

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023332**Date Inspected:** 30-Jun-2009**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

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>
<b>Inspected CWI report:</b>	<b>Yes</b> <b>No</b> <b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b> <b>No</b> <b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b> <b>No</b> <b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b> <b>No</b> <b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
		<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG Trial Assembly	

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Lift 2 West (2AW to 2BW)

This Quality Assurance (QA) Inspector witnessed final tension verification against Bolting Inspection Notification Sheet No. 00053 Dated 06.30.2009. for Side Panel to Floor Beam Clips for PP 14, PP 15, PP 15.5, PP16, PP17 and PP18 (Except for the 10th clip from bottom at PP17 North Side) for Segment 2AW to 2BW. Inspected 10% of the bolts tension found tension satisfactory. Bolt sizes used are M16 x 65 RC Lot No. DHGM160006 and final Torque required was 180 N-m. Tension verification carried out by Manual Torque wrench with Sr. No. X02-118.

Lift 2 West (2AW to 2BW)

This Quality Assurance (QA) Inspector witnessed final tension verification against Bolting Inspection Notification Sheet No. 00053 Dated 06.30.2009. for Side Panel to Floor Beam Clips for PP 14, PP 15, PP 15.5, PP16, PP17 and PP18 (Except for the 10th clip from bottom at PP17 North Side) for Segment 2AW to 2BW. Inspected 10% of the bolts tension found tension satisfactory. Bolt sizes used are M16 x 45 RC Lot No. DHGM160001 and final Torque

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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required was 210 N-m. Tension verification carried out by Manual Torque wrench with Sr. No. X02-118.

Note: At PP No. 17 Side Panel to Floor Beam Clip North side 10th Clip from the Longitudinal Stiffener. ZPMC QC did not offered the inspection as clip not welded to the side panel T-Rib.

Lift 2 West (2AW to 2BW)

This Quality Assurance (QA) Inspector witnessed final tension verification against Bolting Inspection Notification Sheet No. 00053 Dated 06.30.2009. for Bottom Panel to Floor Beam Clips for PP 14.5 for Segment 2AW to 2BW. Inspected 10% of the bolts tension found tension satisfactory. Bolt sizes used are M16 x 50 RC Lot No. DHGM160003 and final Torque required was 200 N-m. Tension verification carried out by Manual Torque wrench with Sr. No. X02-118.

Lift 4 West (4AW to 4BW)

This Quality Assurance (QA) Inspector randomly noticed bolt installation for the walkway at PP 26 and PP 27 South Side. Walk way is proceeding from toward the side panel and which ends up at the opening at CB3. Bolt size used are M16 x 40.

Lift 4 West (4AW to 4BW)

This Quality Assurance (QA) Inspector randomly noticed bolt installation for the walkway at PP 26 and PP 27 South Side. Walk way is proceeding from toward the side panel and which ends up at the opening at CB3. Bolt sizes used are M16 x 40.

Lift 2 West (2AW to 2BW)

This Quality Assurance (QA) Inspector randomly verified the rotation of the bolt for that Bottom Panel to Bottom Panel at PP 16 and PP17.

Lift 1 East (1AE to 1BE)

This Quality Assurance (QA) Inspector randomly verified the snug tightening of the bolts for that Bottom Chevron Either side of the Panels at PP 8.5, PP 9, PP 9.5, PP10, PP11 North and South side.

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

### **Summary of Conversations:**

No relevant 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 15000422372, who represents the Office of Structural Materials for your project.

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# WELDING INSPECTION REPORT

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<b>Inspected By:</b>	Math,Manjunath	Quality Assurance Inspector
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<b>Reviewed By:</b>	Miller,Mark	QA Reviewer
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