

**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-027858**Date Inspected:** 27-Jun-2012**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:** Job site

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes No N/A	
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes No N/A	
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes No N/A	
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes No N/A	
		<b>Delayed / Cancelled:</b>	Yes No N/A	
<b>Bridge No:</b>	34-0006	<b>Component:</b>	Tower	

**Summary of Items Observed:**

Quality Assurance Inspector (QAI) Rodney Patterson 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:

The QAI was provided ABF QC reports to verify, utilizing ultrasonic testing for the Tower Shear Plate weld connections designated ESW "L". The weld has been previously repaired and tested by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.4 and supplemental contract document SE-UT-D1.5-CT-108-ESW. The QA was informed previously that transverse indications were observed in repair excavations on similar Electro slag welds (ESW) on earlier dates and that scanning pattern "E" will need to be utilized in order to detect these indications.

The following suspected transverse indications detected ultrasonically on this date are neither rejectable nor recordable in accordance with AWS D1.5-2002, section 6, table 6.4, however some were observed to exhibit planar characteristics. Due to the presence of weld reinforcement the QAI was unable to size the length and measure the "X" location on the welds in way of the suspected transverse indications.

Face A Weld ESW "L" ( Y=2300 ~ Y=4600)

Y=2300, Sound Path=125, Depth=40, AWS db Rating = +18

Y=2340, Sound Path=90, Depth=29, AWS db Rating = +22 (Grouping of Multiple indications)

Y=2880, Sound Path=133, Depth=43, AWS db Rating = +20 (Grouping of Multiple indications)

Y=2920, Sound Path=140, Depth=45, AWS db Rating = +20

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

Y=3000, Sound Path=95, Depth=32, AWS db Rating = +19  
Y=3270, Sound Path=132, Depth=44, AWS db Rating = +18  
Y=3370, Sound Path=93, Depth=31, AWS db Rating = +20  
Y=3500, Sound Path=104, Depth=33, AWS db Rating = +16  
Y=3530, Sound Path=82, Depth=26, AWS db Rating = +11  
Y=3610, Sound Path=105, Depth=34, AWS db Rating = +12  
Y=3745, Sound Path=100, Depth=32, AWS db Rating = +16  
Y=3870, Sound Path=99, Depth=32, AWS db Rating = +15  
Y=4200, Sound Path=124, Depth=40, AWS db Rating = +16  
Y=4440, Sound Path=98, Depth=32, AWS db Rating = +11  
Y=4560, Sound Path=110, Depth=35, AWS db Rating = +18

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

**Summary of Conversations:**

No relevant conversations.

**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.

---

<b>Inspected By:</b>	Patterson,Rodney	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

---