

**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-023546**Date Inspected:** 03-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**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 and Tower 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-TBSA7-4A/B-11, 24 located on PCMK east tower, lift 7. Welder was identified as 202354. QC was identified as ZPMC CWI Shi Yu (QC1). Weld variables recorded by QC1 appeared to comply with WPS-B-P-2213-TC-U4c as verbally identified by QC1.

SMAW welding of weld joints WSD1-TBSA7-4A/B-11, 24 located on PCMK west tower, lift 7. Welder was identified as 041271. QC was identified as QC1. Weld variables recorded by QC1 appeared to comply with WPS-B-P-2213-TC-U4c as verbally identified by QC1.

**OBG Trial Assembly Area**

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

SMAW welding of weld joints SEG3020D-18, 19 located on PCMK OBG 14W. Welder was identified as 067942. QC was identified as ZPMC CWI Shi Lei (QC2). Weld variables recorded by QC2 appeared to comply with WPS-B-P-2114-FCM-1 as verbally identified by QC2.

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FCAW layering repair welding of plate number LD3049 X4970H located on PCMK OBG 14W. Welder was identified as 067275. QC was identified as QC2. Weld variables recorded by QC2 appeared to comply with WPS-345-FCAW-2G(2F)-ESAB-repair as displayed on ZPMC Weld Repair Report B-WR20754 as presented to this QA Inspector and verbally identified by QC2.

SMAW repair welding of weld joint SEG3013P-168 located on PCMK OBG 13AW. Welder was identified as 047863. QC was identified as ZPMC CWI Gu Rong Jian (QC3). Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was ZPMC QC Wang Xiang Pin (QCA3), who was not a CWI. Weld variables recorded by QCA3 appeared to comply with WPS-345-SMAW-4G(4F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR20695 as presented to this QA Inspector and verbally identified by QCA3.

SMAW repair welding of weld joint SEG3013P-233 located on PCMK OBG 13AW. Welder was identified as 066109. QC was identified as QC3. 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-345-SMAW-3G(3F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR20695 as presented to this QA Inspector and verbally identified by QCA3.

SMAW repair welding of weld joint SEG3013P-217 located on PCMK OBG 13AW. Welder was identified as 037779. QC was identified as QC3. 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-345-SMAW-4G(4F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR20695 as presented to this QA Inspector and verbally identified by QCA3.

FCAW repair welding of weld joint SEG3013F-060 located on PCMK OBG 13AW. Welder was identified as 048696. QC was identified as . 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-345-FCAW-3G(3F)-ESAB-repair as displayed on ZPMC Weld Repair Report B-WR20606 as presented to this QA Inspector and verbally identified by QCA3.

FCAW repair welding of weld joints SEG3013D-065 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 QCA3, who was not a CWI. Weld variables recorded by QCA3 appeared to comply with WPS-345-FCAW-3G(3F)-ESAB-repair as displayed on ZPMC Weld Repair Report B-WR20606 as presented to this QA Inspector and verbally identified by QCA3.

SMAW repair welding of weld joints SEG3013D-089 located on PCMK OBG 13AW. Welder was identified as 067609. QC was identified as QC3. 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-345-SMAW-4G(4F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR20606 as presented to this QA Inspector and verbally identified by QCA3.

SMAW welding of weld joint SEG3013AA-055 located on PCMK OBG 13AW. Welder was identified as 069683. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding operation

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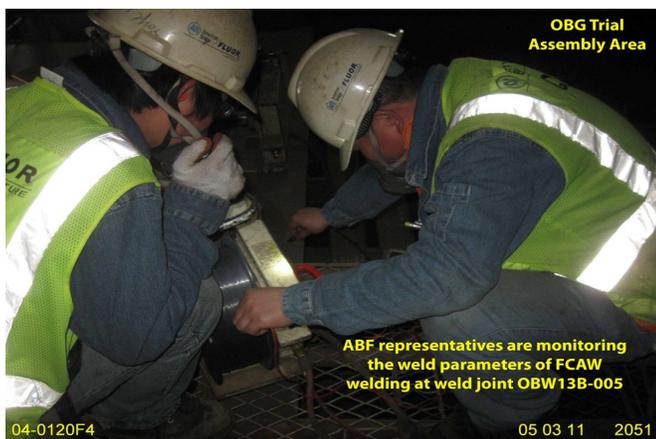
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and recording data was QCA3, who was not a CWI. Weld variables recorded by QCA3 appeared to comply with WPS-B-P-2214-FCM-1 as verbally identified by QC3.

SMAW repair welding of weld joints SEG3013Q-210, 191 located on PCMK OBG 13AW. Welders were identified respectively as 070437, 066002. QC was identified as QC3. 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-345-SMAW-3G(3F)-FCM-repair-1 as displayed on ZPMC Weld Repair Report B-WR20693 as presented to this QA Inspector and verbally identified by QCA3.

FCAW welding of weld joint OBW13B-005 located at the PCMK OBG 13AW/13BW bottom plate transverse joint. Welder was identified as 066673. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding operation and recording data was QCA3, who was not a CWI. appeared to comply with WPS-B-T-2231T-ESAB-1 as verbally identified by QCA3. See photo below of ABF representatives monitoring weld parameters at this location.

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

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<b>Inspected By:</b>	Goulet, George	Quality Assurance Inspector
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<b>Reviewed By:</b>	Riley, Ken	QA Reviewer
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