

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-015914**Date Inspected:** 25-Jul-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:	N/a	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 Trial Assembly	

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. 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

Segment 9CW

This QA Inspector witnessed the final bolt tension verification on bolts connecting the T-Ribs to Floor Beam at Side Panel (Cross Beam and Counter Weight side) and Bottom Panel at the Panel Points (PP) 77, PP 78 and PP 79 for Segment 9CW. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00439 dated July 25, 2010.

The bolt sizes used were M16 x 45 RC Lot # DHGM160001 and the final torque value established was 210 N-m.

The bolt sizes used were M16 x 65 RC Lot # DHGM160006 and the final torque value established was 180 N-m.

The manual torque wrench used to verify tension was S/N XO2-779. Please reference the pictures attached for more comprehensive details.

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Segment 9DW

This QA Inspector witnessed the final bolt tension verification on bolts connecting the T-Ribs to Floor Beam at Side Panel (Cross Beam and Counter Weight side) and Bottom Panel at the Panel Points (PP) 80, PP 81 and PP 82 for Segment 9DW. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00439 dated July 25, 2010.

The bolt sizes used were M16 x 45 RC Lot # DHGM160008 and the final torque value established was 200 N-m.

The bolt sizes used were M16 x 50 RC Lot # DHGM160003 and the final torque value established was 200 N-m.

The bolt sizes used were M16 x 65 RC Lot # DHGM160006 and the final torque value established was 180 N-m. The manual torque wrench used to verify tension was S/N XO2-779.

Segment 9DW

This Quality Assurance (QA) Inspector witnessed the final bolt tension verification on bolts connecting the Lower Chevron at Cross Beam and Counter Weight side at Panel Points (PP) 80, PP 81 and PP 82 for Segment 9DW. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00439 dated July 25, 2010.

The bolt sizes used were M22 x 70 RC Lot # DHGM220017 and the final torque value established was 487 N-m.

The bolt sizes used were M22 x 80 RC Lot# DHGM220091 and the final torque value established was 460 N-m.

The manual torque wrench used to verify tension was S/N XO2-779. Please reference the pictures attached for more comprehensive details.

Note: At Panel Point (PP) 81 Lower Chevron bolts, tension verification not offered for inspection by ZPMC QC.

Segment 9DW

This Quality Assurance (QA) Inspector witnessed the final bolt tension verification on bolts connecting the Upper Chevron at Cross Beam and Counter Weight side at Panel Points (PP) 80, PP 81 and PP 82 for Segment 9DW. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00439 dated July 25, 2010.

The bolt sizes used were M22 x 70 RC Lot # DHGM220017 and the final torque value established was 487 N-m.

The manual torque wrench used to verify tension was S/N XO2-779.

Note: At Panel Point (PP) 81 Upper Chevron bolts, tension verification not offered for inspection by ZPMC QC.

Segment 9CE to Segment 9DE (Skin Flatness)

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This QA Inspector performed Joint Inspection along with the ABF Survey Team to check the Skin Flatness between Segment 9CE to Segment 9DE between Panel Points (PP) 79 and PP 80 at the following locations:

The skin flatness was measured on North side (Cross Beam side at B1 and B2 location) and South side (Bike Path side at B3 and B4 location) at 100mm from the weld connecting Bottom Panel to Side Panel using 5000mm string line to verify overall flatness. Straight Edges of 600mm and 630 mm of length was also used to measure the localized flatness.

The skin flatness was measured on North side (Cross Beam side at T1 location) and South side (Bike Path side at T2 location) at 100mm from the weld connecting Deck Panel to Edge Panel using 5000mm string line to verify overall flatness. The Straight Edge of 600mm and 630 mm length was also used to measure the localized flatness.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

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



Summary of Conversations:

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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 150000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer
