

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-022732**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:** 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 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 12AE

This QA Inspector performed Individual Inspection against the Punch List Sr. No. 258, Incident Report 1100 Dated Jan 10, 2010 Segment 12AE Panel Point 112.5. The weld access holes have been omitted from the ends of Floor Beam 3014 at Panel Point (PP) 112.5. Approved shop drawing FB3014 Specifies 30mm radius Weld access holes at each end of the floor beam web where it butts into longitudinal diaphragms LD 3007 and LD3008

The location was inspected by the QA and confirmed Cope Hole as per Drawing after rectification that ZPMC has fixed the issue.

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The Caltrans Lead Inspector was been notified for further action.

Segment 12AE

This QA Inspector performed Individual Inspection against the Punch List Sr. No. 258, Incident Report 1100 Dated Jan 10, 2010 Segment 12AE Panel Point 112.5 observed the cope hole radius on stiffener X3111 of FB3013-003 measured approximately 50mm. The approved shop drawing required this radius to be 25mm

The location was inspected by the QA and confirmed Cope Hole as per Drawing after rectification that ZPMC has fixed the issue.

The Caltrans Lead Inspector was been notified for further action.

Segment 12BW

This Quality Assurance (QA) Inspector witnessed final tension verification for Traveler Rails. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00659 Dated April 21, 2011.

11TR1 - 013,11TR2 - 015,11TR2 - 003,11TR1 - 024,11TR3 - 026,11TR12 - 001,11TR1 - 030,11TR3- 014,11TR2 - 010,11TR1 - 029,11TR3 - 002,11TR4 - 001,11TR1 - 009,11TR1 - 019,11TR2 - 011,11TR2 - 009,11TR1 - 026, 11TR3 - 019,11TR12 - 002,11TR1 - 023,11TR3 - 024,11TR2 - 007 ,11TR1- 021,11TR3 - 015,11TR4 - 002, 11TR1 - 005,10TR6 - 001,10TR3 - 019,10TR1 - 003,10TR2 - 016,10TR2 - 014

Bolt sizes used were M16 x 75 DHGM160023 and final torque required was 190 N-m.

Bolt sizes used were 5/8 X 3 278585A and final torque required was 170 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-777.

BAY 10

This QA received ZPMC inspection notification sheet 08888 to perform dimensional inspection of traveler rails identified as 3011TR1. Dimensional inspections performed on each of these traveler rails include, but is not limited to, overall length, thickness at typical section, Flange width at typical section, rail sweep, Depth typical section. The results of the inspection were recorded on Caltrans (CT) QA form "OBG DCP Hand Measurements Survey: Traveler Rails and submitted to CT QA lead for review.

WELDING:

Segment 12CW

This QA Inspector observed ZPMC qualified welding personnel identified as 046704 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SA6020C-012-008; located On Orthotropic Box Girder (OBG) Traveler Rail CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Hu Mei Gang . This QA Inspector observed the base material appears to have been preheated by a torch prior to welding. ZPMC Quality Control (QC) Mr. Hu Mei Gang 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.

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Unless otherwise noted, all work observed on this date appeared to generally comply with the 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:	Prabhune,Manoj	Quality Assurance Inspector
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Reviewed By:	Peterson,Art	QA Reviewer
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