

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-018764**Date Inspected:** 25-Nov-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: Mr. Bao Quan, Mr. Lv Li Qing, Mr. Peng Wen Jun, Mr. Li Yan 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:

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This QA Inspector observed ZPMC welder Mr. Liu Min, stencil 044790 used flux cored welding procedure WPS-B-T-2233-ESAB to make welds DP3091-001-131 through 138. These welds join OBG longitudinal diaphragm plates to deck plate DP3091-001. This QA Inspector observed ZPMC has recorded a welding current of 260 amps and 25.7 volts, the base materials were preheated with an electric heater and Mr. Liu Min 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 Ms. Gao Yuling stencil 217805 used flux cored welding procedure WPS-B-T-2233-ESAB to make welds DP3091-001-062 and 065. These welds join OBG longitudinal diaphragm plates to deck plate DP3091-001. This QA Inspector observed ZPMC QC has recorded a welding current of 258 amps and 25.1 volts, the base materials were preheated with an electric heater and Ms. Gao Yuling appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract

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documents.

This QA Inspector observed ZPMC welder stencil 068501 used flux cored welding procedure WPS-B-T-2233-ESAB to make welds DP3103-001-051 and 058. These welds join OBG longitudinal diaphragm plates to deck plate DP3103-001. This QA Inspector observed ZPMC QC has recorded a welding current of 250 amps and 25.7 volts, the base materials were preheated with an electric heater. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder stencil 067888 used flux cored welding procedure WPS-B-T-2233-ESAB to make welds DP3103-001-011 and 018. These welds join OBG longitudinal diaphragm plates to deck plate DP3103-001. This QA Inspector observed ZPMC QC has recorded a welding current of 255 amps and 25.7 volts, the base materials were preheated with an electric heater. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhang Mingwu, stencil 066283 used flux cored welding procedure WPS-B-T-2132 to make weld DP3106A-001-023 and 024. These welds join OBG longitudinal diaphragm plate to deck plate DP3106A-001. This QA Inspector observed a welding current of approximately 290 amps and 33 volts, the base materials were preheated with an electric heater and Mr. Zhang Mingwu 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 Quanlin stencil 066746 used flux cored welding procedure specification WPS-B-T-2233-TC-U5-F to make OBG segment 13AE weld SEG3007G-049. This weld joins floor beam FB3127A to SP3068A. This QA Inspector observed ZPMC has recorded a welding current of 218 amps, 26.5 volts, the base materials were preheated with an electric heater and Mr. Wang Quanlin 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. Zhang Xiang Rong, stencil 066763 used flux cored welding procedure specification WPS-B-T-2233-TC-U5-F to make OBG segment 13AE weld SEG3007J-048. This weld joins floor beam FB3111A to SP3069A. This QA Inspector observed ZPMC has recorded a welding current of 217 amps, 26.1 volts, the base materials were preheated with an electric heater and Mr. Zhang Xiang Rong 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. Ye Bing stencil 066733 used flux cored welding procedure specification WPS-B-T-2233-TC-U5-F to make OBG segment 13AE weld SEG3007L-046. This weld joins floor beam FB3124A to SP3069A. This QA Inspector observed ZPMC has recorded a welding current of 210 amps, 25.9 volts, the base materials were preheated with an electric heater and Mr. Ye Bing 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 stencil 066041 used flux cored welding procedure specification WPS-B-T-2233-TC-U4B-F to make OBG segment 13AE weld SEG3007C-175. This weld joins floor beam FB3120-001 to longitudinal diaphragm LD3026A. This QA Inspector observed ZPMC has recorded a welding current of 219 amps, 25.3 volts and the base materials were preheated with an electric heater. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ZPMC welder Mr. Liu Xiaolin, stencil 067079 used flux cored welding procedure specification WPS-B-T-2233-TC-U4B-F to make OBG segment 13AE welds SEG3007G-018 and 020. These welds join floor beam FB3120-001 to longitudinal diaphragm LD3026A. This QA Inspector observed ZPMC has recorded a welding current of 217 amps, 26.0 volts and the base materials were preheated with an electric heater. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yang TTianbing stencil 066439 used flux cored welding procedure specification WPS-B-T-2233-TC-U4B-F to make OBG segment 13AW welds SEG3013AD-017, 019 and 021. This QA Inspector observed ZPMC QC has recorded a welding current of 218 amps, 26.0 volts, Mr. Yang TTianbing appeared to be certified to make this weld and the base materials were preheated with an electric heater. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Fei Cheng Fang stencil 066239 used flux cored welding procedure specification WPS-B-T-2233-TC-U4B-F to make OBG segment 13AW welds SEG3013AD-032 and 033. This QA Inspector observed ZPMC QC has recorded a welding current of 218 amps, 26.0 volts, Mr. Fei Cheng Fang appeared to be certified to make this weld and the base materials were preheated with an electric heater. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder stencil 066695 used flux cored welding procedure specification WPS-B-T-2232-TC-U4B-F to make OBG segment 13AW welds SEG3013AD-012, 014 and 016. This QA Inspector observed ZPMC QC has recorded a welding current of 218 amps, 26.0 volts and the base materials were preheated with an electric heater. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder stencil 017942 used flux cored welding procedure specification WPS-B-T-2233-TC-U4B-F to make OBG segment 13AW welds SEG3013AD-018 and 019. This QA Inspector observed ZPMC QC has recorded a welding current of 218 amps, 26.0 volts and the base materials were preheated with an electric heater. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Dian Yifa stencil 068596 used flux cored welding procedure specification WPS-B-T-2232-TC-U4B-F to make OBG segment 13AW weld SEG3013F-003. This QA Inspector observed ZPMC QC has recorded a welding current of 309 amps, 30.4 volts, Mr. Dian Yifa appeared to be certified to make this weld and the base materials were preheated with an electric heater. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder stencil 069682 used flux cored welding procedure specification WPS-B-T-2232-TC-U4B-F to make OBG segment 13AW weld SEG3013F-002. This QA Inspector observed ZPMC QC has recorded a welding current of 309 amps, 30.4 volts, weld and the base materials were preheated with an electric heater. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ABF CWI Mr. Peng Wen Jun has recorded that ZPMC welder stencil 062761 used flux cored welding procedure WPS-B-T-2233 to make OBG bikepath welds BK004A3-014-032 and 033. This QA Inspector observed the welding parameters recorded by Mr. Peng Wen Jun appeared to comply with the WPS. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ABF CWI Mr. Peng Wen Jun has recorded that ZPMC welder stencil 062788 used flux cored welding procedure WPS-B-T-2233 to make OBG bikepath welds BK004A3-014-019 and 020. This QA Inspector observed the welding parameters recorded by Mr. Peng Wen Jun appeared to comply with the WPS. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ABF CWI Mr. Peng Wen Jun has recorded that ZPMC welder stencil 062807 used flux cored welding procedure WPS-B-T-2233 to make OBG bikepath welds BK004A3-014-043 and 044. This QA Inspector observed the welding parameters recorded by Mr. Peng Wen Jun appeared to comply with the WPS. 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 Devy +8615000026784, who represents the Office of Structural Materials for your project.

Inspected By: Dawson,Paul

Quality Assurance Inspector

Reviewed By: Carreon,Albert

QA Reviewer