

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-018465**Date Inspected:** 27-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 11DE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG072A-044, Side Plate to Bottom Plate. The welder is identified as #050289 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-SMAW-1G (1F)-FCM-repair-1 for WR17823, UT repair.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG072*-049, Edge Plate to Deck Plate hold back weld. The welder is identified as #040320 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for WR17822, UT repair.

Segment 11EE

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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 SEG074A-014, Side Plate to Bottom Plate. The welder is identified as #050289 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-SMAW-1G (1F)-FCM-repair-1 for WR17823, UT repair.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated CA094-005, Edge Plate to Deck Plate hold back weld. The welder is identified as #044515 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for WR17821, 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 TR1C-PP096-006, 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 WPSB-T-2231-TC-U4c-F.

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

Segment 11DE

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Deck Plate at location of removed fit up plates along the Segment to Cross Beam connection.

Bike Path Cantilever BK1-048

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the cope hole cover plates.

Bike Path Cantilever BK1-049

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the side panels at locations of removed lifting lugs..

Segment 11DW

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Side Plate to Bottom Plate longitudinal CJP splice, cross beam side.

Segment 11EE/12AE

This QA Inspector observed fit up of the Edge Plate transverse CJP splice, bike path side at the field splice location.

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Segment 11EE

This QA Inspector observed drilling of bolt holes in the Side Plate for the bolted connection of the traveler rail bracket at panel point 108.

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

Light Bracket

LB3A-003-006

LB3-003-044

LB3-003-058

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.

Inspected By: Hernandez,Dan

Quality Assurance Inspector

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Reviewed By: Dsouza,Christopher

QA Reviewer