

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023446**Date Inspected:** 06-May-2011**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:** Jobsite**CWI Name:** John Pagliero**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:**

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. 10E 11E E2 (Inside)
2. 9W 10W C2 (outside)
3. 7W PP53 W3 Lifting Lug Holes #1-4 VT, MT and UT
4. 7W PP56 W3 Lifting Lug Hole #4 VT, MT and UT
5. 10W 11W C2 (Inside)
6. 9W 10W E1 R1

1. 10E 11E E1 (Inside)

The QA Inspector randomly observed ABF welding operators Song Tao Huang and Jin Quan Huang performing Flux Core Arc Welding w/gas (FCAW-G) operations on face E2 inside of the OBG. The QA Inspector observed the QC inspector Jesse Cayabyab as being present in order to monitor the progress and ensure the welding parameters were within the established WPS. The QA Inspector noted that the work was in progress and appeared to be in general conformance with the contract documents.

2. 9W 10W C2 (outside)

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The QA Inspector noted and periodically observed ABF welding operators Rory Hogan and Jeremy Dolman performing FCAW-G operations on face C outside of the OBG. The QA Inspector observed the QC inspector Jesse Cayabyab as being present in order to monitor the progress and ensure the welding parameters were within the established WPS. The work progressed throughout the QA Inspector's shift. The work is in progress and the QA Inspector noted that the work appeared to be in general conformance with the contract documents.

### 3. 7W PP53 W3 Lifting Lug Holes #1-4 VT, MT and UT

The QA Inspector performed a Magnetic Particle Test (MT) on LLH's 1-4. The QA Inspector tested 10% of the weld to verify the weld and testing by QC meet the requirements of the contract documents. . The QA Inspector noted that the work appeared to be free of defects and was found to be acceptable and in general conformance with the contract documents. Upon completion of the MT, the QA Inspector performed Ultrasonic Testing utilizing a G. E./Krautkramer USN 60. The QA Inspector also utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev. 4 during the examination. Upon completion of the testing, it was noted by the QA Inspector that no indications were present and the work was found to be acceptable.

### 4. 7W PP56 W3 Lifting Lug Hole #4 VT, MT and UT

The QA Inspector performed a Magnetic Particle Test (MT) on LLH #4. The QA Inspector tested 10% of the weld to verify the weld and testing by QC meet the requirements of the contract documents. . The QA Inspector noted that the work appeared to be free of defects and was found to be acceptable and in general conformance with the contract documents. Upon completion of the MT, the QA Inspector performed Ultrasonic Testing utilizing a G.E. /Krautkramer USN 60. The QA Inspector also utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination. Upon completion of the testing, it was noted by the QA Inspector that no indications were present and the work was found to be acceptable.

### 5. 10W 11W C2 (Inside)

The QA Inspector randomly observed ABF welding operators Lin Pei Wang performing FCAW-G operations on face C2 inside of the OBG. The QA Inspector observed the QC inspector Jesse Cayabyab as being present in order to monitor the progress and ensure the welding parameters were within the established WPS. The QA Inspector noted that the work was in progress and appeared to be in general conformance with the contract documents.

### 6. 9W 10W E1 R1

The QA Inspector noted the dimensions of excavation #1 at y=1735mm-1830mm to be 7mm's deep, 24mm's wide and 95 mm's long. Excavation #2 at y=2055mm-2150mm to be 7mm's deep, 25mm's wide and 95mm's long. Excavation #3 at y=3115mm-3215mm to be 8mm's deep, 24mm's wide and 100mm's long. Upon Visual Inspection and Magnetic Particle Testing by the QC Inspector Jesse Cayabyab, the ABF welder Jorge Lopez performed Shielded Metal Arc Welding (SMAW) on E1. The QA Inspector observed the QC inspector monitor the progress and ensure the welding parameters were within the established WPS. The QA Inspector noted that the work was completed on this date and appeared to be in general conformance with the contract documents.

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## Summary of Conversations:

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

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**Inspected By:** Frey,Doug

Quality Assurance Inspector

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**Reviewed By:** Levell,Bill

QA Reviewer