

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-000362**Date Inspected:** 14-Aug-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**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:**

Caltrans Quality Assurance (QA) Inspector Danny C. White (B89) is present at the Ironworkers Apprenticeship Training Facility as requested by American Bridge/Flour (ABF) for the purpose of witnessing Procedure Qualification Record (PQR) tests. On this date, the QA Inspector observed the following personnel present: Smith-Emery Company Quality Control (QC) Representative Certified Welding Inspector (CWI) Mr. Michael Johnson, ABF Representatives Mr. Tommy Gibson, Mr. Rick Clayborn and welder Mr. Dan Gordon.

The QA Inspector observed that ABF and the ESAB Representative reviewed the previously rejected Radiographic Testing (RT) for PQR test plate known as ABF-PQR-011-1B and decided to remove a portion of the backing bar for informational purposes. ABF informed the QA Inspector that they believe the rejectable indications detected in the RT film could be in the backup bar. Mr. Johnson and Mr. Gibson used the original RT film to locate the indication on the back-side of the PQR plate after the backing bar was removed then used a yellow paint pen to transfer the indications marked on the RT film onto the back of the PQR plate prior to informational RT. This PQR plate was shipped for informational RT. See photo below for additional information.

The QA Inspector observed the root pass on (3) non-PQR test plates were welded and the backing bar was removed by Carbon Arc Cutting (CAC). After removal of the backing bar, ABF examined the root and the fusion of the weld with the backing bar. ABF informed the QA Inspector that they believe that they have the correct parameters and technique to proceed with the next PQR test plate.

The fifth attempt to weld PQR test plate known as ABF-PQR-010-1D. Mr. Johnson monitored welding amperage, voltage and travel speed parameters. The welders are using .072 inch diameter (1.8mm) ESAB Coreshield

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

(FCAW-S) process and utilizing a Bug-O Systems mechanical device that travels on a magnetic track. Welder Dan Gordon deposited a total of (10) weld passes onto this PQR test plate. For specific welding parameters recorded during this PQR see Caltrans Welding Witness Report, TL-6032 generated on this date.



Summary of Conversations:

The QA Inspector was informed that PQR plates known as ABF-PQR-001-D, ABF-PQR-002-1D, ABF-PQR-016-2, ABF-PQR-017-1, ABF-PQR-021-1C, ABF-PQR-022-2A, ABF-PQR-026-1 and ABF-PQR-026-2 have been sent for destructive mechanical testing.

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
