

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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000069**Date Inspected:** 05-Dec-2006**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Huang Wei**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:** N/A**Summary of Items Observed:**

Office of Structural Materials Quality Assurance Inspector (QA), David McClary observed quality control functions related to procedure qualification (PQR) testing at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

The QA Inspector observed welding of a Procedure Qualification (PQR) test plate identified as HP-2006119-2 (3rd test). The test was conducted using Gas Metal Arc Welding (GMAW), Supertech SM-70, electrode in the 1G (flat) position to AWS D1.5, Section 5.13 (Production Procedure). ZPMC Quality Control (QC) observed micro-porosity in the ninth pass, which was subsequently removed by. The QA Inspector observed ZPMC Quality Control (QC) recording the essential variable (amps, volts, travel speed) for each pass and randomly verified the parameters using an Fluke® amperage / voltage meter and a stopwatch. The welding appeared to comply with the contract documents. See TL-6032 by QA Inspector Mark Wright for additional details.

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Summary of Conversations:

ZPMC Quality Control (QC) Mr. Lu Hua informed the QA Inspector that the Radiographic Testing (RT) film for the 1G FCAW PQR, 3rd test, was rejected by ZPMC Quality Control for lack of fusion. ZPMC was backgouging into the PQR plate to determine the depth of the lack of fusion.

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: McClary,David

Quality Assurance Inspector

Reviewed By: Lowry,Patrick

QA Reviewer