

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-002530**Date Inspected:** 17-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**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:** Li Bing and 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:** See Below**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector, M. Paul Stovall, was present at Zhenhua Port Machinery Company (ZPMC) on Changxing Island, Shanghai, China for the purpose of monitoring Quality Control (QC) functions during the fabrication of the Self Anchored Suspension (SAS) and Orthotropic Box Girder (OBG) sections of the San Francisco/Oakland Bay Bridge.

Bay 3

This QA Inspector observed ZPMC welding personnel Liang Yanhai, ID # 048625 use the Flux Cored Arc Welding (FCAW) process to perform tack welding on WT stiffeners on Side Plate (SP) SP092-001. The work appeared to comply with WPS-B-P-2112-FCAW and the contract documents.

This QA Inspector observed ZPMC welding personnel He Yumei; ID #048625 use the FCAW process to weld Complete Joint Penetration (CJP) splices on W21 X 57 material. The work appeared to comply with WPS-B-T-2231-B-U2-F (3G, 1G) and the contract documents.

This QA Inspector observed ZPMC welding personnel Gu Caihong; ID #853748 use the Submerged Arc Welding (SAW) process to weld Complete Joint Penetration (CJP) splice joining plates P1909A and P1909B. The work appeared to comply with the contract documents. The ZPMC Certified Welding Inspector (CWI) monitoring the welding was Xu Xian Ping.

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WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC welding personnel Jiang Jingteng, ID #046830 use the SAW process on CJP Tower Internal Diaphragm Plate weld joint number SSD1-SA335-1A. Approximately 50% of the weld was completed on side "A" prior to ZPMC personnel turning the plates over for back gouging on the "B" side. The QA Inspectors' shift ended prior to ZPMC starting the back gouging operation. The work observed appeared to comply with Welding Procedure Specification (WPS) WPS-T-3221-B-U3c-5-1 and the contract requirements.

This QA Inspector observed ZPMC welding personnel fit up and tack weld run off tabs on CJP Tower Internal Diaphragm Plate weld joint number ESD1-SA287-4A. The work appeared to comply with the contract documents. This QA Inspector observed ZPMC CWI Chen Sun monitoring the work at this and other locations.

This QA Inspector observed ZPMC personnel heat straightening various Internal Tower Diaphragm Plates with QC personnel monitoring the process.

Bay-7

This QA Inspector observed ZPMC welding personnel Wang Linjiang, ID #051356, Chen Chuanjong, ID #044824, and Wu Wanyong, ID #051242 use FCAW process to weld fillet welds attaching plate stiffeners and gusset plates to Floor Beams (FB) FB025-014, FB018-02, FB003-08, FB003-07, FB008-02, and FB003-13. The work observed appeared to comply with Welding Procedure Specification (WPS) WPS-B-T-2132-3 and the contract documents. This QA Inspector observed that QC personnel were present to monitor the welding and this QA Inspector verified the WPS welding parameters as 286 amperes and 30.6 volts.

Bay 8

This QA Inspector observed ZPMC Certified Welding Inspector (CWI) Xu Bing monitor the preheating of Internal Tower Diaphragm Plate weld joint number NSD1-SA334-A/B-21 prior to welding personnel start the root pass weld.

Summary of Conversations:

The QA Inspector had no substantial conversations.

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:	Stovall,Paul	Quality Assurance Inspector
Reviewed By:	Hager,Craig	QA Reviewer
