

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-016586**Date Inspected:** 06-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 Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as BP103-001-045, Bottom Plate WT stiffener hold back weld. The welder is identified as #053486 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

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 CA074-002, Edge Plate to Deck Plate splice. The welder is identified as #037723 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 Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SP661-001-027, Side Plate WT stiffener hold back weld. The welder is identified as #040609 and

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was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

Segment 10CW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as BP104-001-027, Bottom Plate WT stiffener hold back weld. The welder is identified as #053486 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

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 SEG063*-035, Edge Plate to Deck Plate splice. The welder is identified as #037723 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 Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SP662-001-017, Side Plate WT stiffener hold back weld. The welder is identified as #040609 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

Segment 10BW/10CW

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 BP049-001-024, Bottom Plate WT stiffener web splice. The welder is identified as #040759 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2233-B-U2-FCM-1.

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 SP622-001-037, Side Plate WT stiffener web splice. The welder is identified as #202384 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2233-B-U2-FCM-1.

Segment 10AE/10BE

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 DP714-001-037, Deck Plate I-rib splice. The welder is identified as #044515 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-3213-B-U3b.

Segment 10AE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SP590-001-049, Side Plate WT stiffener hold back weld. The welder is identified as #040367 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification

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WPS-B-T-2132.

Segment 10BE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SP591-001-001, Side Plate WT stiffener hold back weld. The welder is identified as #040367 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

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

Segment 10AE/10BE

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Bottom Plate transverse CJP splice, D-scan was performed.

Segment 10AW

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Deck Plate at locations of removed fit up plates at 9EW/10AW field splice location.

Segment 10BW/10CW

This QA Inspector observed back gouging of the Side Plate transverse CJP splice root pass, counter weight side.

Lift 9 West

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Deck Plate at locations of removed fit up plates at the Counter Weight Connection plates and removed safety cable posts.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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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

Reviewed By: Peterson, Art

QA Reviewer