

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-004100**Date Inspected:** 13-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Chih-Ming**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:** Various (see below)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG assembly bay 2

QA observed ZPMC qualified welding personnel SMAW in the 4G position on joint# SEG-024A-015 following the guide lines of WPS-B-P-2214-Tc-U4b-FCM. QC monitored the welding process continuously through out the evening. The welder ID and welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 25.1 Amps: 182 Travel speed: 106mm/min

Welder ID: 066258

QA observed ZPMC qualified welding personnel SMAW in the 4G position on joint# SEG-024A-016 following the guide lines of WPS-B-P-2214-Tc-U4b-FCM. QC monitored the welding process continuously through out the evening. The welder ID and welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 25.4 Amps: 175 Travel speed: 106mm/min

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Welder ID: 200114

QA observed ZPMC qualified welding personnel SMAW in the 4G position on joint# SEG-023A-016 following the guide lines of WPS-B-P-2214-Tc-U4b-FCM. QC monitored the welding process continuously through out the evening. The welder ID and welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 25 Amps: 190 Travel speed: 126mm/min

Welder ID: 037996

QA observed ZPMC qualified welding personnel SMAW in the 4G position on joint# SEG-024A-015 following the guide lines of WPS-B-P-2214-Tc-U4b-FCM. QC monitored the welding process continuously through out the evening. The welder ID and welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 26 Amps: 189 Travel speed: 127mm/min

Welder ID: 200114

QA observed ZPMC qualified welding personnel SAW on joint# SEG-024*-005 following the guide lines of WPS-B-P-2221-B-L2c-S-2. QC monitored the welding process continuously through out the evening. The welder ID and welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 31.7 Amps: 575 Travel speed: 535mm/min

Welder ID: 048296

QA observed ZPMC qualified welding personnel FCAW root on joint# SEG-023*-005 following the guide lines of WPS-B-T-2231-B-U2-F. QC monitored the welding process continuously through out the evening. The welder ID and welding parameters as measured with Quality Controls calibrated instruments appeared to be in conformance with the posted WPS's and were as follows:

Volts: 29.4 Amps: 285 Travel speed: 290mm/min

Welder ID: 051348

QA performed preliminary Ultrasonic Testing (UT) for cracks in the tacked areas of the Partial Joint Penetration (PJP) welds joining u-ribs to deck plates on the following deck panel:

DP-405-001:

Weld# 1 – 26 tacks UT'ed – 1 indication

Weld# 2 – 26 tacks UT'ed – 2 indications

NOTE: 2 Deck Panels were purchased by Caltrans for testing and initial UT and PAUT procedural development purposes. At this time no written PAUT procedure has been issued. However, all the test samples identified with the PAUT method as crack indications were confirmed after macro-etching and magnetic particle testing.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

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 Ryan Smith, (858) 232-6799, who represents the Office of Structural Materials for your project.

Inspected By:	Hall,Steven	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
