

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-002421**Date Inspected:** 23-Apr-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:** Xu Xian Peng, Xu Le Feng**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 Zhenghua Port Machinery Company (ZPMC) on Changxing Island, Shanghai, China to monitor the Quality Control (QC) functions during the fabrication of the Self Anchored Suspension (SAS) section of the San Francisco/Oakland Bay Bridge.

OBG Preassembly Bay 2

The QA Inspector observed ZPMC personnel cut plate material for use on the SFOBB Tower.

OBG Preassembly Bay 3

The QA Inspector observed ZPMC welders Wang Zhonghua, ID #053753, Lv Peng, and Zhang Feng, ID #049769 fit and tack weld WT stiffeners onto Side Plates (SP) SP475-001, SP473-001, and SP525-001.

The QA Inspector observed ZPMC welder Li Zhaoqian, ID #048810 weld Complete Joint Penetration (CJP) welds on W21 X 57's that will later become WT stiffeners.

The QA Inspector observed ZPMC welder Fu Yanjie, ID #066268 back gouge and later weld the roots on SP094-001, SP148-001, SP361-001, SP121-001, and SP307-001.

The QA Inspector observed ZPMC personnel weld using the Submerged Arc Weld (SAW) process plates for SP094 and ZPMC welder Li Shaoqian, ID #053609 weld CJP welds on W21 x 57's.

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The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

OBG Preassembly Bay 4

The QA Inspector observed ZPMC personnel pre-heat and continuing to weld Diaphragm Plate weld numbers ESD1-SA268-16B and SSD1-SA276-1B (2B). This is a Submerged Arc Weld (SAW) and Welding Procedure Specification (WPS) WPS-B-T-3221-B-U3c-S-1 is used.

The QA Inspector observed ZPMC personnel fit and tack weld Internal Tower Diaphragm plate numbers P590 to SA268, this is weld number WSD1-SA268-16A (16B), P546 to SA27, and this is weld number NSD1-SA27-A/B-1A (1B).

The QA Inspector observed ZPMC personnel weld fill passes on Internal Tower Diaphragm Plate weld number ESD1-SA238-A/B-3A (4A). The QA Inspector verified the WPS parameters as 602 amperes (amps), 30.3 volts, and a travel speed of 515 mille-meters (mm) per minute.

The QA Inspector observed ZPMC personnel grind fillet welds on welded Side Plates and Bottom Plates and for ZPMC welder Dai Lu, ID #048659 to make minor weld repairs.

The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

OBG Preassembly Bay 7

The QA Inspector observed ZPMC personnel fit and tack weld edge plate stiffeners onto Floor Beams (FB) FB003-037, FB003-037, FB003-046, FB003-022, FB003-028, FB003-029, and FB003-030.

The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

OBG Preassembly Bay 8

The QA Inspector observed ZPMC welder Xu Pei Pei, ID #050223 using the SAW weld process on Diaphragm plate joint number ESD1-SA371-A/B-6A, at the 38-meter elevation approximately 80 percent full. The QA Inspector verified the WPS parameters on this piece as 602 amps and 30.8 volts and ZPMC welder Ma Ying, ID #045270, welded SAW passes between Shielded Metal Arc Weld (SMAW) tack welds at the root of ESD1-SA290-11A.

The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

Summary of Conversations:

The QA Inspector had no significant 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

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for your project.

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