

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-010537**Date Inspected:** 28-Nov-2009**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:** Tower**Summary of Items Observed:**

CWI Inspector: Mr. Du Zhiquan

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:

Tower Bay 10

ZPMC issued "Inspection Notification Sheet" number 4756 informing QA that ZPMC has completed visual and magnetic particle inspections of lift 4 South Tower skin D to skin E weld SST14-1b/1-2b for a length of 1200 mm at each of the seven double diaphragms. These portions of the welds will be inaccessible once ZPMC installs additional plates on each side of the double diaphragms. This QA Inspector observed the welds appear to comply with AWS D1.5 visual and magnetic particle inspection requirements. For additional information on these inspections see the TL6028 Magnetic Particle Test Report.

This QA Inspector observed ZPMC welder Mr. Shi Xingyu, stencil 052930 is using shielded metal arc welding procedure WPS-B-T-3212-TC-U5b-1 to make a 3F (vertical) fillet weld on shear link stiffener weld NDI-BPSA5-2-2-8B. This QA Inspector measured a welding current of approximately 260 amps. This QA Inspector observed the base material has been preheated to a minimum temperature of 180 degrees Celsius with electrical heating elements. Items observed by the QA Inspector appear to comply with project specifications.

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This QA Inspector observed ZPMC welder Ms. Pu Xuezheng, stencil 052075 is using flux cored welding procedure WPS-B-T-4332-TC-P5-F-1 to make tower weld NSTL4-3K/L-117. This QA Inspector measured a welding current of approximately 280 amps and 31.0 volts and the base material has been preheated with an electrical heating element. This welding is being monitored by ZPMC QC CWI Inspector Mr. Du Zhiqun. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yu Jun, stencil 201825 is using flux cored welding procedure WPS-B-T-4332-TC-P5-F-1 to make tower weld NSTL4-3K/L-118. This QA Inspector measured a welding current of approximately 310 amps and 30.0 volts and the base material has been preheated with an electrical heating element. This welding is being monitored by ZPMC QC CWI Inspector Mr. Du Zhiqun. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Xu Xiuping, stencil 057244 is using flux cored welding procedure WPS-B-T-4332-TC-P5-F-1 to make tower weld NSTL4-3H/L-055. This QA Inspector measured a welding current of approximately 300 amps and 30.0 volts and the base material has been preheated with an electrical heating element. This welding is being monitored by ZPMC QC CWI Inspector Mr. Du Zhiqun. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Dong Yumei stencil 054069 is using flux cored welding procedure WPS-B-T-2133 to make north tower lift 4 weld NSTL4-3C/L-121. This QA Inspector observed ZPMC CWI Mr. Wang Chuanqing has recorded a welding current of 318 amps and 31.0 volts. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Dong Yuqin, stencil 053116 is using flux cored welding procedure WPS-B-T-2133 to make north tower lift 4 weld NSTL4-3C/L-131. This QA Inspector observed ZPMC CWI Mr. Wang Chuanqing has recorded a welding current of 315 amps and 30.8 volts. Items observed on this date appeared to generally comply with applicable contract documents.

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.

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