

**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:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027145**Date Inspected:** 04-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**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 5W-PP36-W2 deck access hole infill plate to top deck plate outside, QA randomly observed ABF/JV qualified welder Wai Kitlai continuing to perform CJP groove welding fill pass then cover pass on the straight and curved radius butt joint. 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) Steve Jensen was noted monitoring the welding parameters of the welder. Measured welding parameters were 269 amperes, 22.5 volts and travel speed of 340mm per minute with calculated heat input of 1.05Kjoules per mm. At the end of the shift, cover pass welding on straight and curved radius of the butt joint was completed.

At OBG 8W-PP61-W2 access hole infill plate to top deck plate outside, QA randomly observed ABF/JV qualified welder Jason Collins perform CJP groove root pass welding. The welder was observed welding in the 1G (flat) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1010 Revision 1. The joint being welded has a double V-groove butt joint. ABF Quality Control (QC) Jesse Cayabyab was noted monitoring the welding parameters of the welder. Prior

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# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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welding, QC has checked the fit up alignment and noted minimal misalignment. This QA verified the fit up alignment and noted the same. During the shift, root pass welding of the butt joint was completed and the welder has moved to another deck access hole location 8W-PP71-W2 and performed fit up alignment of the deck infill plate to top deck plate. The fit up was not completed and should continue on Monday.



## 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.

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**Inspected By:** Lizardo, Joselito

Quality Assurance Inspector

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**Reviewed By:** Levell, Bill

QA Reviewer