

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023386**Date Inspected:** 07-May-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:** Shen Fu Yoo**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, 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:

BAY 14

Orthotropic Box Girder (OBG)

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Longitudinal Diaphragm for Segment 7BW. The weld joint no. SEG-035C-039 is in progress. The welder is identified as 066401. Welder was welding Fillet in 2F (Horizontal) position. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2132.

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Longitudinal Diaphragm for Segment 7DW. The weld joint no. SEG-039C-003 is in progress. The welder is identified as 050316. Welder was welding CJP in 1G (Flat) position. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2211-Tc-U4b.

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Longitudinal Diaphragm for Segment 7DW. The weld joint no. SEG-039C-025 is in progress. The welder is

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identified as 201215. Welder was welding CJP in 3G (Vertical) position. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2213-Tc-U4b.

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Unequal Angle to Bottom Plate for Segment 7EW. The weld joint no. SSD-029-PP59.5 from 205 to 209 is in progress. The welder is identified as 204730. Welder was welding Fillet in 2F (Horizontal) position. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2132.

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Unequal Angle to Bottom Plate for Segment 7BW. The weld joint no. SSD-12-PP-52 220, 230, 240 and 250 is in progress. The welder is identified as 066401 and 045240. Welder was welding CJP with metal backing in 1G (Flat) position. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231-Tc-U4c.

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Side Plate between BP 097A to BP 043A for Segment 6CW. The weld joint no. SEG-049A-005 is in progress. The welder is identified as 207465. Welder was welding in 1G (Flat) position. In process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231-B-U2-F.

This QA Inspector observed ZPMC welding personnel performing Submerged Arc Welding (SAW) for Side Plate between BP 098 to BP 044 for Segment 9BW. The weld joint no. SEG-051A-003 is in progress. The welder is identified as 045265. Welder was welding in 1G (Flat) position. In process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2221-B-L2c-S.

This QA Inspector observed ZPMC welding personnel performing Stud Welding for Corner Panel CA37 for Segment 6CW. Welder was welding in Vertical position. In process Stud Welding appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2143-Stud.

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Longitudinal Diaphragm for Segment 6AW. The weld joint no. SEG-027B-015 is in progress. The welder is identified as 066038. Welder was welding CJP in 4G (Overhead) position. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-Tc-U4b.

This QA Inspector observed ZPMC welding personnel performing Submerged Arc Welding (SAW) for Side Plate between BP 105A to BP 132A for Segment 9AW. The weld joint no. SEG-049A is in progress. The welder is identified as 045265. Welder was welding in 1G (Flat) position. In process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2221-B-L2c-S.

The designated ZPMC CWI for the West Line is Mr. Shen Fu Yoo and QC Mr. Li Ming Yang and Mr. Liu Rudan.

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

### Summary of Conversations:

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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 15000422372, 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>	Miller,Mark	QA Reviewer

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