

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-000413**Date Inspected:** 04-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:** Shanghai, China**CWI Name:** Gu Xin Zhai**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:** MOCK UP**Summary of Items Observed:**

Elevation 77:

Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding being performed for the fabrication of the Mock Up at elevation 77. The QA Inspector randomly observed ZPMC welders Xin Meng and Liu Xie, utilizing the flux cored arc welding (FCAW) process to weld longitudinal stiffener MP9-1 to skin plate C at weld joints (WJ) MUSA-MA4-9 and MUSA-MA4-10. Both welders were utilizing ZPMC weld procedure specification WPS-B-T-2332-TC-P5-F with the semi-automatic method. The QA Inspector observed ZPMC CWI Gu Xin Zhai monitoring weld parameters. The QA Inspector also performed random verification of the above weld parameters and documented same. The welding amperage was 297 amps with a corresponding welding voltage of 32 volts and a travel speed of 315 millimeters per minute for WJ MUSA-MA4-9 and 320 amps, 30 volts with a travel speed of 316 millimeters per minute for WJ MUSA-MA4-10.

The QA Inspector also observed ZPMC NDT Technician Zhou Dong Yun performing 100% MT inspection of the root passes in WJ's MUSA-MA4-3 and MUSA-MA4-4. The QA Inspector performed a 20% random magnetic particle (MT) inspection of WJ's MUSA-MA4-3 and MUSA-MA4-4. There appeared to be no indications. ZPMC CWI Gu Xin Zhai accepted the root passes of the above WJ's.

The QA Inspector observed ZPMC NDT Technician Zhou Dong Yuu performing 100% MT inspection of the tack welds in WJ's attaching longitudinal stiffeners MP10-1, MP16-1 and MP16-2 to skin plate B. ZPMC CWI Gu Xin Zhai accepted the tack welds attaching the longitudinal stiffeners to skin plate B. There appeared to be no

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indications.



Summary of Conversations:

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

Inspected By: Franco,Charlie

Quality Assurance Inspector

Reviewed By: Cuellar,Robert

QA Reviewer