

**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-018464**Date Inspected:** 28-Nov-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), 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 11DW/11EW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBW11C-007, Side Plate transverse splice. The welder is identified as #040611 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for CWR2272, UT repair.

Traveler Rail Bracket

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated TR1B-PP095-004, Traveler Rail Bracket connection plate. The welder is identified as #053486 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-TC-U4c-F.

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# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated TR1B-PP107-004, Traveler Rail Bracket connection plate. The welder is identified as #049220 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-ESAB.

## Segment 11DW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG071A-044, Side Plate to Bottom Plate. The welder is identified as #040611 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for CWR2301, UT repair.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspector is identified as Zhou Zhong Hai. The welding variables recorded by QC appeared to comply with the Applicable WPS.

## Segment 11EE

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Edge Plate at locations of removed fit up plates at panel point 107 at location of Bike Path Cantilever.

## Segment 11CE/11DE

This QA Inspector observed ABF personnel performing Magnetic Particle Testing along the interior Deck Plate transverse CJP splice.

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Edge Plate to Deck Plate and Edge Plate to Side Plate hold back welds, bike path side.

## Segment 11DE

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Side Plate to Bottom Plate hold back weld, bike path side at 11DE/11EE.

## Segment 12AE

This QA Inspector observed fit up of the FL3 Bottom Panel at panel points 110-112.

## Segment 11EW/12AW

This QA Inspector observed the fit up of the Side Plate transverse CJP field splice.

## Segment 12AE

This QA Inspector observed beveling of the Deck Plate and Side Plates with the use of a mechanical guided torch

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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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at the east end of the segment.

Segment 12BW

This QA Inspector observed 12BW was placed in the Trial Assembly West line up.

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

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