

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-019361**Date Inspected:** 08-Jan-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:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

FCAW welding of weld joints BK009-001-008, 009, 050~052, 061~063 located on PCMK OBG BK009-001, longitudinal slanted T-ribs. Welders were identified as 040434, 040302. QC was identified as Xu Le Feng (QC1). Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was Li Peng Fei (QCA1), who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-T-2232-ESAB and WPS-B-T-2233-ESAB as verbally identified by QCA1.

Bay 11

This QA Inspector randomly observed the following work in progress in Bay 11:

ZPMC workers were performing installation of transverse diaphragms between the grillage connection plates of the south tower and west tower, lift 5, skins A. The workers were also performing installation of bolt sets connecting the transverse diaphragms to the grillage connection plates and what appeared to be initial tightening to a snug tight condition using an air impact gun.

OBG Trial Assembly Area

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This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

FCAW welding of weld joint OBE12C-001 located inside PCMK OBG 12BE/12CE, bottom plate to bottom plate, transverse joint. Welder was identified as 040458. QC was identified as ZPMC CWI Liu Hua Jie (QC2).

Welding variables recorded by QC2 appeared to comply with WPS-B-T-2231T-ESAB-1 as verbally identified by QC2.

FCAW welding of temporary alignment plates located outside PCMK OBG 12BW/12CW, deck plate across transverse joint. Welder was identified as 053697. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was Zhao Peng (QCA2), who was not a CWI.

Welding variables recorded by QCA2 appeared to comply with WPS-B-T-2132 as verbally identified by QCA2.

SMAW welding of temporary alignment plates located outside PCMK OBG 12BW/12CW, bottom plate across transverse joint. Welder was identified as 500436. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-P-2114-FCM-1 as verbally identified by QCA2.

SMAW welding of temporary alignment plates located outside PCMK OBG 12BW/12CW, side plate, north(counterweight) side, across transverse joint. Welder was identified as 218707. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-P-2114-FCM-1 as verbally identified by QCA2.

SMAW welding of temporary alignment plates located outside PCMK OBG 12BW/12CW, side plate, south(crossbeam) side, across transverse joint. Welder was identified as 202316. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-P-2114-FCM-1 as verbally identified by QCA2.

SMAW welding of temporary alignment plates located inside PCMK OBG 12BW/12CW, side plate, south(crossbeam) side, across transverse joint. Welder was identified as 057333. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-P-2112-FCM-1 as verbally identified by QCA2.

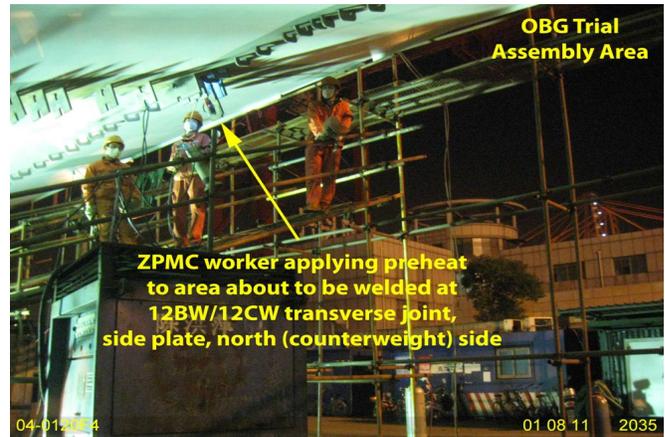
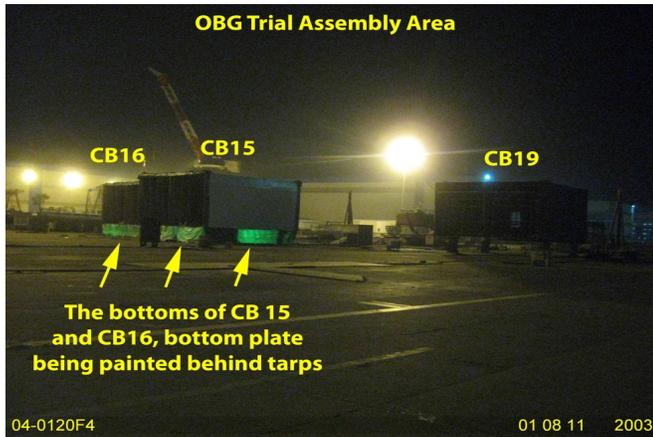
SMAW welding of temporary alignment plates located inside PCMK OBG 12BW/12CW, side plate, north(counterweight) side, across transverse joint. Welder was identified as 041713. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-P-2112-FCM-1 as verbally identified by QCA2. See photo below.

ZPMC workers were spray painting the bottom of CB15 and CB16, bottom plate while shielded with a tarp for a windscreen. See photo below.

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Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

As noted 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 Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

Inspected By: Goulet, George

Quality Assurance Inspector

Reviewed By: Riley, Ken

QA Reviewer
