

**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-026503**Date Inspected:** 11-Oct-2011**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>	John Pagliero and Bernie Docena			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Bridge No:</b>	34-0006			<b>Component:</b>	SAS Tower		

**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

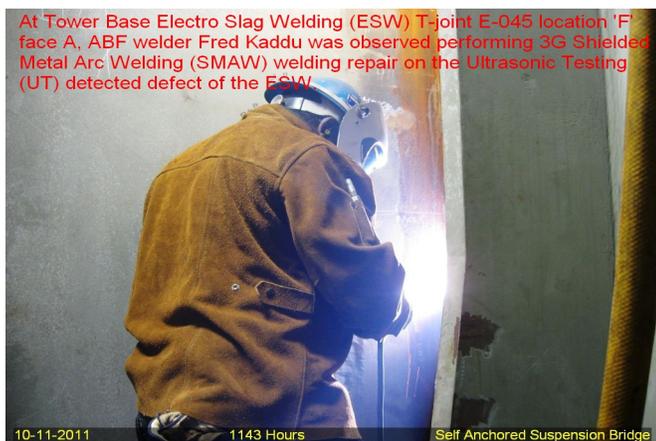
At Tower Base Elevation Electro Slag Welding (ESW) T-joint E-045 location 'F' face A, QA randomly ABF welder Fred Kaddu perform 3G SMAW first time welding repair (R1) on the Ultrasonic Testing (UT) detected defect on the vertical weld of the ESW. The welder was observed welding in the 3G (vertical) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000-Repair Rev. 2. The boat shape repair excavation located at Y=3380mm was excavated to dimensions of 290mm long x 25mm wide x 17mm deep. The excavation was tested using Magnetic Particle Testing (MT) by ABF QC John Pagliero and verified by this QA with positive result. The repair excavation and the adjacent base metal were preheated to more than 300°F using the propylene gas torch. Prior welding, Caltrans Engineer Saman has verbally approved the repair of the weld joint. During the shift, ABF QC Bernie Docena was noted monitoring the welder. Measured welding parameter during welding was 125 amperes on a 1/8" diameter E7018H4R electrode. At the end of the shift, repair welding at location mentioned above was completed.

At Tower Base Electro Slag Welding (ESW) T-joints #S-041 location 'S' (face A) and E-041 location 'R' face A, ABF QC Bernie Docena was observed performing Magnetic Particle Testing (MT) on the removal of the remnants of the welded temporary strong back attachments. The QC Inspector was noted performing MT on the two ESW weld joints elevation 9 to 13 meters. There was no MT indication noted during the test.

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At Tower Base Elevation Electro Slag Welding (ESW) T-joint S-045 location 'G' face B, QA randomly observed ABF welder Jorge Lopez excavate the Ultrasonic Testing (UT) detected defect at ESW welded T-joint using carbon air arc gouging. Prior the excavation, the welder has preheated the defect location to more than 250°F using the propylene gas torch. ABF QC Bernie Docena has performed the Magnetic Particle Testing (MT) as the welder chase the extent of the indication. The repair excavation was located at Y=3380mm and has a boat shape dimensions of 150mm long x 28mm wide x 22mm deep. The repair excavation was tested by ABF QC Bernie Docena using Magnetic Particle Testing (MT) with positive result. This QA performed VT/MT verification on the defect removal and noted same result. After the excavation and testing on the defect removal of the defect, QC has informed this QA that QC will initiate the Request for Welding Repair (RWR) and forward it to ABF for Caltrans approval.



## Summary of Conversations:

No significant conversation occurred today.

## 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 SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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