

**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-005175**Date Inspected:** 13-Jan-2009**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:** Shen Fuyou**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:** cross braces and OBG segments**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall 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:

OBG assembly bay 19

This QA observed ZPMC personnel tack welding cross beam diaphragm sub assembly identified on the material as mark# FB209A.

This QA also observed ZPMC personnel flame straightening unidentified plates measuring 70mm x 940mm x 3900mm. ZPMC QC identified as Mr. Zhou Cheng inform this QA that the part numbers were written on the far side of the plates and at this time he was unable to quote the part numbers. Mr. Zhou Cheng was present to monitor the process. The flame straightening appeared to be in general compliance to the contractors WQCP and the contract documents.

OBG outside assembly (OBG segment 3BW)

This QA observed ZPMC qualified welding personnel identified as Mr. Ni Lei Jiang (037723) performing weld repairs on Complete Joint Penetration (PJP) weld identified on the material as SEG015A-009. This QA reviewed the Critical Weld Repair (CWR) procedure identified as B-CWR258 Rev. 1 provided to QA by ZPMC QC CWI identified as Mr. Shen Fuyou and discovered that it had not yet been approved by the engineer. QA informed Mr.

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Fuyou and ABF representative Mr. Peter Shaw that an incident report would be issued concerning this non-conformance. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-4G (4F)-repair (FCM) as referenced on the CWR report.

OBG outside assembly (OBG segment 4BW)

This QA observed ZPMC qualified welding personnel identified as Mr. Luo Xuanping (067610) and Mr. Zang Wei (066413) perform SMAW 4G on weld joints identified as SSD10-PP026-128 and 129. ZPMC QC identified Mr. Wang Tai was present to monitor the welding process however, Mr. Wang Tai was unable to provide a copy of the applicable WPS for QA review. This QA has issued an incident report concerning the issue of QC not having WPS's available in the area of welding several days ago however, the contractor is continuing to weld without the proper documents available for QA review as stated in AWS D1.5 2002.

ABF representative identified as Mr. Peter Shaw informed this QA that he too had warned the contractor about the above mentioned issue and would issue an NCR for this non-compliance.

OBG outside assembly (OBG segment 5BW)

This QA observed ZPMC qualified welding personnel identified as 067572 and 066413 perform SMAW 4G weld repairs on weld joint identified as SEG023A-031. ZPMC QC identified Mr. Li Ming Yang was present to monitor the welding process however, Mr. Yang was unable to provide a copy of the applicable repair report and WPS for QA review.

This QA observed ZPMC personnel identified as Mr. He Hanqiang (201981) excavating 8 areas in weld joint identified as SEG-023A-041 in order to correct defects previously rejected by ZPMC QC Ultrasonic Testing (UT) technicians. ZPMC QC identified Mr. Wu Shigao was present to monitor the gouging process however, Mr. Shigao was unable to provide a copy of the applicable repair report and WPS for QA review. This QA has issued an incident report concerning the issue of QC not having WPS's available in the area of welding several days ago however, the contractor is continuing to weld without the proper documents available for QA review as stated in AWS D1.5 2002.

OBG outside assembly (OBG segment 5AW)

No work being performed by the contractor on this segment at the time this QA was present.

OBG outside assembly (OBG segment 5CW)

No work being performed by the contractor on this segment at the time this QA was present.

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

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## Summary of Conversations:

As mentioned above.

## 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.

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

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