

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-021920**Date Inspected:** 04-Mar-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.

NDT

BAY 14

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted notification number 08447.

Ultrasonic Testing (UT).

This QA inspector performed UT of approximately 10 % of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

SEG3013AH-105, 114, 108, 117.

SEG3013AH-027, 028, 031.

WELDING

This QA Inspector observed the following work in progress:

BAY 14

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This QA Inspector observed ZPMC qualified welding personnel identified as 066674 perform repair welding by Shielded Metal Arc Welding (SMAW), on Deck panel of OBG Segment 14W. Weld joint is identified as DP3172-001-018. ABF Quality Assurance (QA) Inspector identified as Shao Jian Yuan was present to monitor the welding process. The welding variables recorded by ABF QA appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair and Critical welding repair report B-CWR2830. This QA Inspector noted welding variables were 184~195 amperes and 26.4 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 067588 perform repair welding by Shielded Metal Arc Welding (SMAW), on Deck panel of OBG Segment 14W. Weld joint is identified as DP3174-001-017. ABF Quality Assurance (QA) Inspector identified as Shao Jian Yuan was present to monitor the welding process. The welding variables recorded by ABF QA appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair and Critical welding repair report B-CWR2820. This QA Inspector noted welding variables were 195~210 amperes and 25.2 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 067707 perform welding by Shielded Metal Arc Welding (SMAW), on Anchor plate to Floor beam stiffener weld of OBG Segment 14W. Weld joint is identified as SEG3020Q-178, 183. 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-P-2213-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 138~145 amperes and 23.6 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 051348, 045246 perform welding by Shielded Metal Arc Welding (SMAW), on Anchor plate to longitudinal diaphragm weld of OBG Segment 14W. Weld joint is identified as SEG3020AB-134. 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-P-2214-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 135~150 amperes and 24.2 volts, which appears to be in compliance with the approved WPS. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 066734 perform welding by Flux Cored Arc Welding (FCAW), on Edge plate to Floor beam weld of OBG Segment 13AW. Weld joint is identified as SEG3013P-031, 036. ZPMC Quality Control (QC) Inspector identified as Liu Fang 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 248~260 amperes and 25.6 volts, which appears to be in compliance with the approved WPS.

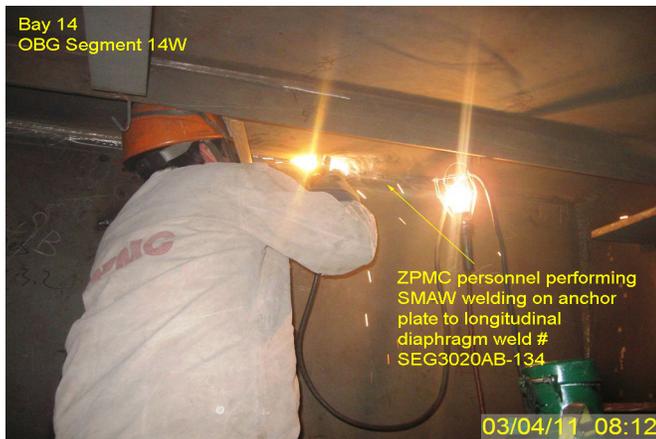
This QA Inspector observed ZPMC qualified welding personnel identified as 037996 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam stiffener of OBG Segment 13AW. Weld joint is identified as SEG3013F-037. ZPMC Quality Control (QC) Inspector identified as Liu Fang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2114-FCM-1. This QA Inspector noted welding variables were 138~150 amperes and 23.6 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 045213 perform welding by Shielded Metal Arc Welding (SMAW), on Deck panel diaphragm to Deck panel diaphragm weld of OBG Segment 13CW. Weld joint is identified as SEG3015L-008. ZPMC Quality Control (QC) Inspector identified as Zhang 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-2213-B-U2-FCM-1. This QA Inspector noted welding variables were 144~155 amperes and 25.8 volts, which appears to be in compliance with the approved WPS.

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



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