

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-021962**Date Inspected:** 27-Feb-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 14

This QA Inspector randomly observed the following work in progress in the Bay 14:

SMAW welding of weld joint SEG3020AP-002 located on PCMK OBG 14W. Welder was identified as 066038. QC was identified as ABF Li Shi You (QC1). Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QC Li Ping (QCA1), who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-P-2214-B-U2-FCM-1 as verbally identified by QCA1.

FCAW welding of weld joints SEG3020BB-013, 589 located on PCMK OBG 14W. Welder was identified as 067949. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was 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, respectively, as verbally identified by QCA1.

FCAW welding of weld joints SEG3013K-031, SEG3013AH-014, SEG3013H-050 located on PCMK OBG 13AW. Welder was identified as 066421. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-T-2233-ESAB as verbally identified by QCA1.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

FCAW welding of weld joints SEG3013F-052, 030 located on PCMK OBG 13AW. Welder was identified as 067876. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-T-2233-ESAB as verbally identified by QCA1.

SMAW repair welding of weld joint DP3174-001-021 located on PCMK OBG 14W. Welder was identified as 066155. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-345-SMAW-2G(2F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR20289 presented to this QA Inspector and verbally identified by QCA1.

SMAW repair welding of weld joint DP3174-001-019 located on PCMK OBG 14W. Welder was identified as 067588. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-345-SMAW-2G(2F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR20313 presented to this QA Inspector and verbally identified by QCA1.

SMAW repair welding of weld joint DP3174-001-018 located on PCMK OBG 14W. Welder was identified as 066398. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-345-SMAW-2G(2F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR20313 presented to this QA Inspector and verbally identified by QCA1.

SMAW repair welding of weld joint DP3161-001-212 located on PCMK OBG 14E. Welder was identified as 215553. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-345-SMAW-2G(2F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR20276 presented to this QA Inspector and verbally identified by QCA1.

SMAW repair welding of weld joint DP3160-001-216 located on PCMK OBG 14E. Welder was identified as 050969. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-345-SMAW-2G(2F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR20272 presented to this QA Inspector and verbally identified by QCA1.

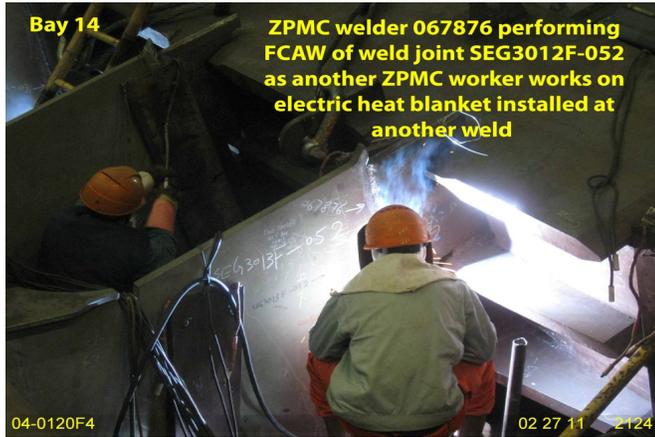
During random observation of the welding operations in Bay 14, seventeen arc strikes were observed on DP3161 and DP3167 deck plates, I-ribs, transverse diaphragms, and longitudinal diaphragms between panel point 125 and panel point 125.5. This QA Inspector clearly marked the visual indications in yellow paint with the notation G+MT, signifying 'grind smooth and magnetic particle test' and informed ZPMC QC Zhan Hai Feng (QCA2) of the arc strikes and marking. See the photo below displaying eight of the arc strikes as marked by this QA Inspector. QCA2 informed this QA Inspector that the arc strikes would be corrected in a manner compliant with the relevant contract documents.

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

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

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 Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Goulet, George

Quality Assurance Inspector

Reviewed By: Riley, Ken

QA Reviewer