

**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-017256**Date Inspected:** 07-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**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 11AW/11BW

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 DP692-001-019, Deck Plate I-rib splice. The welder is identified as #046709 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-3213-B-U3b.

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 DP679-001-021, Deck Plate I-rib splice. The welder is identified as #040611 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-3213-B-U3b.

Segment 11AW

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This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as DP678-001-013, Deck Plate I-rib hold back weld. The welder is identified as #069683 and was observed welding in the 4F (overhead) position using approved Welding Procedure Specification WPS-B-T-4114-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as DP691-001-018, Deck Plate I-rib hold back weld. The welder is identified as #069841 and was observed welding in the 4F (overhead) position using approved Welding Procedure Specification WPS-B-T-4114-1.

### Segment 11BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as DP679-001-017, Deck Plate I-rib hold back weld. The welder is identified as #069683 and was observed welding in the 4F (overhead) position using approved Welding Procedure Specification WPS-B-T-4114-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as DP692-001-012, Deck Plate I-rib hold back weld. The welder is identified as #069841 and was observed welding in the 4F (overhead) position using approved Welding Procedure Specification WPS-B-T-4114-1.

### Segment 11AE/11BE

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 DP705-001-021, Deck Plate I-rib splice. The welder is identified as #044515 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-3213-B-U3b.

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 DP718-001-021, Deck Plate I-rib splice. The welder is identified as #500363 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-3213-B-U3b.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (JP) weld joint. The Weld joint is designated as SP714-001-031, Side Plate I-rib splice. The welder is identified as #052763 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2332-TC-P4-F.

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 BP078-001-020, Bottom Plate WT stiffener web splice. The welder is identified as #044504 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2213-B-U2-FCM-1.

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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 OBE11B-003, Bottom Plate transverse splice. The welder is identified as #047353 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-P-2231T.

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 OBE11B-004, Side Plate transverse splice. The welder is identified as #047353 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2233T.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspectors are identified as Wang Li Yang and Wang Zhu. The welding variables recorded by QC appeared to comply with the Applicable WPS.

### Segment 11AW

This QA Inspector observed fit up of the Top Counter Weight Connection Plate at panel points 96-97.

### Segment 10CW

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Side Plate to Bottom Plate hold back CJP weld, cross beam side at 10CW/11AW field splice location.

### Segment 10AE/CB13

This QA Inspector observed fit up of bolted splice plates at FL3 to Side Panel.

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.

### **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
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<b>Reviewed By:</b>	Peterson,Art	QA Reviewer
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