

**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-003234**Date Inspected:** 08-Jul-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

<b>CWI Name:</b>	Chen Chih-Ming/Huang Wen-Pan			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>

**Bridge No:** 34-0006**Component:** OBG side, bottom and deck 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 observed ZPMC Ultrasonic Testing (UT) technicians UT side to bottom panel joint# SEG-020A-019 and SEG-020-025 SP-080 to BP-022. QC observed what appeared to be weld cap indications from the far side weld cap. ZPMC QC CWI identified as Huang Wen-Pang informed QA that ZPMC personnel would dress the far side weld by grinding and QC would re-examine by UT on 7-9-08. NOTE: These are the same two welds that QC UT, ed yesterday and determined that more grinding was necessary on the back side weld.

QA observed ZPMC qualified welding personnel SAW SEG-027B-001 SP-094 to SP-121 following the guide lines of WPS-B-T-2221-B-L2c-S-1. QC monitored the welding process continuously throughout the evening. The welder ID and welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 30 Amps: 512 Travel speed: 656mm/min

Welder ID: 045265

QA observed ZPMC qualified welding personnel FCAW SEG-019-019 following the guide lines of

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WPS-B-T-2231-B-U2-F-1. QC monitored the welding process continuously throughout the evening. The welder ID and welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 29 Amps: 275 Travel speed: 515mm/min

Welder ID: 051348

QA observed ZPMC qualified welding personnel SMAW SP-069B to SP-070A following the guide lines of WPS-B-P-2213-B-U2. QC monitored the welding process continuously throughout the evening. The welder ID and welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 24 Amps: 160 Travel speed: 85mm/min

Welder ID: 066179

QA observed ZPMC qualified welding personnel SMAW OBG component LD5D to BP-007A following the guide lines of WPS-B-P-2112. QC monitored the welding process continuously throughout the evening. The welder ID and welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 24 Amps: 160 Travel speed: 85mm/min

Welder ID: 068918

QA performed 10% verification MT on the following side panel welds on OBG section 4BW: SP-049 welds 15 thru 28. All welds examined appeared to conform to AWS D1.5 2002 and the contract documents.



### 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
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<b>Reviewed By:</b>	Cuellar, Robert	QA Reviewer
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