

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-016780**Date Inspected:** 15-Sep-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 Segment**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 10BW

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 OBW10L-005, top Counter Weight Connection Plate. The welder is identified as #046709 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-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 OBW10L-008, bottom Counter Weight Connection Plate. The welder is identified as #046067 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

Segment 10CW

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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 OBW10L-010, bottom Counter Weight Connection Plate. The welder is identified as #057333 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

Segment 10BE/10CE

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 OBE10A-003, Deck Plate splice root pass. The welders are identified as #047353, #040367, #052926 and #040458 and were observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-223(2)1T-2.

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 OBE10A-002, Deck Plate splice. The welder is identified as #052926 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231T.

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 OBE10A-004, Deck Plate splice. The welder is identified as #040458 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231T.

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 OBE10C-003, Bottom Plate splice. The welders are identified as #052763 and #044473 and were observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231T.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspectors are identified as Zhou Peng, An Qing Xiang and Liu Hua Jie. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Segment 10BW

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Deck Plate to Edge Plate hold back CJP weld; cross beam side at 10BW/10CW. D-scan was performed.

Segment 10AE/10BE

This QA Inspector observed ZPMC personnel performing Magnetic Particle Testing on the Side Plate transverse CJP splice and locations of removed fit up plates, bike path side.

Segment 10AW/10BW

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Side Plate transverse

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CJP splice and locations of removed fit up plates, cross beam side.

Segment 10BW/10CW

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Side Plate (cross beam and counter weight side) and Bottom Plate transverse CJP splice. D-scan was performed.

Segment 10BE

This QA Inspector observed fit up of the Suspender bracket at panel point 90.

This QA Inspector observed fit up of the Bike Path Cantilever at panel point 91.

Segment 11AE

This QA Inspector observed beveling of the Bottom Plate and Side Plate (cross beam and counter weight side) with the use of a mechanical guided torch at 10CE/11AE field splice location.

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: Peterson, Art

QA Reviewer