

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-018730**Date Inspected:** 08-Dec-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. Zhu Zhong Hai.**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:** 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:

OBG TRIAL ASSEMBLY**Repair Welding:**

This QA Inspector observed ZPMC qualified welding personnel identified as 047353 Perform Flux Core Arc Welding (FCAW) on OBG segment Panel point 105 bike path Cross beam cantilever beam. Joint identified as BK001-012-005. ZPMC QC Identified as Shen Jian Bo with temporary welding repair report WRR-B-WR17895. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-FCAW-3G (3F) ESAB-Repair. For more information see below attached picture number 1.

Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 052763 Perform Flux Core Arc Welding (FCAW) on OBG segment Panel point 105 bike path Cross beam cantilever beam. Joint identified as BK001-012-007. ZPMC QC Identified as Shen Jian Bo with temporary welding repair report WRR-B-WR17895. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-FCAW-3G (3F) ESAB-Repair.

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This QA Inspector observed ZPMC qualified welding personnel identified as 053486 Perform Flux Core Arc Welding (FCAW) on OBG segment 12AW+12BW Bottom plate to Bottom plate. Joint identified as OBW12B-001. ZPMC QC Identified as Shi Lei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231T-ESAB. For more information see below attached picture number 2.

This QA Inspector observed ZPMC qualified welding personnel identified as 040611 Perform Shielded Metal Arc Welding (SMAW) on OBG segment T rib counter weight side. Joint identified as SP3048-001-084. ZPMC QC Identified as Shi Lei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-Tc-U2-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 041713 Perform Shielded Metal Arc Welding (SMAW) on OBG segment T rib counter weight side. Joint identified as SP3047-001-092. ZPMC QC Identified as Shi Lei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-Tc-U2-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 046709 Perform Shielded Metal Arc Welding (SMAW) on OBG segment 11EW + 12AW Edge plate to Deck plate cross beam side Hold back area. Joint identified as CA092-002 and SEG3004AA-001. ZPMC QC Identified as Shi Lei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040656 Perform Shielded Metal Arc Welding (SMAW) on OBG segment Side plate I Rib cross beam side. Joint identified as SP3034-001-080. ZPMC QC Identified as Shi Lei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2214-B-U2-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 049220, 040759 Perform Flux Core Arc Welding (FCAW) on OBG segment 12AW + 12BW Deck plate to Deck plate after completed root pass of the weld. The crack observed on weld some location and one location crack approx. 400mm in length. Joint identified as OBW12-001. ZPMC QC Identified as Zhou Peng. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-223(2) 1-T-ESAB. For more information see below attached picture number 3.

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 Eric Tsang phone :150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Shailesh

Quality Assurance Inspector

Reviewed By: Carreon,Albert

QA Reviewer