

**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-007734**Date Inspected:** 06-Jul-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Liu Xiao Zhong, Wan Wen Zhong			<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>
<b>Bridge No:</b>	34-0006			<b>Component:</b>	Tower and OBG Components		

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

**OBG Trial Assembly Area**

This QA Inspector, George Goulet, randomly observed the following work in progress in the trial assembly area:

2AW/2BW joint – ZPMC workers installing U-rib lap splice inner and outer plates. The bolt sets being inserted and snug tightened appeared to come from Set #DHGM220021.

**Bay 11**

This QA Inspector, George Goulet, randomly observed the following work in progress in Bay 11:

SMAW welding of weld joints WSD1-FCSA4-2A/C-85A, 84A located on PCMK west tower, lift 4, skin C.

Welder was identified as 203793. ZPMC QC was identified as CWI Liu Xiao Zhong (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Cao Cheng, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-B-T-4211-Tc-U3b-2.

FCAW welding of weld joints NSD1-FASA4-2E/E-83B, 83A located on PCMK north tower, lift 4, skin A.

Welders were identified respectively as 066439, 070254. ZPMC QC was identified as QC1. Assisting QC1 at this

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location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Cao Cheng, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-B-T-2332-P4-F.

SAW welding of weld joints WSD1-FCSA4-2C/C-4B, 18B located on PCMK west tower, lift 4, skin C. Welders were identified as 042195, 040772. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Cao Cheng, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-B-T-2221-Tc-U3c-S-2.

Bay 10

This QA Inspector, George Goulet, randomly observed the following work in progress in Bay 10:

FCAW welding, using the gantry, of weld joints SSD1-FDSA4-1C/C-21, 20, 36, 35 located on PCMK south tower, lift 4, skin D. Welders were identified respectively as 057244, 057266, 050041, 201825. ZPMC QC was identified as Wan Wen Zhong (QC2). Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Li Peng Fei, who was not a CWI. The welding variables recorded by QC2 and QC2's assistant appeared to comply with WPS-B-T-2332-Tc-P5-F.

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

### Summary of Conversations:

This QA Inspector, George Goulet, asked QC monitoring the welding if all the welding variables observed by QC appeared to comply with the appropriate WPS, including the preheat requirements according to thickness of the thickest member being welded. QC showed this QA Inspector, George Goulet, that QC was carrying the proper temperature sticks to monitor the minimum and maximum preheat and interpass temperatures and replied that all QC observed did appear to comply.

### 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>	Goulet,George	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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