

**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-028408**Date Inspected:** 20-Sep-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** See 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:** OBG**Summary of Items Observed:**

Quality Assurance Inspector (QA) Fritz Belford 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:

**OBG 12W**

This QA observed the following welders working in OBG 12W at various locations:

Authorized welder Jin Quan Huang #9340:

Welder Jin Quan Huang was observed grinding on weld 12W W2.1-A1 from the underside removing Visual Testing (VT) rejects that were noted earlier when the weld was ground flush in preparation for Ultrasonic Testing Shear Wave (UTSW). The welder was observed utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D15-1001-R and preheating the weld to 125 degrees Fahrenheit prior to welding. All other welding parameters appear to be in compliance with the WPS noted above.

Authorized welder Guo Wu Chen #1556:

Welder Guo Wu Chen was observed grinding on weld 12W W2.1-A1 from the underside removing Visual Testing (VT) rejects that were noted earlier when the weld was ground flush in preparation for Ultrasonic Testing Shear Wave (UTSW). The welder was observed utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D15-1001-R and preheating the weld to 125 degrees Fahrenheit prior to welding. All other welding parameters appear to be in compliance with the WPS noted above.

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Authorized welder Eric Sparks #3040:

Welder Foreman Eric Sparks was observed performing welding repairs and grinding on weld 12W W2.1-A1 at Y locations 1420 and 1800. Both excavations were excavated to 12mm deep. The welder was then observed utilizing Caltrans approved Welding Procedure Specification's (WPS) ABF-WPS-D15-1001-R to fill the excavations up. The weld was preheated to 125 degrees Fahrenheit prior to welding. Welding parameters observed appears to be in compliance to the WPS noted above. The repaired areas were areas rejected by Ultrasonic Testing Shear Wave (UTSW). The Ultrasonic Testing Shear Wave (UTSW) inspection for the weld was in process during the weld repairs.

This QA randomly observed QC Inspector Andrew Keech performing Magnetic Particle Testing (MPT) and Ultrasonic Testing Shear Wave (UTSW) on weld 12W W2.1-A1. Also noted with him performing Ultrasonic Testing Shear Wave (UTSW) on the weld were QC Inspectors Harry Schein and Jesus Cayabyab QC Inspector Patrick Swain was observed working closely with welder Eric Sparks on repairing the rejects before being assigned elsewhere.

### Magnetic Particle Testing

This QA performed Magnetic Particle Testing (MT) on the following welds:

12W PP116.5 W2.1-PS3:

- 100% Final MT (100mm, MT Accept.)

### Ultrasonic Testing Shear Wave

This QA performed Ultrasonic Testing Shear Wave (UTSW) on the following weld:

12W PP116 W2.1-PS3:

- (100% Final UT, 100mm x 20mm Thick, UT Accept.)

12W PP116.5 W2.1- PS3:

- (100% Final UT, 100mm x 20mm Thick, UT Accept.)

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



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# WELDING INSPECTION REPORT

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## Summary of Conversations:

Conversations relevant to work performed on this date.

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

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