

**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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009250**Date Inspected:** 21-Sep-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:** Xu Yumin**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 Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 1AAW/1AW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW1A-004. The welder is identified as #049769 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1 for WR7664.

This QA Inspector observed ZPMC personnel performing Ultrasonic Testing (UT) on the segment Bottom Plate CJP splice.

Segment 1AAE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as OBE1-119 thru 130. The welder is identified as #067103 and was observed welding in the 3F

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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(vertical) position using approved Welding Procedure Specification WPS-B-T-2133.

### Segment 5BW

This QA Inspector observed grinding of the root pass on the lower Counter Weight connection bracket.

### Segment 5AE

This QA Inspector observed back gouging of the vertical CJP welds at the connection plate on the bike path cantilever at panel point 29.

### BK002-001

This QA Inspector observed ZPMC personnel performing Magnetic Particle Testing (MT) on the interior welds of the cantilever.

### Segment 2AE

This QA Inspector observed blasting in progress of the interior of the segment.

### Segment 1AAE/1AE

This QA Inspector observed ZPMC personnel performing Ultrasonic Testing (UT) on the segment Bottom Plate CJP splice.

### Segment 1AW

This QA Inspector observed fit up of the Cable Trays to the Bottom Plate for match drilling of bolt holes.

This QA Inspector observed ZPMC personnel performing MT on the Drip Plate on the Counter Weight side.

### Segment 5CE

This QA Inspector observed heat straightening on the short Longitudinal Diaphragm at panel point 35 Cross Beam side using HSR1 (B)-6723.

ZPMC Quality Control (QC) Inspector is identified as Chen Bo and Zhang Hai Tao. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

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

### Summary of Conversations:

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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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No relevant conversations.

## **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, 150-0042-2372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hernandez,Dan	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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