

**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-010242**Date Inspected:** 14-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**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:** OBG Trail 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) Assembly Area

Segment 5AW

This Quality Assurance (QA) Inspector witnessed final tension verification for Side Panel to Side Panel T-Rib between PP 29.5 to 30 Counter Weight Side for Segment 5AW. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M22 x 70 RC Set# DHGM220020 and final torque required is 520 N-m and

Bolt sizes used were M22 x 75 RC Set# DHGM220005 and final torque required is 473 N-m.

Manual Torque wrench is been used with Sr. No. XQ2-675.

Segment 5BW

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## WELDING INSPECTION REPORT

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This Quality Assurance (QA) Inspector witnessed final tension verification for Side Panel to Side Panel T-Rib between PP 33 and 33.5 Cross Beam Side for Segment 5BW. Inspection was offered and performed for the 4th T-Rib from Longitudinal Diaphragm as rests of the others were inspected on Nov 09, 2009. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M22 x 65 RC Set# DHGM220021 and final torque required is 543 N-m.

Manual Torque wrench is been used with Sr. No. XQ2-675.

Segment 5BE to 5CE

This QA Inspector measured and recorded the misalignment along with QA Inspector Mr. Manikandhan and measured the offset for the Side Panel to Side Panel T-Rib (Cross Beam and Bike Path side) and Bottom Panel and prepared report in the "SURVEY ON T-RIB FOR OBG" form for Segment 5BE to 5CE between PP 34 to 35 and submitted the records to Engineer for review.

Segment 6AE to 6BE

This QA Inspector measured and recorded the root gap measurement for 6AE for Side Panel and Edge Panel Cross Beam and Bike Path side and recorded in the "SURVEY ON ROOT OPENING FOR OBG" for segment 6AE to 6BE.

Segment 2AW to 2BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Longitudinal Diaphragm LD17C for Segment 2AW at PP 16 Counter Weight side. The PMCK is identified as X76N. The Weld No. was identified as LD017-001 – 007/008. The welding is being carried out against B-WR 8558 Rev.0 and noticed welding has been performed. The welder is identified as 067571. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-2G (2F)-Repair-1 and WPS-345-SMAW-4G (4F)-Repair-1.

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

**Summary of Conversations:**

No relevant conversations.

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

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