

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-019742**Date Inspected:** 05-Dec-2010**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**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 (NWIT # 7629)

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.

SEG3020AZ-011

SEG3020AZ-004

SEG3020AY-011

SEG3020AY-008

BAY 14, OBG (NWIT # 7636)

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.

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

---

SEG3015H-178, 172, 160, 154, 130, 124, 118, 112  
SEG3015F-184, 178, 172, 160, 148, 118, 112, 106, 089, 094

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

Bay 14

### SEGMENT 13AW (B-WR18371)

Repair welding by SMAW process of weld joint SEG3013X-379 joining stiffener of Floor Beam (FB) 3192A to Sub Assembly (SA) 3179B of segment 13AW. Welder is identified as 045221. ZPMC CWI is identified as Mr. Qiu Wen. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G(2F)-FCM-REPAIR.

### SEGMENT 13AW (B-WR18335)

Repair welding by SMAW process of weld joint SEG3013Y-129 joining stiffener of Floor Beam (FB) 3188A to Sub Assembly (SA) 3178A of segment 13AW. Welder is identified as 066002. ZPMC QC is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G(2F)-FCM-REPAIR.

### SEGMENT 13AW FL3 AREA

Welding by SMAW process of weld joint SEG3013AD-011, 012 of segment 13AW. Welder is identified as 066258. ZPMC QC is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

Welding by SMAW process of weld joint SEG3013AD-017, 019 of segment 13AW. Welder is identified as 066038. ZPMC QC is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

### SEGMENT 13AW

Welding by FCAW process of weld joint SEG3013AD-022 joining Side Plate (SP) 3091P to Floor Beam (FB) 3202 at Panel Point (PP) 120 of segment 13AW. Welder is identified as 047866. ZPMC QC is identified as Mr. Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

During random in process inspection this QA inspector observed that fit up of Edge Plate (EP) 3020D to Floor Beam (FB) 3193A and FB 3189A, EP 3020C to FB 3189A and FB 3186A, EP 3020B to FB 3186A has been done by ZPMC personnel. The paint was not removed on the contact area of stiffener of edge plate to floor beam connection area.

This issue has been discussed with ZPMC CWI Mr. Qiu Wen and CT lead QA. Mr Qiu Wen informed this QA that ZPMC will not proceed for welding without removal of paint. Attached photograph provide additional details.

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

---

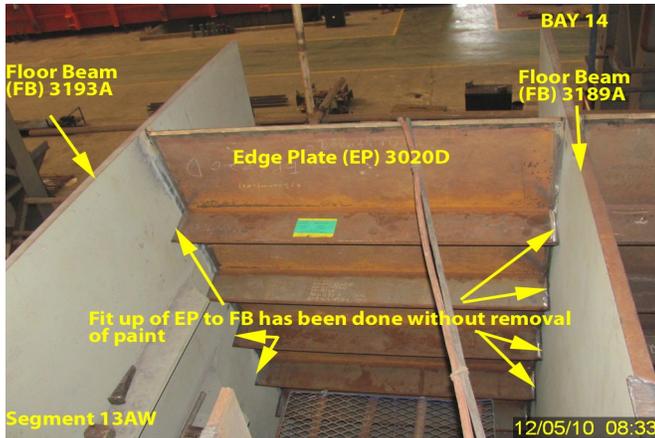
---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

---



## 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.

---

**Inspected By:** Gaikwad,Umesh

Quality Assurance Inspector

---

**Reviewed By:** Patterson,Rodney

QA Reviewer