

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000398**Date Inspected:** 31-Aug-2007**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:** 1530**Location:** Benicia, CA**CWI Name:** Michael Johnson**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:** Procedure Qualification Record (PQR) Test**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector observed the fourth attempt for the test plate assembly identified as ABF-PQR-001-1C. The QA Inspector observed that (9) weld passes of self shielding flux cored arc welding (FCAW-S) have been deposited onto 760 mm long set of plates. This PQR was started and completed on this date and welded in the 1G position. It is noted that the root pass was deposited by hand and the (8) sequential weld passes were deposited utilizing the Bug-O welding machine model number MPD-1000 device. All weld passes were made utilizing Miller Dimension 652 welding power source in combination with a Miller Suitcase 12RC 24V wire feeder.

The welder used .072 inch diameter (1.8 millimeter) Lincoln Innershield NR-232 E71T-8 FCAW-S. Smith-Emery Company Quality Control (QC) Representative Mr. Michael Johnson monitored preheat and interpass temperatures, voltage, amperage and travel speed. Mr. Johnson monitored these welding variables using Fluke meters identified as 189 and 337, an infrared thermal measuring device to check temperatures and a stop watch to verify travel speed.

The QA Inspector observed the average of the (9) weld passes deposited on the completed PQR plate mentioned above at 23.1 volts, 346.9 amps and the travel speed of 188.1 mm/minute and an average heat input of 2.56kJ/mm.

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Summary of Conversations:

The QA Inspector notified the QC Inspector of these indications and his response was "these chicken scratch indications are surface and will be ground out before the PQR test plate is shipped".

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	White,Danny	Quality Assurance Inspector
Reviewed By:	Mertz,Robert	QA Reviewer
