

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-013258**Date Inspected:** 04-Apr-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:

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% 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 Tower Lift 4 Strut. The weld designations reviewed are as follows.

ED1-STSA4-6-143M-1, 2-2A/B ND1-STSA4-6-143M-1, 2-2A/B ED1-STSA4-6-143M-1-1A/B, 3A/B, 4A/B

ED1-STSA4-6-143M- 2-4A/B ND1-STSA4-6-143M-1, 2-4A/B
NDT Notification No-005472

This QA Inspector performed random Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% 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 4 D/E corner seam Fit lug 123M, 127M 131M, 135M, triangular diaphragm plate, and Man access plate. The weld designations reviewed are as follows.

SSTL4-1G/L-20, 92, SSTL4-1I/L-89, SSTL4-1H/L-24, 91
SSD1-FASA4-1C/E-5, 6, SSD1-FASA4-1A/E-15, 16

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119M Lower and Upper Diaphragm	SSTL4-1C/L-6, 91, 92
123M Lower and Upper Diaphragm	SSTL4-1F/L-18, 90
127M Lower and Upper Diaphragm	SSTL4-1G-18, 19, 93
131M Lower and Upper Diaphragm	SSTL4-1H/L-20, 89
135M Lower and Upper Diaphragm	SSTL4-1I/L-21, 87
139M Lower and Upper Diaphragm	SSTL4-1J/L-21, 88, 90
143M Lower and Upper Diaphragm	SSTL4-1K/L-21, 86, 91

NDT Notification No-005470

This QA Inspector performed random Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% 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 5 A/E corner seam. The weld designations reviewed are as follows.

SSD1-TL5-1B-F-3A/B,
SSD1-TL5-1B-F-36A/B
NDT Notification No-005473

This QA Inspector observed the following work in progress:

BAY 10

Repair Welding

This QA Inspector observed ZPMC qualified welding personnel identified as 500363. Perform Shielded Metal Arc Welding (SMAW) on North tower lift 4 B/C corner joint Diagonal stiffener. Joint identified as NSTL4-3D/L-53. ZPMC QC Identified as Deng Zhi Bing. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-3G (3F)-Repair. For more information see below attach photo.

This QA Inspector observed ZPMC qualified welding personnel identified as 255455. Perform Flux Core Arc Welding (FCAW) on North tower lift 4 A/E corner Back fill plate welding. Joint identified as NSTL4-3C/L-100. ZPMC QC Identified as Deng Zhi Bing, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 255455. Perform Flux Core Arc Welding (FCAW) on North tower lift 4 A/E corner Back fill plate welding. Joint identified as NSTL4-3C/L-103. ZPMC QC Identified as Deng Zhi Bing, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4332-Tc-P4-F-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 052075. Perform Flux Core Arc Welding (FCAW) on North tower lift 4 A/E corner Back fill plate welding. Joint identified as NSTL4-3F/L-31. ZPMC QC Identified as Deng Zhi Bing, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 052493. Perform Flux Core Arc Welding (FCAW) on Skirt Plate. Joint identified as SSD1-A434-B/D-23. ZPMC QC Identified as Jiang Xiang Bo, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with

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WPS-B-T-2132.

Repair Welding

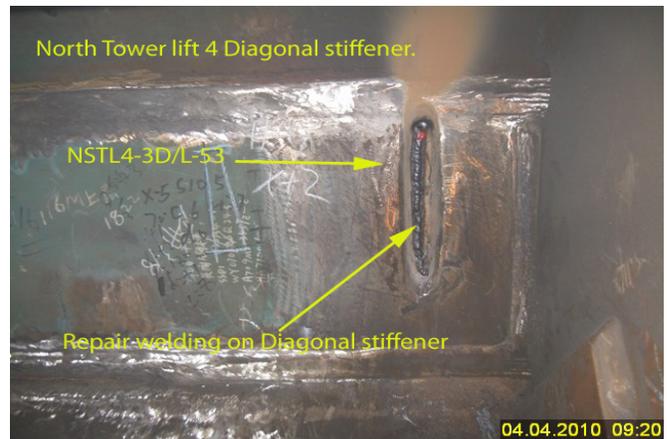
This QA Inspector observed ZPMC qualified welding personnel identified as 052493. Perform Shielded Metal Arc Welding (SMAW) on North tower lift 4 D/E corner joint. Joint identified as NSTL4-3B/L-2B. ZPMC QC Identified as Deng Zhi Bing. With Critical welding repair report CWR-T-CWR609. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F)-Repair.

During random Visual inspection This QA Inspector observed, ZPMC Magnetic Particle Testing (MT) inspector performing MT on North Tower lift 4 Skin C, base metal repair area and temporary attachment area. For more information see below attach photo.

BAY 11:

This QA Inspector observed ZPMC qualified welding personnel identified as 044550. Perform Submerged Arc Welding (SAW) on Tower strut flange plate. Joint identified as SD1-STSA4-5-143M-1-22, ZPMC QC Identified as Xu Jie, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4221-C-U3c-S-1.

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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Inspected By:	Gaikwad,Shailesh	Quality Assurance Inspector
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Reviewed By:	Clifford,William	QA Reviewer
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