

**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-021735**Date Inspected:** 09-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 14

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

SMAW welding of weld joint SEG3007-007 located on PCMK OBG 13AE. Welder was identified as 037748.

QC was identified as ZPMC QC Bao Qian (QC1), who was not a CWI. Weld variables recorded by QC1 appeared to comply with WPS-B-P-2214-B-U2-FCM-1 as verbally identified by QC1.

FCAW welding of weld joints SA3007AH-107 located on PCMK OBG 13AE. Welder was identified as 055491.

QC was identified as QC1, who was not a CWI. Weld variables recorded by QC1 appeared to comply with WPS-B-T-2231-ESAB as verbally identified by QC1. See photo below of weld joint SA3007AH-107 being cleaned by ZPMC welder 055491 between fill passes.

FCAW welding of weld joints SA3007AH-061 located on PCMK OBG 13AE. Welder was identified as 050242.

QC was identified as QC1, who was not a CWI. Weld variables recorded by QC1 appeared to comply with WPS-B-T-2231-ESAB as verbally identified by QC1.

FCAW welding of weld joints SA3007Q-326 located on PCMK OBG 13AE. Welder was identified as 055546.

QC was identified as QC1, who was not a CWI. Weld variables recorded by QC1 appeared to comply with

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WPS-B-T-2233-ESAB as verbally identified by QC1.

SMAW repair welding of weld joint SEG3019AA-028 located on PCMK OBG 14E. Welder was identified as 216086. 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 ZPMC QC Zheng Peng (QCA1), who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-345-SMAW-3G(3F)-FCM-repair as displayed on ZPMC Weld Repair Report B-CWR2755 as presented to this QA Inspector and verbally identified by QCA1. See photo below displaying page 2 of B-CWR2755 outlining the weld repair procedure.

SMAW repair welding of weld joint SEG3119W-040 located on PCMK OBG 14E. Welder was identified as 215553. 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-345-SMAW-3G(3F)-FCM-repair as displayed on ZPMC Weld Repair Report B-WR20244 as presented to this QA Inspector and verbally identified by QCA1.

SMAW welding of weld joint SEG3019Y-053 located on PCMK OBG 14E. Welder was identified as 201087. 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-P-2212-TC-U4b-FCM-1 as verbally identified by QCA1.

SMAW welding of weld joint SA3325-069 located on PCMK OBG 14E. Welder was identified as 044779. 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-P-2214-TC-U4b-FCM-1 as verbally identified by QCA1.

FCAW welding of weld joints SEG3019P-236 located on PCMK OBG 14E. Welder was identified as 054013. 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-2213-ESAB as verbally identified by QCA1.

FCAW welding of weld joint SEG3019H-250 located on PCMK OBG 14E. Welder was identified as 066733. 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.

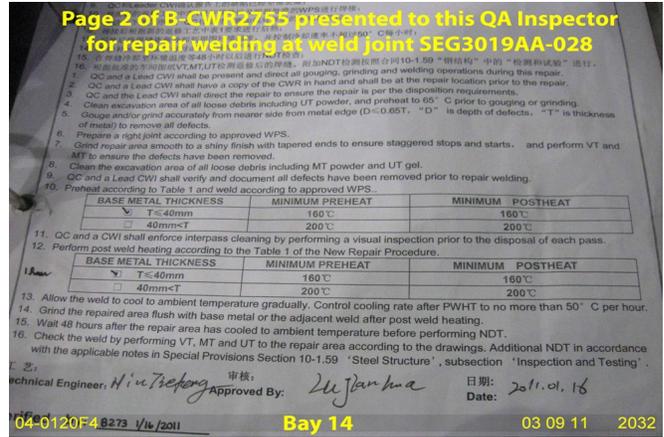
SMAW welding of weld joint SEG3019Z-012 located on PCMK OBG 14E. Welder was identified as 050969. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding operation and recording data was QCA1, who was not a CWI. Weld variables recorded by QCA1 appeared to comply with WPS-B-P-2212-TC-U4b-FCM-1 as verbally identified by QCA1.

SAW welding of weld joint SEG3007-201 located on PCMK OBG 13AE. Welder was identified as 050502. 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 ZPMC QC Zhong Yong Gang (QCA2), who was not a CWI. Weld variables recorded by QCA2 appeared to comply with WPS-B-T-2221-B-L2c-S-2 as verbally identified by QC2.

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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 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