

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-006154**Date Inspected:** 12-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Zhong Hui**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:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Erik Prue 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 Inspector observed and/or found the following:

OBG Bay 19: QA Inspector randomly observed ZPMC qualified welders ID#'s 062738, 062807, 062735, and 062750 welding stiffeners to bottom plate BP-028-001. Welders were observed welding in the 2G (horizontal) position utilizing the Flux Core Arc Welding (FCAW) process. QA Inspector observed the ZPMC QC Inspector Li Liqing verifying welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector with QC Inspector observed parameters as follows: preheat temperature to be at 80°C and measured the welding parameters to be 318 amps, 30.7 volts, a travel speed of 446 mm/min. Welding parameters verified by QA Inspector appear to be in general compliance with the approved WPS-B-P-2132-3.

OBG Segment 4AE: QA Inspector performed ultrasonic (UT) verification testing of OBG floor beam sub assemblies # FB003-011, FB006-013, and FB002-004 complete joint penetration (CJP) butt joints on welds for green tag inspection. The Ultrasonic Testing (UT) was performed to verify that 10% of the weld meets the requirements of the contract documents and AWS D1.5-2002 after ZPMC QC UT acceptable inspection. The welds and base metal were scanned utilizing a Krautkramer Branson USN 58L #01WHB1. QA Inspector performed a base metal lamination check using a 25mm diameter 2.25 MHz transducer and a shear wave scan using a 20mm x 15mm 2.25 MHz transducer on a 70 degree angle wedge from face A. For details please see the ultrasonic testing report TL-6027 dated 12 March, 2009. QA Inspector found the welds inspected to be in compliance with AWS D1.5 2002 Table 6.3 and the contract documents.

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Unless otherwise noted, all work observed on this date appears to be in general compliance with the applicable contract documents.

Summary of Conversations:

No significant conversations this day.

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, 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prue,Erik	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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