

**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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012780**Date Inspected:** 26-Mar-2010**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:** Li Yang**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:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar 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 Changxing Island in Shanghai, China. QA observed and/or found the following:

**TRIAL ASSEMBLY YARD****ULTRASONIC INSPECTION****OBG 9CE**

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10% of OBG components previously accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3 and Detection of Transverse Planar Discontinuities with Significant Flaw Height Dimension Procedure. Rejectable indications were found.

Weld identification numbers were

CA064-004 (9CE- DP to EP, BP side)

This QA Inspector performed conventional UT (Ultrasonic Testing) after ABF UT department for detection of planar transverse indication.

For more information refer the ABF/CT report dated on 03/26/2010.

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This QA Inspector randomly observed the following work in progress.

### OBG SEGMENT 7AE-7BE-7CE

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066258 performing Shielded Metal Arc Welding process for weld SP451-001-060 located on PCMK. Side panel "I" rib stiffener splice weld (cross beam side). ZPMC QC Mr. Wang Li Yang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-345-SAMW-3G (3F)-FCM-Repair. Weld repair report identified as B-WR11359.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 048659 performing Shielded Metal Arc Welding process for weld OBE7C -010 located on PCMK. Edge panel stiffener splice weld between OBG segment 7BE and 7CE (bike path side). ZPMC QC Mr. Li Yang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-345-SAMW-4G (4F)-FCM-Repair. Weld repair report identified as B-WR11363.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066361 performing Shielded Metal Arc Welding process for weld CA033-005 located on PCMK. Edge panel to side panel. ZPMC QC Mr. Li Yang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-345-SAMW-1G (1F)-FCM-Repair. Weld repair report identified as B-WR11353.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066258 performing Shielded Metal Arc Welding process for weld OBE7B-007 located on PCMK. Side panel splice weld between OBG segment 7BE and 7CE (cross beam side). ZPMC QC Mr. Wang Li Yang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-345-SAMW-3G (3F)-FCM-Repair.

This Quality Assurance (QA) Inspector observed ZPMC NDT Inspector performing Magnetic Particle Inspection for the hold back weld between "T" stiffener and side panel near the splice weld between OBG segment 7AE and 7BE (cross beam side).

This Quality Assurance (QA) Inspector observed ZPMC NDT Inspector performing Magnetic Particle Inspection for the weld between longitudinal diaphragm top flange to floor beam at PP49 (cross beam side).

This Quality Assurance (QA) Inspector observed ABF QA Inspector performing Magnetic Particle Inspection for the temporary attachment removed area near deck panel splice weld between OBG segment 7BE and 7CE.

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.

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## Summary of Conversations:

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 Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Utekar,Shrikant

Quality Assurance Inspector

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**Reviewed By:** Dawson,Paul

QA Reviewer