

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022690**Date Inspected:** 13-Apr-2011**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. Cui Zheng Hua

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 Bay 14

This QA Inspector observed ZPMC welder Mr. Wang Linjiang stencil 051356 used flux cored welding procedure WPS-B-TC-2233-ESAB to make OBG segment 14E weld DP3019Q-1-103. This QA Inspector observed a welding current of approximately 270 amps, 25.0 volts and Mr. Wang Linjiang appeared to be certified to make his weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Li, stencil 044772 used shielded metal arc welding procedure specification WPS-345-SMAW-4G(4F)-FCM-Repair-1 to make repairs to OBG segment 14E weld SEG3019Z-0467. ZPMC QC informed this QA Inspector that weld repair document B-WR-20572 documents this weld had been ultrasonically rejected. This QA Inspector observed a welding current of approximately 175 amps, the base material had been preheated with a torch and Mr. Wang Li appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ZPMC welder Mr. Yuan Wensong, stencil 055491 used flux cored welding procedure WPS-B-T-2233-ESAB to make OBG segment 14E weld SEG3019L-044. This QA Inspector measured a welding current of approximately 240 amps and 26.5 volts. This QA Inspector observed Mr. Yuan Wensong appeared to be certified to make this weld and the base materials had been heated with a torch. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Zhang Min stencil 215993 used submerged arc welding procedure specification WPS-B-T-2221-B-L2C-S-2 to complete OBG segment 14E groove weld SEG3019*-007. This QA Inspector observed a welding current of approximately 520 amps 29.0 volts for the initial pass, 680 amps 27.9 volts for the fill passes and the base materials were preheated with electric heaters. Items observed on this date appeared to generally comply with applicable contract documents. See the photograph below for additional information.

This QA Inspector observed ZPMC welder Mr. Zhu Jibo, stencil 055564 used flux cored welding procedure WPS-B-T-2233-ESAB to make OBG segment 14E welds SEG3019Q-1-14, 110 and 264. This QA Inspector measured a welding current of approximately 260 amps, 26.5 volts, the base materials were preheated with a torch and Mr. Zhu Jibo appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Changfa, stencil 058102 used shielded metal arc welding procedure specification WPS-B-P-2214B-U2-FCM-1 to make OBG segment 14E weld SEG3019M-010 and later in the evening Mr. Wang Changfa performed weld repairs of weld SEG3019BB-002 in accordance with weld repair document B-WR-20650. This QA Inspector observed a welding current of approximately 170 amps, the base material had been preheated with a torch and Mr. Wang Changfa appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

See Above.

Comments

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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 James Devey +8615000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer
