

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024473**Date Inspected:** 07-Jun-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Lu Hua Jie**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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Chang xing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress.

**FCAW Process:**

This QA Inspector observed ZPMC qualified welding personnel identified as 050977 Perform Flux Core Arc Welding (FCAW) on OBG Segment 13 AE+13BE. Joint identified as SA3032D-005, 007. ZPMC QC Identified as Wang Li Yang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-ESAB.

**Repair welding, SMAW Process:**

This QA Inspector observed ZPMC qualified welding personnel identified as 066326 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 14 West Deck panel to Edge panel. Joint identified as SEG3020\*-012. ZPMC QC Identified as Zhu Lin with Temporary welding repair report WRR-B-WR21150. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F) FCM-Repair-1.

**Repair welding, SMAW Process:**

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This QA Inspector observed ZPMC qualified welding personnel identified as 045246 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 13 AW+13BW. Joint identified as OBW13B-003, 001. ZPMC QC Identified as Zhu Lin with Critical welding repair report CWR-B-CWR3008. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F) FCM-Repair-1. For more information see below attached picture number 1.

### Repair welding, SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 037723 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 13 BE. Joint identified as EB3022-001-001, 002. ZPMC QC Identified as Zhu Lv Li Qing with Temporary welding repair report WRR-B-WR21200. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F) FCM-Repair-1.

### Repair welding, FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 055564 Perform Flux Core Arc Welding (FCAW) on OBG Segment 13BE. Joint identified as SEG3009V-031. ZPMC QC Identified as Lv Li Qing with Temporary welding repair report WRR-B-WR21213. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-FCAW-1G (1F) ESAB-Repair.

### Repair welding, FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 052696 Perform Flux Core Arc Welding (FCAW) on OBG Segment 13CE LD to BP. Joint identified as SEG3009K-118. ZPMC QC Identified as Wang Li Yang with Temporary welding repair report WRR-B-WR21199. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-FCAW-2G (2F) ESAB-Repair.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



### Summary of Conversations:

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Only general conversation was held between QA and QC concerning this project.

## **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: 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Gaikwad,Shailesh	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer

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