

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-016148**Date Inspected:** 10-Aug-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 9EW

This QA Inspector witnessed the final bolt tension verification on bolts connecting the T-Ribs Clips to Floor Beam at Side Panel (Cross Beam and Counter Weight side) and Bottom Panel at the Panel Points (PP) 83, PP 84 and PP 85 for Segment 9EW. 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. 00449 dated August 10, 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. Please reference the pictures attached for

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more comprehensive details.

Segment 10AW

This QA Inspector witnessed the final bolt tension verification on bolts connecting the T-Ribs Clips to Floor Beam at Side Panel (Cross Beam and Counter Weight side) and Bottom Panel at the 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. 00449 dated August 10, 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. Please reference the pictures attached for more comprehensive details.

Segment 9EW

This Quality Assurance (QA) Inspector witnessed the final bolt tension verification on bolts connecting the Lower Chevron and Upper Chevron at Cross Beam and Bike Path side at Panel Points (PP) 83, PP 84 and PP 85 for Segment 9EW. 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. 00449 dated August 10, 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.

Segment 11CW

This QA Inspector performed Dimension Control Inspection for the Segment 11CW from Panel Point (PP) 100.75 to PP 103.75 at the following locations:

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 Counter Weight (CW) side from Panel Point (PP) 100.75 to PP 103.75. 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 Counter Weight (CW) side from Panel Point (PP) 100.75 to PP 103.75. The QA Inspector measured the skin flatness using 600mm Straight Edge.

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The diameter and smoothness of the cope holes at the Bottom Panel to Floor Beam and Side Panel to Floor Beam at work point W3 and W4 were verified and measured at Panel Points (PP) 101, PP 102, PP 103. The QA Inspector measured the diameter of the cope holes 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.

Segment 11CW

This QA Inspector performed Green Tag Dimension Control Inspection along with Caltrans QA Inspector Mr. Shailesh Wadkar for the Segment 11CW from Panel Point (PP) 100.75 to PP 103.75 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) 101, PP 102 and PP 103. 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) 101, PP 102 and PP 103. The QA Inspector measured the plumbness using carpenter square and performed a flatness check using 710mm Straight Edge.

The diameter of the cope holes at the Corner Assembly (CA) were verified and measured at Panel Points (PP) 101, PP 101.5, PP 102, PP 102.5, PP 103 and PP 103.5 at the Cross Beam (CB) and Counter Weight (CW) 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) 101, PP 101.5, PP 102, PP 102.5, PP 103 and PP 103.5 at the Cross Beam (CB) and Counter Weight (CW) side. The QA Inspector measured the protrusion of stiffener 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.

Segment 9EW to Segment 10AW

This QA Inspector performed Dimension Control Inspection for measuring Offset on the U-Rib to U-Rib from Counter Weight side towards Cross Beam side at a total of 39 locations on Segment 9EW to Segment 10AW between Panel Point (PP) 85 to PP 86 at the following locations:

The offset was measured within 50mm from the Deck Panel on U-Rib on the South and North side. The QA Inspector measured the Offset using 1(One) Meter Straight Edge.

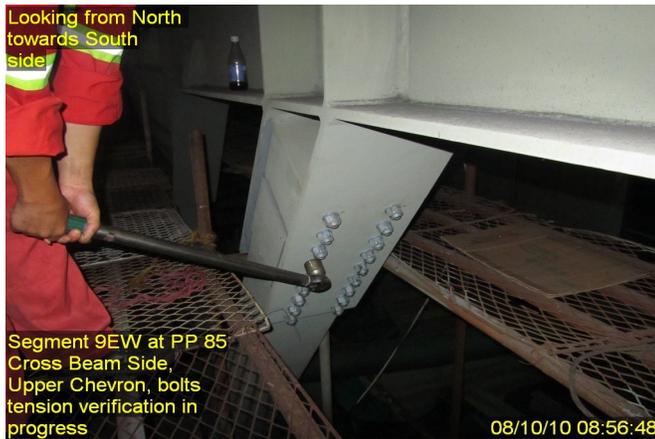
The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

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

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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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