

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-022520**Date Inspected:** 13-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:** Liu Hua Jie**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 Manoj Prabhune 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 randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

DCP:

Segment 12BE ~ 12CE

This Quality Assurance (QA) Inspector witnessed final tension verification for Corner Assembly at Panel Point (PP) 113 to PP 117.5 for Segment 12BE ~ 12CE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00649 Dated April 13, 2011.

Bolt sizes used were M22 x 120 DHGM220054 and final torque required was 497 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-666

WELDING:

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Segment 13CW

This QA Inspector observed ZPMC qualified welding personnel identified as 045213 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3015A-009; located On Orthotropic Box Girder (OBG) Bottom Plate to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Ping . This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR20566. ZPMC Quality Control (QC) Mr. Wang Xiang Ping was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-B-U2-FCM-1. See attached photo for further details.

Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 066398 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013-001; located On Orthotropic Box Girder (OBG) Deck Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Shen Jian Bo. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Shen Jian Bo was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1. See attached photo for further details

Segment 13AE

This QA Inspector observed ZPMC qualified welding personnel identified as 066398 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3007P-128; located On Orthotropic Box Girder (OBG) FL3 Rib to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Liu Hua Jie. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Liu Hua Jie was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

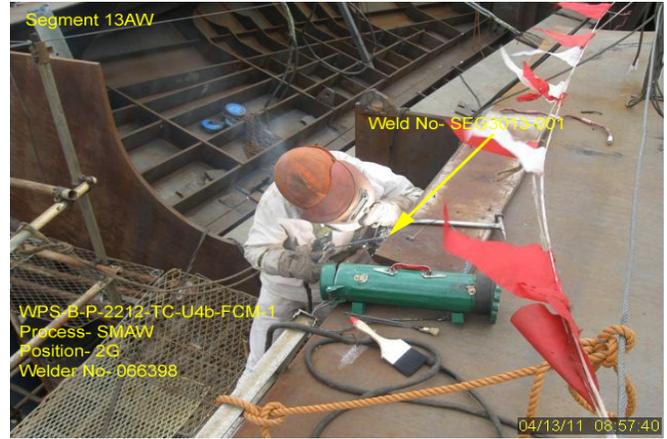
Segment 13AE

This QA Inspector observed ZPMC qualified welding personnel identified as 050242 perform Flux Cored Arc Welding (FCAW), weld joint identified as AH3150-001; located On Orthotropic Box Girder (OBG) Side Plate I-Rib to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Liu Hua Jie. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Liu Hua Jie was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-T-2232-ESAB.

Unless otherwise noted, all work observed on this date appeared to generally comply with the 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: Prabhune,Manoj

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer