

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-017671**Date Inspected:** 01-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 11BE/11CE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated BP187-001-020, Bottom Plate WT stiffener web Splice. The welder is identified as #040367 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233-B-U2-F.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SP596-001-020, Bottom Plate WT stiffener web Splice. The welder is identified as #040367 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2213-B-U2-F.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated DP719-001-020, Deck Plate I-rib stiffener web Splice. The welder

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is identified as #044515 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-3213-B-U3b.

This QA Inspector observed Base Metal Repair using the Shielded Metal Arc Welding (SMAW) process at locations of removed fit up plates along the interior of the Deck Plate transverse CJP splice. 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 CWR1957.

Segment 11CW/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 OBW11C-003, Bottom Plate transverse Splice. The welder is identified as #049220 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-B-U2-F.

This QA Inspector observed Submerged Arc Welding (SAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBW11A-003, Deck Plate transverse Splice. The welder is identified as #044560 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-223(2)1T-1.

Segment 11CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated CA085-006, Deck Plate to Edge Plate hold back weld. The welder is identified as #046709 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 CA086-002, Deck Plate to Edge Plate hold back weld. The welder is identified as #040611 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

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 CA085-002, Deck Plate to Edge Plate hold back weld. The welder is identified as #046709 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 SEG071*-044, Deck Plate to Edge Plate hold back weld. The welder is identified as #040611 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

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Segment 11BE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated SP354-001-035, Side Plate WT stiffener hold back weld. The welder is identified as #047353 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated BP187-001-043, Bottom 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.

Segment 11CE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated SP355-001-011, Side Plate WT stiffener hold back weld. The welder is identified as #047353 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated BP188-001-031, Bottom 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 Liu Hua Jie and Zhou Peng. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Segment 11BW/11CW

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Side Plate transverse CJP splice, counter weight side. D scan was performed.

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Edge Plate transverse CJP splice, counter weight side. D scan was performed.

Segment 11AE

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Side Plate at locations of removed fit up plates, cross beam side at the west end of the segment.

Segment 11BE

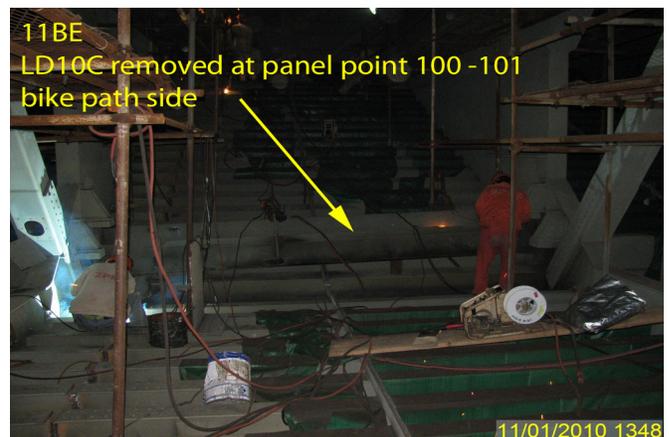
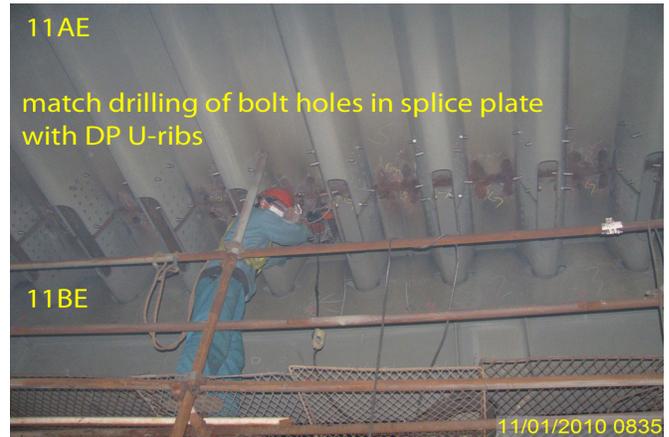
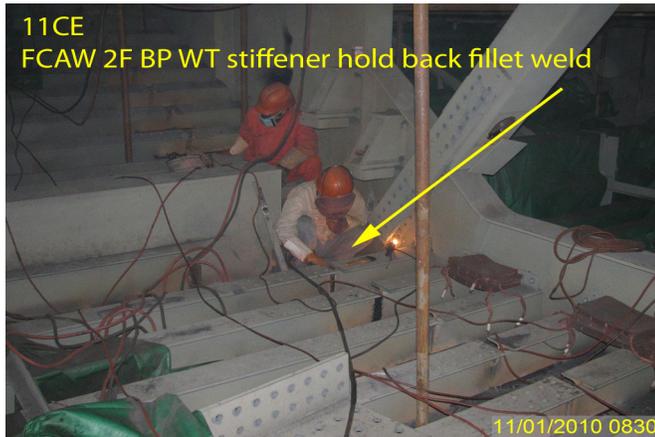
This QA Inspector observed match drilling of the Deck Plate U-ribs and splice plates at 11AE/11BE.

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This QA Inspector observed Longitudinal Diaphragm LD10C was removed at panel points 100-101 following CWR1961, bike path side.

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

Reviewed By: Dsouza, Christopher

QA Reviewer
