

**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-019752**Date Inspected:** 17-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Qiu Wen**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 13BW/13CW (NWIT # 7817)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3014P-001, 009, 109, 002, 011, 111, 003, 017, 008, 035, 117

SEG3015E-151, 155, 147

SEG3015G-169, 173, 164

SEG3015L-167, 171, 163

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

Bay 14

SEGMENT 13AW

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Repair welding by SMAW process of weld joint SEG3013N-126 (B-WR18883) joining Floor Beam (FB) 3181A to stiffener of bottom plate at Panel Point (PP) 118.35 of segment 13AW. Welder is identified as 066163. ZPMC QC is identified as Mr. Li Ping. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G(3F) FCM-REPAIR.

Welding by SMAW process of weld joint SEG3013AA-075 at FL3 area of segment 13AW. Welder is identified as 067829. ZPMC QC is identified as Mr. Liu Fang. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

## SEGMENT 13CW

Repair welding by SMAW process of weld joint SEG3015B-223 (B-WR18841) joining Floor Beam (FB) 3233A to stiffener of bottom plate at Panel Point (PP) 124.5 of segment 13CW. Welder is identified as 066258. ZPMC QC is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G(3F) FCM-REPAIR.

During random in process inspection this QA inspector observed that the fit up of weld joint FB3238-001-105 joining Floor Beam (FB) 3236A to Floor Beam (FB) 3238A at Panel Point 124.5 of segment 13CW. Fit up done with improper bevel preparation and improper bevel angle. This issue has been informed to AB/F QA Mr. Wang Chao and Mr. Wang Chao informed this QA that ZPMC will repair this issue as comply with contract documents. Attached photograph provide additional details.

## SEGMENT 14W

During random in process inspection this QA inspector observed tack weld joining deck panel DP3169 plate 3482A to plate 3482B was cracked on several locations. This issue has been discussed with ZPMC QC Mr. Li Ming Yang and AB/F QA Lv Yun. ZPMC QC Mr. Li Ming Yang informed this QA that ZPMC will perform repair of tack weld as comply with contract document. Attached photograph provide additional details.

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



## Summary of Conversations:

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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>	Patterson,Rodney	QA Reviewer

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