

**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-008808**Date Inspected:** 21-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1845**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 715**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:** SFOBB Fabrication**Summary of Items Observed:**

CWI Inspectors: Mr. Sun Bo, 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 8**

This QA Inspector observed ZPMC welder Mr. Hu Xing Ping, stencil 049099, is using welding procedure WPS-B-P-2114-FCM-1 to make OBG Cross Beam flux cored tack weld CB202A-17. This QA Inspector measured a welding current of 175 amps, and ZPMC QC personnel have recorded that Mr. Hu Xing Ping has a welding current of 154 amps. Items observed on this date appeared to generally comply with applicable contract documents.

**OBG Bay 9**

This QA Inspector observed ZPMC welder Mr. Xiang Jie, stencil 59378 is using flux cored welding procedure WPS B-T-2232-TC-U5F to make internal stiffener to closed rib tack welds for OBG deck plate DP304-001. This QA Inspector observed the base material had been cleaned of oxides where the stiffener welds are to be installed. This QA Inspector measured a welding current of approximately 190 amps and Mr. Xiang Jie is certified to make

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## WELDING INSPECTION REPORT

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this weld. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

This QA Inspector observed ZPMC welder Mr. Song Yinshu, stencil 059421 is using flux cored welding procedure WPS-345-FCAW-2G(2F)-Repair-1 to make repairs to OBG deck plate DP321-001 closed rib welds. This QA Inspector observed a welding current of 250 amps, 29.2 volts. This QA Inspector observed that the base where Mr. Yinshu was preparing to add weld material to the existing weld surface has a light layer of rust oxide. This QA Inspector observed the other areas that Mr. Yinshu has been making weld repairs also appear to have light rust adjacent to the weld zone. This QA Inspector informed ZPMC CWI Mr. Sun Bo that Mr. Yinshu does not appear to have been precleaning or otherwise preparing the surfaces where he has been welding. Mr. Bo said he will have Mr. Yinshu obtain a wire brush and clean the surfaces prior to performing any additional welding. Items observed on this date appeared to generally comply with applicable contract documents.

### OBG Bay 13

This QA Inspector observed ZPMC welder Mr. Dong Chang Xi, stencil 070046 is using flux cored welding procedure WPS-B-P-2114-FCM-1 to make OBG deck plate weld DP313-001-008. The QA Inspector observed that ZPMC QC Inspector Mr. Tian Lei has recorded a welding current of 217 amps and 25.2 volts. Items observed on this date appeared to generally comply with applicable contract documents.

### OBG Bay 14

This QA Inspector observed ZPMC welder stencil 068753 is using flux cored welding procedure WPS-B-P-2114-FCM-1 to make OBG deck plate weld DP313-001-008. The QA Inspector observed that ZPMC QC Inspector Mr. Tian Lei has recorded a welding current of 217 amps and 25.2 volts. Items observed on this date appeared to generally comply with applicable contract documents.

The QA Inspector observed ZPMC welder Mr. Jiang Yong Sheng, stencil 045240 is using the flux cored process welding procedure WPS-B-T-2232-U4b-F to make OBG corner assembly weld CA571-004. This QA Inspector observed a welding current of approximately 310 amps, 32.0 volts and Mr. Jiang Yong Sheng is 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.

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

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