

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-026210**Date Inspected:** 29-Aug-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:** William Sherwood**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 PP85.2 Pipe Welding (Exterior)
2. 9E PP78.2 Pipe Welding (Exterior)
3. 10W 11W Bottom Plate D1/D2 (Interior)
4. 11W 12W Side Plate E (exterior)
5. 10W 11W Side Plate C (Interior)
6. 10W 11W Bottom Plate D (interior)

1. 10E PP85.2 Pipe Welding (Exterior)

The QA inspector observed F.W. Spencer welder Curtis Jump ID# 7326 performing SMAW in the 1G flat and 3G vertical positions on 2.5 and 4 inch schedule 80 pipe located at 10E PP85.2 weld #24/2.5/85/NE and weld #24/4/85/NE. 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 all of which in an uphill progression. The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work appeared to be in general conformance with the contract documents.

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2. 9E PP78.2 Pipe Welding (Exterior)

The QA inspector observed F.W. Spencer welder Curtis Jump ID# 7326 performing SMAW in the 1G flat and 3G vertical positions on 2.5 and 4 inch schedule 80 pipe located at 8E PP78.2 weld #20/2.5/79/NE and weld #20/4/79/NE. 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 all of which in an uphill progression. The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work appeared to be in general conformance with the contract documents.

3. 10W 11W Bottom Plate D1/D2 (Interior)

The QA inspector observed the QC inspector identified as Jesse Cayabyab perform Magnetic Particle Testing and Ultrasonic Testing on the completed welds on Bottom plate D1/D2 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.

4. 11W 12W Side Plate E (exterior)

The QA inspector randomly observed ABF welding operator James Zhen ID#6001 performing Flux Core Arc Welding with gas (FCAW-G) utilizing a "Bug-O" motorized rail system with a magnetic base attached in the 4G overhead position on the underside of side plate E, at 11W 12W of the OBG. The QA inspector observed the QC inspector identified as Steve Jensen monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-3042B-1. The parameters were recorded as (A=250/V=25/TS=180/HI=2.08). The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work is in progress and appeared to be in general conformance to the contract requirements.

5. 10W 11W Side Plate C (Interior)

The QA Inspector performed a Magnetic Particle Test (MT) utilizing procedure SE-MT-D1.5-CT-100, Rev. 4. on Side Plate C welds C1 and C2 at 10W 11W on the north side interior of the OBG. 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.

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6. 10W 11W Bottom Plate D (interior)

The QA Inspector performed a Magnetic Particle Test (MT) utilizing procedure SE-MT-D1.5-CT-100, Rev. 4. on Bottom Plate D welds D1 and D2 at 10W 11W on the north side interior of the OBG. 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.

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.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
