

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014559**Date Inspected:** 27-May-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 9AE

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 CA057-005. The welder is identified as #068917 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

Segment 9BE

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 SEG052A-046. The welder is identified as #068917 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Segment 8CW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SP767-001-047, 048. The welder is identified as #045227 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

Segment 9AW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SP768-001-005, 006. The welder is identified as #045227 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

Segment 8BE/8CE

This QA Inspector observed grit blasting in progress at the segment transverse splice, interior.

Segment 8AW

This QA Inspector observed drilling of bolt holes in the Deck Plate for Suspender Brackets at panel points 62 and 64.

Segment 7EE/8AE

This QA Inspector observed removal of the remaining portion of fit up plates by arc gouging along the segment transverse field splice.

Segment 8AE/CB9

This QA Inspector observed fit up of the bolted splice plate for match drilling at panel point 64 FL3/Side Panel.

Segment 9AE/9BE

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

Segment 7AW/7BW

This QA Inspector observed ZPMC personnel performing Ultrasonic Testing on the top Counter Weight Connection plate at panel points 48 to 54.

Segment 7AW/7BW

This QA Inspector observed Final Bolt tension verification on M22x65 A325 high strength bolts for U rib bolted splice plates. Verification of U ribs # 16, 17, 31, 33, 34, 35, 36, 37, 38 from north end of segment was not

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

performed. Offset exceeded 5mm and require oversize splice plates, installation currently in progress and these locations.

ZPMC Quality Control (QC) Inspector is identified as Wang Zhu. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

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:

Traveler Rail Bracket

TR2A-PP50-002

TR2A-PP54-002

TRA1-PP55-002

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:	Carreon,Albert	QA Reviewer
