

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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003509**Date Inspected:** 24-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2200**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**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 Fabrication**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

Orthotropic Box Girder (OBG) Fabrication:

QA Inspector Mr. Wu Ming Kai

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The QA Inspector completed visual and Ultrasonic (UT) inspection of the entire length of welds ESD1-SA268-5A/B and ESD1-SA268-6A/B to determine if they comply with AWS D1.5 requirements. ZPMC had previously performed 100% inspection of these two welds instead of 25% lengths of welds 3A, 4A, 7A, 8A, 9A and 17A. ZPMC is required to perform ultrasonic inspection of 25% of each CJP weld and the project specifications allow ZPMC to perform 100% inspection of one weld instead of four individual partial (25%) UT weld inspections. Items observed by the QA Inspector appear to comply with project specifications. See the TL6027 ultrasonic test report below for additional information.

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The QA Inspector completed visual and UT inspection of approx 50 % length of welds FB039-001-125, FB039-001-146, FB028-002-125 and FB028-002-148. Ultrasonic inspections conducted by this QA Inspector appear to comply with project specifications. The QA Inspector observed welds FB039-001-125 and FB028-002-125 have weld extension plates still attached to the end of both of these complete joint penetration welds. AWS D1.5 requires all run off plates to be removed prior to visual acceptance and final ultrasonic inspections. The QA Inspector informed ABF/Fluor Inspector Mr. Li Hanjie and ZPMC QC Inspector Mr. Wu Ming Kai ZPMC that the run off plates had not been removed and Mr. Kai said the weld extension plates will be removed and the welds will be reexamined. See the TL6027 ultrasonic test report and the photographs below for additional information.

ZPMC “Notification of witness inspection” document # 00721 dated 7-24-2008 states the above listed welds along with welds FB039-001-126 , FB039-001-127, FB028-002-126 and FB028-002-127 are to have been ultrasonically inspected today. The QA Inspector observed those four welds have been marked as “UT REJECT” by ZPMC ultrasonic inspection personnel. Since ZPMC has not accepted the ultrasonic inspections test results, the QA Inspector did not perform UT inspections of these welds.



Summary of Conversations:

See above.

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 Ady Velasco 13816942685, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
