

**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-003699**Date Inspected:** 05-Aug-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Chih-Ming**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 Tower and Orthotropic Box Girders (OBG).

**Bay 2 OBG Assembly:**

The QA Inspector randomly observed a ZPMC helper utilizing an angle grinder to prepare the bevel at the bottom of the split flange on the 30 mm Web Plates on Floor Beam Sub-Assembly FB008-06 at weld joint with the edge of the top flange on Longitudinal Diaphragm LD004-001. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Yang Chang Ming ID Number 058242, utilizing the Shielded Metal Arc Welding (SMAW) Process in the 2F (Horizontal Fillet) Position with ZPMC Weld Procedure Specification (WPS) WPS-B-P-2112, to tack weld U-Rib Diaphragm X1G-7 & 9 to Deck Plate DP067-001 during fit up. The QA Inspector randomly observed ZPMC QC monitoring weld parameters.

The QA Inspector randomly observed ZPMC welder Yang Chang Ming ID Number 058242, utilizing the SMAW Process in the 2F (Horizontal Fillet) Position with ZPMC WPS WPS-B-P-2112, to tack weld U-Rib Diaphragm X1G-9 to Deck Plate DP066-001 during fit up. The QA Inspector randomly observed ZPMC QC monitoring weld parameters.

The QA Inspector randomly observed ZPMC welder Yang Chang Ming ID Number 058242, utilizing the SMAW Process in the 2F (Horizontal Fillet) Position with ZPMC WPS WPS-B-P-2112, to tack weld U-Rib Diaphragm

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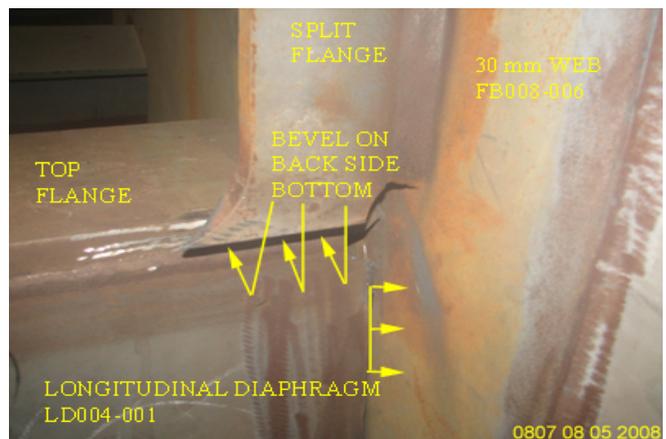
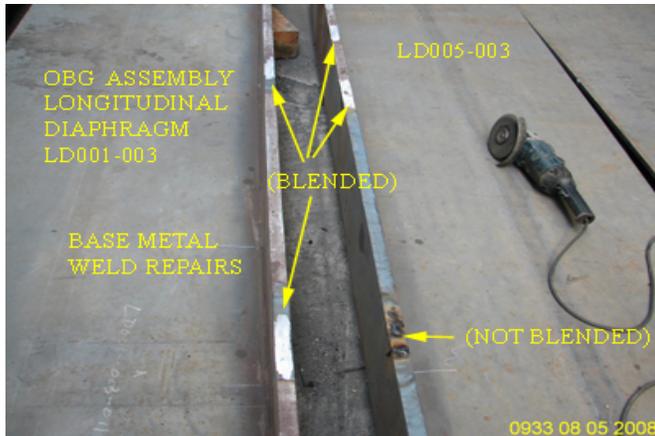
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X1B-8 to Deck Plate DP026-001 during fit up. The QA Inspector randomly observed ZPMC QC monitoring weld parameters.

The QA Inspector randomly observed ZPMC welder Yang Chang Ming ID Number 058242, utilizing the SMAW Process in the 2F (Horizontal Fillet) Position with ZPMC WPS WPS-B-P-2112, to tack weld U-Rib Diaphragm X1D-9 to Deck Plate DP027-001 during fit up. The QA Inspector randomly observed ZPMC QC monitoring weld parameters.

The QA Inspector randomly observed a helper utilizing an angle grinder to prepare the weld joint between the Floor Beam Diaphragm FB003-036 and the web plate on Floor Beam Sub-Assembly FB015-010. The attached photograph provides additional detail.

The QA Inspector randomly observed a ZPMC helper blending base metal weld repairs to the edges of the flanges on Longitudinal Diaphragms LD001-003, LD002-004, LD002-005, LD005-003 and LD007-004. The QA Inspector asked ZPMC QC what weld repair procedure was being used to perform the work. The response from ZPMC was an immediate stoppage of the work and removal of equipment and personnel from the area. The attached photographs provide additional detail.



## Summary of Conversations:

As noted in the above body of this report.

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## 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 Ady Velasco 13816942685, who represents the Office of Structural Materials for your project.

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