

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1x.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012816**Date Inspected:** 29-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1100**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

<b>CWI Name:</b>	Bonifacio Daquinag and Jim Cunningham			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Bridge No:</b>	34-0006			<b>Component:</b>	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.

QAI had noted ABF/JV welder James Zheng (I.D. 6001) performed the horizontal (2F) fillet welding of the backing bar to one side of the deck plate at Orthotropic Box Girder (OBG) L1W/L2W deck plate 'A'. The welder was using shielded metal arc welding (SMAW) with 1/8" E7018 H4R electrode implementing Welding Procedure Specification (WPS) ABF-WPS-D15-F1200A. During welding, the welder was noted preheating the plates prior welding and ABF QC Jesus Cayabyab was noted monitoring the welding parameters.

At OBG L1W/L2W plate 'C', ABF/JV welder Rick Clayborn (I.D. 2773) performed the overhead (4F) fillet welding of the temporary attachment fitting gear to side plate 'C' that will hold the backing bar to the splice butt joint welding. The welder was using shielded metal arc welding (SMAW) with 1/8" E7018 H4R electrode implementing Welding Procedure Specification (WPS) ABF-WPS-D15-F1200A. During welding, the welder was noted preheating the plates prior welding and ABF QC Bonifacio Daquinag was also noted monitoring the welding parameters.

At OBG L2E/L3E bottom plate 'D', ABF QC Jim Cunningham was observed performing Magnetic Particle Testing on the back gouged and ground backing bar removal. The QC was noted using a Magnaflux electromagnetic yoke with red magnetic powder as detecting media. Two ABF personnel were also noted grinding areas that QC has found with MT indications.

---

---

# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

QAI also noted ABF personnel perform gouging of backing bar at L1E/L2E plate 'E' using the track mounted plasma arc machine. Also at OBG L1E/L2E bottom plate 'D', two ABF personnel were noted flush grinding the back weld reinforcement using abrasive flapper discs. Both jobs are still continuing.



## Summary of Conversations:

As stated above.

## 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 Mohammad Fatemi (916) 227-5298, who represents the Office of Structural Materials for your project.

---

**Inspected By:** Lizardo, Joselito

Quality Assurance Inspector

---

**Reviewed By:** Levell, Bill

QA Reviewer