

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-018447**Date Inspected:** 04-Dec-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 11DW to Segment 11EW (Transverse Splice T-Ribs)

This QA Inspector performed Dimension Control Inspection along with Caltrans QA Inspector Mr. Murugan Manikandan on the Transverse Splice T-Ribs to T-Ribs for the Segment 11DW to Segment 11EW between Panel Point (PP) 106 to PP 107 at the following locations:

Work Point W6 towards Work Point W4 (Side Panel Cross Beam Side) total 19 T-Ribs.

Work Point W4 towards Work Point W3 (Bottom Panel) total 18 T-Ribs.

Work Point W3 towards Work Point W1 (Side Panel Counter Weight Side) total 19 T-Ribs.

The QA Inspector measured the Vertical Offset using 1(One) Meter Straight Edge and measured the Horizontal Offset on the web using a Bridge Cam gauge.

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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.

Bike Path at East side of the Blast Shop # 1

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

BK004A-001
BK004A-003
BK004A-008
BK004A-010

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. Hiranch Patel.

Segment 11DE

This QA Inspector observed the in process fillet welding by Shielded Metal Arc Welding (SMAW) process. The weld joint was designated as OBE11A-014/015. The welder identification was 040270 and observed welding in the 4F (Overhead) position using approved Welding Procedure Specification WPS-B-P-2114-FCM-1. The piece mark was identified as "Arch Plate" welded below the Deck Panel extension at PP 106, east end.

Please reference the pictures attached for more comprehensive details.

Segment 11DW

This QA Inspector observed the in process fillet welding by Shielded Metal Arc Welding (SMAW) process. The weld joint was designated as SSD22-PP105.5-001. The welder identification was 066413 and observed welding in the 2F (Horizontal), 3F (Vertical) and 4F (Overhead) position using approved Welding Procedure Specification WPS-B-P-2112, WPS-B-P-2113, and WPS-B-P-2114. The piece mark was identified as "Un-equal Angle" at Side Panel, Counter Weight side, connecting the Corner Assembly vertical truss post plate.

Please reference the pictures attached for more comprehensive details.

Segment 11EE

This QA Inspector observed the in process fillet welding operation by the Flux Cored Arc Welding (FCAW) process. The weld joint was designated as SP718-001-021/022. The welder identification was 040367 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification

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WPS-B-T-2132-ESAB. The piece mark was identified as the Side Panel, T-Ribs hold back weld, Bike Path side.

Segment 12AE

This QA Inspector observed the in process fillet welding operation by the Flux Cored Arc Welding (FCAW) process. The weld joint was designated as SP3016-001-033/034. The welder identification was 040367 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132-ESAB. The piece mark was identified as the Side Panel, T-Ribs hold back weld, Bike Path side.

Segment 11EE

This QA Inspector observed the in process fillet welding operation by the Shielded Metal Arc Welding (SMAW) process. The weld joint was designated as SP330-001-029/030. The welder identification was 053871 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1. The piece mark was identified as the Side Panel, T-Ribs hold back weld, Bike Path side.

Segment 12AE

This QA Inspector observed the in process fillet welding operation by the Shielded Metal Arc Welding (SMAW) process. The weld joint was designated as SP3015-001-001/012. The welder identification was 053871 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1. The piece mark was identified as the Side Panel, T-Ribs hold back weld, Bike Path side.

Please reference the pictures attached for more comprehensive details.

Segment 12AE

This QA Inspector observed the repair welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld. The weld joint was designated as Seg3001T-019. The welder identification was 047353 and observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-B-T-2233-ESAB. The piece mark was identified as Longitudinal Diaphragm web, welded to Floor Beam at work point E4.

Please reference the pictures attached for more comprehensive details.

Segment 11EW

This QA Inspector observed the in process fillet welding by Shielded Metal Arc Welding (SMAW) process. The Weld joint was designated as DP695-001-013/014. The welder identification was 044504 and observed welding in the 4F (Overhead) position using approved Welding Procedure Specification WPS-B-T-4114-1. The piece mark was identified as Deck Panel I-Rib hold back weld, Bike Path side.

Segment 12AW

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This QA Inspector observed the in process fillet welding by Shielded Metal Arc Welding (SMAW) process. The Weld joint was designated as DP3039-001-012/017. The welder identification was 044504 and observed welding in the 4F (Overhead) position using approved Welding Procedure Specification WPS-B-T-4114-1. The piece mark was identified as Deck Panel I-Rib hold back weld, Bike Path side.

Segment 11BW to Segment 11CW

This QA Inspector observed bolts installed at Transverse Splice T-Ribs as Side Panel Counter Weight, Cross Beam and Bottom Panel. Rotation of nut is in progress.

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Segment 11AE, Segment 11BE and Segment 11CE

This QA Inspector observed Cable Tray structure installation is in progress at Bottom Panel T-Ribs at North and South side.

Please reference the pictures attached for more comprehensive details.

Lift 11 West

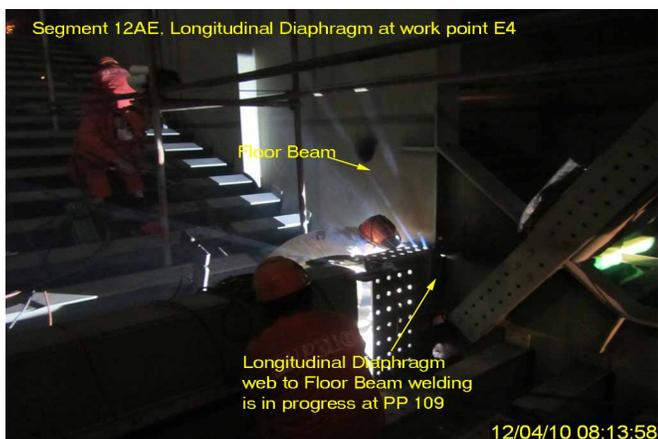
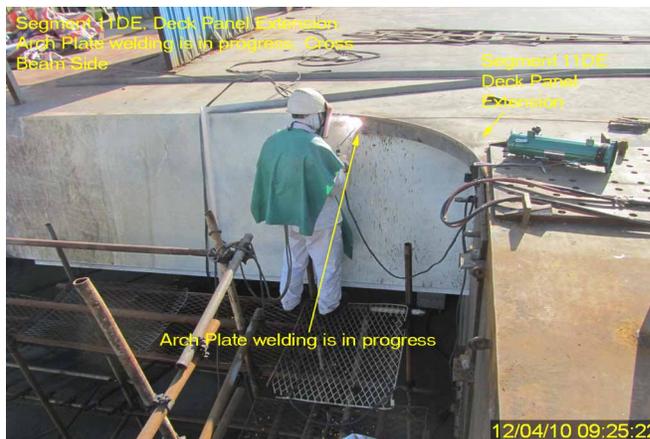
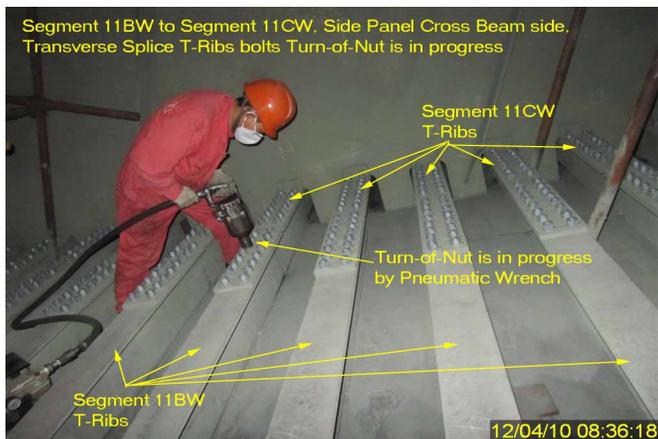
This QA Inspector observed Suspender Brackets been removed from it pre-installed locations for further processing. This QA Inspector performed the faying surface gap inspection on December 04, 2010 and observed the gap was within the allowable tolerances. The inspection was performed against the inspection notification # 00018 dated December 04, 2010.

Please reference the pictures attached for more comprehensive details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

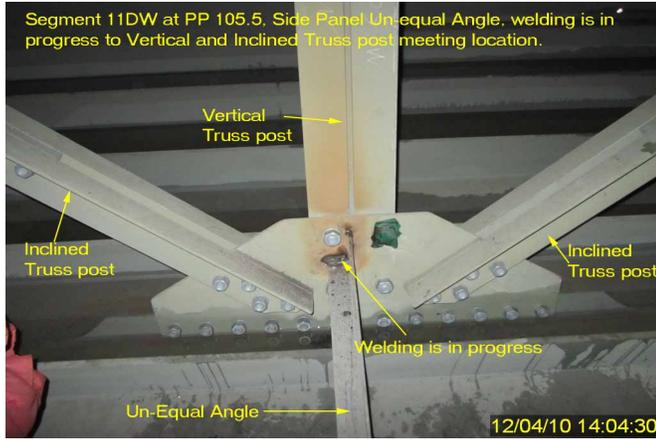
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Summary of Conversations:

No relevant conversations 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
