

**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-028259**Date Inspected:** 18-Aug-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

<b>CWI Name:</b>	As noted below		
<b>Inspected CWI report:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A

<b>CWI Present:</b>	Yes	No	
<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved WPS:</b>	Yes	No	N/A
<b>Delayed / Cancelled:</b>	Yes	No	N/A
<b>Component:</b>	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:

## 12E/13E-LS1 (Interior)

This QA Inspector randomly observed the excavation operations of Ultrasonic rejectable indications on the Complete Joint Penetration (CJP) joint of the Longitudinal Stiffener (LS) at 12E/13E-LS1 on the interior of the OBG. This QA Inspector observed ABF/JV qualified welder Mike Jimenez #4671 performing the Carbon Arc Gouging (CAG) method to remove metal from the material. The welder was observed cleaning up the excavations utilizing a small disc grinder and a de-burring drill. Upon completion of the excavations, Quality Control (QC) Inspector Salvador Merino performed a Magnetic Particle Inspection (MT) of the sites to determine soundness of the metal and observed no indications, QC then measured the dimensions of the excavations for length, width and depth.

This QA Inspector recorded the dimensions of the excavations as:

LS1-y+0; 150mm in length, 37mm wide and 13mm deep.

LS2-y+0; 80mm in length, 40mm wide and 11mm deep.

LS3-y+0; 210mm in length, 35mm wide and 14mm deep.

## 12E PP111.1 (Interior)

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# WELDING INSPECTION REPORT

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This QA Inspector randomly observed ABF certified welder Jin Quan Huang #1088 continuing to perform 4G (overhead position) Shielded Metal Arc Welding (SMAW) welding fill pass on the CJP transverse joint on 12E PP111.1 on the interior of the OBG. The welder was utilizing 3.2mm diameter E7018H4R on the fill pass implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1040C-Revision 0. The joint was preheated to more than 150 degree Fahrenheit using propylene gas torch prior welding. Welding parameters were monitored by ABF/QC Fred Michels. QA noted the welding working current of 135 amperes on the 3.2 diameter E7018H4R electrode. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work at this location was in progress and appeared to be in general conformance with the contract specifications.

12E/13E-B (Interior)

This QA Inspector randomly observed QC Inspector Pat Swain at 12E/13E-B on the interior of the OBG performing Ultrasonic Testing (UT). The QC Inspector was observed scanning from each side of the weld and the scanning pattern as described in D1.5 6.24. The QC Inspector was noted as identifying rejectable indications and the work at this location is ongoing and appeared to be in general conformance with the contract documents and SE-UT-D1.5-CT-100-Revision 4.

### Summary of Conversations:

Conversations today were pertinent to the weld locations.



### 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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<b>Inspected By:</b>	Frey,Doug	Quality Assurance Inspector
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<b>Reviewed By:</b>	Levell,Bill	QA Reviewer
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