

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-026433**Date Inspected:** 29-Sep-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: | 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:

- 11E PP104 E3 Lifting Lug Hole (Interior)
- 9W PP80 W3 Lifting Lug Holes (Exterior)
- 7W PP60 Pipe Welding (Exterior)
- 5E/6E PP37 E5-E6 Diverter Bar (Exterior)

- 11E PP104 E3 Lifting Lug Hole (Interior)

The QA inspector observed the QC inspector identified as Fred Von Hoff perform Magnetic Particle Inspection on Lifting Lug Holes #2 and 4 at 11E PP104 E3 on the interior of the OBG. The QA inspector verified that the proper procedure was utilized as well as correct technique. The testing found no indications and the QA inspector verified the findings and noted that the work appears to be in general conformance with the contract documents.

- 9W PP80 W3 Lifting Lug Holes (Exterior)

The QA Inspector noted the dimensions of the excavations of Lifting Lug Hole #1 as 1 y+345 as 55mm's in

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

length, and 10mm's depth, y+400 as 70mm's in length and 7mm's in depth. Lifting Lug Hole #2 as y+210 as 120mm's in length and 5mm's depth, y+465 80mm's in length and 6 mm's deep. Lifting Lug Hole #4 as y+0 60mm's in length, 9mm's deep, y+100 65mm's in length, 9 mm's deep, y+165 35mm's in length and 6mm's deep, y+ 330 60mm's in length and 10mm's deep, y+390 60mm's in length and 11 deep, y+450 40mm's in length and 11mm's deep, y+490 70mm's in length and 12mm's deep, y+545 83mm's in length and 10mm's deep. The QA Inspector observed the QC Inspector identified as Pat Swain 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 Mike Jimenez ID#4671 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. 7W PP60 Pipe Welding (Exterior)

The QA inspector observed F.W. Spencer welder Curtis Jump ID# 7326 performing Shielded Metal Arc Welding (SMAW) in the 1G flat and 3G vertical positions on 2.5 and 4 inch schedule 80 pipe located at 7W PP60 welds # 6/2.5/60/SW and #6/4/60/SW. The QA inspector verified the fit up of the joints and found it to be satisfactory. The QA inspector observed the QC inspector identified as Steve Jensen monitoring the welding to ensure the welding parameters were in compliance pertaining to WPS-1-12-1 Revision 2 (1.12). The welder was observed implementing 6010 electrodes in the root pass with the balance using 7018 electrodes. The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work was completed on this date and appeared to be in general conformance with the contract documents.

4. 5E/6E PP37 E5-E6 Diverter Bar (Exterior)

The QA Inspector randomly observed ABF welder Todd Jackson ID# 4639 performing SMAW in the 2G horizontal position on the diverter bar at 5E/6E PP37 E5-E6. The QA Inspector observed the QC Inspector Steve McConnel as being present in order to monitor the progress and ensure the welding parameters were in compliance with ABF-WPS-D15-F1200A. The work is in progress 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.

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.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

| | | |
|----------------------|-----------|-----------------------------|
| Inspected By: | Frey,Doug | Quality Assurance Inspector |
|----------------------|-----------|-----------------------------|

| | | |
|---------------------|-------------|-------------|
| Reviewed By: | Levell,Bill | QA Reviewer |
|---------------------|-------------|-------------|