

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003282**Date Inspected:** 07-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** Chen Chih Meng**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**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to monitor activities associated with the Production Monitoring Test of Orthotropic Box Girder (OBG) components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Assembly Shop 2

The Caltrans QA Inspector observed ZPMC welders Mr. Wang Li and Mr. Liu Xio Lin performing Shielded Metal Arc Welding (SMAW) in the 4G position on the OBG floor beam to side plate Segment 20A, lift 4BE welds SSD18-093 through 132. The above mentioned welding is a continuous Complete Joint Penetration (CJP) weld joint. Welding was performed after back gouging. Welding appeared to be in conformance with AWS D1.5 (2002) and the posted Welding Procedure Specification, WPS-2214-TC-U4b-FCM. The following welding variables were recorded during welding amperage 168, volts 27, travel speed 140 mm/min with a heat input of 1.94 kJ/mm.

The Caltrans QA Inspector observed base metal repair welding of Segment 14A lift 4AE bevel face (B-WR536). ZPMC welder Mr. Wanglin Jiang performed Flux Cored Arc Welding (FCAW) in the 1G position. The above mentioned repair procedure was a dual repair for the bevel face as well as the flame cut areas of the stiffeners. Only weld build up was performed on the bevel face. The repair procedure called for 5 to 6 mm of additional weld from the dimension listed on shop drawings. Welding appeared to be in conformance with AWS D1.5 (2002) and the posted Welding Procedure Specification, WPS-345-FCAW-1G (1F) FCM Repair. Please see photo of the flame cut area on stiffener.

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Summary of Conversations:

No relevant conversations occurred this date.

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer
