

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-026895**Date Inspected:** 16-Dec-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

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:

- 13W14W/A2.2 Repair (Exterior)
- 12W/13W/E2 (Interior)

- 13W14W/A2.2 Repair (Exterior)

This QA Inspector randomly observed ABF personnel Devon Murphy performing the back-gouge operation of ultrasonic rejectable indications on "A2.2" 13W/14W on the exterior of the OBG located at "Y" 2780 mm: (22 mm wide; 100 mm length; and 13 mm in depth) "Y" 3280 mm: (23 mm wide; 90 mm length; and 13 mm in depth).

This QA Inspector observed QC Inspector William Sherwood perform a Magnetic Particle Inspection (MT) of the excavation to determine the soundness of the metal. Upon completion of the testing this QA Inspector verified that no rejectable indications were present.

This QA Inspector randomly observed ABF qualified welder Richard Garcia (Welder ID 5892) performing the repair welding operation of two (2) ultrasonic rejectable indications as per the Shielded Metal Arc Welding (SMAW) process in the (1G) flat position on OBG deck plate "A2.2" 13W/14W. This QA Inspector observed QC Inspector Mr. William Sherwood verify that the preheat temperature was at the minimum of 325 Degrees F and that the welding parameters were in accordance with WPS D1.5 - 1004 Repair. Upon completion of the repairs,

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

thermal induction blankets were placed over the area for 1 hour between 450 and 600 degrees F. This joint is a Seismic Performance Critical Member (SPCM).

2. 12W/13W/E2 (Interior)

This QA Inspector randomly observed ABF welder Fred Kaddu excavating ultrasonic rejectable indications on "E2" splice plate 12W/13W located at "Y" 1860 mm: (25 mm wide; 150 mm length; and 20 mm in depth) "Y" 2340 mm: (22 mm wide; 70 mm length; and 11 mm in depth) "Y" 2550 mm: (20 mm wide; 100 mm length; and 10 mm in depth). This QA Inspector observed QC Inspector Sal Merino perform a Magnetic Particle Inspection (MT) of the excavation to determine the soundness of the metal. Upon completion of the testing this QA Inspector verified that no rejectable indications were present.

This QA Inspector randomly observed ABF welder Fred Kaddu (Welder ID 2188) performing the repair welding operation of three (3) ultrasonic indications as per the SMAW process in the (1G) flat position on "E2" on the interior of the OBG at 12W/13W. This QA Inspector observed the use of 1/8" (3.2mm) E7018-H4R electrodes and QC Inspector William Sherwood verify the minimum preheat temperature of 150° F and the welding parameters (Amps=135) were in accordance with WPS D1.5-1000- Repair. The welding parameters observed at this location appeared to be in general compliance with approved WPS and the contract specifications.

12W/13W/E1 (Exterior)

This QA Inspector randomly observed ABF welder Jeremy Dolman performing the back-gouge operation of an ultrasonic rejectable indication on OBG plate section "E1" 12W/13W located at "Y" location 2150 mm. The excavated area for repair was: (20 mm wide; 40 mm length; and 13 mm in depth).

This QA Inspector randomly observed ABF welder Jeremy Dolman performing the repair welding operation of an excavation as per the Shielded Metal Arc Welding (SMAW) process in the (4G) overhead position on "E1" at the above named location. This QA Inspector observed the use of E7018-H4R electrodes and QC Inspector William Sherwood verify that the preheat temperature was at the minimum of 150 degrees F and that the welding parameters were in accordance with WPS D1.5-1000- Repair. This QA Inspector made periodic observations and noted that the work was completed on this date and appeared to be in general conformance with the contract specifications.

This QA Inspector performed a progress survey of the westbound OBG plate splices, lifting lug hole and vent holes from 11W-14W as directed by QA Lead Inspector, Daniel Reyes.

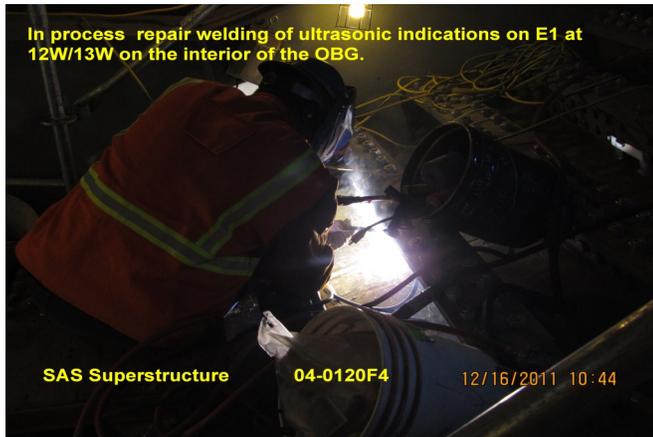
Note: The QAI reviewed the observations and inspection with QA Lead Inspector, Daniel Reyes, written in this report. The issues were noted by the QAI and the QA Lead Inspector concurs with the QA report.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Summary of Conversations:

The were no pertinent conversations to report.



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
