

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-009870**Date Inspected:** 25-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**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:** Tower Fabrication**Summary of Items Observed:**

CWI Inspectors: Mr. Huang Zhang, Mr. Lian Yan, Mr. Guy Yan Fei, Mr. Xu Le Feng

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. The QA Inspector observed the following:

Tower Bay 10

The QA Inspector observed ZPMC welder Ms. Liu Xiaoyan stencil 207745 is using welding procedure specification WPS-B-T-2221-B-P3-S-2 to make submerged arc groove weld SSD1-FDSA3-1A/C-3B. The QA Inspector observed ZPMC Quality Control personnel monitoring this welding and the QA Inspector observed ZPMC Quality Control personnel measuring Ms. Liu Xiaoyan having a welding current of approximately 650 amps and 31.5 volts. Items observed by the QA Inspector appear to comply with project specifications.

This QA Inspector performed random ultrasonic inspections of approximately 10 percent length of Lift 3 South tower skin plate E complete joint penetration butt welds SSD1-FESA3-1B/D-7, SSD1-FESA3-1B/D-8, SSD1-FESA3-1B/D-12, SSD1-FESA3-1B/D-23, SSD1-FESA3-1B/D-24 and SSD1-FESA3-1B/D-28. These welds had previously been ultrasonically inspected and accepted by ZPMC inspection personnel. The QA Inspector observed the welds that were ultrasonically inspected by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on this inspection see the TL6027 Ultrasonic Test Report.

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This QA Inspector performed random ultrasonic inspections of approximately 15 percent length of Lift 3 South tower skin plate C complete joint penetration butt weld SSD1-FCSA3-1B/C-11B-(1). These welds had previously been ultrasonically inspected and accepted by ZPMC inspection personnel. The QA Inspector observed the welds that were ultrasonically inspected by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on this inspection see the TL6027 Ultrasonic Test Report.

This QA Inspector observed ZPMC welder Mr. Li Xiuchun, stencil 040733 is using flux cored welding process to make stiffener plate welds to tower skin plate critical weld repair CWR-T-CWR-078 on lift 1, East skin plate B to skin plate C complete joint penetration weld. The QA Inspector observed the base material had been preheated using an electrical heater element and ZPMC CWI Mr. Xu Le Feng monitoring this welding. The QA Inspector asked Mr. Xu Le Feng if he had a copy of the critical weld repair documents and Mr. Xu Le Feng said the documents are in his office and he will have someone bring them to him. Prior to commencement of the critical weld repair the QA Inspector observed CWI Mr. Xu Le Feng measuring Mr. Xi Xiuchen having a welding current of approximately 295 amps and 31.5 volts. The QA Inspector observed the spool of flux cored electrode does not have any date to indicate when the hermetically sealed packaging had been removed from the spool. ZPMC CWI Mr. Xu Le Feng had ZPMC welder Mr. Li Xiuchun obtain a new spool of welding electrodes that indicates the spool had been initially used earlier today. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

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 Serge Sinevod phone: 134-8257-0045 , who represents the Office of Structural Materials for your project.

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