

**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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001062**Date Inspected:** 15-Dec-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 730**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Xianping & Zhang Zhong**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:**

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Orthotropic Box Girders (OBG).

**Bay 3 OBG:**

The QA Inspector randomly observed ZPMC welder He Yumei ID Number 048625, utilizing the Flux Cored Arc Welding (FCAW) Process with ZPMC approved Weld Procedure Specification (WPS) WPS-B-T-2231-B-U2-F in the 1G position to weld lifting lugs to the edges of Side Plate Sub-Assemblies. The QA Inspector randomly observed ZPMC CWI Xu Xianping, monitoring weld parameters on Side Plate PL86C. The QA Inspector also randomly monitored weld parameters and documented them as follows: 298 amps and 32 volts. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed a ZPMC helper utilizing a grinder and a deburring tool to clean up butt splices on butt splices on W21 X 57 I-Beams to be used as T-Ribs. The attached photograph provides additional detail.

The QA Inspector randomly observed a ZPMC helper utilizing a grinder to blend fillet welds attaching I-Ribs to Side Plate Sub-Assembly PL67A at WJ's SP006-01-001 through SP006-01-010. The attached photograph provides additional detail.

**Bay 7 OBG:**

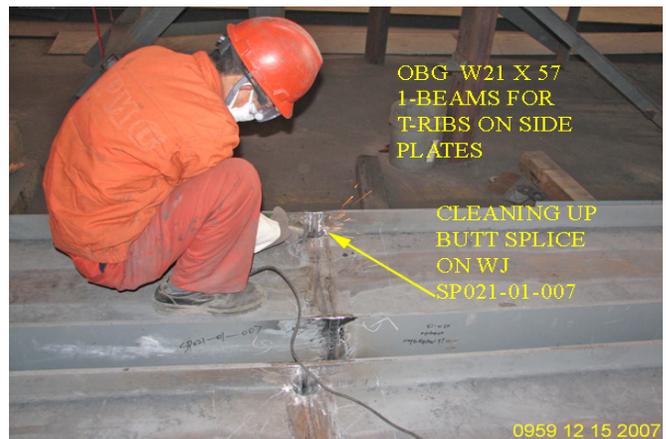
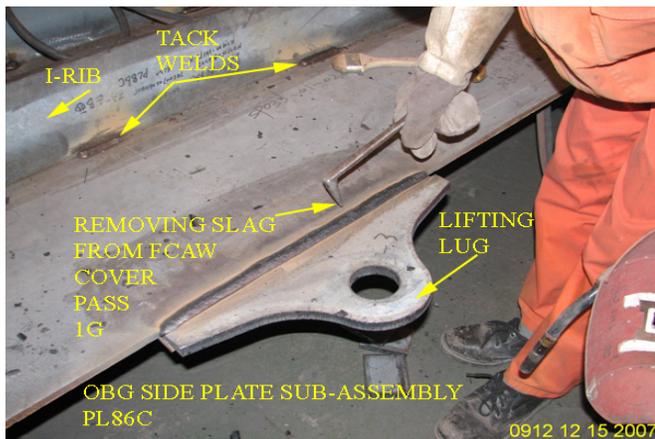
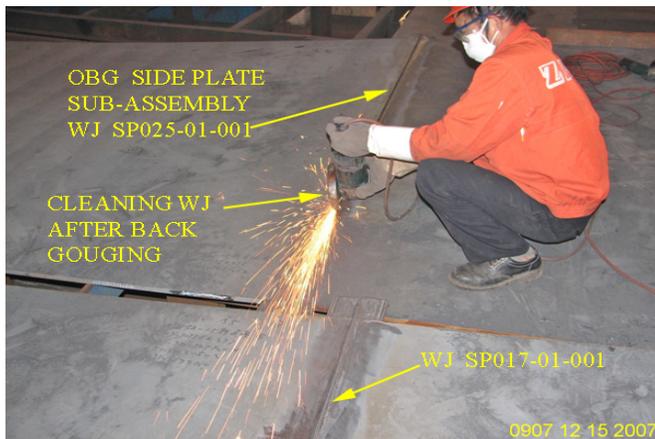
# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

The QA Inspector observed ZPMC personnel performing heat straightening operations with a rose bud per ZPMC Heat Straightening Request (HSR) HSR1(B)-081, on Floor Beam Sections X46C (T=30mm SPCM) + X46A (T=12mm) + X14 (T=12mm) at WJ FB007-05-021, 026. The QA Inspector observed that a 4.5 metric ton block had been placed along the entire length of WJFB008-06-023 on piece mark X14A (T=12mm) 30 mm from the edge of the WJ and a 1.5 metric ton block perpendicular to it on piece mark X46C.

The QA Inspector randomly observed a ZPMC helper utilizing a grinder to clean up torch cut notches on Floor Beam Sub-Assembly 46A-1 (T=12mm) + X46C (T=30mm) + X14A (T=12mm), which included WJ's FB007-01-021, 026. The attached photograph provides additional detail.

The QA Inspector observed ZPMC personnel performing a second heat straightening operation with a rose bud per ZPMC Heat Straightening Request (HSR) HSR1(B)-081, on Floor Beam Sections X46C (T=30mm SPCM) + X46A (T=12mm) + X14 (T=12mm) at WJ FB007-05-021, 026. The QA Inspector observed that a 4.5 metric ton block had been placed along the entire length of WJFB008-06-023 on plate X14A (T=12mm) 30 mm from the edge of the WJ and a 1.5 metric ton block perpendicular to it on PL X46C.



---

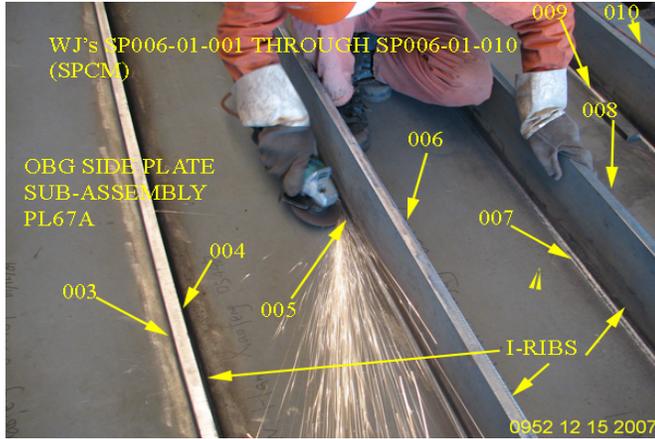
---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

---



## Summary of Conversations:

There were no relevant conversations.

## 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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Franco,Charlie	Quality Assurance Inspector
<b>Reviewed By:</b>	Cochran,Jim	QA Reviewer

---