

**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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023694**Date Inspected:** 08-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Sun Tian Liang**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 Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 009063

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment 13B/CW. The weld designations reviewed are as follows:

1. DP3133-001-030
2. DP3146-001-241

OBG Trail Assembly

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) welding of weld joint CA3016A-125, 129, 133, 137 and 141 located on Corner Assembly Edge Plate RS Stiffener at panel point 124 to 124.5 of Segment 13CW. ZPMC Welder is identified as 045240. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132-ESAB.

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FCAW welding of weld joint CA3015A-008, 012, 016, 020 and 024 located on Corner Assembly Edge Plate RS Stiffener at panel point 121 to 121.5 of Segment 13BW. ZPMC Welder is identified as 066239. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132-ESAB.

FCAW welding of weld joint SEG3015H-207 located on Vertical Plate to Floor Beam at panel point 123 of OBG Segment 13CW. ZPMC Welder is identified as 045143. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-FCAW-3G-(3F)-FCM-ESAB-Repair-1, which is used as per Welding Repair Report (WRR) B-WRR-20901.

FCAW welding of weld joint OBG13B-003 located on bottom plate to side plate of OBG Segment 13AW to OBG Segment 13BW. ZPMC Welder is identified as 066421. ZPMC Quality Control (QC) is identified as Mr. Hu Mei Gang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231T-ESAB.

FCAW welding of weld joint SA3126-016~029-005 and 009 located on bottom plate connected SA3126 at panel point 123 to 123.5 FL2 side of OBG Segment 13CW. ZPMC Welder is identified as 066687. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-ESAB.

Shielded Metal Arc Welding (SMAW) welding of weld joint DP3128-001-030, 044 and 058 located on deck panel longitudinal diaphragm to deck panel of OBG Segment 13BW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G-(3F)-FCM-Repair-1, which is used as per Welding Repair Report (WRR) B-WRR-20905.

SMAW welding of weld joint AH3003-001 located on Architecture House side plate to edge plate of OBG Segment 13CW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-FCAW-1G-(1F)-FCM-ESAB-Repair-1, which is used as per Welding Repair Report (WRR) B-WRR-20917.

FCAW welding of weld joint SEG3020R-174 located on edge beam to floor beam at panel point 126 of OBG Segment 14W. ZPMC Welder is identified as 066421. ZPMC Quality Control (QC) is identified as Mr. An Qing Xing. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-4G-(4F)-FCM-Repair-1, which is used as per Welding Repair Report (WRR) B-WRR-20845.

FCAW welding of weld joint SEG3020AH-002 located on edge plate to side plate at panel point 125 to 127 of OBG Segment 14W. ZPMC Welder is identified as 037932. ZPMC Quality Control (QC) is identified as Mr. An Qing Xing. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4c-FCM-1.

SMAW welding of weld joint SEG3020S-111 and 115 located on side plate RS stiffener at panel point 125.5 of OBG Segment 14W. ZPMC Welder is identified as 045246. ZPMC Quality Control (QC) is identified as Mr. An

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# WELDING INSPECTION REPORT

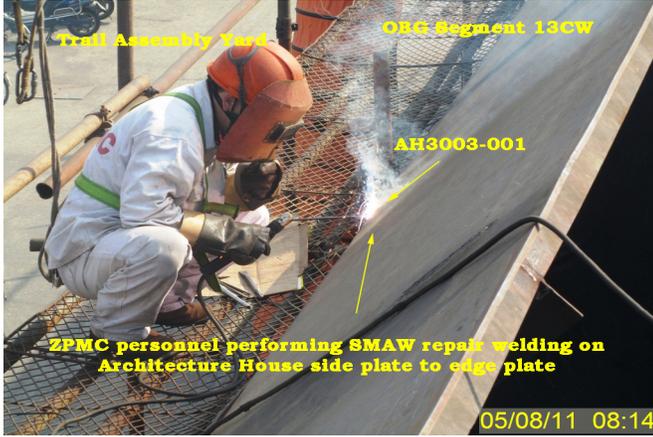
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Qing Xing. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1. See the attached picture.

general compliance with the applicable contract documents.



## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

## 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 , who represents the Office of Structural Materials for your project.

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**Inspected By:** Kumar,Vibin

Quality Assurance Inspector

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**Reviewed By:** Patel,Hiranch

QA Reviewer