

**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-016514**Date Inspected:** 25-Aug-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

<b>CWI Name:</b>	Mr. Xu Le Feng		
<b>Inspected CWI report:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A

<b>CWI Present:</b>	Yes	No	
<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved WPS:</b>	Yes	No	N/A
<b>Delayed / Cancelled:</b>	Yes	No	N/A

**Bridge No:** 34-0006**Component:** Tower and Orthotropic Box Girder (OBG)**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:

This QA Inspector observed the following work in progress:

BAY 10, SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 053049, 050289, 052493, 052930 Perform Shielded Metal Arc Welding (SMAW) on South Tower lift 5 Grillage plate. Joint identified as SSD1-TL5-1B-F-20, 18. ZPMC QC Identified as Yuan Hai Gang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-Tc-U4c. For more information see below attached picture number 1.

This QA Inspector observed ZPMC qualified welding personnel identified as 066002, 066179, 067520, 066422 Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 5 Grillage plate. Joint identified as NSD1-TL5-3B-F-5, 10. ZPMC QC Identified as Yu Zhi Lai. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-Tc-U4c.

This QA Inspector observed ZPMC qualified welding personnel identified as 066163, 037997, 070006, 067993 Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 5 Grillage plate. Joint identified as NSD1-TL5-3B-F-16BA, 21A, ZPMC QC Identified as Yu Zhi Lai. The welding parameters as measured using

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QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-Tc-U5b.

### FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 053116, Perform Flux core Arc Welding (FCAW) on Tower façade seal angle plate, Joint identified as SD1-SFSA4-152-1~16. ZPMC QC Identified as Jiang Xian Bo. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132.

This QA Inspector observed ZPMC qualified welding personnel identified as 056364, 040582, Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 4 Skin A Mounting plate. Joint identified as NSD1-FASA4-1A/E-42, 50, 51, 52, 53, 46, 47, 48, 49. ZPMC QC Identified as Lijun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2112, 2113, 2114. For more information see below attached picture number 2.

### BAY 11: SMAW Process.

This QA Inspector observed ZPMC qualified welding personnel identified as 040614, 054460, 040655, 046769, Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 5 Grillage plate, Joint identified as ESD1-TL5-2B-F-6A, 4A. 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-3213-Tc-U5b.

This QA Inspector observed ZPMC qualified welding personnel identified as 041271, 040667, Perform Shielded Metal Arc Welding (SMAW) on West Tower lift 5 Grillage plate. Joint identified as WSD1-TL5-2B-F-17. 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-3213-Tc-U4c.

### SAW process

This QA Inspector observed ZPMC qualified welding personnel identified as 044550, Perform Submerged Arc Welding (SAW) on OBG lift 14 Bottom Plate. Joint identified as BP3092-001-037. ZPMC CWI Identified as Yu Dong Ping. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2221-B-U2c-S-2.

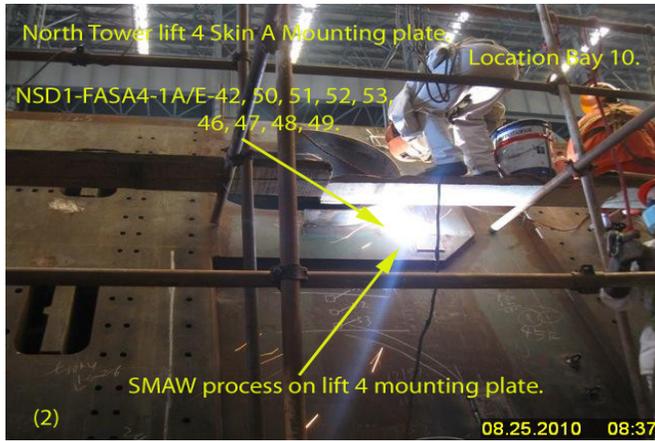
Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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## 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 Michael Ng Phone: 15921845703, who represents the Office of Structural Materials for your project.

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**Inspected By:** Gaikwad,Shailesh Quality Assurance Inspector

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**Reviewed By:** Clifford,William QA Reviewer