

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014278**Date Inspected:** 07-May-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:** Li Yang**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**

Segment 7CW ~ 7EW

This Quality Assurance (QA) Inspector witnessed final tension verification for Catwalk at Bottom Panel from Panel Point (PP) 52 ~ PP 60.5 for Segment 7CW ~ 7EW. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00343 Dated May 7, 2010.

Bolt sizes used were M16 x 40 RC Set# DHGM160019 and final torque required was 200 N-m.

Bolt sizes used were M16 x 45 RC Set# DHGM160010 and final torque required was 200 N-m and

Bolt sizes used were M16 x 50 RC Set# DHGM160011 and final torque required was 200 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114. Please refer the pictures for more comprehensive

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## WELDING INSPECTION REPORT

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detail.

### Segment 7CW ~ 7EW

This Quality Assurance (QA) Inspector witnessed final tension verification for Cable Tray at Panel Point (PP) 55 ~ 56 & PP 58 ~ 59 for Segment 7CW ~7EW. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00343 Dated May 7, 2010

Bolt sizes used were M19 x 55 RC Set# DHG60580 and final torque required was 340 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

### Segment 7EE~ 8AE (Joint Survey with ABF)

This QA Inspector performed dimensional survey with QA Inspector Manikandan for the Skin Flatness across Transverse Splice Joints at Location B1, B2, B3, B4, T1 and T2 for Segment 7EE to 8AE along with ABF using 5M string line, 600mm and 630mm straight edge. Reports forwarded to team leader for further action.

### Segment 7EW to 8AW (U-Ribs) Joint Survey with ABF

This QA Inspector performed Joint Inspection with ZPMC Survey Team for the U-Ribs to U-Ribs (Total 39 nos.) for Segment 7EW~8AW (Shop Segment Splice) between Panel Point (PP) 60 and PP 61 from North towards South side. The measured readings were recorded generated the report and submitted to the Task Leader and Engineer for review.

Using 1000mm Straight edge offset was measured.

### Segment # 8BE-PP67

#### Repair Welding.

This QA inspector observed ZPMC qualified welding personnel identified as 054467 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG046B-006 and was observed welding in the 4G (Overhead) position; The Welding Repair Report (WRR) was B-WR12876. ZPMC QC is identified as Mr. Wang Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM- Repair-1. See the attached below Photo.

### Segment # 8AW~8BW

This QA inspector observed ZPMC qualified welding personnel identified as 045196 perform Shielded Metal Welding (SMAW), weld joint identified as OBW8B-002 and was observed welding in the 4G (Overhead) position; ZPMC QC is identified as Mr. Zhang Xiag Ming. The welding parameters measured using QC's calibrated instrument 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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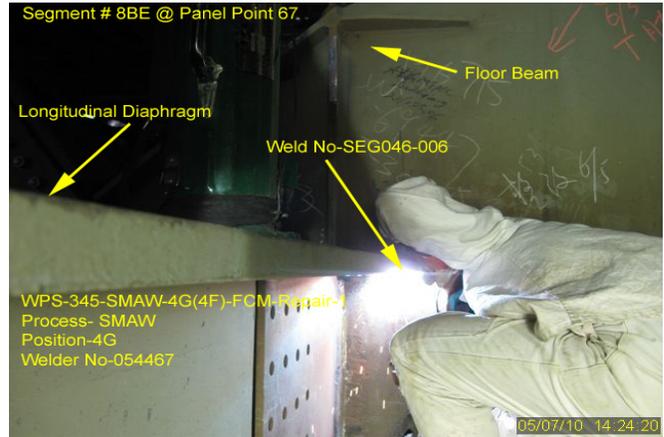
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# WELDING INSPECTION REPORT

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

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<b>Inspected By:</b>	Prabhune,Manoj	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer

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