

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-029023**Date Inspected:** 22-Jan-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:** 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:

Welder Chris Bruce #8901:

Welder was observed performing weld repairs on excavations on Electro Slag Weld ESW W-043 "V" face B; on indications rejected with Ultrasonic Testing Shear Wave and excavated at Y 9490 & 9600. After completion of the welding at face B the welder was observed relocating to face A to weld the excavations located at Y 8630 and 8810. Welder was observed preheating the weld to 300 degrees Fahrenheit prior to any welding at faces A & B, utilizing Welding Procedure Specification (WPS) ABF-WPS-D15-1000-Repair Rev.3 for Shield Metal Arc Welding (SMAW). Welding parameters were verified by QC Inspector William Sherwood throughout the day and appear to be in compliance with the WPS noted above. See details below.

Weld ESW W-043 V:

Fc B, Y location: 9490 & 9600, Combined Excavation: 260 x 50 x 50, RWR: 201301-032 & 033.

Fc A, Y location: 8630, Excavation: 130 x 30 x 30, RWR: 201301-030.

Fc A, Y location: 8810, Excavation: 130 x 45 x 45, RWR: 201301-031.

Welder Eric Sparks #3040:

Welder was observed performing Carbon Arc Gouging (CAG) on Electro Slag Weld ESW S-043 "T" at Fc B, excavating Y locations 8435, 8500 & 8700 as per Request for Weld Repair or RWR 201301-034 thru 036. The

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weld was preheated to 300 degrees Fahrenheit prior to any carbon arc gouging of the weld. QC Inspector Tony Sherwood was present before the excavation of the weld ensuring proper preheat was applied.

After carbon arc gouging of Ultrasonic Testing Shear Wave rejects, the welder was observed relocating to weld ESW E-043 Q at Fc B to weld filled the 1025 x 30 x 20 deep excavation at Y location 8750. The weld was preheated to 300 degrees Fahrenheit with the Miller Pro Heat induction blankets prior to welding. Welder was observed utilizing Welding Procedure Specification (WPS) ABF-WPS-D15-1000-Repair Rev.3 for Shield Metal Arc Welding (SMAW) as per Request for Weld Repair or RWR 201301-038. Welding parameters as verified by QC Inspector William Sherwood throughout the day and appear to be in compliance with the WPS noted above.

Welder James Zhen #6001:

Welder was observed excavating weld ESW E-045 "F" in 1mm increments at Y location 9620. Each 1mm excavation was achieved with grinder and observed Magnetic Particle Tested (MPT) and photographed by QC Inspector Steve Jensen or William Sherwood as work scope allows. A 2mm indication was noted at a depth of 30mm and was ground out at 32mm deep. Excavation will continue until a depth of 40mm has been reached. Welder was observed grinding through the whole shift.

Non-Destructive Testing (NDT)

This QA performed non-destructive testing on the following:

Weld ESW E-045 "F" (Fc A) :

- o Y 9620, 1mm Incremental Excavation from 22mm to 30mm deep (MPT Reject).

TL-6028 was not required for this MT.

The completed and accepted work observed at this location appeared to be in compliance with the contract specifications.

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



Summary of Conversations:

Conversations this day as required for scope of work.

Comments

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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.

Inspected By:	Belford,Fritz	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer
