

**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-009785**Date Inspected:** 21-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Yumin and Li Jia**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) Joe Alaniz 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:

5BE + 5CE

FCAW welding performed on LD15E weld joints 005 and 006 located on SEG025B.

Welder is identified as Mr. Chen Zheng Hua (220067). ZPMC QC is identified as Xu Yumin.

The welding variables recorded by QC appeared to comply with WPS-345-FCAW-2G (2F)-Repair and repair procedure WR8063.

1AAW+1AW

SMAW build up welding performed on deck plate stiffeners located above bottom plate.

Welder is identified as Mr. Chen Zhenghua (220067). ZPMC QC is identified as Xu Yumin.

The welding variables recorded by QC appeared to comply with WPS-345-FCAW-4G (4F)-Repair and CWR778.

For further information of weld buildup work in progress of above noted stiffeners, please refer to repair procedure CWR778 (Rev 1) and RFI 1904.

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# WELDING INSPECTION REPORT

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SMAW repair welding performed on weld joint 003 excavation located at Y location 7260 off counter weight side plate on OBW1A. Welder is identified as Mr. HA Xiaofeng (054467). ZPMC QC is identified as Xu Yumin. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-Repair and CWR847.

5CW

SMAW repair welding on various side plate stiffeners located on counter weight side of segment at panel point 35. Welder is identified as Mr. Chen Zheng Hua (220067). ZPMC QC is identified as Xu Yumin. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

## NDT Observation

This QA Inspector observed ZPMC Ultra Sonic (UT) Technician performing UT on various locations in the trial assembly yard. Locations are as followed:

1. UT was performed and accepted on corner assembly open ribs on edge plate and side plate weld splice (5AW+5BW). Located is at panel point 32 counter weight side of segment.

This QA Inspector observed ZPMC Magnetic Particle (MT) Technician performing MT on various locations in the trial assembly yard. Locations are as followed:

1. Floor beam to side plate (cross beam side) and bottom plate weld joint at panel point 8.5 in segment 1AW. During the course of the noted ZPMC MT inspection, ZPMC Technician observed 1 transverse indication approximately 5mm in length. Y location of transverse indication is approximately 1340mm off edge plate. Engineer was not notified of the noted issue. Weld was repaired without an engineer approval or a CWR present at the time of work. See photo for more information. This QA Inspector issued an incident report on the above noted UT rejections.

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

## 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 (134-8257-0045), who represents the Office of Structural Materials for your project.

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

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