

**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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010736**Date Inspected:** 05-Dec-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:** 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 6BE/6CE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE6C-004. The welder is identified as #220069 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-T.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE6C-003. The welder is identified as #220067 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233-T.

Segment 6AW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG027B-031. The welder is identified as #066746 and was observed

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welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-B-U2a-F, 270mm was welded after cutting for misalignment.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG027B-035. The welder is identified as #067947 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-B-U2a-F, 270mm was welded after cutting for misalignment.

This QA Inspector observed cutting of the Side Plate to Bottom Plate CJP splice weld at a length of approximately 2785mm at the 6AW/6BW splice location, cross beam side.

Segment 6AE/6BE

This QA Inspector observed grinding of the Deck Plate CJP splice weld flush on the interior of the segment.

Segment 6AE

This QA Inspector observed Heat Straightening in progress of the Deck Plate Splice at DP513A to DP516A to correct welding distortion following HSR1 (B)-7964.

Segment 6AW/6BW

This QA Inspector observed alignment and tack welding of the Bottom Plate WT stiffeners.

Segment 1W

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

ZPMC Quality Control (QC) Inspector is identified as Wang Li Yang. 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:**

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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**Inspected By:** Hernandez,Dan

Quality Assurance Inspector

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**Reviewed By:** Miller, Mark

QA Reviewer