

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-012703**Date Inspected:** 16-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:****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 5BE (Cat Walk)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts Installed at Segment 5BE at FL3 area between PP 32 and PP 33. Inspected 10% on a random basis and found the Rotation of Nut to be in general compliance. Inspection was performed against the Notification No. 00284 Dated March 16, 2010.

Bolt sizes used were M16 x 40 RC Set# DHGM160019 and final torque required was 200 N-m and

Bolt sizes used were M16 x 50 RC Set# DHGM160011 and final torque required was 200 N-m.

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

Please refer the pictures for more comprehensive details.

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Segment 5BW (Cat Walk)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts Installed at Segment 5BW at FL3 area between PP 32 and PP 33. Inspected 10% on a random basis and found the Rotation of Nut to be in general compliance. Inspection was performed against the Notification No. 00284 Dated March 16, 2010.

Bolt sizes used were M16 x 40 RC Set# DHGM160019 and final torque required was 200 N-m and

Bolt sizes used were M16 x 50 RC Set# DHGM160011 and final torque required was 200 N-m.

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

Segment 5BE (Cable Tray)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts Installed at Segment 5BE at FL3 area at PP 32 and PP 33. Inspected 10% on a random basis and found the Rotation of Nut to be in general compliance. Inspection was performed against the Notification No. 00284 Dated March 16, 2010.

Bolt sizes used were M3/4 x 2 1/4 RC Set# DHG60580 and final torque required was 340 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-114. Please refer the pictures for more comprehensive details.

Segment 5AE to 5BE (Bottom Panel T-Ribs)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bottom Panel T-Ribs to T-Ribs between Panel Point (PP) 31 and PP 32 for Segment 5AE to 5BE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00285 Dated March 16, 2010.

Bolt sizes used were M22 x 70 RC Set# DHGM220004 and final torque required was 453 N-m.

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

Note: 5BE bolts not installed for 5 rows and 2 columns due to temporary sea fasteners. Please refer the pictures for more comprehensive details.

Segment 5BE to 5CE (Bottom Panel T-Ribs)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bottom Panel T-Ribs to T-Ribs between Panel Point (PP) 34 and PP 35 for Segment 5BE to 5CE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00285 Dated March 16, 2010.

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Bolt sizes used were M22 x 70 RC Set# DHGM220004 and final torque required was 453 N-m.

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

Note: 5CE bolts not installed due to temporary sea fasteners. Please refer the pictures for more comprehensive details.

Segment 5AE to 5BE (Longitudinal Diaphragm)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts Installed at Longitudinal Diaphragm to Longitudinal Diaphragm at W3 and W4 (North and South side) at Panel Point (PP) 31 and PP 32 for Segment 5AE to 5BE. Inspected 10% on a random basis and found the Rotation of Nut to be in general compliance. Inspection was performed against the Notification No. 00285 Dated March 16, 2010.

Bolt sizes used were M24 x 70 RC Set# DHGM240003 and final torque required was 543 N-m and

Bolt sizes used were M24 x 95 RC Set# DHGM240021 and final torque required was 540 N-m.

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

Note: Please refer the pictures attached for more comprehensive detail.

Segment 5BE (Side Panel to Half Length Floor Beam Flange)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts Installed at Side Panel to Half Length Floor Beam Flange at Panel Point (PP) 31, PP 32 and PP 33 for Segment 5BE. Inspected 10% on a random basis and found the Rotation of Nut to be in general compliance. Inspection was performed against the Notification No. 00285 Dated March 16, 2010.

Bolt sizes used were M24 x 65 RC Set# DHGM240009 and final torque required was 567 N-m.

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

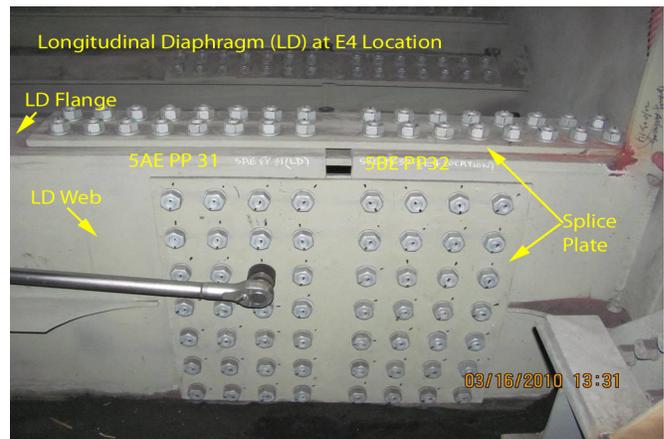
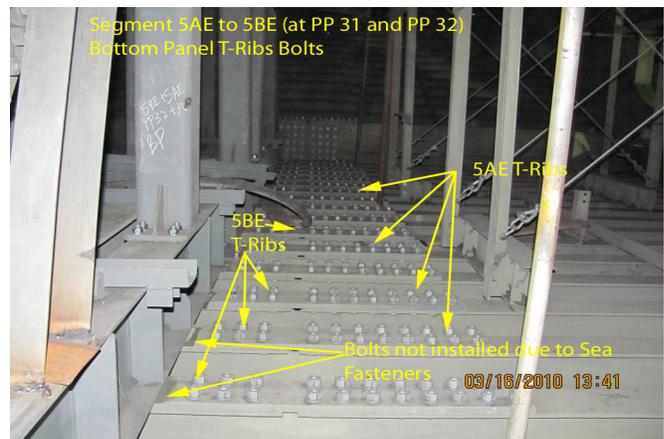
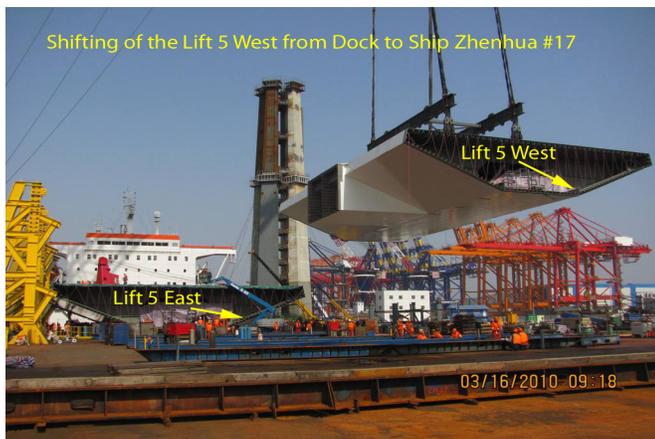
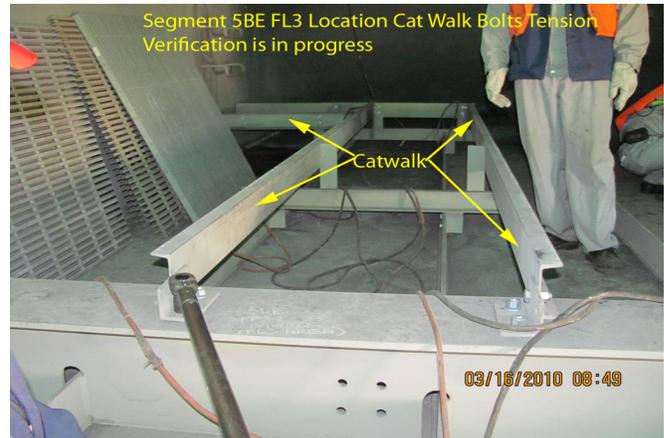
Lift 5 West

This Quality Assurance (QA) Inspector noticed that Lift 5 West was lifted from the Heavy Dock Area to ZPMC Ship Zhenhua #17 and placed on top of Lift 5 East. Please refer the pictures for more comprehensive details.

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.

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.

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Inspected By:	Math,Manjunath	Quality Assurance Inspector
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Reviewed By:	Miller,Mark	QA Reviewer
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