

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-005706**Date Inspected:** 28-Feb-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:** Shen Fu You**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:

Bay 14: QA Inspector randomly observed ZPMC qualified welders ID #050988 and #066041 welding diaphragm plates to U-ribs. Welders were observed welding in the 3G & 3F (vertical) position utilizing the Flux Core Arc Welding (FCAW) process. QA Inspector observed the ZPMC QC Inspector Wu Bin verifying welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector with QC Inspector observed parameters taken for welder # 050988 as follows: preheat temperature to be at 36°C and measured the welding parameters to be 218 amps, 24.2 volts, a travel speed of 115 mm/min. Welding parameters verified by QA Inspector appear to be in general compliance with the approved WPS-B-T-2133 3F.

OBG Bay 13: QA Inspector performed ultrasonic (UT) verification testing of OBG segment complete joint penetration (CJP) butt joints. Welds tested were Seg 019-001 DP37A to 38A, Seg 019-002 DP38a to DP39A, Seg 019-003 DP73A to DP74A, Seg 019-025 DP37A to DPCA11A, and Seg 019-027 DP73A to 39A. 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 28 Feb, 2009. QA Inspector found the welds inspected to be in compliance with AWS D1.5 2002 Table 6.3 and the contract

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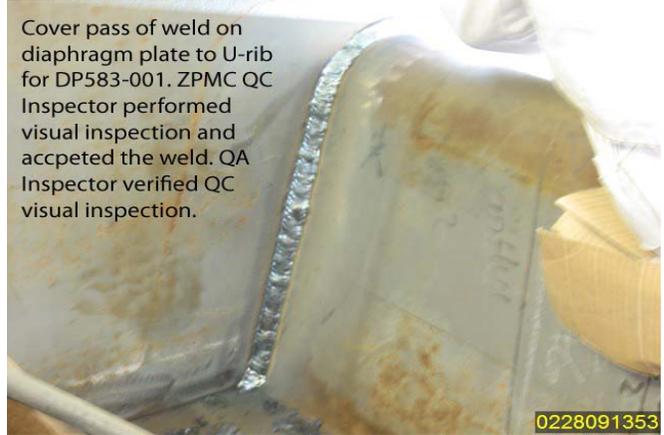
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documents.

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
Reviewed By:	Carreon,Albert	QA Reviewer
