

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017012**Date Inspected:** 16-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**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**Summary of Items Observed:**

CWI Inspectors: Mr. Lv Li Qing, Mr. Liu Yang

On this date CALTRANS OSM 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. This QA Inspector observed the following:

OBG Segment Trial Assembly

This QA Inspector observed ZPMC welder Mr. Wang Xiaomin, stencil 046709 used shielded metal arc welding procedure specification WPS-345-SMAW-1G(1F)-FCM-Repair to complete repairs of weld OBW10C-003 as directed on weld repair document B-WR15106. This weld repair document was issued to perform repairs of ultrasonic rejections in the butt weld between OBG segment 10BW and 10CW. This QA Inspector observed a welding current of approximately 185 amps, Mr. Wang Xiaomin appeared to be certified to make this weld and ZPMC QC is monitoring this welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yun Qiang, stencil 044504 used shielded metal arc welding procedure WPS-B-P-2214-TC-U4B-FCM-1 to make welds CA078-005. This weld joins the edge plates to the side plate at on the cross beam side of OBG segment 10BE. This QA Inspector observed a welding current of approximately 160 amps, Mr. Yun Qiang appeared to be certified to make this weld and the base material appears

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

to have been preheated with a torch. Items observed on this date appeared to generally comply with applicable contract documents. See the photograph below for additional information.

This QA Inspector observed ZPMC welder Mr. Lv Yongquan, stencil 500409 used shielded metal arc welding process to a weld temporary alignment plate to OGB segments 10CW and 11AW top deck plates. This QA Inspector measured a welding current of approximately 170 amps, the base material adjacent to this weld was preheated with a torch and Mr. Lv Yongquan appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Gao Fuchao, stencil 059773 used shielded metal arc welding process to weld temporary alignment plates to side and edge plates on the counterweight side of OGB segments 10CW and 11AW. This QA Inspector measured a welding current of approximately 140 amps, the base material adjacent to this weld was preheated with a torch and Gao Fuchao appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Liu Shuyin, stencil 059773 used flux cored welding process to weld temporary alignment plates to side and edge plates on the OGB segments 10CE and 11AE top deck plates. This QA Inspector observed Liu Shuyin appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.

Bay 10

This QA Inspector observed ZPMC welder Mr. Sun Guang Ping, stencil 050289 used shielded metal welding process to make repairs of groove weld SSD1-TL5-1B/F-20 between south tower lift 5 internal connection plates. ZPMC had issued weld repair document T-CWR685 due to ultrasonic rejections. This is the second repair of this weld location. This QA Inspector measured a welding current of approximately 150 amps. This QA Inspector observed the base material has been heated with an electric heating element and the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container that is warm to the touch. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Shen Yun Chun, stencil 500363 used shielded metal arc welding procedure WPS-B-P-2112 to make edge plate stiffener tack weld EP3029-001-003 and EP3029-001-004. This QA Inspector observed a welding current of approximately 180 amps, a torch was used to preheat the steel, Mr. Wang Qixiang appeared to be certified to perform this welding and QC inspectors are monitoring this welding. Items observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



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 Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

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