

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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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-011329**Date Inspected:** 22-Dec-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**Summary of Items Observed:**

CWI Inspectors: Mr. Liu Hua Jie, Mr. Zhu Zhong Hai, Mr. Liu Fa Wen

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. Wang Guilin, stencil 067275, is using flux cored welding procedure WPS-B-T-2232-TC-U5-F to make traveler rail weld 11TR2-018-014. This QA Inspector observed a welding current of approximately 320 amps 31.0 volts, Mr. Wang Guilin appears to be certified to make this weld and the base material was preheated with a torch prior to starting this weld.. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Ban Qiuyun, stencil 250353 is using flux cored welding procedure WPS-B-T-2232-TC-U5-F to make traveler rail weld 11TR2-018-014. This QA Inspector observed a welding current of approximately 300 amps and 32.0 volts, Ms. Ban Qiuyun appears to be certified to make this weld and the base material was preheated with a torch prior to starting 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. Pan Ben Yung, stencil 067601, is using flux cored welding procedure WPS-B-T-2232-TC-U5-F to make traveler rail weld 10TR1-009-005. This QA Inspector observed a welding current of approximately 285 amps and 32.0 volts and Mr. Pan Ben Yung appears to be 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 Ms. Li Jiao, stencil 049861 is using shielded metal arc welding procedure specification WPS-B-P-2211-B-U2-FCM to make tack weld SEG3001A-012 between bottom plate BP3001A and BP3002A. This QA Inspector observed a welding current of approximately 160 amps and Ms. Li Jiao appears to be certified to make this weld. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is hot to the touch and the base material was preheated with a torch prior to making the tack welds. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Gao Min, stencil 050988 is using flux cored welding procedure specification WPS-B-P-2133 to make weld DP322-001-044 between a deck plate and a diaphragm plate. This QA Inspector observed a welding current of approximately 230 amps, 27.0 volts and Ms. Gao Min appears to be certified to make this weld. This QA Inspector observed the base material was preheated with a torch prior to commencement of welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Wu Wanyong, stencil 050242 is using flux cored welding procedure specification WPS-B-P-2133 to make weld DP322-001-070 between a deck plate and a diaphragm plate. This QA Inspector observed a welding current of approximately 220 amps, 25.0 volts and Ms. Wu Wanyong appears to be certified to make this weld. This QA Inspector observed the base material was preheated with a torch prior to commencement of welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yang Changming, stencil 058242 has recently completed using shielded metal arc welding procedure specification WPS-345-SMAW-4G(4F)-Repair-1 to complete weld SEG061B-005-001. ZPMC QC Inspector Mr. Li Ming Yang informed this QA Inspector that this weld is being repaired as a result of an ultrasonic rejection. This QA Inspector observed the welding electrodes are being stored in a heated portable electrode storage oven and Mr. Yang Changming 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. Wang Changming, stencil 047864 is using shielded metal arc welding procedure specification WPS-345-SMAW-4G(4F)-Repair-1 to complete weld SEG061B-005-001. ZPMC QC Inspector Mr. Li Ming Yang informed this QA Inspector that this weld is being repaired as a result of an ultrasonic rejection. 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 and Mr. Wang Changming appears to be certified to make this weld. 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.

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<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
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<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer
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