

**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-028597**Date Inspected:** 15-Oct-2012**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:** Job Site**CWI Name:** As noted below**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:

This QA observed the following welders working in OBG 12E at various locations:

ABF welder Xiao Hua Luo #1291 was observed performing weld repairs on weld 12E PP117 E2.1-BW1 at y=190mm with dimensions of the excavation at; 80L/35W/9D, y=295mm 80L/35W/9D. The Welder was observed utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D15-1000R Rev.2 for Shielded Metal Arc Welding (SMAW). The welder was observed preheating the welds prior to Carbon Arc Gouging and welding. Other welding parameters as inspected by QC Inspector appear to be in compliance with the WPS noted above.

ABF welder Eric Sparks #3040 was observed performing weld repairs on weld 13E-E2.5 at y=4235mm with dimensions of the excavation at; 70L/20W/11D. The Welder was observed utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D15-1004-Repair Rev.0 for Shielded Metal Arc Welding (SMAW). The welder was observed preheating the welds prior to Carbon Arc Gouging and welding. Other welding parameters as inspected by QC Inspector appear to be in compliance with the WPS noted above.

This QA Inspector inadvertently omitted additional information pertaining to the initial back gouging of the root weld on production welding on the corner drop-in of 12E. The back gouged area was verified for soundness and

---

---

# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

free of indications with Magnetic Particle (MT) utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26.2.1. The following locations were verified on the date shown.

12E PP113-E2.1-BW1 – 8/28/12, 12E PP113-E2.1-BW2 – 8/28/12, 12E PP113-E2.1-PS1 – 8/30/12, 12E PP113.5-E2.1-BW2 – 9/8/12, 12E PP113.5-E2.1-FS1– 9/9/12, 12E PP113.5-E2.1-PS1 – 9/8/12, 12E PP114.5-E2.1-BW1 – 9/6/12, 12E PP114.5-E2.1-BW2 – 9/8/12, 12EW PP114.5-E2.1-FP1 – 9/6/12, 12E PP114.5-E2.1-PS2 – 9/5/12, 12E PP115-E2.1-BW2 – 8/21/12, 12E PP115-E2.1-PSW1 – 8/29/12.

This QA observed QC Inspector William Sherwood and Salvador Merino performing welding parameter checks such as voltage, amps, electrodes and preheats throughout the day. Also noted were QC Inspectors John Pagliero and Harry Scharein performing various Non-Destructive Testing (NDT) on completed weld repairs as they became available for testing. Non-Destructive Testing methods utilized by the QC Inspectors were Visual Testing (VT), Magnetic Particle Testing (MPT) and Ultrasonic Testing Shear Wave (UTSW). QC Inspectors were observed performing inspection per applicable code and or contract criteria.

Unless otherwise noted, all work observed on this date appeared to generally comply with the contract documents.

### Summary of Conversations:

Conversations relevant to work performed.



### 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 Gary Thomas 916-764-6027 , who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Frey,Doug	Quality Assurance Inspector
<b>Reviewed By:</b>	Reyes,Danny	QA Reviewer

---