

**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-002810**Date Inspected:** 03-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Chih-Ming / Chen Xi**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 deck, side and bottom panels**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 new assembly bay 2

QA performed 10% verification Ultrasonic Testing (UT) on the following floor beam weld joints: SSD19A-PP023-131 & 106, SSD19-PP023-135, 108 & 008. All welds examined appeared to be compliant with AWS D1.5 2002 and the contract documents. QA noted that ZPMC UT technicians have rejected the following welds on the same floor beam: SSD19-PP023-131, SSD19A-PP023-006 & 127.

QA observed ZPMC qualified welding personnel perform SAW on SP-032 to BP-024 joint# SEG-020A-031 following the guide lines of WPS# WPS-B-T-223(2)-1T. QC monitored the welding process continuously throughout the evening. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 32.5 Amps: 665 Travel speed: 600mm/min

QA observed ZPMC qualified welding personnel perform FCAW repair welding on joint# SEG-019A-002 following the guide lines of repair WPS# WPS-345-FCAW-1G-FCM-repair. QC has documented the repairs on repair report# B-WR384. QC monitored the process continuously until completion. The welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and

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were as follows:

Volts: 30 Amps: 280 Travel speed: 510mm/min

Other general observations include ZPMC personnel grinding side and bottom panels and weld bevel prep.

OBG bay 1

QA received written notification (“notification of witness inspection” document# 00478) on this date from ZPMC QC department concerning UT on U rib diaphragms for deck panels DP-551-001 and DP-556-001. Notification stated that UT would be conducted by ZPMC QC at 1930 hrs. QA arrived at approximately 1915 hrs. There was no QC in this bay at the time QA was present. U ribs for deck panel DP-556-001 could not be found and U ribs for DP-551-001 had been UT’ed and 5 of the welds rejected by ZPMC QC on 5/30/08. The rejected welds had been excavated but not yet repaired by welding. QA departed at approximately 1945 hrs.

**Summary of Conversations:**

Only general conversations were 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 Patrick Lowry (858)-344-2712, 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>	Cuellar,Robert	QA Reviewer

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