

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-013131**Date Inspected:** 04-Apr-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:	Li Yang and Wu Zhi Cheng	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, 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 7AE (Side Panel Bike Path Side Connecting Clips)

This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Side Panel Bike Path Side T-ribs to the Floor Beam at Panel Point (PP) 48 and PP 49 for Segment 7AE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00314 Dated April 04, 2010.

Bolt sizes used were M16 x 45 RC Set# DHGM160001 and final torque required was 210 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

Segment 7AE (Bottom Panel Connecting Clips)

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This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Bottom Panel T-ribs to the Floor Beam at Bottom Panel at Panel Point (PP) 48 and PP 49 for Segment 7AE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00314 Dated April 04, 2010.

Bolt sizes used were M16 x 45 RC Set# DHGM160001 and final torque required was 210 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

Segment 7AE (Side Panel Cross Beam Side Connecting Clips)

This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Side Panel Cross Beam Side T-ribs to the Floor Beam at Panel Point (PP) 48 and PP 49 for Segment 7AE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00314 Dated April 04, 2010.

Bolt sizes used were M16 x 45 RC Set# DHGM160001 and final torque required was 210 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

Segment 7BE (Side Panel Bike Path Side Connecting Clips)

This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Side Panel Bike Path Side T-ribs to the Floor Beam at Panel Point (PP) 50, PP 51 and PP 52 for Segment 7BE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00314 Dated April 04, 2010.

Bolt sizes used were M16 x 45 RC Set# DHGM160001 and final torque required was 210 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

Note: Side Panel Bike Path Side Connecting Clips bolts not installed at PP 52 at 1st, 2nd, 3rd, 5th and 6th T-Ribs thus tension verification not performed (Number Reference taken from Side Panel towards Longitudinal Diaphragm at E3 Location).

Segment 7BE (Bottom Panel Connecting Clips)

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This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Bottom Panel T-ribs to the Floor Beam at Bottom Panel at Panel Point (PP) 50, PP 51 and PP 52 for Segment 7BE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00314 Dated April 04, 2010.

Bolt sizes used were M16 x 45 RC Set# DHGM160001 and final torque required was 210 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

Note: Bottom Panel Connecting Clips bolts not installed at PP 52 at 14th, 15th, 16th, 17 and 18th T-Ribs thus tension verification not performed (Number Reference taken from Longitudinal Diaphragm at E3 Location towards Longitudinal Diaphragm at E4 Location. Please refer the picture attached for more comprehensive details.

Segment 7BE (Side Panel Cross Beam Side Connecting Clips)

This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Side Panel Cross Beam Side T-ribs to the Floor Beam at Panel Point (PP) 50, PP 51 and PP 52 for Segment 7BE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00314 Dated April 04, 2010.

Bolt sizes used were M16 x 50 RC Set# DHGM160003 and final torque required was 200 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114.

Note: Side Panel Cross Beam Side Connecting Clips bolts not installed at PP 52 at 2nd, 4th, 6th, 11th and 14th T-Ribs thus tension verification not performed (Number Reference taken from Longitudinal Diaphragm at E4 Location towards Side Panel).

Segment 7BE to 7CE (Joint Inspection for Skin Flatness)

The QA inspector performed dimensional survey on Skin Flatness for Segment 7BE to 7CE between Panel Point (PP) 52 and PP 53 along with ABF using Five Meter String line B1 and B2 at (E4 Location), B3 and B4 at (E3 Location), T1 (at E5 Location) and T2 (at E2 Location). Reports submitted to Engineer for review and further action. Please refer the picture attached for more comprehensive details.

Segment 7BE to 7CE (Joint Inspection for Skin Flatness)

The QA inspector performed dimensional survey on Skin Flatness for Segment 7BE to 7CE between Panel Point (PP) 52 and PP 53 along with ABF using 600mm and 630mm Straight Edge at B1 and B2 at (E4 Location), B3 and B4 at (E3 Location), T1 (at E5 Location) and T2 (at E2 Location). Reports submitted to Engineer for review

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and further action.

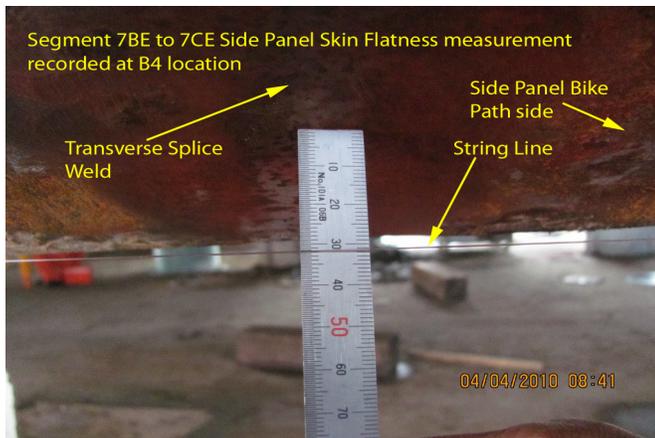
Segment 7W

This QA Inspector observed ZPMC welding personnel performing welding for weld joint CA031-004 located on PMCK W2 Location, Deck Panel connected to Edge Panel. Welder is identified as 045196 and 045221. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure WPS-345-SMAW-2G (2F)-FCM-Repair-1.

Segment 7BW (CB7)

This QA Inspector observed ZPMC welding personnel performing welding for weld joint SSD27-PP051-222. Welder is identified as 048659. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure WPS-B-P-2214-Tc-U4b-FCM-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 Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer