

**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-011959**Date Inspected:** 26-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** You Qi Guo.**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**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad 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 performed randomly Visual Testing of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as South Tower Lift 4 Corner joint skin A/B. The weld designations reviewed are as follows.

SSTL4-1B/L-4B

NDT Notification No: 005138.

This QA Inspector observed the following work in progress:

**BAY 11****Repair Welding:**

This QA Inspector observed ZPMC qualified welding personnel identified as 053316, 040723. Perform Flux Core Arc Welding (FCAW) on West Tower lift 4, B/C Corner joint. Joint identified as WSTL4-2B/L-58A/B, ZPMC

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QC Identified as Peng Guo, with welding repair report. WRR-T-WR3041. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-FCAW-2G (2F) Repair.

### Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 040667. Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 4, Base metal repair on skin A, B, C, D, E. ZPMC QC Identified as Fu Wei Min. with Welding repair report WRR-T-WR3036. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-3G(3F) Repair.

### Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 040614. Perform Shielded Metal Arc Welding (SMAW) on West Tower lift 2, Base metal repair on skin D, ZPMC CWI Identified as An Qing Xing. with Welding repair report WRR-T-WR3013. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-3G(3F) Repair.

This QA Inspector observed ZPMC qualified welding personnel identified as 058009. Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 4 back fill plate weld. Joint identified as ESTL4-2H/L-68, ZPMC QC Identified as Xu Jin Long. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-B-U2a-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040733. Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 4 back fill plate weld. Joint identified as ESTL4-2H/L-105, ZPMC QC Identified as Xu Jin Long. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-B-U2a-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040656. Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 5 Corner joint of skin C/D Corner joint. Joint identified as ESD1-TL5-2B/F-16B,39B, ZPMC QC Identified as Lijun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3212-TC-U4b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040699. Perform Submerged Arc Welding (SAW) on Strut web plate. Joint identified as ED1-STSA4-6-123M-1-1B, 2-1B, ND1-STSA4-6-123M-1-1B, 2-1B, ED1-STSA4-6-127M-1-1B, ZPMC QC Identified as Mao Bin Bin. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4221-B-U3c-S-1.

BAY 10

### Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 057258, 052930. Perform Shielded Metal Arc Welding (SMAW) on South Tower Lift 4 A/E Corner joint, Joint identified as SSTL4-1B/L-3A/B. ZPMC CWI Identified as You Qi Guo, with Critical welding repair report. CWR-T-CWR512 (Rev. 2). The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-2G (2F) Repair.

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This QA Inspector observed ZPMC qualified welding personnel identified as 040365. Perform Shielded Metal Arc Welding (SMAW) on North Tower Lift 4 Back fill plate welding. Joint identified as NSTL4-3K/L-86, near Diaphragm 143M top, ZPMC QC Identified as Wang Hao. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3212-B-U2a-2

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### 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 Skyler Guest phone: 15000422360, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Gaikwad,Shailesh	Quality Assurance Inspector
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<b>Reviewed By:</b>	Clifford,William	QA Reviewer
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