

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-010918**Date Inspected:** 28-Dec-2009**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**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 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 1AW

This Quality Assurance (QA) Inspector witnessed final tension verification for Cat Walk Handrail Panel Point (PP) 8.5 to PP 10 at Bottom Panel for Segment 1AW. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M16 x 95 RC Set# DHGM160017 and final torque required was Snug Tight (Turn of Nut).

12" Spanner used for verifying the Snug Tight as Handrail Gratings are made of Fiber Reinforced Plastic.

Note: Inspection was carried on Ship Zhenhua #17.

Segment 1BW

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

This Quality Assurance (QA) Inspector witnessed final tension verification for Cat Walk Handrail Panel Point (PP) 11 to PP 12 at Bottom Panel for Segment 1BW. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M16 x 95 RC Set# DHGM160017 and final torque required was Snug Tight (Turn of Nut).

12" Spanner used for verifying the Snug Tight as Handrail Gratings are made of Fiber Reinforced Plastic.

Note: Inspection was carried on Ship Zhenhua #17.

Segment 2AW

This Quality Assurance (QA) Inspector witnessed final tension verification for Cat Walk Handrail Panel Point (PP) 13 to PP 16 at Bottom Panel and at PP 14.5 to PP 15 Side Panel Cross Beam Side for Segment 2AW. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M16 x 95 RC Set# DHGM160017 and final torque required was Snug Tight (Turn of Nut).

12" Spanner used for verifying the Snug Tight as Handrail Gratings are made of Fiber Reinforced Plastic.

Note: Inspection was carried on Ship Zhenhua #17.

Segment 2BW

This Quality Assurance (QA) Inspector witnessed final tension verification for Cat Walk Handrail Panel Point (PP) 17 to PP 18 at Bottom Panel Side Panel Cross Beam Side for Segment 2BW. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M16 x 95 RC Set# DHGM160017 and final torque required was Snug Tight (Turn of Nut).

12" Spanner used for verifying the Snug Tight as Handrail Gratings are made of Fiber Reinforced Plastic.

Note: Inspection was carried on Ship Zhenhua #17.

Segment 3AW

This Quality Assurance (QA) Inspector witnessed final tension verification for Cat Walk Handrail Panel Point (PP) 19 to PP 21 at Bottom Panel and at PP 20.5 to PP 21 Side Panel Cross Beam Side for Segment 3AW. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M16 x 95 RC Set# DHGM160017 and final torque required was Snug Tight (Turn of Nut).

12" Spanner used for verifying the Snug Tight as Handrail Gratings are made of Fiber Reinforced Plastic.

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Note: Inspection was carried on Ship Zhenhua #17.

Segment 3BW

This Quality Assurance (QA) Inspector witnessed final tension verification for Cat Walk Handrail Panel Point (PP) 23 at Bottom Panel for Segment 3BW. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M16 x 95 RC Set# DHGM160017 and final torque required was Snug Tight (Turn of Nut).

12" Spanner used for verifying the Snug Tight as Handrail Gratings are made of Fiber Reinforced Plastic.

Note: Inspection was carried on Ship Zhenhua #17.

Segment 4AW

This Quality Assurance (QA) Inspector witnessed final tension verification for Cat Walk Handrail Panel Point (PP) 25 at Bottom Panel for Segment 4AW. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M16 x 95 RC Set# DHGM160017 and final torque required was Snug Tight (Turn of Nut).

12" Spanner used for verifying the Snug Tight as Handrail Gratings are made of Fiber Reinforced Plastic.

Note: Inspection was carried on Ship Zhenhua #17.

Segment 4BW

This Quality Assurance (QA) Inspector witnessed final tension verification for Cat Walk Handrail Panel Point (PP) 26 to PP 28 at Bottom Panel and at PP 26.5 to PP 27 Side Panel Cross Beam Side for Segment 3AW. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M16 x 95 RC Set# DHGM160017 and final torque required was Snug Tight (Turn of Nut).

12" Spanner used for verifying the Snug Tight as Handrail Gratings are made of Fiber Reinforced Plastic.

Note: Inspection was carried on Ship Zhenhua #17.

Segment 1AE

This Quality Assurance (QA) Inspector witnessed final tension verification for Corner Assembly Edge Plate Splice (South) at Panel Point (PP) 8.5 for Segment 1AE. Inspected 10% on a random basis and found the tension to be in general compliance.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

Bolt sizes used were M24 x 75 RC Set# DHGM240020 and final torque required was 600 N-m.

Manual Torque wrench is been used with Sr. No. XO2 – 625.

Note: Inspection was carried on Ship Zhenhua #17.

Segment 1AAE

This Quality Assurance (QA) Inspector witnessed final tension verification for Corner Assembly Barrier Angle (North and South) between Panel Point (PP) 8 and PP 8.5 for Segment 1AAE. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M22 x 120 RC Set# DHGM220053 and final torque required was 440 N-m.

Manual Torque wrench is been used with Sr. No. XO2 – 625.

Note: Inspection was carried on Ship Zhenhua #17.

Segment 1AAW

This Quality Assurance (QA) Inspector witnessed final tension verification for Corner Assembly Barrier Angle (North and South) between Panel Point (PP) 8.5 and PP 9.0 for Segment 1AAW. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M22 x 120 RC Set# DHGM220051 and final torque required was 433 N-m.

Manual Torque wrench is been used with Sr. No. XO2 – 625.

Note: Inspection was carried on Ship Zhenhua #17.

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 , who represents the Office of Structural Materials for your project.

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