

**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-021967**Date Inspected:** 04-Mar-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 10

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

SMAW welding of weld joints 27TR1-011, 013 located on PCMK OBG traveler rail. Welder was identified as 050582. QC was identified as ZPMC QC Li Peng Fei (QC1), who was not a CWI. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was Zhu Feng (QCA1), who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-P-2212-TC-U5b as verbally identified by QCA1.

FCAW welding of weld joint 26TR2-022 located on PCMK OBG traveler rail. Welder was identified as 054069. QC was identified as QC1, who was not a CWI. 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-2132-ESAB as verbally identified by QCA1.

SMAW welding of weld joints 26TR2-018, 020 located on PCMK OBG traveler rail. Welder was identified as 040581. QC was identified as QC1, who was not a CWI. 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-P-2212-TC-U5b as verbally identified by QCA1.

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 4 )

---

SMAW welding of weld joint 26TR2-024 located on PCMK OBG traveler rail. Welder was identified as 040365. QC was identified as QC1, who was not a CWI. 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-P-2212-TC-U5b as verbally identified by QCA1.

SMAW welding of weld joint BK15B-001-012 located on PCMK OBG bike path. Welder was identified as 057220. QC was identified as QC1, who was not a CWI. 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-P-2211-TC-U5b as verbally identified by QCA1. See photo below of ZPMC drawing BK15B showing weld joint BK15B-001-012.

### Bay 11

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

SMAW welding of weld joints 20TR2-011, 034 located on PCMK OBG traveler rail. Welders were identified as 046769, 202354. QC was identified as ZPMC QC Xu Le Feng (QC2), who was not a CWI. Assisting QC2 at this location and appearing to be monitoring the welding operation and recording data was Wang Chuang Xin (QCA2), who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-P-2211-TC-U5b as verbally identified by QCA2.

SMAW welding of weld joints 20TR2-011, 035 located on PCMK OBG traveler rail. Welder was identified as 040611. QC was identified as QC2, who was not a CWI. 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-2211-TC-U5b as verbally identified by QCA2.

### Bay 14

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

FCAW welding of weld joints SA3174-001-019, 023, located on PCMK OBG 13AW. Welder was identified as 045175. QC was identified as ABF QC Li Shi You (QC3), who was not a CWI. Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was ABF QC Chen Kun (QCA3), who was not a CWI. Weld variables recorded by QCA3 appeared to comply with WPS-B-T-2232-ESAB and WPS-B-T-2233-ESAB as verbally identified by QC3. See photo below of the FCAW being performed on weld joint SA3174-001-019.

FCAW welding of weld joint SA3174-001-037 located on PCMK OBG 13AW. Welder was identified as 207465. QC was identified as QC3, who was not a CWI. Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was QCA3, who was not a CWI. Weld variables recorded by QCA3 appeared to comply with WPS-B-T-2233-ESAB as verbally identified by QC3.

SMAW welding of weld joint SEG3013H-036 located on PCMK OBG 13AW. Welder was identified as 047864. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QCA4, who was not a CWI. Weld variables recorded by QCA4 appeared to comply with WPS-B-P-2214-TC-U4b-FCM-1 as verbally identified by QCA4.

---

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 4 )

---

---

SMAW welding of weld joint SEG3013K-037 located on PCMK OBG 13AW. Welder was identified as 066038. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was QCA4, who was not a CWI. Weld variables recorded by QCA4 appeared to comply with WPS-B-P-2214-TC-U4b-FCM-1 as verbally identified by QCA4.

SMAW welding of weld joint SEG3013F-038 located on PCMK OBG 13AW. Welder was identified as 067764. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was QCA4, who was not a CWI. Weld variables recorded by QCA4 appeared to comply with WPS-B-P-2214-TC-U4b-FCM-1 as verbally identified by QCA4.

FCAW welding of weld joint SEG3013AH-183 located on PCMK OBG 13AW. Welder was identified as 068445. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was QCA4, who was not a CWI. Weld variables recorded by QCA3 appeared to comply with WPS-B-T-2232-ESAB as verbally identified by QCA4.

FCAW welding of weld joint SEG3013AH-183 located on PCMK OBG 13AW. Welder was identified as 068445. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was QCA4, who was not a CWI. Weld variables recorded by QCA3 appeared to comply with WPS-B-T-2232-ESAB as verbally identified by QCA4.

FCAW welding of weld joint SEG3013G-023 located on PCMK OBG 13AW. Welders were identified as 067949, 066421. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was QCA4, who was not a CWI. Weld variables recorded by QCA4 appeared to comply with WPS-B-T-2232-ESAB as verbally identified by QCA4.

FCAW welding of weld joint SEG3013J-008 located on PCMK OBG 13AW. Welder was identified as 203871. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was QCA4, who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-T-2232-ESAB as verbally identified by QCA4.

FCAW welding of weld joint SEG3013C-133 located on PCMK OBG 13AW. Welder was identified as 067876. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was QCA4, who was not a CWI. Weld variables recorded by QCA4 appeared to comply with WPS-B-T-2232-ESAB as verbally identified by QCA4.

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

---

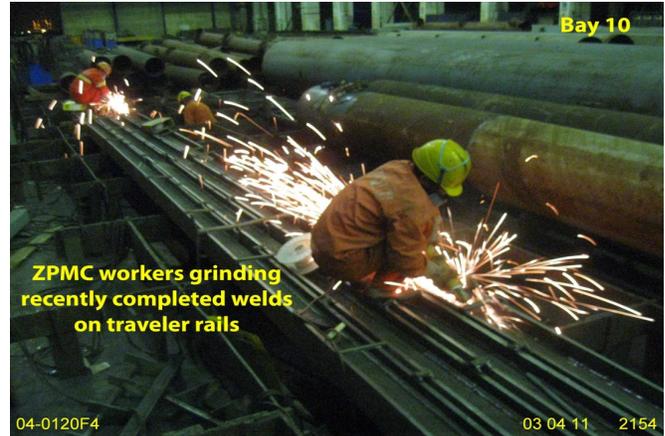
---

# WELDING INSPECTION REPORT

( Continued Page 4 of 4 )

---

---



## 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