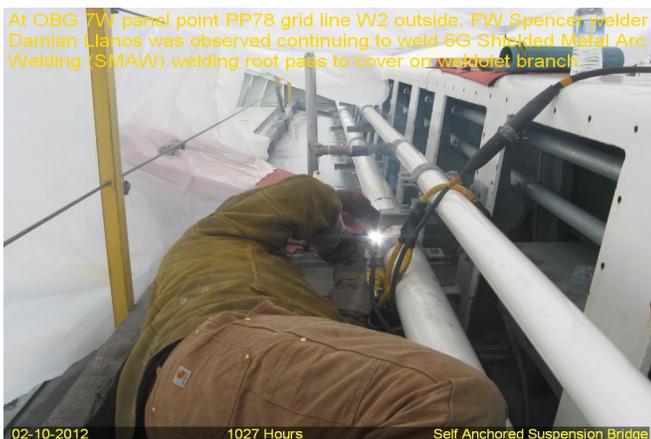
At the Tower Base, ABF personnel were noted mobilizing their tools and equipment in preparation for the welding of the 13 meters diaphragm to the tower shafts and shear plates. The personnel were noted laying their welding cables, positioning their portable electrode ovens and clearing the weld joints to be welded from covered miscellaneous stuffs. The welders are scheduled to start welding the 13 meters diaphragm tomorrow.

FW Spencer:

At location Panel Point PP58 and PP60 of OBG grid line W2, FW Spender welder Damian Llanos was observed performing 6G (all position) Shielded Metal Arc Welding (SMAW) welding root pass to cover pass on the 1" & 2" weldolet branch of the 2.5" and 4" domestic water and compressed air lines. The welder was noted welding the root pass with 3/32" diameter E6010 electrode and followed by fill pass to cover pass using 3/32" diameter E7018H4R electrode implementing Caltrans approved procedure FW Spencer WPS 1-12-1. The welder was noted preheating and removing the moisture of the joint using a portable propane gas torch prior welding. During welding, ABF QC Steve Jensen was noted monitoring the parameters of the welder. At the end of the shift, two (2) two weldolet field weld joints on each line (2 1/2" & 4") were completed and visually accepted by QC. This QA performed VT verification on the completed weld splices and they appear in compliance to the Contract requirements. The following were welded and inspected during the shift;

Line Service Line/Pipe Size Panel Point Location Joint Designation

- 1 Domestic Water 1" weldolet 58 Northwest 1/DW1/58/NW
- 2 Compressed Air 2" weldolet 58 Northwest 1/CA2/58/NW
- 3 Domestic Water 1" weldolet 60 Northwest 1/DW1/60/NW
- 4 Compressed Air 2" weldolet 60 Northwest 1/CA2/60/NW



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

Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
