

**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-023184**Date Inspected:** 01-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: 008997

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 13CW. The weld designations reviewed are as follows:

1. SEG3015G-151, 152, 153, 154, 155, 162
2. SEG3015J-133, 134, 135, 136, 137, 146
3. SEG3015C-133, 134, 135, 136, 137, 146
4. SEG3015L-151, 152, 153, 154, 155, 162
5. SEG3015E-133, 134, 135, 136, 137, 146

OBG Trail Assembly

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint DP3137-001-012, 013, 046, 047, 080, 081, 114 and 115 located on Deck Panel Diaphragm to Deck panel of OBG Segment 13BW. ZPMC Welder is identified as

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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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-B-P-2214-FCM-1. See the attached file.

SMAW welding of weld joint DP3138-001-012, 013, 046, 047, 080, 081, 114 and 115 located on Deck Panel 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-B-P-2214-FCM-1.

SMAW welding of weld joint AH3003-031, 032, 033, 034, 036 and 037 located on Architecture House RS Stiffeners of OBG Segment 13BW. ZPMC Welders are identified as 066179 and 067588. 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-4G-(4F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20719.

Flux Core Arc Welding (FCAW) welding of weld joint SA3126-001 to 005 - 005 and 007 located on bottom plate connected SA3126 at panel point 123 to 123.5 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-B-T-2231-ESAB.

FCAW welding of weld joint OBW13-001 located on deck panel to deck panel of OBG Segment 13BW to OBG Segment 13CW. ZPMC Welder is identified as 066421. 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-223(2)1T-ESAB.

SMAW welding of weld joint SEG3020AQ-025 located on side plate to anchor plate at panel point 125 to 127 of OBG Segment 14W. ZPMC Welder is identified as 066361. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-1G-(1F)-FCM-Repair-1, which is used as per Critical Welding Repair Report (CWR) B-CWR-2923R1.

SMAW 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 037938. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2212-Tc-U4b-FCM-1.

FCAW welding of weld joint SEG3020D-038 located on deck panel diaphragm to floor beam at panel point 128.3 of OBG Segment 14W. ZPMC Welder is identified as 066695. 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-2232-ESAB.

FCAW welding of weld joint SEG3020V-027 located on deck panel diaphragm to anchor panel at panel point 125 of OBG Segment 14W. ZPMC Welder is identified as 066881. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

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## WELDING INSPECTION REPORT

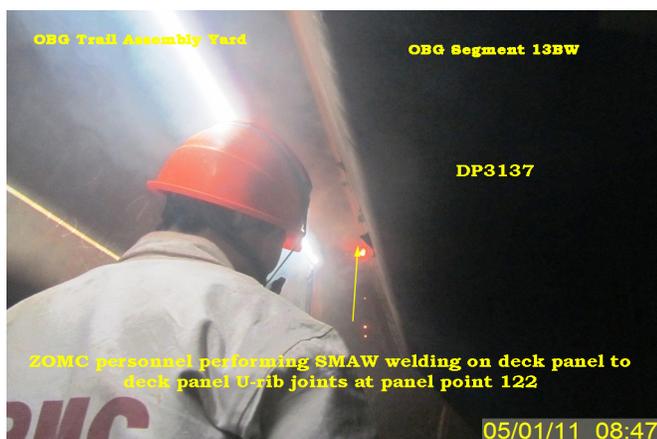
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SMAW welding of weld joint SEG3020-014 located on edge plate to deck panel at panel point 128 to 128.3 of OBG Segment 14W. ZPMC Welder is identified as 037748. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1. See the attached picture.

Unless otherwise noted, all work observed on this date appeared to be in 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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<b>Inspected By:</b>	Kumar,Vibin	Quality Assurance Inspector
<b>Reviewed By:</b>	Patel,Hiranch	QA Reviewer

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