

**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-008266**Date Inspected:** 01-Aug-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>	Guo Peng, Li Lin, Du Zhi Qun	<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>	Tower 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.

Bay 11

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

SAW welding of weld joints ESD1-A67-1-145B and located on PCMK east tower, skirt beam plate. Welder was identified as 044558. ZPMC QC was identified as CWI Guo Peng (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Xu Jin Long, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-B-T-2221-B-L2c-S-2. Also at this location and appearing to be monitoring the welding operation was ABF Representative Li Shi You.

SMAW tack welding of weld joint WSD1-A504-A/C-185A located on west tower. Welder was identified as 203787. 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 Xu Jin Long, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-B-P-2211-B-U3b. Also present at this location and appearing to be monitoring the welding was ABF representative Luo Lai Quan.

FCAW welding of weld joint WSD1-FCSA4-2C/C-24, 25 located on west tower, lift 4, skin C. Welders were identified respectively as 068923, 070254. ZPMC QC was identified as CWI Li Lin (QC2). Assisting QC2 at this

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location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Mao Bin Bin, 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.

SAW welding of weld joint WSTL3-4B/K-81B located on PCMK west tower shaft, lift 3, skins A to E. Welders were identified as 041716, 052642, 040699, 047304. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2221-C-U2b-S-2.

SAW welding of weld joint ESTL3-4B/K-81B located on PCMK east tower shaft, lift 3, skins A to E. Welders were identified as 056975, 040634, 044560, 202756. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2221-C-U2b-S-2.

Heat straightening of WSD1-FASA4-2A/E located on PCMK west tower, lift 4. ZPMC QC was identified as CWI QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Chen Hongyun, who was not a CWI. The variables recorded by QC1 and QC1's assistant appeared to comply with HSR1(T)-9801.

Bay 10

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

FCAW welding of weld joint NSD1-FCSA4-1C/C-2, 3 located on north tower, lift 4, skin C. Welders were identified respectively as 040349, 047350. ZPMC QC was identified as CWI Du Zhi Qun (QC3). The welding variables recorded by QC2 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 each 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. Each QC monitoring the welding 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 Serge Sinevod, 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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