

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 #: 04-0120F4Cty: 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-023744**Date Inspected:** 11-May-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 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 11

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

SMAW welding of weld joints ESD1-TBSA7-3-3, 4, 5, 6, 37, 38, 39, 40 located on PCMK East Tower, lift 7 and NSD1-TBSA7-3-3, 4, 5, 6, 37, 38, 39, 40 located on PCMK North Tower, lift 7. Welder was identified as 041271. QC was identified as ZPMC CWI Zhu Feng (QC1). Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QC Wang Chuang Xin (QCA1), who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-P-2212 as verbally identified by QCA1. See photo below of ZPMC welder 041271 cleaning the previous pass of weld joint ESD1-TBSA7-3-3.

Heavy Dock

This QA Inspector randomly observed the following work in progress onboard the ship moored at the end of the Heavy Dock:

ZPMC workers drilled hold-downs attaching to the four lift 6 tower sections. ZPMC workers were performing touch-up painting of various parts on the deck of the ship as well as various areas of OBG Segments 12E and 12W.

ZPMC workers were also installing handrails at the catwalks in Segments 12E and 12W. No welding was observed.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

OBG Trial Assembly Area

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

SMAW welding of weld joint OBW13B-003 located on PCMK OBG 13AW/13BW transverse joint, bottom plate. Welder was identified as 067829. QC was identified as ZPMC CWI Sha Zhi (QC2). Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QC Wang Xiang Pin (QCA2), who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-P-2214-U2a-FCM-1 as verbally identified by QCA2.

SMAW welding of weld joint OBW13B-005 located on PCMK OBG 13AW/13BW transverse joint, bottom plate. Welder was identified as 067942. 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. Weld variables recorded by QCA2 appeared to comply with WPS-B-P-2214-U2a-FCM-1 as verbally identified by QCA2. See close-up photo below of the cover pass of weld joint OBW13B-005.

FCAW welding of weld joints SEG3011-259, 262 located on PCMK OBG 13CE. Welder was identified as 050977. 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. Weld variables recorded by QCA2 appeared to comply with WPS-B-T-2233-ESAB as verbally identified by QCA2.

SMAW welding of weld joints SEG3019AE-007, 014, 021, 028 located on PCMK OBG 14E. Welder was identified as 044779. 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. Weld variables recorded by QCA2 appeared to comply with WPS-B-P-2213-TC-U4b-FCM-1 as verbally identified by QCA2.

SMAW welding of weld joints SEG3019AF-007, 014, 021, 028 located on PCMK OBG 14E. Welder was identified as 215553. 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. Weld variables recorded by QCA2 appeared to comply with WPS-B-P-2213-TC-U4b-FCM-1 as verbally identified by QCA2.

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

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



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 James Devey 15000026784, who represents the Office of Structural Materials for your project.

Inspected By: Goulet, George

Quality Assurance Inspector

Reviewed By: Riley, Ken

QA Reviewer