

**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-009821**Date Inspected:** 16-Oct-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:** Wang Chuan Ging, Li Lin**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/OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar 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 observed and/or found the following:

**BAY #10**

This QA Inspector randomly observed the following work in progress.

**SOUTH TOWER LIFT # 4**

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 050041 performing Flux Core Arc Welding process for the weld joint SSSL4-1I/L -135 located on PCMK South tower lift #4. ZPMC QC Mr. Wang Chung Ging monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4332-TC-P5-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 053869 performing Flux Core Arc Welding process for the weld joint SSSL4-1I/L -11 located on PCMK South tower lift #4. ZPMC QC Mr. Wang Chung Ging monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4332-TC-P5-F.

**BAY #11**

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## WELDING INSPECTION REPORT

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This QA Inspector randomly observed the following work in progress.

### EAST TOWER LIFT # 4

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 042218 performing Flux Core Arc Welding process for the weld joint ESTL4-2I/L -82 located on PCMK East tower lift #4. ZPMC QC Mr. Li Lin monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 049220 performing Flux Core Arc Welding process for the weld joint ESTL4-2K/L -80 located on PCMK East tower lift #4. ZPMC QC Mr. Li Lin monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

### TOWER ASSEMBLY/ JETTY

This QA Inspector randomly observed the following work in progress.

### SOUTH TOWER LIFT #1

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 040533 performing Flux Core Arc Welding process for the weld joint SSD1-A111B/H-13 located on PCMK South tower lift #1 skin E to base plate. ZPMC QC Mr. Zhou Yun monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2332-TC-P5-F.

### BAY #14

This QA Inspector randomly observed the following work in progress.

### OBG SEGMENT 9AW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066401 performing Flux Core Arc Welding process for the weld joint SEG049A-010 located on PCMK OBG segment 9AW. ZPMC QC Mr. Li Ming Yang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-B-U2-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066478 performing Shielded Metal Arc Welding process for the weld joint SSD13-PP72-005 located on PCMK OBG segment 9AW. ZPMC QC Mr. Li Ming Yang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2112-FCM-1.

### OBG SEGMENT 9DW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045246 performing Shielded Metal Arc Welding process for the weld joint SEG055A-15 located on PCMK OBG segment 9DW. ZPMC QC Mr. Li Ming Yang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-TC-U4B-FCM-1.

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# WELDING INSPECTION REPORT

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## OBG SEGMENT 9BW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 202122 performing Flux Core Arc Welding process for the weld joint SEG051B located on PCMK OBG segment 9BW. ZPMC QC Mr. Li Ming Yang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2232-TC-U4B-F.

BAY#09

## MAGNETIC PARTICLE INSPECTION

This Caltrans QA Inspector performed approximately 15% Magnetic Particle Testing verification of OBG Deck panel U rib tack welds after ZPMC initial MT inspection. ZPMC personnel have made repairs of areas found unacceptable. ZPMC has not performed the final MT of the repair areas. This Quality Assurance (QA) Inspector did not generated Magnetic particle Inspection (MT) report for above inspection. No relevant indications were found during this in-process inspection. The Following panels were tested

DP3013-001-001 through 06

DP3069-001-001 through 08

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

### Summary of Conversations:

No relevant 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 remedial efforts please contact Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

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

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