

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-016798**Date Inspected:** 13-Sep-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

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes No N/A	
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes No N/A	
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes No N/A	
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes No N/A	
		<b>Delayed / Cancelled:</b>	Yes No N/A	
<b>Bridge No:</b>	34-0006	<b>Component:</b>	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 9AW (Steel Cable)

This QA Inspector witnessed the final tension verification for steel cable connecting diagonally the Cable Tray Crosby Clips. The Cable Trays were installed at Bottom Panel Cross Beam and Counter Weight side at following Panel Points for Segment 9AW. The QA Inspector verified the tension of steel cable by pulling and pushing manually and the results appeared to be in general compliance with contract specification.

The Panel Points (PP) where the steel cables were installed for cable trays are identified as below.

Between PP71.25 to PP 72.

Between PP72 to PP 73.

The Inspection was performed against Notification No. 00486 dated September 13, 2010.

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### Segment 9BW (Steel Cable)

This QA Inspector witnessed the final tension verification for steel cable connecting diagonally the Cable Tray Crosby Clips. The Cable Trays were installed at Bottom Panel Cross Beam and Counter Weight side at following Panel Points for Segment 9BW. The QA Inspector verified the tension of steel cable by pulling and pushing manually and the results appeared to be in general compliance with contract specification.

The Panel Points (PP) where the steel cables were installed for cable trays are identified as below.

Between PP73 to PP 74.

Between PP74 to PP 75.

Between PP75 to PP 76.

The Inspection was performed against Notification No. 00486 dated September 13, 2010.

### Segment 9CW (Steel Cable)

This QA Inspector witnessed the final tension verification for steel cable connecting diagonally the Cable Tray Crosby Clips. The Cable Trays were installed at Bottom Panel Cross Beam and Counter Weight side at following Panel Points for Segment 9CW. The QA Inspector verified the tension of steel cable by pulling and pushing manually and the results appeared to be in general compliance with contract specification.

The Panel Points (PP) where the steel cables were installed for cable trays are identified as below.

Between PP76 to PP 77.

Between PP77 to PP 78.

Between PP78 to PP 79.

The Inspection was performed against Notification No. 00486 dated September 13, 2010.

### Segment 9DW (Steel Cable)

This QA Inspector witnessed the final tension verification for steel cable connecting diagonally the Cable Tray Crosby Clips. The Cable Trays were installed at Bottom Panel Cross Beam and Counter Weight side at following Panel Points for Segment 9DW. The QA Inspector verified the tension of steel cable by pulling and pushing manually and the results appeared to be in general compliance with contract specification.

The Panel Points (PP) where the steel cables were installed for cable trays are identified as below.

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Between PP79 to PP 80.

Between PP80 to PP 81.

Between PP81 to PP 82.

The Inspection was performed against Notification No. 00486 dated September 13, 2010.

Segment 9EW (Steel Cable)

This QA Inspector witnessed the final tension verification for steel cable connecting diagonally the Cable Tray Crosby Clips. The Cable Trays were installed at Bottom Panel Cross Beam and Counter Weight side at following Panel Points for Segment 9EW. The QA Inspector verified the tension of steel cable by pulling and pushing manually and the results appeared to be in general compliance with contract specification.

The Panel Points (PP) where the steel cables were installed for cable trays are identified as below.

Between PP82 to PP 83.

Between PP83 to PP 84.

Between PP84 to PP 85.

The Inspection was performed against Notification No. 00486 dated September 13, 2010.

Segment 10BW to Segment 10CW (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 Cross Beam side towards Bike Path side at a total of 39 locations on Segment 10BW to Segment 10CW between Panel Points (PP) 91 to PP 92 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.

Segment 10BW to Segment 10CW (Skin Flatness)

This QA Inspector performed Joint Inspection along with ABF QA Inspector to check the skin flatness between Segment 10BW to Segment 10CW between Panel Points (PP) 91 and PP 92 at the following locations:

The skin flatness was measured on North side (Counter Weight Side at B1 and B2 location) and South side (Cross Beam side at B3 and B4 location) at 100mm from the weld connecting Bottom Panel to Side Panel using 5000mm

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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 (Counter Weight side at T1 location) and South side (Cross Beam 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 Edge of 600mm and 630 mm length were also used to measure the localized flatness.

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.

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

**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.

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<b>Inspected By:</b>	Math,Manjunath	Quality Assurance Inspector
<b>Reviewed By:</b>	Peterson,Art	QA Reviewer

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