

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-020922**Date Inspected:** 23-Feb-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), Changxing Island **Location:** Shanghai, China**CWI Name:** Qiu Wen, An Qing Xiang**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**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 14, OBG 13AE (NWIT # 08364)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3007Z-001, 004

SEG3007D-191, 192, 040, 045, 050, 055

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 14W:

Repair welding of weld joint no: SEG3020BB-028 [Bottom Plate (BP) 3088A to Vertical Shear Plate SA3446A,

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Complete Joint Penetration (CJP) weld in between panel point (PP) 125~126]. The welder is identified as 067942 and was observed welding in the 2G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by this QA appeared to comply with WPS: 345-SMAW-2G(2F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair (CWR) Report: B-CWR 2793 Rev-0.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020BB-113 (Anchor Plate (AP) 3032A to Vertical Shear Plate SA3447A, CJP weld at PP126). The welder is identified as 066695 and was observed welding in the 3G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020U-587 (Anchor Plate (AP) 3032A to Longitudinal Diaphragm (LD) 3049A, CJP weld at PP126). The welder is identified as 045175 and was observed welding in the 3G position. ZPMC CWI was identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with WPS: B-T-2233-ESAB.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020AP-002 (Anchorage Plate (AP) 3019A to Anchorage Plate (AP) 3020A, CJP weld in between Panel Point PP125~PP127). The welder is identified as 201215 and was observed welding in the 1G position. ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-T-2231-ESAB. (Attached photograph provide additional details).

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020P-010, 014, 016 (Anchorage Plate (AP) 3018A/AP3019A to Floor Beam 3349B, Fillet weld at Panel Point PP126.5). The welder is identified as 069896 and was observed welding in the 4F position. ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-P-2114-FCM-1.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020P-024, 029, 031 (Anchorage Plate (AP) 3020A/AP3021A/AP3022A to Floor Beam 3319A, Fillet weld at Panel Point PP126.5). The welder is identified as 067829 and was observed welding in the 4F position. ZPMC QC was identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-P-2114-FCM-1.

Repair welding of weld joint no: SEG3020L-112, 118 [I-rib stiffener on Bottom Plate (BP) 3019A to Floor Beam (FB) 3327A, Complete Joint Penetration (CJP) weld at panel point (PP) 127]. The welder is identified as 067707 and was observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). AB/F QA was identified as Mr. Xiao Jun Peng. The welding variables recorded by this QA appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair-1. Repair welding was done as per Welding Repair (WR) Report: B-WR 20251 Rev-0.

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

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## 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 Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Gaikwad,Umesh	Quality Assurance Inspector
<b>Reviewed By:</b>	Peterson,Art	QA Reviewer

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