

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-017301**Date Inspected:** 03-Oct-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 Inspectors: ZPMC: Mr. Liu Hua Jie, Mr. Li Yang

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. Xu Changhong, stencil 040611 used shielded metal arc welding procedure WPS-B-P-2214 to make hold back welds CB202A-014-015. This welding is on the exterior of OBG cross beam 14. This QA Inspector measured a welding current of approximately 170 amps. This QA Inspector observed that Xu Changhong appeared to be certified to perform this welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Chen Rui stencil 041713 used shielded metal arc welding procedure specification WPS-B-P-2112-FCM-1 to make repairs of longitudinal diaphragm welds LD009-007-011 and -012. This longitudinal diaphragm had been identified as being misaligned and the work is being performed per weld repair document B-WR15277. This QA Inspector observed ZPMC CWI Mr. Liu Hue Jie has recorded a welding current of 169 amps. Mr. Chen Rui 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 Ms. Chen Lin Li, stencil 053871 used shielded metal arc welding procedure WPS-B-P-2212-FCM-1 to make OBG weld SP206-013-042. This stiffener hold back weld is on the interior of cross beam 14. This QA Inspector observed a welding current of approximately 180 amps, Ms. Chen Lin Li appeared to be certified to make this weld and the base material appears to have been preheated with a torch.

Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Huang Zhao, stencil 056200 used shielded metal arc welding procedure WPS-B-P-2112-FCM-1 to make hold back weld FB202-018-007. This weld is on the inside of OBG cross beam 13. This QA Inspector observed a welding current of approximately 170 amps. This QA Inspector observed that Mr. Huang Zhao appeared to be certified to perform this welding and the electrodes were stored in a heated portable electrode storage container. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Chen Hong Ye, stencil 040270 used shielded metal arc welding process to make weld SSD27-013-100. This stiffener plate weld was on the inside of OBG cross beam 13. This QA Inspector observed a welding current of approximately 170 amps. This QA Inspector observed that Mr. Chen Hong Ye appeared to be certified to perform this welding and the electrodes were stored in a heated portable electrode storage container. 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 Ms. Ye Xulan, stencil 040581 used shielded metal arc welding procedure WPS-B-P-2212-FCM-1 to make hold back welds FB028-009-001 and -002. These stiffener plate welds are on the inside of OBG cross beam 13. This QA Inspector observed a welding current of approximately 210 amps. This QA Inspector informed Mr. Li Yang that Ms. Ye Xulan has a welding current that was approximately 35 amps above the maximum allowed by the WPS and he had the welding current decreased to approximately 180 amps. This QA Inspector observed that Ms. Ye Xulan appeared to be certified to perform this welding and the electrodes were stored in a heated portable electrode storage container. Items observed on this date did not fully appear to comply with applicable contract documents.

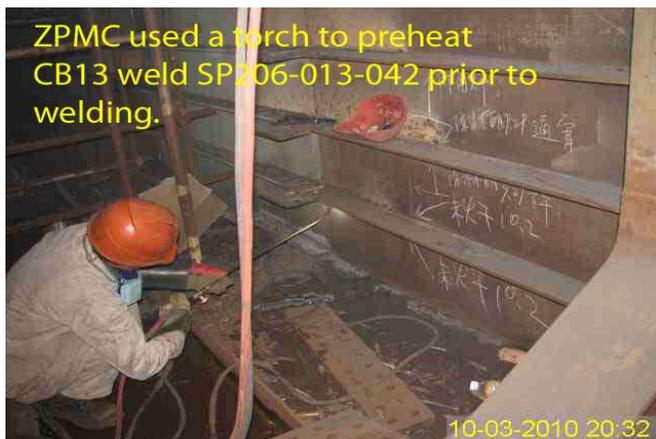
This QA Inspector observed ZPMC welder Ms. Liu Tong Xia, stencil 040484 used shielded metal arc welding procedure WPS-B-P-2212-FCM-1 to make hold back welds FB203-013-017 through -024. These floor beam stiffener plate welds are on the inside of OBG cross beam 13. This QA Inspector observed a welding current of approximately 180 amps. This QA Inspector observed that Ms. Liu Tong Xia appeared to be certified to perform this welding and the electrodes were stored in a heated portable electrode storage container. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Xu Jian Wen, stencil 040378 used shielded metal welding procedure WPS-B-T-2231-TC-U4B-F to make weld OBW10L-010. This weld joins counterweigh attachment plates to OBG segment 10CW edge plates. This QA Inspector observed a welding current of approximately 310 amps. This QA Inspector observed Mr. Xu Jian Wen appeared to be certified to make this weld and the base material had been preheated with electric heating elements. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ZPMC welder Mr. Zhu Ming Jun, stencil 040609 used shielded metal welding procedure WPS-B-T-2234-TC-U4B-F to make weld OBW10L-009. This weld joins counterweigh attachment plates to OBG segment 10CW edge plates. This QA Inspector observed a welding current of approximately 160 amps. This QA Inspector observed Mr. Zhu Ming Jun appeared to be certified to make this weld and the base material had been preheated with electric heating elements. 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
