

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-015700**Date Inspected:** 20-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 8AW

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Suspender Bracket to Deck Panel, Edge Panel and Side Panel Corner Assembly at Panel Points (PP) 62 and PP 64 for Segment 8AW. 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. 00430 dated July 20, 2010.

The bolt sizes used were M24 x 75 RC Lot # DHGM240020 and the final torque value established was 993 N-m.

The bolt sizes used were M24 x 85 RC Lot # DHGM240015 and the final torque value established was 1133 N-m.

The bolt sizes used were M24 x 100 RC Lot # DHGM240022 and the final torque value established was 527 N-m.

The bolt sizes used were M27 x 85 RC Lot # DHGM270001 and the final torque value established was 1767 N-m.

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The manual torque wrench used to verify tension was S/N XO-871.

Segment 8BW

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Suspender Bracket to Deck Panel, Edge Panel and Side Panel Corner Assembly at Panel Point (PP) 66 for Segment 8BW. 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. 00430 dated July 20, 2010.

The bolt sizes used were M24 x 75 RC Lot # DHGM240020 and the final torque value established was 993 N-m.

The bolt sizes used were M24 x 85 RC Lot # DHGM240015 and the final torque value established was 1133 N-m.

The bolt sizes used were M24 x 100 RC Lot # DHGM240022 and the final torque value established was 527 N-m.

The bolt sizes used were M27 x 85 RC Lot # DHGM270001 and the final torque value established was 1767 N-m.

The manual torque wrench used to verify tension was S/N XO-871.

Segment 8CW

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Suspender Bracket to Deck Panel, Edge Panel and Side Panel Corner Assembly at Panel Points (PP) 68 and PP 70 for Segment 8CW. 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. 00430 dated July 20, 2010.

The bolt sizes used were M24 x 75 RC Lot # DHGM240020 and the final torque value established was 993 N-m.

The bolt sizes used were M24 x 85 RC Lot # DHGM240015 and the final torque value established was 1133 N-m.

The bolt sizes used were M24 x 100 RC Lot # DHGM240022 and the final torque value established was 527 N-m.

The bolt sizes used were M27 x 85 RC Lot # DHGM270001 and the final torque value established was 1767 N-m.

The manual torque wrench used to verify tension was S/N XO-871. Please reference the pictures attached for more comprehensive details.

Segment 11BE

This QA Inspector performed Green Tag Dimension Control Inspection along with Caltrans QA Inspector Mr. Shailesh Wadkar for the Segment 11BE from Panel Point (PP) 97.75 to PP 100.75 at the following locations:

The Floor Beam (FB) flatness was verified and measured from East and West side of the FB at Panel Points (PP)

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98, PP 99 and PP 100. The QA Inspector measured the flatness using 1500mm Straight Edge.

The Deck Panel to the Deck Panel Diaphragm plate plumbness and flatness was verified and measured from east and west side of the Deck Panel Diaphragm at Panel Points (PP) 98, PP 99 and PP 100. The QA Inspector measured the plumbness using carpenter square and performed a flatness check using 710mm Straight Edge.

The vertical offset and horizontal offset was verified and measured from Work Point E6 towards Work Point E4 at Side Panel (SP) FL3 location Cross Beam (CB) Side, T-Ribs to T-Ribs at Panel Points (PP) 96, PP 97 and PP 98. The QA Inspector measured the Vertical Offset on the T-Rib flange using 1(One) Meter Straight Edge and measured the Horizontal Offset on the web using a Bridge Cam gauge.

The skin flatness was verified and measured across the longitudinal butt weld at Side Panel (SP) to Corner Assembly (CA) at the Cross Beam (CB) and Bike Path (BK) side from Panel Point (PP) 97.75 to PP 100.75. The QA Inspector measured the skin flatness using 600mm Straight Edge.

The skin flatness was verified and measured across the longitudinal butt weld at Deck Panel (DP) to Corner Assembly (CA) at the Cross Beam (CB) and Bike Path (BK) side from Panel Point (PP) 97.75 to PP 100.75. The QA Inspector measured the skin flatness using 600mm Straight Edge.

The diameter of the cope holes at the Corner Assembly (CA) were verified and measured at Panel Points (PP) 98, PP 98.5, PP 99, PP 99.5, PP 100 and PP 100.5 at the Cross Beam (CB) and Bike Path (BK) side. The QA Inspector measured the diameter of the cope holes using a 150mm steel ruler.

The protrusion of the Deck Panel (DP) stiffener inside cope holes area at the Corner Assembly (CA) were verified and measured at the Panel Points (PP) 98, PP 98.5, PP 99, PP 99.5, PP 100 and PP 100.5 at the Cross Beam (CB) and Bike Path (CW) side. The QA Inspector measured the protrusion of stiffener using a 150mm steel ruler.

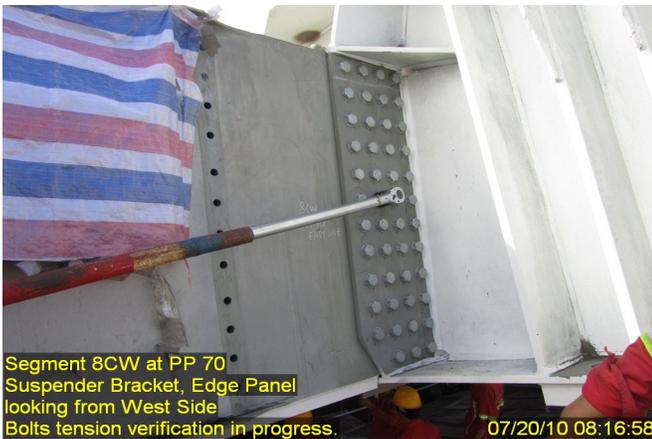
The Cope hole dimensions located at the Floor Beam to Bottom Panel, Floor Beam to Side Panel and at Longitudinal Diaphragms were verified and measured at the Panel Points (PP) 98, PP 99 and PP 100 at the Cross Beam (CB) and Bike Path (CW) side. The QA Inspector measured the cope hole dimensions using a 150mm steel ruler.

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.

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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.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer
