

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-009890**Date Inspected:** 14-Oct-2009**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 Fabrication**Summary of Items Observed:**

CWI Inspectors: Mr. Guy Yan Fei, Mr. Lv Li Qing, Mr. Li Yang, Mr. Shen Fu You

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 BAY 5

This QA Inspector observed ZPMC welder Mr. Si Gao Feng, stencil 204342, is using flux cored welding procedure WPS-B-T-2233-TC-U4C-F to make cantilever beam groove weld BK001-038-046. This QA Inspector observed a welding current of approximately 210 amps 25.3 volts and Mr. Si Gao Feng is certified to make this weld. ZPMC QC Inspector Mr. Wang Liang had previously recorded a welding current of 209 amps and 25.8 volts. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Shen Tianju, stencil 215083, is using shielded metal arc welding process to make repairs to flame cut notches on the edges of various traveler rail plates including 11TR1. This QA Inspector observed a welding current of approximately 140 amps. This QA Inspector observed Mr. Shen Tianju is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ZPMC welder Mr. Li Yuanzheng, stencil 217185, is using flux cored welding procedure WPS-B-T-2231-B-U2-F to make cross beam root pass weld CB202B-016-004 between deck plate DP203A and DP205A. This QA Inspector observed a welding current of approximately 230 amps and 27.5 volts. This QA Inspector observed Mr. Li Yuanzheng is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

OBG BAY 9

This QA Inspector performed random magnetic particle inspections of approximately 20 percent of the tack welds that attach closed ribs to deck panels DP3002A-001, DP3048A-001 and DP3007-001. These three deck panels are clamped to the convex shaped welding platforms that are adjacent to overhead welding gantry #2. Earlier in this shift ZPMC conducted a "Production Monitoring Test" using gantry #2 and if the testing results are satisfactory these deck panels are scheduled to be welded during the dayshift. These deck panel tack welds appear to have been previously MT inspected by ZPMC personnel and several of the welds appear to have been ground to eliminate MT indications which had been marked by ZPMC MT Inspectors. These inspections were performed on an informational basis and no TL-6028 Magnetic Particle Test Report has been issued to document these inspections.

OBG BAY 13

This QA Inspector observed ZPMC welder Mr. Tian Shanglong, stencil 50240 is using shielded metal welding process to tack weld temporary braces to anchor floor beam FB015-043 at OBG panel point PP102. This QA Inspector observed a welding current of approximately 170 amps and Mr. Tian Shanglong is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

OBG BAY 14

This QA Inspector observed ZPMC welder Mr. Xu Liguang, stencil 200114 has recently completed using shielded metal arc welding procedure WPS-B-P-2214-B-U2-FCM to make weld SSD19A-P079-134. This QA Inspector observed ZPMC QC Inspector Mr. Guo Xing Hui has recorded a welding current of 162 amps. This QA Inspector observed that Mr. Xu Liguang is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder stencil 215553 has recently completed using the shielded metal arc welding process WPS-B-P-2113-FCM-1 to make OBG weld SSD29-PP76.8-58 which connect angle braces to the tops of side panel T ribs. This QA Inspector observed ZPMC QC Inspector Mr. Guo Xing Hui has recorded a welding current of 166 amps. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Wang Lanying, stencil 045265 using submerged arc welding procedure specification WPS-B-T-2221-B-L2C-S-2 to make groove weld SEG071A-003. This QA Inspector observed a welding current of approximately 530 amps and 32.0 volts. Items observed on this date appeared to generally comply with applicable contract documents.

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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
