

**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-010868**Date Inspected:** 27-Dec-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**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 George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

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

FCAW welding of weld joint SSTL4-K/L-70, 74 located inside PCMK south tower, lift 4, skin C/D corner assembly at top of 143M double diaphragm. Welder was identified as 052075. ZPMC QC was identified as CWI Wang Chuan Qing (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Jiang Xiao Bo, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-2132 and WPS-B-T-2133. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Li Nan.

FCAW welding of weld joint SSTL4-K/L-1, 3 located inside PCMK south tower, lift 4, skin C/D corner assembly at bottom of 143M double diaphragm. Welder was identified as 052075. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Jiang Xiao Bo, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-2132 and WPS-B-T-2133. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Li Nan.

FCAW welding of weld joint SSTL4-F/L-73, 75 located inside PCMK south tower, lift 4, skin C/D corner

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assembly at top of 123M double diaphragm. Welder was identified as 054069. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2132 and WPS-B-T-2133.

FCAW welding of weld joint SSTL4-F/L-5, 3 located inside PCMK south tower, lift 4, skin C/D corner assembly at bottom of 123M double diaphragm. Welder was identified as 054069. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2132 and WPS-B-T-2133.

FCAW welding of weld joint SSTL4-F/L-73, 75 located inside PCMK south tower, lift 4, skin C/D corner assembly at top of 131M double diaphragm. Welder was identified as 053116. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2132 and WPS-B-T-2133.

FCAW welding of weld joint SSTL4-F/L-1, 3 located inside PCMK south tower, lift 4, skin C/D corner assembly at bottom of 131M double diaphragm. Welder was identified as 053116. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2132 and WPS-B-T-2133.

### Bay 11

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

SAW welding of weld joint WSTL4-2B/L-58A located outside PCMK west tower, lift 4, skin B to skin C, between approximately 114M and 121M elevations. Welder was identified as 040772. ZPMC QC was identified as CWI Liu Xiao Zhong (QC2). The welding variables recorded by QC2 appeared to comply with WPS-B-T-2221-C-U2b-S. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Wang Jiang Hua.

SAW welding of weld joint WSTL4-2B/L-58A located outside PCMK west tower, lift 4, skin B to skin C, between approximately 122M and 127M elevations. Welder was identified as 052195. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2221-C-U2b-S. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Wang Jiang Hua.

SAW welding of weld joint WSTL4-2B/L-58A located outside PCMK west tower, lift 4, skin B to skin C, between approximately 127M and 131.5M elevations. Welder was identified as 047304. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2221-C-U2b-S. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Wang Jiang hua.

SAW welding of weld joint WSTL4-2B/L-58A located outside PCMK west tower, lift 4, skin B to skin C, between approximately 131.5M and 136M elevations. Welder was identified as 041716. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2221-C-U2b-S. Also present at this location and appearing to be monitoring the welding operation was ABF Representative Wang Jiang hua.

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

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**Summary of Conversations:**

As noted 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 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>	Dawson,Paul	QA Reviewer

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