

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018228**Date Inspected:** 22-Nov-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)**Location:** Shanghai, China**CWI Name:** Li Yang and Zhu Zhong Hai**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 Mr. 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) at Trial Assembly Areas

Segment 11BW (Floor Beam Flatness after Heat Straightening)

This QA Inspector performed Floor Beam flatness check for the Segment 11BW from Panel Point (PP) 99 and PP 100 at the following locations after heat straightening:

The Floor Beam flatness was verified and measured at the Counter Weight (CW) side and Cross Beam (CB) side at Panel Point (PP) 99 and PP 100. The QA Inspector measured the Floor Beam flatness using 1500mm straight edge.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 11CW (Floor Beam Flatness after Heat Straightening)

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This QA Inspector performed Floor Beam flatness check for the Segment 11CW from Panel Point (PP) 102 and PP 103 at the following locations after heat straightening:

The Floor Beam flatness was verified and measured at the Counter Weight (CW) side and Cross Beam (CB) side at Panel Point (PP) 102 and PP 103. The QA Inspector measured the Floor Beam flatness using 1500mm straight edge.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 13BW (U-Rib to U-Rib)

This QA Inspector performed Dimension Control Inspection for measuring offset along with ABF QA Inspector on the U-Rib to U-Rib from Counter Weight side towards Cross Beam side at a total of 34 locations on Segment 13BW between Panel Points (PP) 121 to PP 121.5 at the following locations:

The offset was measured within 50mm from the Deck Panel on U-Rib on the South and North side. The QA Inspector measured the Offset using 1(One) Meter Straight Edge.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Note: At locations 1st, 2nd, 3rd, 13th and 27th there are no U-Rib as per design.

Segment 13CW (U-Rib to U-Rib)

This QA Inspector performed Dimension Control Inspection for measuring offset along with ABF QA Inspector on the U-Rib to U-Rib from Counter Weight side towards Cross Beam side at a total of 37 locations on Segment 13CW between Panel Points (PP) 123 to PP 123.5 at the following locations:

The offset was measured within 50mm from the Deck Panel on U-Rib on the South and North side. The QA Inspector measured the Offset using 1(One) Meter Straight Edge.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Note: At location 13 and 27 there are no U-Rib as per design.

Please reference the pictures attached for more comprehensive details.

Segment 13CW (U-Rib to U-Rib)

This QA Inspector performed Dimension Control Inspection for measuring offset along with ABF QA Inspector on the U-Rib to U-Rib from Counter Weight side towards Cross Beam side at a total of 37 locations on Segment

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13CW between Panel Points (PP) 124 to PP 124.5 at the following locations:

The offset was measured within 50mm from the Deck Panel on U-Rib on the South and North side. The QA Inspector measured the Offset using 1(One) Meter Straight Edge.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Note: At location 13 and 27 there are no U-Rib as per design.

Bike Path at Paint Shop # 3

This QA Inspector performed Dimension Control Inspection on the Bike Path bottom plate for flatness check across the longitudinal butt weld. Flatness check was performed on following mentioned Bike Paths and Bike Path are identified as:

BK004A-005

The QA Inspector measured the flatness using 600mm long straight edge and observed flatness dimensions out of allowable tolerance.

The results of the inspection were informed to Caltrans Lead Inspector Mr. Mark Miller and Mr. Hiranach Patel.

Segment 11DW to Segment 11EW (Transverse Splice at Side Panel)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBW11C-007. The welder identification was 040611 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G(4F)-Repair-FCM-1. The piece mark was identified as the Side Panel, Counter Weight side. ZPMC performed repair welding in accordance with Welding Repair Report B-WR-17444.

Please reference the pictures attached for more comprehensive details.

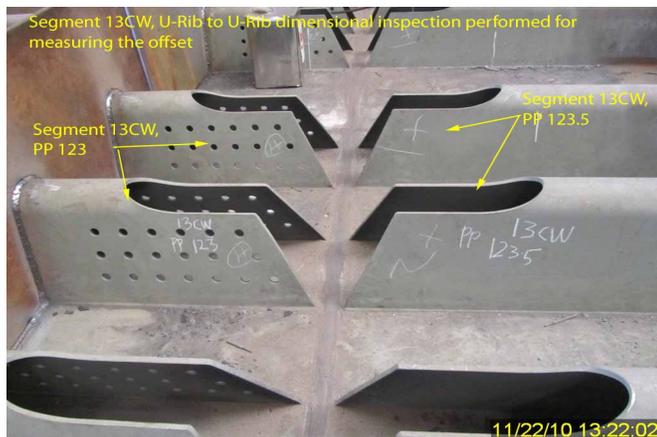
Segment 11DW to Segment 11EW (Transverse Splice at Side Panel)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBW11C-006. The welder identification was 067609 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G(4F)-Repair-FCM-1. The piece mark was identified as the Side Panel Corner Assembly, Counter Weight side. ZPMC performed repair welding in accordance with Welding Repair Report B-WR-17444.

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 were reported on this date.

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 Tsang 150000422372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Dsouza,Christopher

QA Reviewer