

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017505**Date Inspected:** 30-Sep-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:** Mr. Xu Le Fung.**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 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:

BAY 10

This QA Inspector performed randomly 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 OBG Bike path plate. The weld designations reviewed are as follows.

8A- BK004A3-028-025, 026, BK004A7-028-228, 230, 068,
8C - BK004A3-028-051, 052, BK004A7-028-140, 142, 080,
10A - BK004A4-028-014, BK004A7-028-025, 158, 086,
BK4A-028-7A, 7B, 7C-BK004A7-028-222, 226, 214, 223, 216
BK4A-028-7P, 7R-BK004A5-028-016, 017, 019, 020, 036, 037, 040, 041
NDT Notification No-06795

BAY 12

This QA Inspector performed randomly Visual Inspection and Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL-

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6027 (UT) report for this date. The member is identified as OBG plate. The weld designations reviewed are as follows.

SA3084A-001, 010, 014, 017, 021, 025, 032
NDT Notification No-06811

This QA Inspector observed the following work in progress:

BAY 11

This QA Inspector observed ZPMC qualified welding personnel identified as 054460, 044541, Perform Shielded Metal Arc Welding (SMAW) on Lift 5 bracket stiffener. Joint identified as ND1-BRSA5-2-11A, 7A. 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-3213-Tc-U4b.

This QA Inspector observed ZPMC qualified welding personnel identified as 046769, 041271, Perform Shielded Metal Arc Welding (SMAW) on Lift 5 bracket stiffener. Joint identified as SD1-BRSA5-1-12A, 8A. 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-3213-Tc-U4b.

Ultrasonic Testing:

This QA Inspector observed ZPMC Ultrasonic Testing Inspector, performing UT on OBG Bike path plate. Joint identified as BK005A1-003-009.

BAY 10

SMAW Process Repair welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 500363, 057220 Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 5 Grillage plate. Joint identified as NSD1-TL5-3B/F-9. ZPMC QC Identified as Yu Zhi Lai with Temporary welding repair report WRR-T-WR3687. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-3G (3F) Repair.

SMAW Process Repair welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 057258 Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 5 Grillage plate. Joint identified as NSD1-TL5-3E/F-9A/B. ZPMC QC Identified as Yu Zhi Lai with Temporary welding repair report WRR-T-WR3686. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-3G (3F) Repair.

SMAW Process Repair welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 052930, 057258 Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 5 Grillage plate. Joint identified as NSD1-TL5-3F/F-20A/B, 13A/B. ZPMC QC Identified as Yu Zhi Lai with Temporary welding repair report WRR-T-WR3689, 3690. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-3G (3F) Repair.

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SMAW Process Repair welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 040582, 052930 Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 5 Grillage plate. Joint identified as NSD1-TL5-3B/F-5, 15. ZPMC QC Identified as Yu Zhi Lai with Temporary welding repair report WRR-T-WR3683, 3685. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-3G (3F) Repair. For more information see below attached picture number 1.

SMAW Process Repair welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 057258, 040582, Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 5 Grillage plate. Joint identified as NSD1-TL5-3E/F-10B, NSD1-TL5-3B/F-17A/B. ZPMC QC Identified as Yu Zhi Lai with Temporary welding repair report WRR-T-WR3248, 3681. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-3G (3F) Repair.

OBG Bike path stringer plate FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 057266, 054069, 057180, 053116, Perform Flux Core Arc Welding (FCAW) on OBG bike path stringer plate. Joint identified as BK004A4-032-066, 067. 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-2132.

This QA Inspector observed ZPMC qualified welding personnel identified as 057266, 054069, 057180, 053116, Perform Flux Core Arc Welding (FCAW) on OBG bike path stringer plate. Joint identified as BK004A4-032-040, 041, BK004A3-032-051, 052, BK004A4-032-014, 015. 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-2132.

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.

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