

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-012437**Date Inspected:** 03-Mar-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 5BW to 5CW (U-Ribs)

This Quality Assurance (QA) Inspector witnessed final tension verification for U-Rib to U-Rib at Panel Point (PP) 34 and PP 35 for Segment 5BW to 5CW. Inspected the U-Ribs at Location 14th, 15th and 16th tension verified on random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00268 Dated March 03, 2010.

Bolt sizes used were M22 x 65 RC Set# DHGM220035 and final torque required was 433 N-m,

Bolt sizes used were M22 x 80 RC Set# DHGM220012 and final torque required was 427 N-m and

Bolt sizes used were M22 x 85 RC Set# DHGM220013 and final torque required was 433 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-675.

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Note: U-Ribs numbering reference taken from Counter Weight Side as 1st U-Rib and Cross Beam Side as 39th U-Rib.

Segment 6CW (T-Ribs)

This Quality Assurance (QA) Inspector witnessed final tension verification for T-Rib to T-Rib at Side Panel Cross Beam side between Panel Point (PP) PP 45 to PP 45.5 and PP 45.5 to PP 46 for Segment 6CW. Inspected the T-Ribs along with 12mm Reinforcing Splice Plate above the Splice Plates. Tension verified on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00267 Dated March 03, 2010.

The following locations identified where 12mm Reinforcing plate installed on the Splice Plate.

At PP 45 to PP 45.5

14th location, 15th location and 16th location.

At PP 45.5 to PP 46

15th location.

Bolt sizes used were M22 x 80 RC Set# DHGM220050 and final torque required was 486 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-584.

Segment 6CW

This QA Inspector performed Offset measurement for Deck Panel to Deck Panel Diaphragm from West facing between the all U-Ribs to U-Ribs from U-Rib 19 through to 39 for Segment 6CW at Panel Point (PP) 45. Report forwarded to team leader for further action.

Segment 6CW

This QA Inspector performed Offset measurement for Deck Panel to Deck Panel Diaphragm from West facing between the all U-Ribs to U-Ribs (Total 39 nos.) for Segment 6CW at Panel Point (PP) 46. Report forwarded to team leader for further action.

Segment 6CW

This QA Inspector performed Offset measurement for Deck Panel to Deck Panel Diaphragm from East facing between the all U-Ribs to U-Ribs from U-Rib 1 through to 26 and from West facing between the all U-Ribs to U-Ribs from U-Rib 27 through to 39 for Segment 6CW at Panel Point (PP) 47. Report forwarded to team leader for further action.

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Signed Off Green Tag's

This Quality Assurance (QA) Inspector witnessed final tension verification for following depicted locations. Inspected 10% on a random basis and found the tension to be in general compliance and thus signed off the Green Tags.

At Segment 5BE, 5CE for Corner Assembly Cross Brace (North + South) Barrier Angle Green Tag No. 628.

At Segment 6CW for T-Stiffener Splice Green Tag No. 629.

At Segment 5BW, 5CW for U-Rib to U-Rib Except Big Splice Green Tag No. 630.

At Segment 5BW, 5CW for U-Rib to U-Rib Green Tag No. 631.

At Segment 5BW, 5CW for U-Rib to U-Rib Big Splice Green Tag No. 632.

Segment 6CW

This QA inspector observed, ZPMC qualified welding personnel identified as 048659 perform repair welding Shielded Metal Arc Welding (SMAW), weld joint identified as SSD12A-PP046-169. ZPMC QC is identified as Mr. Wang Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-FCAW-4G (4F)-FCM-Repair-1. The Welding Repair Report (WRR) was B-WR10775.

Segment 6CW

This QA inspector observed, ZPMC qualified welding personnel identified as 054467 perform repair welding Shielded Metal Arc Welding (SMAW), weld joint identified as SSD11A-PP045-168. ZPMC QC is identified as Mr. Wang Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-FCAW-4G (4F)-FCM-Repair-1. The Welding Repair Report (WRR) was B-WR10774.

Segment 7BW

This QA inspector observed, ZPMC qualified welding personnel identified as 045196 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG035A-005. ZPMC QC is identified as Mr. Zhang Hai Tao. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-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

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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
