

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
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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-028066  
**Date Inspected:** 27-Jul-2012

**Project Name:** SAS Superstructure  
**Prime Contractor:** American Bridge/Fluor Enterprises, a JV  
**Contractor:** American Bridge/Fluor Enterprises, a JV

**OSM Arrival Time:** 700  
**OSM Departure Time:** 1730  
**Location:** jobsite

<b>CWI Name:</b>	Steve Jensen	<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>	OBG	

**Summary of Items Observed:**

At the start of the shift this Quality Assurance Inspector (QA) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) welding and Quality Control (QC) personnel. The observations and inspections were performed as noted below:

**13W/14W Drop-In**

This QAI observed Welder Xiao Juan Wan (ID#9677) using a rosebud torch to preheat Stiffeners 12W/13W LS-7, and LS-8 to a QC recorded, QA verified temperature of 250F. Preheat temperature was measured using a Tempil Stick. This QAI noted QC Tony Sherwood recording preheat temperature whenever there was a stop in work.

QAI observed the back gouging to sound metal of the backside of the two above-mentioned stiffeners by Mr. Wan. At the conclusion of back gouging QC Technician Bernie performed Magnetic Particle Testing at a frequency of 100% of the back gouged joint. No indications were noted.

QAI observed Mr. Wan using the Shield Metal Arc Welding process to deposit E9018 consumable electrode to the parameters set forth by the approved Welding Procedure Specification in Stiffeners 12w/13W LS-7 and LS-8. This QAI observed the welder Mr. Wan using good workmanship practices cleaning between weld passes.

This QAI observed the fitting and tacking of plate 13W-WK-WP1. The tack welding was performed by qualified welder Rick Clayborn utilizing the Shield Metal Arc Welding Process with E7018 consumable electrodes. The web plate does not meet the project fit-up requirements. No paperwork has been submitted by Quality Control at the

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# WELDING INSPECTION REPORT

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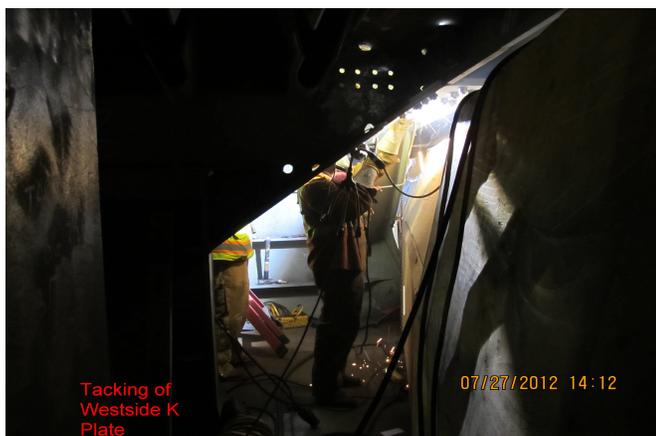
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time of this report.

This QAI observed Rick Clayborn (2773) excavating weld 13W-W2.1 utilizing a Carbon Arc Gouging. During gouging operations a 250F preheat was maintained using induction heating blankets. At the conclusion of gouging the joint was ground to a U-Joint profile that exhibited a bright clean shiny metal condition.

After Grinding, QAI witnessed William Sherwood Quality Control Technician perform Magnetic Particle Testing to the above listed excavation of weld 13W-W2.1. Mr. Sherwood performed testing at a frequency of 100%. No indications were noted.

This QAI observed Rick Clayborn welding the above-mentioned repair excavations utilizing the Shield Metal Arc Welding to the parameters set forth in the approved Welding Procedure Specification using E7018 consumable electrode. During welding operations a Quality Control recorded Quality Assurance verified 350F preheat was maintained using induction heating blankets. At the conclusion of welding operations post heat was initiated utilizing induction heating blankets at 450F for four hours. First time repairs, no RWR required.



## Summary of Conversations:

There were general conversations with Quality Control Inspector Steve Jensen, at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift. All observations were relayed to Bill Levell.

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## WELDING INSPECTION REPORT

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### 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>	Daggett, Matt	Quality Assurance Inspector
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<b>Reviewed By:</b>	Levell, Bill	QA Reviewer
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