

**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-024250**Date Inspected:** 30-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), Changxing Island **Location:** Shanghai, China**CWI Name:** 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**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 Self-Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

TA YARD, OBG 13AW (NWIT # 09306)

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.

SEG3013B-273

EP3024-005, 006

AH3001A-080, 081, 078, 079

TA YARD, OBG 14W Blast Inspection

This QA Inspector performed Blast inspection on fillet welds and complete joint penetration (CJP) welds from panel point (PP) 125 to PP127 and floor beam FL3 area of segment 14W from PP 125 to 127. During inspection, several non conforming discontinuities such as weld spatter and arc strikes were observed. These areas were marked up for repair. One linear indication was also observed on weld joint SEG3020AL-006 at PP 126 and was

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

---

marked up for repair. This was informed to ZPMC CWI, identified as Mr. Zhu Lin. Afterwards, all marked up locations were repaired in accordance with contract specifications. See attached photographs for further details.

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

TA YARD

OBG Seg 14W:

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020E-106 [Complete Joint Penetration (CJP) weld at panel point (PP) 128.3]. The welder is identified as 067572 and was observed welding in 4G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020E-101 [CJP weld at PP128.3]. The welder is identified as 069118 and was observed welding in 4G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020R-143 [CJP weld at PP126]. The welder is identified as 037748 and was observed welding in 3G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-P-2213-Tc-U4b-FCM-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020X-079[CJP weld at PP126]. The welder is identified as 045175 and was observed welding in 1G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-T-2231-ESAB.

The SMAW process on weld joint no: SEG3020AE-135/136 [Fillet weld at PP125 to PP125.5]. The welder is identified as 068864 and was observed welding in 4F position. ZPMC QC was identified as Mr. An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2114-FCM-1.

The FCAW process on weld joint no: SEG3020R-146[CJP weld at PP126]. The welder is identified as 066675 and was observed welding in 3G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-T-2233-ESAB.

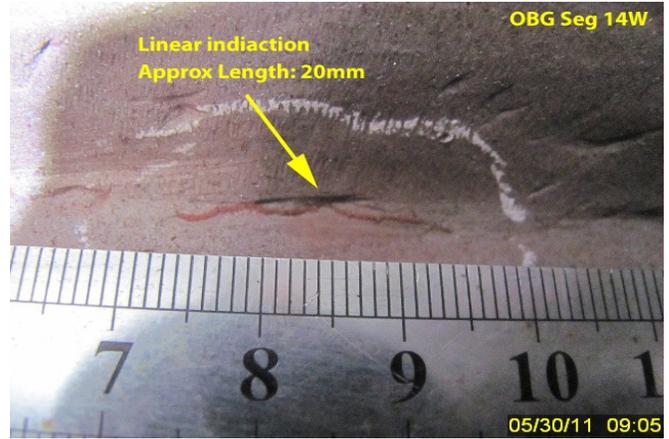
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

---

# 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:** Peterson,Art QA Reviewer