

**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-028385**Date Inspected:** 12-Sep-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1200**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Salvador Merino**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 12E-PP111.5-E2.1 PS2 plate stiffener, ABF certified welder Deli Zhang continuing to perform 4G (overhead) position Shielded Metal Arc Welding (SMAW) welding fill pass on the CJP splice butt joint. The welder was noted utilizing 3.2mm diameter E7018H4R on the fill pass implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1040A-CU Rev. 0. The plates were preheated to more than 150 degree Fahrenheit using propylene gas torch prior welding. Welding parameters were monitored by ABF/QC Salvador Merino. QA noted the welding working current of 135 amperes on the 3.2 diameter E7018H4R electrode. The workmanship and appearance of the completed fill pass deemed satisfactory. During the shift, fill pass welding was still continuing when the observation of this welding activity was turned over to one of the fellow QA Inspectors.

At OBG 2E-PP112-E2.1 corner drop-in floor beam BW2 inside, QA randomly observed ABF/JV qualified welder Jacob Stafford perform fill pass welding on the Complete Joint Penetration (CJP) web splice butt joint. The welder was observed manually welding in the 3G (vertical) position utilizing a Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1040A-CU. The joint being welded has a single V-groove butt joint with ceramic backing bar that will be removed and back gouged. Though ABF is using ceramic instead of copper that is specified in the WPS, this issue has been brought to ABF and Caltrans attention thru an Incident Report that has been generated by

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# WELDING INSPECTION REPORT

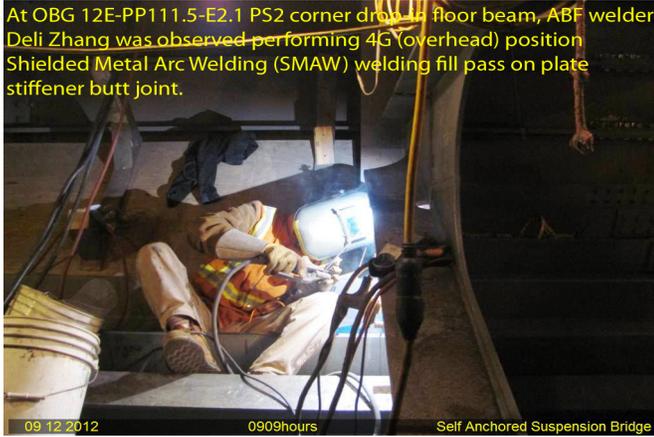
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other QA Inspector. During welding, ABF Quality Control (QC) Salvador Merino was noted monitoring the welding parameters of the welder. During the shift, fill pass SMAW welding was still continuing when the observation of this welding activity was turned over to one of the fellow QA Inspectors.

At OBG 12E-PP111.5-E2.1 PS2 corner drop-in floor beam, ABF welder Deli Zhang was observed performing 4G (overhead) position Shielded Metal Arc Welding (SMAW) welding fill pass on plate stiffener butt joint.



At OBG 12E-PP112-E2.1 BW2 corner drop-in floor beam, ABF welder Jacob Stafford was noted preheating the plates to 150 degrees Fahrenheit prior SMAW fill pass welding.

## 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 Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

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**Inspected By:** Lizardo, Joselito

Quality Assurance Inspector

**Reviewed By:** Levell, Bill

QA Reviewer

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