DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-023729
Date Inspected: 17-May-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 1900
OSM Departure Time: 700
Location: Shanghai, China

CWI Name: See below

Inspected CWI report:	☐	Yes	☑	No	☐	N/A
Electrode to specification:	☑	Yes	☐	No	☐	N/A
Qualified Welders:	☑	Yes	☐	No	☐	N/A
Approved Drawings:	☑	Yes	☐	No	☐	N/A

CWI Present:	☑	Yes	☐	No		
Rod Oven in Use:	☑	Yes	☐	No	☐	N/A
Weld Procedures Followed:	☑	Yes	☐	No	☐	N/A
Verified Joint Fit-up:	☐	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. An Qing Xiang

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 Trial Assembly

This QA Inspector observed ZPMC welder Mr. Liao Yanfei, stencil 066398 used shielded metal arc welding procedure WPS-B-P-2212-TC-U4B-FCM-1 to make OBG segment 14W weld SEG3020*-014. This QA Inspector observed a welding current of approximately 240 amps, the base materials were heated with an electric heater. Later in the shift Mr. Liao Yanfei used shielded metal arc welding procedure WPS-B-P-2212-C-U4B-FCM-1 to make OBG segment 14W weld SEG3020C-057. This QA Inspector observed a welding current of approximately 260 amps, the base materials were heated with a torch. Mr. Liao Yanfei 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. Huang Hongpei, stencil 037705 used flux cored welding procedure WPS-B-T-2233-ESAB to make OBG segment 14W welds SEG3020D-274 and 278. This QA Inspector observed a welding current of approximately 240 amps, 25.0 volts, the base material had been preheated with a torch and

Mr. Huang Hongpei appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wu Cunnang, stencil 070101 used flux cored welding procedure specification WPS-B-T-2233-ESAB to make OBG segment 14W welds SEG3020B-116, 083 and SEG3020C-057. This QA Inspector observed a welding current of approximately 270 amps, 25.0 volts and Mr. Wu Cunnang 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 Rucheng, stencil 066881 used flux cored welding procedure WPS-B-T-2112-ESAB to make OBG segment 14W stiffener plate hold back welds SP3142-001-021~030. This QA Inspector observed a welding current of approximately 280 amps, 26.0 volts, the base material had been preheated with electrical heaters and Mr. Wang Rucheng 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. Jiang Yang Sheng, stencil 045240 used flux cored welding procedure WPS-B-T-2231-ESAB to make welds SA3127-001-009, 010. This QA Inspector observed a welding current of approximately 230 amps the base material had been preheated with electric heaters and Mr. Jiang Yang Sheng 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. Li Jian stencil 067829 used shielded metal arc welding procedure specification WPS-B-P-2214-TC-U4B-FCM-1 to make segment 13BW welds DP3122-001-244 and DP3135-001-018. This QA Inspector observed a welding current of approximately 130 amps, the base material had been preheated with a torch. Later in the shift Mr. Li Jian used shielded metal arc welding procedure specification WPS-B-P-2212-TC-U4B-FCM-1 to make segment 13BW weld BP3058-001-012, 013. This QA Inspector observed a welding current of approximately 170 amps, the base material had been preheated with a torch and Mr. Li Jian 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. Li Shoufu, stencil 066674 used shielded metal arc welding procedure WPS-345-SMAW-3G(3F)-FCM-Repair-1 to make segment 13CW repair weld SEG3013K-038. ZPMC QC informed this QA Inspector that critical weld repair document B-CWR-2980 documents repairs of this weld. This QA Inspector observed the base materials appear to have been preheated with electrical heaters and Mr. Li Shoufu appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Pan Ming, stencil 066673 used shielded metal arc welding procedure specification WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 13AW welds SEG3013P-133, 142. This QA Inspector observed a welding current of approximately 160 amps and Mr. Pan Ming 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. Liu Ya, stencil 067520 used shielded metal arc welding procedure

specification WPS-B-T-3213-B-U3B make segment 13BW weld DP3126-007. This QA Inspector observed a welding current of approximately 160 amp, the base materials appear to have been preheated with a torch and Mr. Liu Ya appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Guijun, stencil 067275 used flux cored welding procedure WPS-B-T-2212-ESAB to make OBG Segment 13CW welds SP3096-001-040~50. This QA Inspector observed a welding current of approximately 300 amps, 26.0 volts, the base material had been preheated with electric heaters and Mr. Wang Guijun 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

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