

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-012559**Date Inspected:** 21-Feb-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:** Du Zhi Qun**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 Magnetic Particle Testing (MT) of approximately 15% and randomly Visual Testing of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as South Tower lift 3 and 4 B/C, C/D Internal splice plate. The weld designations reviewed are as follows.

SSD1-SPSA4-15-1~2A/B, SSD1-SPSA4-16-1~2A/B,

NSD1-SPSA4-15-1~2A/B, NSD1-SPSA4-16-1~2A/B

NDT Notification No-005217

This QA Inspector observed the following work in progress:

BAY 10

Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 052930, Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 4 A/B corner joint. The weld identified as NSTL4-3B/L-4B, near 143M double Diaphragm, Y location is 800mm. ZPMC QC Identified as Liu Zhong An, with Critical welding repair

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report CWR-T CWR543. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-2G (2F) - Repair. For more information see attached photos.

Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 066236, Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 4 A/B corner joint. The weld identified as NSTL4-3B/L-4B, Y location is 5440mm. ZPMC QC Identified as Liu Zhong An, with Critical welding repair report CWR-T CWR543. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-2G (2F) - Repair.

Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 057258, Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 4 C/D corner joint. The weld identified as NSTL4-3B/L-1A, Y location is 10180mm. ZPMC QC Identified as Du Zhi Qun, With temporary welding repair report. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F) - Repair. For more information see attached photos.

Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 052930, Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 4 A/B corner joint. The weld identified as NSTL4-3B/L-4B, near 143M double Diaphragm, Y location is 300mm. ZPMC QC Identified as Liu Zhong An, with Temporary welding repair report TWR3042. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-2G (2F) - Repair.

This QA Inspector observed ZPMC qualified welding personnel identified as 050295, Perform Submerged Arc Welding (SAW) on South Tower lift 5 A/B corner joint. The weld identified as SSD1-TL5-1B-F-37A, ZPMC QC Identified as Jiang La Mai, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3221-B-U3c-S-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 053116, Perform Flux Core Arc Welding (FCAW) on Skirt Plate. The weld identified as SD1-A440E/E-37, ZPMC QC Identified as Sun Tian Liang, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2331-B-P3-F.

BAY 11

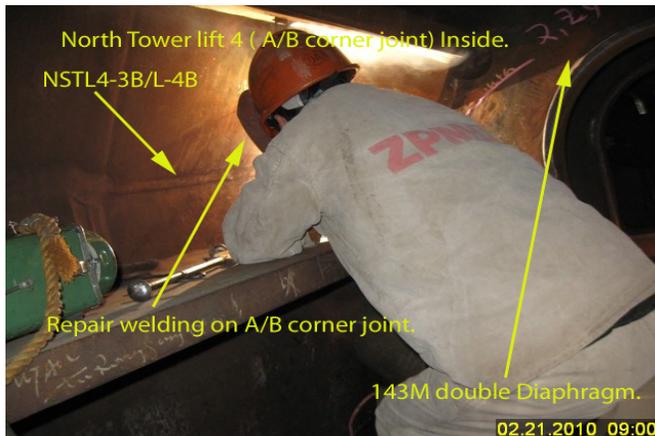
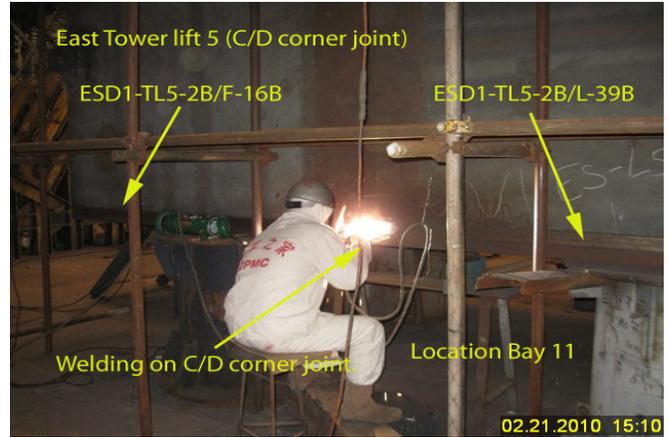
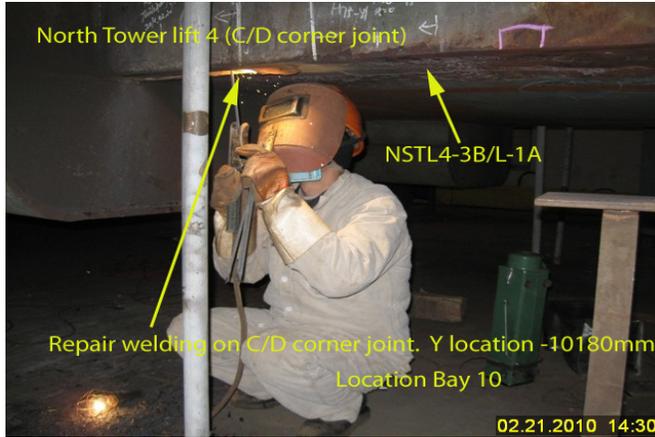
This QA Inspector observed ZPMC qualified welding personnel identified as 066361, Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 5 C/D corner joint. The weld identified as ESD1-TL5-2B-F-16B, 39B, ZPMC QC Identified as Lilin, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3212-C-U2. For more information see attached photos.

This QA Inspector observed ZPMC qualified welding personnel identified as 040699. Perform Submerged Arc Welding (SAW) on Web Flange Plate. Joint identified ND1-STSA4-10-119M-1-6B, ND1-STSA4-10-119M-2-6B, ZPMC CWI Identified as Lilin. 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.

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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.

Inspected By: Gaikwad,Shailesh

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer