

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-026537**Date Inspected:** 17-Oct-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**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

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. 9W PP84 Pipe Welding (Exterior)
2. 12W 13W Edge Plate "F" Welding (Exterior)
3. 12W 13W Side Plate E1 Welding (Interior)
4. 12W 13W Side Plate C Fit Up (Interior)
5. 8E PP70.5 Deck Access Hole Ultrasonic Testing (Exterior)

1. 9W PP84 Pipe Welding (Exterior)

The QA inspector observed F.W. Spencer welder Curtis Jump ID# 7326 performing Shielded Metal Arc Welding (SMAW) in the 2G horizontal position on 4" domestic water pipe and 2.5" compressed air pipe located at 9W PP84 weld #25/2.5/84/SW and weld #25/4/84/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 appears to be in general conformance with the contract documents.

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2. 12W 13W Edge Plate “F” Welding (Exterior)

The QA inspector randomly observed ABF welding operator Fred Kaddu ID#2188 performing Shielded Metal Arc Welding (SMAW) on edge plate “F” at 12W 13W of the OBG. The QA inspector observed the QC inspector identified as William Sherwood monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-1040 B. The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work is in progress and appears to be in general conformance to the contract requirements.

3. 12W 13W Side Plate E1 Welding (Interior)

The QA inspector randomly observed ABF welding operator Richard Garcia ID#5892 performing Flux Core Arc Welding-with Gas (FCAW-G) on “E1” at 12W 13W of the OBG. The QA inspector observed the QC inspector identified as William Sherwood monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-3042 B-1. The parameters were recorded as (A=255/V=22.2/TS=300/HI=1.13). The QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work is in progress and appears to be in general conformance to the contract requirements.

4. 12W 13W Side Plate C Fit Up (Interior)

This QA performed observation at random intervals of approved ABF welding personnel performing fit-up and Shielded Metal Arc Welding (SMAW) of temporary attachments at the “C” plate of 12W/13W segment splice. In conjunction with QC William Sherwood this QA performed a visual survey of joint fit-up for the 22mm to 18mm thick section of the “C” plate of 12W/13W segment splice. In addition, this QA and QC Sherwood also measured the planar offset of this section of the joint. All areas of measurement were noted to be within 3mm or less except noted below.

Y=3441mm-3510mm offset = 4mm

Y=3511mm-3600mm offset = 5mm

Y=3601mm-3690mm offset = 4mm

The QA inspector has verified the above measurements are not in compliance and observed that ABF personnel have exhausted all efforts to bring the fit up of “C” into compliance. QC will record the findings and report to QCM for review. This QA Inspector verbally informed QA SPCM Lead Inspector, Daniel Reyes, of the issues noted in this report for compliance therefore for further details of issues of significance see QA SPCM Lead Inspector, Daniel Reyes, Daily Inspection Report (6031) for this date.

5. 8E PP70.5 Deck Access Hole Ultrasonic Testing (Exterior)

The QA Inspector performed Ultrasonic Testing on the Deck Access Hole located at 8E PP70.5 utilizing a G.

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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.

6. 9W PP86 Pipe Welding (Exterior)

The QA inspector observed F.W. Spencer welder Curtis Jump ID# 7326 performing Shielded Metal Arc Welding (SMAW) in the 2G horizontal position on 4" domestic water pipe and 2.5" compressed air pipe located at 9W PP84 weld #26/2.5/86/SW and weld #26/4/86/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 appears to be in general conformance with the contract documents.

Note: The QAI reviewed the observations and inspection with QA Lead Inspector, Daniel Reyes, written in this report. With the exception of item #4, no issues were noted by the QAI and the QA Lead Inspector concurs with the QA report.

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.

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Inspected By: Frey,Doug

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer