

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016876**Date Inspected:** 25-Sep-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)**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) at Trial Assembly Areas

Segment 10AW (Side Panel T-Ribs at FL3 location)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the T-Rib to T-Rib at Side Panel Cross Beam side at Panel Points (PP) 86, PP 87 and PP 88 for Segment 10AW. 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. 00497 dated Sep 25, 2010. The QA inspector observed reinforced splice plates are installed at following locations.

At PP 86: 4th T-Rib, 9th T-Rib, 10th T-Rib, 12th T-Rib, 16th T-Rib, 17th T-Rib, 18th T-Rib and 19th T-Rib.

At PP 87: 9th T-Rib.

At PP 88: 5th T-Rib, 8th T-Rib, 10th T-Rib, 11th T-Rib, 16th T-Rib and 17th T-Rib.

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Note: T-Ribs numbering reference taken from Work Point W4 towards W6.

The bolt sizes used were M22 x 65 RC Lot # DHGM220105 and the final torque value established was 380 N-m.

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

The bolt sizes used were M22 x 80 RC Lot # DHGM220094 and the final torque value established was 470 N-m.

The Manual Torque wrench used was Serial No. XO2-776. Please reference the pictures attached for more comprehensive details.

Segment 10AW (Side Panel T-Ribs at FL3)

This QA Inspector performed Dimension Control Inspection on the side panel T-Rib at FL3 areas after bolting for the Segment 10AW at Panel Points (PP) 86, PP 87 and PP 88 at the following locations:

Work Point W6 towards Work Point W4 (Side Panel Cross Beam Side) total 19 T-Ribs.

Work Point W4 towards Work Point W3 (Bottom Panel) total 18 T-Ribs.

Work Point W3 towards Work Point W1 (Side Panel Counter Weight Side) total 19 T-Ribs.

The QA Inspector measured the Vertical Offset using 1(One) Meter Straight Edge.

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.

Segment 10CW (Connection Plates)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the T-Rib connections plates at Side Panel (Counter Weight and Cross Beam side) and at Bottom Panel at the Panel Points (PP) 92, PP 93 and PP 94 for Segment 10CW. 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. 00498 dated September 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 was Serial No. XO2-776. Please reference the pictures attached for more comprehensive details.

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Segment 11AW (Connection Plates)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the T-Rib connections plates at Side Panel (Counter Weight and Cross Beam side) and at Bottom Panel at the Panel Points (PP) 95, PP 96 and PP 97 for Segment 11AW. 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. 00498 dated September 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 was Serial No. XO2-776.

Segment 11BW (Connection Plates)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the T-Rib connections plates at Side Panel (Counter Weight and Cross Beam side) and at Bottom Panel at the Panel Points (PP) 98, PP 99 and PP 100 for Segment 11BW. 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. 00498 dated September 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 was Serial No. XO2-776.

Segment 10AW (Lower Chevron Flatness Survey)

This QA Inspector performed Dimension Control Inspection along with ZPMC QC Mr. Hu Mei Gang on the Splice plate installed at Lower Chevron from East and West side to ensure flatness is within the allowable tolerance before snug tightening the bolts for Segment 10AW at Panel Point (PP) 86 at Cross Beam side, work point W4.

The QA Inspector measured the Flatness using 1(One) Meter Straight Edge and the results appeared to be in general compliance with contract requirements.

Segment 10BW (Lower Chevron Flatness Survey)

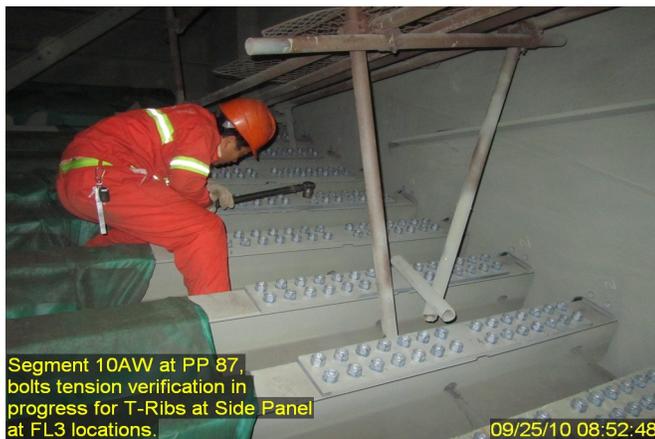
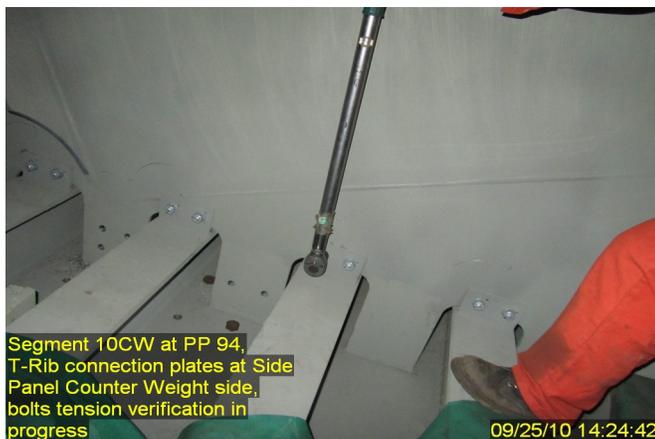
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This QA Inspector performed Dimension Control Inspection along with ZPMC QC Mr. Hu Mei Gang on the Splice plate installed at Lower Chevron from East and West side to ensure flatness is within the allowable tolerance before snug tightening the bolts for Segment 10BW at Panel Points (PP) 89 and PP 90 at Cross Beam side, work point W4 and at PP 91 Cross Beam Side and Counter Weight side, work points W4 and W3.

The QA Inspector measured the Flatness using 1(One) Meter Straight Edge and the results appeared to be in general compliance with contract requirements.

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

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