

**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-005584**Date Inspected:** 24-Feb-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

<b>CWI Name:</b>	Hu Wei Oing	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes No N/A	
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes No N/A	
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes No N/A	
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes No N/A	
		<b>Delayed / Cancelled:</b>	Yes No N/A	
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG	

**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Erik Prue 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 Inspector observed and/or found the following:

Bay 2 lift 1AAE: QA Inspector randomly observed ZPMC qualified welders ID #045280, #045221, and #050316 welding plates to stiffener plates. Welders were observed welding in the 3G (vertical) position utilizing Flux Core Arc Welding (FCAW) process. QA Inspector observed the ZPMC QC Inspector Xiang Feng Tong verifying welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector with QC Inspector observed parameters taken for welder # 045280 as follows: preheat temperature to be at 120°C and measured the welding parameters to be 182 amps, 23.9 volts, a travel speed of 101 mm/min. Welding parameters verified by QA Inspector appear to be in general compliance with the approved WPS-B-T-2233 B-U2-F.

Bay 2 lift 1AW: QA Inspector randomly observed ZPMC qualified welder ID #048389 repair welding side plate 405A to bottom plate 313A Seg 003-007. Welder was observed welding in the 4G (overhead) position utilizing Shielded Metal Arc Welding (SMAW) process. QA Inspector observed the ZPMC QC CWI Hu Wei Oing verifying welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector with QC Inspector observed parameters taken as follows: preheat temperature to be at 65°C and measured the welding parameters to be 161 amps, 22 volts, and travel speed of 100 mm/min. Welding parameters verified by QA Inspector appear to be in general compliance with the approved WPS-345-SMAW-4G (4F) to WRR B-W2527. QA Inspector discussed with ZPMC CWI that welder was observed chipping slag (cleaning) in between weld passes but was not wire cleaning the welds. QA Inspector asked CWI to ensure that cleaning in

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# WELDING INSPECTION REPORT

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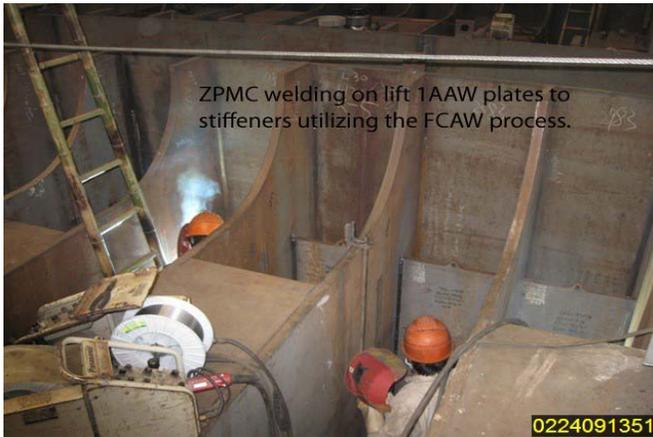
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between weld passes was done and inspected by ZPMC QC. ZPMC CWI informed QA Inspector that ZPMC QC Inspectors will inspect in between weld passes for cleanliness and the removal of slag inclusions.

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

## Summary of Conversations:

Conversations noted in items 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>	Prue,Erik	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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