

**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-017252**Date Inspected:** 06-Oct-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 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 OBW11-003, Deck Plate transverse splice. The welder is identified as #040656 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

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 SP113-001-057, Side Plate Wt stiffener web splice. The welder

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is identified as #069683 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

### Segment 10BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Partial Joint Penetration (PJP) weld joint. The Weld joint is designated as LB003-002-075, Light Bracket to Edge Plate. The welder is identified as #069683 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2314-TC-P4.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Partial Joint Penetration (PJP) weld joint. The Weld joint is designated as LB003-002-058, Light Bracket to Deck Plate. The welder is identified as #040759 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-T-2332-TC-P4-F.

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

### Segment 10AW

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

### QA Verification

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC MT personnel. The following items were tested:

### 11AW

SEG065B-001  
SEG065B-009  
SEG065B-011  
SEG065C-006  
SEG065C-024  
SEG065C-027

### 10CW

SEG063B-001  
SEG063B-011  
SEG063B-013  
SEG063C-001  
SEG063C-011  
SEG063C-013

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10AE

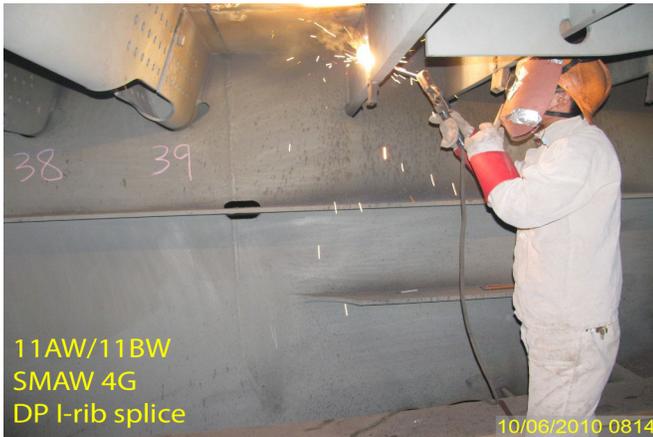
SSD023-PP85.5-001

SSD024-PP86.5-001

SSD024-PP87.5-001

SSD029-PP88.5-004

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:** Peterson,Art

QA Reviewer