

**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-029428**Date Inspected:** 19-Apr-2013**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**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 on the OBG at various locations:

This QA Inspector randomly observed ABF welder Lin E Yun #9344 complete the welding of the Dehumidification Seal Plates located at 13E PP119 + 1500mm. The welder was observed utilizing WPS ABF-D1. 5-F1200A for SMAW. The welder was observed preheating the welds prior to welding. Other welding parameters as inspected by the QC Inspector appeared to be in compliance with the WPS noted above. RFI-003256R00 was referenced during this observation and Magnetic Particle (MT) testing shall be performed after 48 hours.

This QA Inspector made random observations of Critical Welding Inspection Quality Control monitoring the welding and the parameters of UIS welder Luke Mortenson #1012. The welder was observed performing the SMAW Process on the masts to the post wall of the Changeable Message Sign (CMS) on the westbound lane of Frame 2. The welder was observed utilizing WPS-F-1SMAW drawing 135 Amps with a 5/32" electrode and completed the work on a subsequent observation while monitoring quality. This QA Inspector observed QC perform MT testing and noted that no indications were observed.

This QA Inspector randomly observed ABF welder Lin E Yun #9344 performing SMAW on the impact damaged area of "A" deck located at 9E PP76. The welder was instructed by ABF personnel to perform the work and was

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performed in the absence of approval from engineering staff. The interpass temperatures were monitored and recorded at below 450°F between passes. This QA Inspector noted that the welder completed the work on this date and a TL-15 was generated.

This QA observed QC Inspector William Sherwood and Salvador Merino performing welding parameter checks such as voltage, amps, electrodes and preheats throughout the day. This QA also observed QC Inspector's John Hays 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:

This QA Inspector contacted ASMR Parinaz Aghili concerning the weld repair prior to engineer approval and generated a TL-15.

## 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.

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

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