

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-023827**Date Inspected:** 21-Apr-2011**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:** An Qing Xiang**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:** OBG Components**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

WELDING

This QA Inspector observed the following work in progress:

BAY 14

This QA Inspector observed ZPMC qualified welding personnel identified as 067275 perform welding by Flux Cored Arc Welding (FCAW), on U Rib Splice plate. Weld joint is identified as X3305K-008-001, 002. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 250~265 amperes and 24.6 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 201215 perform welding by Flux Cored Arc Welding (FCAW), on U Rib Splice plate. Weld joint is identified as X3305K-006-001, 002. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 240~250 amperes and 25.3 volts, which appears to be in compliance with the approved WPS.

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This QA Inspector observed ZPMC qualified welding personnel identified as 066695 perform repair welding by Flux Cored Arc Welding (FCAW), on Traveler Rail TR3027. Weld joint is identified as TR3027-TR1-001-011. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-FCAW-3G (3F)-ESAB-Repair and Welding repair report B-WR20755. This QA Inspector noted welding variables were 255~265 amperes and 25.4 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066734 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel DP3177 to Deck panel DP3183 weld of OBG Segment 14W. Weld joint is identified as SEG3020-011. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-223(2)1T-ESAB-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 066261 perform welding by Shielded Metal Arc Welding (SMAW), on Extension plate of Vertical shear plate to Top Anchor plate weld of OBG Segment 14W. Weld joint is identified as SEG3020BB-003. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC 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 067764 perform welding by Shielded Metal Arc Welding (SMAW), on Extension plate of Vertical shear plate to Top Anchor plate weld of OBG Segment 14W. Weld joint is identified as SEG3020BB-048. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC 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 067572 perform welding by Shielded Metal Arc Welding (SMAW), on Edge plate stiffener to Edge plate weld at panel point PP125 of OBG Segment 14W. Weld joint is identified as SEG3020W-118, 123, 128, 133. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 140~150 amperes and 23.5 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066361 perform welding by Shielded Metal Arc Welding (SMAW), on Edge plate stiffener to Edge plate weld at panel point PP126 of OBG Segment 14W. Weld joint is identified as SEG3020R-211, 216, 221, 226. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 145~160 amperes and 22.4 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ABF qualified NDT personnel perform Magnetic Particle Testing on Anchor plate Stiffener to Side plate weld of OBG Segment 14W, after back gouging. Weld joint is identified as SEG3020BC-002. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 045246 perform welding by Shielded

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Metal Arc Welding (SMAW), on Vertical Shear plate stiffener to Anchor plate weld of OBG Segment 14W. Weld joint is identified as SEG3020BD-001. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 066421 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to Floor beam flange weld at panel point 127, of OBG Segment 14W. Weld joint is identified as SEG3020L-028. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2232-ESAB. This QA Inspector noted welding variables were 275~290 amperes and 24.2 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066881 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to Floor beam flange weld at panel point 127.3, of OBG Segment 14W. Weld joint is identified as SEG3020K-002. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2232-ESAB. This QA Inspector noted welding variables were 270~280 amperes and 24.7 volts, which appears to be in compliance with the approved WPS.

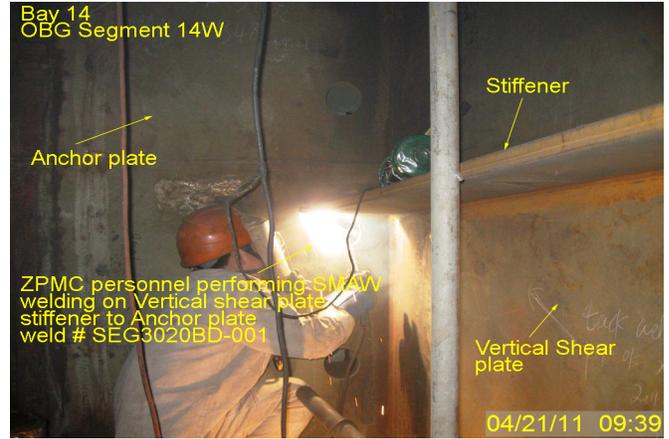
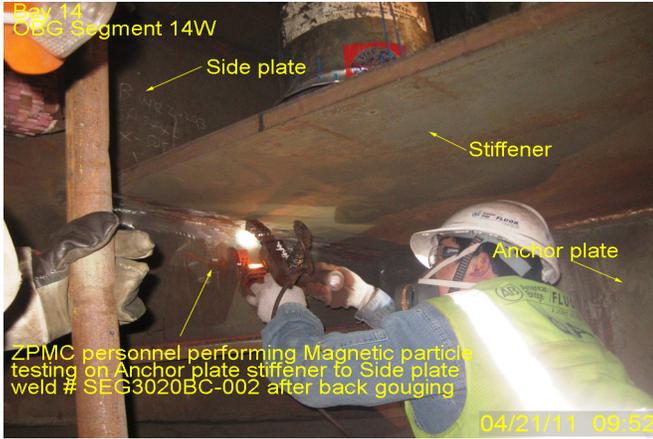
This QA Inspector observed ZPMC qualified welding personnel identified as 067949 perform welding by Flux Cored Arc Welding (FCAW), on Bottom plate I Rib to Bottom plate weld between panel point 128.3 and panel point 128.7, of OBG Segment 14W. Weld joint is identified as SEG3020D-235/236. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2132-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 070007 perform welding by Shielded Metal Arc Welding (SMAW), on Side plate I Rib to I Rib weld at panel point 125, of OBG Segment 14W. Weld joint is identified as SEG3020AW-101, 102. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No significant conversations were reported on this date.

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: 15000422372 , who represents the Office of Structural Materials for your project.

Inspected By: Upadhye, Anand

Quality Assurance Inspector

Reviewed By: Clifford, William

QA Reviewer