

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-015423**Date Inspected:** 27-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**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:**

CWI Inspector: Mr. Zhu Zhong Hai

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Segment Trial Assembly

This QA Inspector observed ZPMC welder Mr. Wang Chang Ming, stencil 047864 is using shielded metal arc welding procedure WPS-345-SMAW-4G(4F)-FCM-Repair-1 to make shielded metal arc repair welds as authorized on weld repair document BWR13822. This document states: "After inspection of the flatness of corner assembly edge plate face cross beam 1st I-rib was 10mm exceeding requirement by 630mm rule measuring. Please see the detail position in the following sketch." The sketch identifies the two stiffener plates as RS89DA and RS90D and this weld repair document does not list the weld numbers that are to be rewelded. ZPMC CWI Mr. Zhu Zhong Hai and ZPMC QC Inspector Mr. Xu Jin Zong both indicated that they do not know the weld numbers for these stiffener plates. See the photographs below for additional information. This welding is located on corner assembly, cross beam side of OBG segment 8CW between panel points PP067 and PP068. This QA Inspector observed ZPMC QC Inspector Mr. Xu Jin Zong monitoring the base material preheat and interpass temperatures. This QA Inspector observed a welding current of approximately 170 amps, the base material was preheated with a torch prior to welding and Mr. Wang Chang Ming appears to be certified to make this weld. Items observed on

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this date appeared to generally comply with applicable contract documents.

ZPMC issued "Inspection Notification Sheet" number 6068 informing Caltrans QA that ZPMC will perform ultrasonic inspections (UT) of the complete joint penetration hold back welds on FL-3 welds on the cross beam side of OBG segment 8AW at 1700 hours today and they will then be ready for Caltrans QA personnel to perform ultrasonic inspections of these welds. This QA Inspector observed ZPMC appears to have UT accepted these welds. This QA Inspector performed random visual and ultrasonic inspections of the following welds: SSD10A-PP062-128, SSD10A-PP062-170, SSD11A-PP063-128, SSD11A-PP063-168, SSD12A-PP064-128 and SSD12A-PP064-169. Items observed by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on these inspections see the TL6027 Ultrasonic Test Report.



Summary of Conversations:

See Above.

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 phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

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Inspected By:	Dawson,Paul	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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