

**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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014285**Date Inspected:** 14-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**

This Quality Assurance (QA) Inspector witnessed final tension verification for Catwalk at Bottom Panel from Panel Point (PP) 61 ~ PP 71 for Segment 8AE ~ 8CE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00347 Dated May 14, 2010.

Bolt sizes used were M16 x 40 RC Set# DHGM160020 and final torque required was 200 N-m.

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. 0900001. Please refer the pictures for more comprehensive detail.

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### Segment # Lift 7 (East)

This Quality Assurance (QA) Inspector witnessed final tension verification for Road Barrier Bracket & Corner Assembly at Panel Point (PP) 47.5 ~ PP 55 for Segment 7AE ~7CE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00347 Dated May 14, 2010

Bolt sizes used were M22 x 120 RC Set# DHGM220052 and final torque required was 463 N-m.  
Bolt sizes used were M22 x 85 RC Set# DHGM220096 and final torque required was 583 N-m.  
Bolt sizes used were M22 x 55 RC Set# DHGM220001 and final torque required was 443 N-m.  
Bolt sizes used were M24 x 60 RC Set# DHGM220014 and final torque required was 567 N-m.  
Bolt sizes used were M24 x 65 RC Set# DHGM220013 and final torque required was 540 N-m.  
Bolt sizes used were M24 x 80 RC Set# DHGM220011 and final torque required was 583 N-m.

Manual Torque wrench was been used with Sr. No. 0900001.

### Segment # 10BE (Cope Weld Access Hole Inspection)

This QA inspector performed visual testing and dimensional check on cope hole and welds access for OBG lift 10 East for smoothness & Radius. Below locations not complies with the ABF inspection report no: CWAHIR-10BE-01dated 13th May 2010. All these details noted and forwarded to team leader for further action.

### Segment # 8BE ~8CE

#### Repair Welding.

This QA inspector observed ZPMC qualified welding personnel identified as 220069 perform Flux Core Arc Welding (FCAW), weld joint identified as SEG044A-021 and was observed welding in the 1G (Flat) position; The Welding Repair Report (WRR) was B-WR12822. 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-B-T-2231T.

### Segment # 8BW~8CW

This QA inspector observed ZPMC qualified welding personnel identified as 037840 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW8C-002 and was observed welding in the 4G (Overhead) position; ZPMC QC is identified as Mr.Zhang Hai Tao. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1. See the attached below Photo.

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

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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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