

**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 #: 1.28**WELDING INSPECTION REPORT**

**Resident Engineer:** Casey, William  
**Address:** 333 Burma Road  
**City:** Oakland, CA 94607

**Report No:** WIR-028347  
**Date Inspected:** 07-Sep-2012

**Project Name:** SAS Superstructure  
**Prime Contractor:** American Bridge/Fluor Enterprises, a JV  
**Contractor:** American Bridge/Fluor Enterprises, a JV

**OSM Arrival Time:** 700  
**OSM Departure Time:** 2130  
**Location:** Job Site

<b>CWI Name:</b>	Barry Drake and Pat Swain	<b>CWI Present:</b>	Yes	No	
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes	No	N/A
		<b>Delayed / Cancelled:</b>	Yes	No	N/A
<b>Bridge No:</b>	34-0006	<b>Component:</b>	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 12W-PP111.1-W2.1 LS3 longitudinal stiffener inside. ABF qualified welder Rick Clayborn was observed continuing to perform third time repair on welded stiffener splice butt joint per Caltrans approved Request for Weld Repair (RWR) # 201209-038. The UT detected defects were excavated from the other side after welding completion from one side. The welder was using carbon air arc gouging then ground smooth the excavation. The excavation was having excavation profile of 250mm long x 40mm wide x 17mm deep and it was noted MT'd by ABF QC Pat Swain with no relevant indication observed. This QA performed the same test verification and noted same result. The 3rd time repair welding was a continuation from yesterday's excavation and welding on one side of the weld joint. The repair welding was performed by the welder using 3.2mm diameter E9018H4R electrode implementing Caltrans approved ABF-WPS-D15-1002 Repair Rev. 0. Prior welding, the repair area and its vicinity were preheated to more than 200°F using propylene gas torch. During the shift, ABF QC Barry Drake was noted monitoring the welder's preheat and working current of 135 amperes. The QC was also on site monitoring the use of the E9018H4R electrode due to limited allowable atmospheric time exposure of one hour. During the shift, the welder has completed the repair welding on LS3 longitudinal stiffener and then moved to LS1 longitudinal stiffener of the same location.

At LS1 longitudinal stiffener, the same welder performed excavation using the same carbon air arc gouging. The welder was given the approval to excavate and weld per Caltrans approved RWR #201209-046. After the

---

---

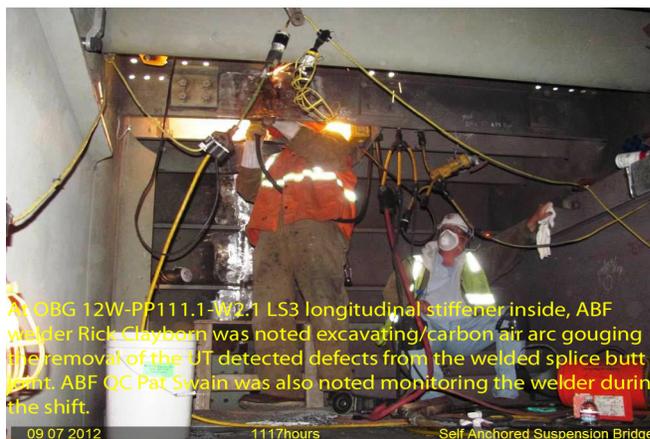
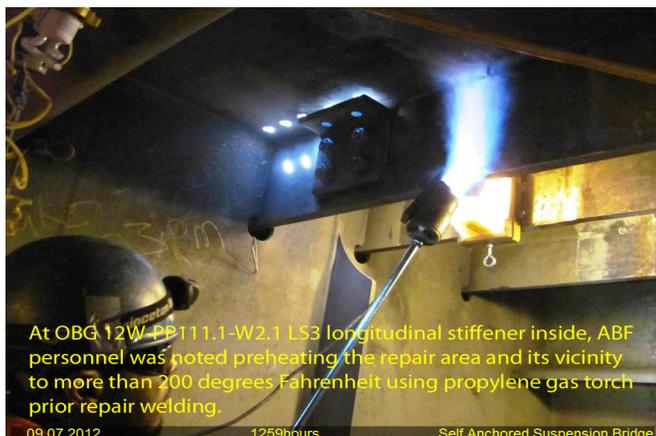
# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

completion of the air arc gouging removal of the UT detected defects, the welder ground smooth the groove of the excavation. ABF QC William Sherwood was noted performing the MT on the two boat shape excavations with no relevant indication noted during the test. This QA performed the same test verification and noted the same result. The two boat shape repair excavations were located at Y=0mm and Y=120mm with respective profile dimensions of 55mm long x 30mm wide x 15mm deep and 80mm long x 30mm wide x 13mm deep. The welder was noted using the same process and implementing the same approved WPS mentioned above. The welder performed welding of the two repairs until the end of the shift wherein both were completed.



## 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.

---

**Inspected By:** Lizardo, Joselito

Quality Assurance Inspector

**Reviewed By:** Levell, Bill

QA Reviewer