

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-012965**Date Inspected:** 10-Mar-2010**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**CWI Name:** See below**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:** Tower Components**Summary of Items Observed:**

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

Bay 11

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

Flame heat straightening of plate assembly marked as SD1-A23. QC was identified as ZPMC CWI Xu Le Feng (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Liu Dao Feng, who was a CAWI. ZPMC QC Liu Dao Feng presented document HSR1(T)-11058, dated 3/9/10 to this QA Inspector. The performance of heat straightening observed by this QA Inspector appeared to comply with the above noted heat straightening report.

SMAW welding of weld joint WD1-SA4-56-123M-1-1A located on PCMK west tower, lift 4, shear link. Welder was identified as 041271. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Liu Dao Feng, who was a CAWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-3211-TC-U5b-1. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Xie Yan.

SMAW welding of weld joints WD1-SA4-56-123M-3-1A located on PCMK west tower, lift 4, shear link. Welder was identified as 040667. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Liu Dao Feng, who was a CAWI. The welding

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variables recorded by QC1's assistant appeared to comply with WPS-B-T-3211-TC-U5b-1. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Xie Yan.

QC1 was not observed by this QA Inspector at either of the above locations or anywhere else in Bay 11.

## Bay 10

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

SAW welding of weld joint SSD1-TL5-1B-F-9A located outside PCMK south tower, lift 5, skins A/B corner. Welder was identified as 040252. QC was identified as ZPMC CWI Du Zhi Qun (QC2). The welding variables recorded by QC1 appeared to comply with WPS-B-T-3221-B-U3c-S-1. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Li Nan.

SMAW welding of weld joints SSD1-TL5-1B-F-17B, 39A located on PCMK south tower, lift 5, skins C/D corner. Welder was identified as 050289. QC was identified as QC2. The welding variables recorded by QC1 appeared to comply with WPS-B-T-3213-C-U2b-1. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Li Nan.

## Heavy Dock

This QA Inspector randomly observed the following work in progress on the Heavy Dock:

FCAW welding of weld joint SSD1-SA17F/G-54 located outside PCMK south tower, lift 1 base, skin C, shear plate stiffener to connection plate. Welder was identified as 053869. QC was identified as ZPMC CWI You Qi Guo (QC3). Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC He Gen, who was not a CWI. The welding variables recorded by QC3's assistant appeared to comply with WPS-B-T-2333-TC-P4-F.

FCAW welding of weld joint SSD1-SA17F/G-38 located outside PCMK south tower, lift 1 base, skin C, shear plate stiffener to connection plate. Welder was identified as 057244. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC He Gen, who was not a CWI. The welding variables recorded by QC3's assistant appeared to comply with WPS-B-T-2333-TC-P4-F.

The tower trial assembly elevator appeared to be dark and inoperative.

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

## Summary of Conversations:

No significant conversations.

## 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

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remedial efforts please contact Skyler Guest, 150-0042-2360, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Goulet,George	Quality Assurance Inspector
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<b>Reviewed By:</b>	Dawson,Paul	QA Reviewer
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