

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-018102**Date Inspected:** 09-Nov-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. Qiu Wen.**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:

NDT

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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 Tower lift 4 Splice plate of strut and OBG Bike path. The weld designations reviewed are as follows.

ND1-SA4-68-143M-3-1A/B,

BK004A1-021-001, 010, 005, 006, 004, 013, 008, 038

NDT Notification No-07291

This QA Inspector observed the following work in progress:

TOWER TRIAL ASSEMBLY:

Tower lift 4, SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 046769, Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 4 skin A Sub assembly. Joint identified as ESD1-FASA4-2B/F-27. ZPMC QC Identified as Sun Zi Wang. The welding parameters as measured using QC's calibrated instrument appeared to

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be in general compliance with WPS-B-T-4212-Tc-U4c-4.

This QA Inspector observed ZPMC qualified welding personnel identified as 046769, Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 4 skin A Sub assembly. Joint identified as ESD1-FASA4-2B/F-6. ZPMC QC Identified as Sun Zi Wang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4214-Tc-U4c. For more information see below attached picture number 1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040582, Perform Shielded Metal Arc Welding (SMAW) on North Tower lift 4 Sub Assembly. Joint identified as NSD1-FASA4-1B/F-30. ZPMC QC Identified as Sun Zi Wang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4313-Tc-P4. For more information see below attached picture number 2.

Repair welding, SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040690, Perform Shielded Metal Arc Welding (SMAW) on West Tower lift 4 Back fill plate. Joint identified as WSD1-FESA4-4B/F-6. ZPMC QC Identified as Sun Zi Wang with temporary welding repair report WRR-T-WR3740. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-2G (2F)-Repair-1.

Repair welding, SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 202354, Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 4 Back fill plate. Joint identified as ESD1-FESA4-2B/F-7. ZPMC QC Identified as Sun Zi Wang with temporary welding repair report WRR-T-WR3742. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-2G (2F)-Repair-1

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Tower Bracket Stiffener, SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040724, Perform Shielded Metal Arc Welding (SMAW) on Tower Bracket Stiffener lift 5. Joint identified as ND1-BRSA5-2-16A, 1A. 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-3212-Tc-U5b.

This QA Inspector observed ZPMC qualified welding personnel identified as 044541, Perform Shielded Metal Arc Welding (SMAW) on Tower Bracket Stiffener lift 5. Joint identified as SD1-BRSA5-1-6B. 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-3212-Tc-U5b.

Tower Lift 6, FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 053316 Perform Flux Core Arc Welding (FCAW) on Tower lift 6 Face plate. Joint identified as ESD1-FASA6-2-5, 6. 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-2132.

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This QA Inspector observed ZPMC qualified welding personnel identified as 053316 Perform Flux Core Arc Welding (FCAW) on Tower lift 6 Face plate. Joint identified as WSD1-FASA6-4-1~10. 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-2132.

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 Thomas Ho phone : 150002048250, who represents the Office of Structural Materials for your project.

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