

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-008860**Date Inspected:** 09-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Yumin and Li Jia**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 Trail Assembly**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Areas**Lift 2 (East)**

This Quality Assurance (QA) Inspector witnessed final tension verification for Longitudinal Stiffener to Longitudinal Stiffener. The Inspection being performed against the Bolting Inspection Notification No. 146 for Lift 4 East North and South Side between PP 25 and 26. Inspected 10% on a random basis the bolts and found the tension to be in general compliance. Bolt sizes used were M24 x 70 with RC Set# DHGM240010 and final Torque required was 560 N-m and M24 x 95 with RC Set# DHGM240021 and final Torque required was 540 N-m. Manual Torque wrench is been used with Sr. No. XQ2- 584.

Lift 3 (East)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bottom Panel to Bottom Panel T-Ribs East side of all Splices and West Side of 9 and 11 Splice taking reference from Longitudinal Stiffener Bike Path Side. The Inspection being performed against the Bolting Inspection Notification No. 145 for Lift 3 East between PP 22 and 23. Inspected 10% on a random basis the bolts and found the tension to be in general compliance. Bolt sizes used were M22 x 70 with RC Set# DHGM220004 and final Torque required was 453 N-m.

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

Lift 2 (East)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bottom Panel to Bottom Panel T-Ribs East side of all Splices and West Side of 9 and 11 Splice taking reference from Longitudinal Stiffener Bike Path Side. The Inspection being performed against the Bolting Inspection Notification No. 145 for Lift 2 East between PP 16 and 17. Inspected 10% on a random basis the bolts and found the tension to be in general compliance. Bolt sizes used were M22 x 70 with RC Set# DHGM220004 and final Torque required was 453 N-m. Manual Torque wrench is been used with Sr. No. XQ2- 584.

Lift 2 (East)

This Quality Assurance (QA) Inspector as on dated wrote an Incident Report No. 04-0120F4_TL-15_B278_09-09-09_Corner Assembly Stiffener to Floor Beam Flange_Counter Weight Side_2AW_PP_15.doc for Segment 2AW, for more comprehensive details please refer to the report.

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 2AE at PP 14.5 to 15 Longitudinal Diaphragm Splice (North) and Bolt Size used was M24 x 75 RC Set# DHGM240020 and final torque required was 600 N-m and Green Tag No. 319.

At Segment 2AE at PP 14.5 to 15 Longitudinal Diaphragm Splice (North) and Bolt Size used was M24 x 95 RC Set# DHGM240021 and final torque required was 540 N-m and Green Tag No. 320.

At Segment 4AW to 4BW at PP 25 to 26 Longitudinal Diaphragm Splice (North and South) and Bolt Size used was M24 x 70 RC Set# DHGM240010 and final torque required was 560 N-m and Green Tag No. 323.

At Segment 4AW to 4BW at PP 25 to 26 Longitudinal Diaphragm Splice (North and South) and Bolt Size used was M24 x 95 RC Set# DHGM240021 and final torque required was 540 N-m and Green Tag No. 324.

Lift 2 (West)

This Quality Assurance (QA) Inspector performed Magnetic Particle Test (MT) for the flush grinded areas for the FL3 for Lift 2(West) at PP 14 and PP 16 and found not recordable indication.

Segment 5BE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Longitudinal Diaphragm and weld joint being identified as Seg. 024B – 029 and 030, between PP 34 and 35 for

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Segment 5BE. The welder is identified as 220069. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2132.

Segment 5BE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Longitudinal Diaphragm and weld joint being identified as Seg. 024B – 029 and 030, between PP 34 and 35 for Segment 5BE. The welder is identified as 053609. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2132.

Segment 5CE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Longitudinal Diaphragm and weld joint being identified as Seg. 026B – 005 and 006, between PP 34 and 35 for Segment 5CE. The welder is identified as 220069. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2132.

Segment 5CE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Longitudinal Diaphragm and weld joint being identified as Seg. 026B – 005 and 006, between PP 34 and 35 for Segment 5CE. The welder is identified as 053609. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2132.

Segment 1AW to 1BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) welding for weld joint OBW1A-008. The welder is identified as 048659. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-B-U2-FCM-1.

Segment 5BE and 5CE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) welding for weld joint SP332A-001-020 to 030 being performed after back gouging. The welder is identified as 220066. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2233-B-U2F.

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

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remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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