

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-013480**Date Inspected:** 11-Apr-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 Inspector: Mr. Lv Li Qing

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 14

This QA Inspector observed ZPMC welder Mr. Wu Wanyong, stencil 050242 has used flux cored welding procedure WPS-B-T-2233-TC-U4b-F to make OBG weld SEG3003D-141 and 142 at OBG segment 12CE. This QA Inspector observed ZPMC CWI Mr. Lv Li Qing has recorded a welding current of 213 amps and 26.2 volts. This QA Inspector observed that Mr. Wu Wanyong appears to be 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 has used flux cored welding procedure WPS-B-T-2233-TC-U4b-F to make OBG weld SEG3003B-149 and 150 at OBG segment 12CE. This QA Inspector observed ZPMC CWI Mr. Lv Li Qing has recorded a welding current of 212 amps and 26.3 volts. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Xie Jin Xia, stencil 048038 is using flux cored welding procedure

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WPS-B-T-2132 to make welds between OBG corner assembly weld CA305EE-069 through CA305EE-082. This QA Inspector measured a welding current of approximately 280 amps and 29.5 volts. This QA Inspector observed a torch was used to preheat the base material prior to welding and Ms. Xie Jin Xia appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Liu Ming, stencil 044790 is using flux cored welding procedure WPS-B-T-2132 to make OBG segment 12AE, deck plate DP3008-028 between diaphragm plates and deck plate DP3008-001. This deck plate weld is being made near the center of OBG Bay 14 and after the diaphragm welds are completed, this plate will be turned over then it will be installed at panel point 110. This QA Inspector observed a welding current of approximately 315 amps and 30.5 volts and the base material had been preheated with a torch. This QA Inspector observed that Mr. Liu Ming appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Tu Zhi Wu, stencil 214945 is using flux cored welding procedure WPS-B-T-2133 to make OBG segment 12AE, deck plate weld DP3008-200 between diaphragm plates and deck plate DP3008-001 "U" ribs. This deck plate weld is being made near the center of OBG Bay 14 and after the diaphragm welds are completed, this plate will be turned over then it will be installed at panel point 112. This QA Inspector observed a welding current of approximately 210 amps and 27.0 volts and the base material had been preheated with a torch. This QA Inspector observed that Mr. Tu Zhi Wu appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Chen Fenglian, stencil 206623 is using flux cored welding procedure WPS-B-T-2132 to make OBG segment 12AE, deck plate welds between diaphragm plates and deck plate DP3009-001. This deck plate weld is being made near the center of OBG Bay 14 and after the diaphragm welds are completed, this plate will be turned over then it will be installed at panel point 112.5. This QA Inspector observed a welding current of approximately 315 amps and 28.5 volts. This QA Inspector observed that Ms. Chen Fenglian appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Cheng Yueying, stencil 050977 is using flux cored welding procedure WPS-B-T-2132 to make OBG segment 12AE, deck plate welds DP3008-246 between diaphragm plates and deck plate DP3008-001. This deck plate weld is being made near the center of OBG Bay 14 and after the diaphragm welds are completed, this plate will be turned over then it will be installed at panel point 111.5. This QA Inspector observed a welding current of approximately 260 amps and 25.5 volts and the base material had been preheated with a torch. This QA Inspector observed that Mr. Cheng Yueying appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhang Yaobing, stencil 204730 has used flux cored welding procedure WPS-B-T-2231TC-U4b-F to make OBG segment 11DW welds SSD10-PP104-220 and 230. These welds are attaching a lifting bracket to the floor beam at panel point 104. This QA Inspector observed ZPMC QC has recorded a welding current of 312 amps and 30.6 volts. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. He Hanbi, stencil 202122 has used flux cored welding procedure

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WPS-B-T-2231TC-U4b-F to make OBG segment 11DW welds SSD10-PP104-240 and 241. These welds are attaching a lifting bracket to the floor beam at panel point 104. This QA Inspector observed ZPMC QC has recorded a welding current of 312 amps and 30.6 volts. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Changmin, stencil 047864 is using shielded metal arc welding process to complete OBG segment 10AW side plate to corner assembly overhead 4G weld repairs near panel point PP86. This observation was made near the end of the shift and no weld repair documentation was available. This QA Inspector observed a welding current of approximately 150 amps and the welding electrodes are being stored in a heated portable electrode storage oven. This QA Inspector observed that Mr. Wang Changmin appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.



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
