

**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-026314  
**Date Inspected:** 20-Sep-2011

**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:** 1530  
**Location:** Jobsite

**CWI Name:** As noted below  
**Inspected CWI report:** Yes No N/A  
**Electrode to specification:** Yes No N/A  
**Qualified Welders:** Yes No N/A  
**Approved Drawings:** Yes No N/A

**CWI Present:** Yes No  
**Rod Oven in Use:** Yes No N/A  
**Weld Procedures Followed:** Yes No N/A  
**Verified Joint Fit-up:** Yes No N/A  
**Approved WPS:** Yes No N/A  
**Delayed / Cancelled:** Yes No N/A  
**Component:** SAS OBG

**Bridge No:** 34-0006**Summary of Items Observed:**

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

1. 11E PP111 E3 Lifting Lug Hole (Exterior)
2. 11W 12W C1 R1 (Interior)
3. 9W PP80 W4 Lifting Lug Holes (Exterior)
4. 10W PP88 W4 Lifting Lug Hole (Exterior)

1. 11E PP111 E3 Lifting Lug Hole (Exterior)

The QA inspector observed ABF welder Fred Kaddu ID# 2188 performing Shielded Metal Arc Welding (SMAW) in the 1G flat position on Lifting Lug Hole (LLH) #4 located at 11E PP111 E3. The QA inspector verified the fit up of the joint and found it to be satisfactory. The QA inspector observed the QC inspector identified as Fred Von Hoff monitoring the progress to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-1050A-CU.

The parameters were recorded as (Amperes=135).

The QA inspector made subsequent observations throughout the shift to monitor quality and the QA inspector noted that the work appeared to be in general conformance with the contract documents.

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## 2. 11W 12W C1 R1 (Interior)

The QA Inspector noted the dimensions of the indications at D1 y+2790 as 80mm's in length, and 13mm's depth, y+3120 as 75mm's in length and 11mm's in depth, y+3530 as 65mm's in length and 10mm's depth. The QA Inspector observed the QC Inspector identified as Sal Moreno perform Magnetic Particle inspection on the excavations and found them to be free of indications. The QA inspector verified that the proper procedure was utilized as well as correct technique. The QA inspector observed ABF welder Wai Kit Lai ID#2953 perform Shielded Metal Arc Welding (SMAW) in the 1G flat position with the QC Inspector being present in order to monitor the welding and ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-1001-R. The QA Inspector noted that the work was completed on this date and appeared to be in general conformance with the contract documents.

## 3. 9W PP80 W4 Lifting Lug Holes (Exterior)

The QA inspector observed the QC inspector identified as Pat Swain perform Ultrasonic Inspection on Lifting Lug Holes #1 - 4 at 9W PP80 W4 on the exterior of the OBG. The QA inspector verified that the proper procedure was utilized as well as correct technique. The testing revealed the following indications: LLH #1 y+425 3.9mm deep, y+375 7.3mm's deep, LLH #2 y+480 .76mm's deep, y+230 2.2mm's deep, LLH #3 y+15 7.0 mm's deep, y+140 9.9mm's deep y+170 3.0mm's deep, y+360 9.1mm's deep, y+415 4.3mm's deep, y+460 9.7 mm's deep, y+500 8.8mm's deep, y+575 8.4 mm's deep. The QA inspector verified the findings and noted that the work appears to be in general conformance with the contract documents.

## 4. 10W PP88 W4 Lifting Lug Hole (Exterior)

The QA inspector observed ABF welder Mike Jimenez ID# 4671 performing Shielded Metal Arc Welding (SMAW) in the 1G flat position on Lifting Lug Hole (LLH) #4 located at 10W PP88 W4. The QA inspector verified the fit up of the joint and found it to be satisfactory. The QA inspector observed the QC inspector identified as Sal Moreno monitoring the progress to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-1050A-CU.

The parameters were recorded as (Amperes=180).

The QA inspector made subsequent observations throughout the shift to monitor quality and the QA inspector noted that the work appeared to be in general conformance with the contract documents.

### **Summary of Conversations:**

At the beginning the shift the QA inspector met with QC inspector William Sherwood and discussed the welders assignments and locations for the shift to include pending issues, ongoing work and required testing.

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

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<b>Inspected By:</b>	Frey,Doug	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

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