

**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-024391**Date Inspected:** 18-Apr-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. Geng Wei.**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 observed the following work in progress:

**OBG 14EAST****SMAW Process:**

This QA Inspector observed ZPMC qualified welding personnel identified as 501946 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 14East. Joint identified as DP3160-001-338. ZPMC QC Identified as Zhu Yuan Yuan. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS- WPS-B-P-2213-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 068091 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 14East. Joint identified as SEG3019S-287. ZPMC QC Identified as Zhu Yuan Yuan. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS- WPS-B-P-2211-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 067571 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 14East. Joint identified as SEG3019\*-007. ZPMC QC Identified as Zhu

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

---

Yuan Yuan. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 058087 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 14East. Joint identified as DP3161-001-303. ZPMC QC Identified as Zhu Yuan Yuan. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2213-Tc-U4b-FCM-1. For more information see attached picture number 1.

### FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 067079, 066733 Perform Flux Core Arc Welding (FCAW) on OBG Segment 14East. Joint identified as X3703-001-003, X3703-001-005. ZPMC QC Identified as Zhu Yuan Yuan. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-ESAB. For more information see attached picture number 2.

This QA Inspector observed ZPMC qualified welding personnel identified as 067877 Perform Flux Core Arc Welding (FCAW) on OBG Segment 14East. Joint identified as SEG3019Z-090. ZPMC QC Identified as Zhu Yuan Yuan. 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 044779 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 14East. Joint identified as SEG3019BB-111, 133. ZPMC QC Identified as Zhu Yuan Yuan with Temporary welding repair report WRR-B-WR20589. 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:

This QA Inspector observed ZPMC qualified welding personnel identified as 066422 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 14East. Joint identified as SEG3019P-194, 197. ZPMC QC Identified as Zhu Yuan Yuan with Temporary welding repair report WRR-B-WR20247. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-3G (3F)-FCM-Repair-1. For more information see attached picture number 3.

### Repair welding, SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 066418 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 14East. Joint identified as SEG3019P-209, 212. ZPMC QC Identified as Zhu Yuan Yuan with Temporary welding repair report WRR-B-WR20247. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-3G (3F)-FCM-Repair-1.

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

---

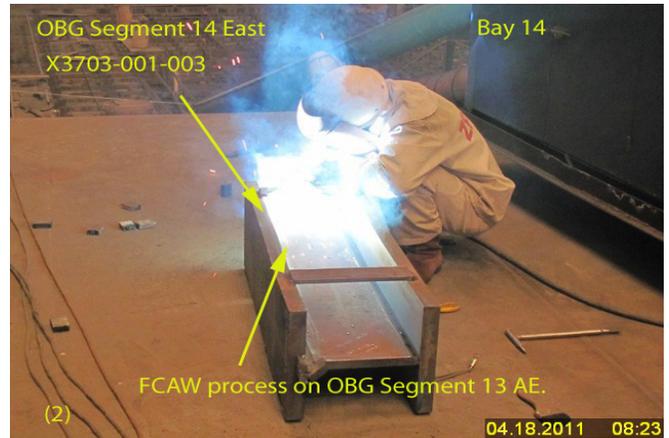
---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

---



## Summary of Conversations:

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.

---

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

---