

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-018206**Date Inspected:** 19-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 11DE to Segment 11EE (Skin Flatness)

This QA Inspector performed Joint Inspection along with Caltrans QA Inspector Mr. Murugan Manikandan to check the skin flatness between Segment 11DE to Segment 11EE between Panel Points (PP) 106 and PP 107 at the following locations:

The skin flatness was measured on North side (Cross Beam Side at B1 and B2 locations) and South side (Bike Path Side at B3 and B4 locations) at 100mm from the weld connecting Bottom Panel to Side Panel using 5000mm string line to verify overall flatness. The straight edges of 600mm and 630 mm of length were also used to measure the localized flatness.

The skin flatness was measured on North side (Cross Beam side at T1 location) and South side (Bike Path Side at T2 location) at 100mm from the weld connecting Deck Panel to Edge Panel using 5000mm string line to verify overall flatness. The straight edges of 600mm and 630 mm length were also used to measure the localized flatness.

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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 11DE (Floor Beam Flatness after Heat Straightening)

This QA Inspector performed Floor Beam flatness check along with Caltrans QA Inspector Mr. Murugan Manikandan for the Segment 11DE from Panel Points (PP) 104, PP 105 and PP 106 at the following locations after heat straightening:

The Floor Beam flatness was verified and measured at the Cross Beam (CB) side and Bike Path side at Panel Points (PP) 104, PP 105 and PP 106. 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 11EE (Floor Beam Flatness after Heat Straightening)

This QA Inspector performed Floor Beam flatness check along with Caltrans QA Inspector Mr. Murugan Manikandan for the Segment 11EE from Panel Point (PP) 107 and PP 108 at the following locations after heat straightening:

The Floor Beam flatness was verified and measured at the Cross Beam (CB) side and Bike Path (BK) side at Panel Point (PP) 107 and PP 108. 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 12BW (Floor Beam Flatness after Heat Straightening)

This QA Inspector performed Floor Beam flatness check along with Caltrans QA Inspector Mr. Murugan Manikandan for the Segment 12BW from Panel Point (PP) 114 at the following locations after heat straightening:

The Floor Beam flatness was verified and measured at the Cross Beam (CB) side at Panel Point (PP) 114. 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.

Bottom Flange- Runner Blade Plate

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as SSD016-PP98-93.

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The welder identification was 044515 and was observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-Tc-U4b-FCM-1. The piece mark was identified as the Bottom Flange- Runner Blade Plate, piece mark identified as X24B.

Please reference the pictures attached for more comprehensive details.

Bottom Flange- Runner Blade Plate

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as SSD016-PP100-94. The welder identification was 044515 and was observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-Tc-U4b-FCM-1. The piece mark was identified as the Bottom Flange- Runner Blade Plate, piece mark identified as X24B.

Bottom Flange- Runner Blade Plate

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as SSD018-PP104-93. The welder identification was 040320 and was observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-Tc-U4b-FCM-1. The piece mark was identified as the Bottom Flange- Runner Blade Plate, piece mark identified as X24B.

Bottom Flange- Runner Blade Plate

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as SSD018-PP106-94. The welder identification was 040320 and was observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-Tc-U4b-FCM-1. The piece mark was identified as the Bottom Flange- Runner Blade Plate, piece mark identified as X24B.

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