

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-000542**Date Inspected:** 29-Sep-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** Ye Yong Jun**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:** 77 D and 114 A67**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe the welding operations and Magnetic Particle Testing (MT) of the Caltrans Mock-up #77.00 and #114.00, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector observed ZPMC shop personnel performing Shielded Metal Arc Welding (SMAW) tack welding at Mock-up # 114.00 sub assembly A67 longitudinal stiffener plate welds. ZPMC QA inspector Mr. Fu Yuhong stated the tack welding was being performed in accordance to WPS-B-P-2212-TC-U5b, ZPMC welder Guo Dengyun performed the above mentioned welding. ZPMC QC MT inspector, Mr. Cai Xin Xin performed MT of Mock-up # 77.00 D sub assembly MA5 stiffener cover passes. During testing Caltrans QA Inspector noted areas open to the surface that appeared to be where valleys between beads had not been ground flush and showed a straight line with a sharp edge that produced a Magnetic Particle Indication that may mask a defect. ZPMC QA Fu Yuhong stated that the welds would be visually retested and MT performed. These areas were not tested before the end of QA inspector Viars shift. The following digital picture below illustrates Magnetic Particle Indications found on weld # 4 of Mock-up 114.00 sub assembly MA5.

The Caltrans QA Inspector observed welding operations of stiffener tack welds # 114.00 A67 and MT of Mock-up 77.00. QA Inspector Viars observed that the welding and testing appeared to be in general conformance with AWS D1.5 2002 requirements.

WELDING INSPECTION REPORT

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

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
