

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 #: 69.21**WELDING WITNESS REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WWR-000145**Date Inspected:** 10-Mar-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**Witness:** **Procedure Qualification Record**
Welding **NDT****Welder Qualification** **Fracture Critical**
Mechanical Testing, describe: Macroetch Test**Index Lot #:** B71-003-07a**Witness Lot #:** B71-010-07**Bridge No:** 34-0006**Component:** Bid: 52, 55 Tower & Girder**Welder:** Jiang Xiao Hu**ID #:** N/A**Joint Description:** Figure 2.3 Fillet weld**WPS ID #:** PWPS-B-T-2132-1 **N/A****Base Metal:** ASTM A709-50-F-2**PQR ID #:** N/A **N/A****Thickness:** 26 mm**Process:** FCAW-G **N/A****Electrode Spec/Class:** TWE-711**Positions:** 2-F **N/A****Backing Material:** N/A**CWI:** Liu Liu **N/A****Average Amps:****AWS Code:** AWS D1.5 2002 **N/A****Average Volts:****Applicable Sec:** 5.10.3 **N/A****Travel Speed:****Heat Input:** **N/A****Preheat:****N/A****Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector was present as requested to observe fillet welds macroetch test for Procedure Qualification Record (PQR) HP200713. This test specimen was welded with the Flux Core Arc Welding Gas (FCAW-G) process with the E71T-1 TWE-711 1.4 mm diameter of the electrode, in the 2F (horizontal) position. The test was performed per the AWS D1.5, Section 5.10.3 requirements. After the QA inspector performed visual inspection on the multiple fillet passes for PQR HP 200713, the QA inspector observed that welds were not in compliance with the Contract documents.

Summary of Conversations:

The QA inspector had a conversation with QA inspector Hu Gang. Mr. Hu relayed to the QA inspector that on PQR HP 200713, test specimens sides 1A, 1B and 2B (multiple passes) failed because the root of the tee joint was not fuse. The QA inspector concurred with Mr. Hu.

is in general conformance with the contract requirements.

Observed welding, testing or results:

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is not in conformance with the contract requirements.

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:	Acuna, Alfredo	Quality Assurance Inspector
Reviewed By:	McClary, David	QA Reviewer
