

**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-017010**Date Inspected:** 14-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:**

ZPMC 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 Segment Trial Assembly**

This QA Inspector observed ZPMC welder Mr. Wang Qixiang, stencil 062812 used shielded metal arc welding procedure WPS-B-P-2112 to make suspender bracket tack weld SB020-086-077. This suspender bracket is located on the bikepath side of OBG segment 10AE. This QA Inspector observed a welding current of approximately 180 amps, a torch was used to preheat the steel and Mr. Wang Qixiang appeared to be certified to perform this welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Xue Yuan stencil 202316 had used shielded metal arc welding procedure specification WPS-345-SMAW-2G(2F)-Repair to complete repairs of OBG segments 10BW and 10CW bottom plate "T" stiffener plate hold back welds near panel point PP092. ZPMC CWI Mr. Lv Li Qing informed this QA Inspector that these welds had been visually rejected. This QA Inspector observed the welding electrodes were being stored in a heated portable rod oven which was connected to an electric power cable and Mr. Xue Yuan

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appeared to be certified to make these welds.

This QA Inspector observed ZPMC welder Mr. Yun Qiang, stencil 044504 used shielded metal arc welding procedure WPS-345-SMAW-1G(1F)-Repair-1 to make repair weld OBE10B-001. This weld joins the side plate to the edge plates at OBG segments 10AE panel point PP088. ZPMC had issued weld repair document B-WR150033 to repair ultrasonic rejections. This QA Inspector observed a welding current of approximately 170 amps and the welding electrodes were stored in were stored in a heated portable electrode storage container. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder stencil 046320 used shielded metal arc welding procedure WPS-345-SMAW-3G(3F)-FCM-Repair-1 to make repair weld SEG060A-029. This weld joins the cross beam side plates between OBG segments 10AE and 10BE. ZPMC had issued weld repair document B-WR15058 to repair ultrasonic rejections. This QA Inspector observed a welding current of approximately 180 amps and the welding electrodes were stored in were stored in a heated portable electrode storage container. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Hua Linming, stencil 044515 recently used shielded metal arc welding process to weld temporary plates between OBG segment 10AW and cross beam 14 bottom plate stiffener plates. This QA Inspector observed Mr. Hua Linming 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. Xu Jian Wen, stencil 040378 recently used shielded metal arc welding process to weld temporary plates between OBG segment 10AW and cross beam 14 bottom plate stiffener plates. This QA Inspector observed Mr. Xu Jian Wen appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents. See the photograph below for additional information.



## 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

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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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