

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-018083**Date Inspected:** 10-Nov-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:** Zhu Zhong Hai.**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 components.**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Mr. Shailesh Wadkar 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 Inspector observed and/or found the following:

OBG Trial Assembly Yard:

Notification no: 007302.

OBG Segment (Seg) 11BW and Seg 11CW:

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector has generated MT report for this date. The members are identified as OBG components. The weld designations MT inspected are as follows:

- 1) BP106A-043, 044, 053, 054.
- 2) BP107A-031, 032, 041, 042.
- 3) BP162A-051, 052.
- 4) BP053A-039, 040.
- 5) BP160A-037, 038.
- 6) BP161A-037, 038.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector observed the following work in progress:

OBG Seg 11DW and Seg 11EW:

Base metal repair welding after removal of temporary attachments at weld joint no: OBW11A-008 [Deck Panel (DP) to DP – transverse splice; complete joint penetration (CJP) weld]. Welding process was identified as Shielded Metal Arc Welding (SMAW). The welder is identified as 062935 and was observed welding in the 1G position. ZPMC QC was identified as Zhu Zhong Hai. The welding variables recorded by QC appeared to comply with WPS: 345-SMAW-1G(1F)-FCM-Repair. Repair welding was done as per Critical Welding Repair Report (CWR): B-CWR-1842 Rev-0.

OBG Seg 11AW:

The Flux Cored Arc Welding (FCAW) process on weld joint no: LB3-003-058 [Light Bracket (LB) to DP of Seg 11AW; partial joint penetration weld (PJP)]. The welder is identified as 053486 and was observed welding in the 2G position. ZPMC QC was identified as Zhu Zhong Hai. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-TC-P4-F-1.

OBG Seg 11EW:

The FCAW process on weld joint no: LB3-004-058 (LB to DP of Seg 11EW; PJP weld). The welder is identified as 040609 and was observed welding in the 2G position. ZPMC QC was identified as Zhu Zhong Hai. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-TC-P4-F-1.

OBG Seg 11BW:

The SMAW process on weld joint nos: SEG067E-077, 078, 086 and 087 (I-rib to DP – hold back fillet weld). The welders are identified as 066258 and 067610 and were observed welding in the 4F position. ZPMC QC was identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS: B-P-2114-FCM-1.

The SMAW process on weld joint no: SSD25-PP99-118 (half height diaphragm; floor beam to corner assembly, CJP weld). The welder is identified as 041713 and was observed welding in the 3G position. ZPMC QC was identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS: B-P-2213-B-U2-FCM-1.

Cross Beam 15 (CB15):

The SMAW process on weld joint no: CB202A-015-004 [East Side Panel to Bottom panel (BP) – CJP hold back weld]. The welder is identified as 052930 and was observed welding in the 2G position. ZPMC QC was identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS: B-P-2212-TC-U4b-FCM-1.

OBG Seg 11CE and Seg 11DE:

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

The SMAW process on weld joint no: DP720-001-020 (DP I-ribs, splice joint, CJP weld; E2 side at Panel Point 104). The welder is identified as 044515 and was observed welding in the 3G position. ZPMC QC was identified as An Qing Xiang. The welding variables recorded by QC appeared to comply with WPS: B-T-3213-B-U3b.

OBG Seg 11EE:

This QA Inspector observed ZPMC personnel doing fit-up of Light Bracket – LB4 003 with deck panel of Seg 11EE. ZPMC QC was identified as An Qing Xiang. See attached photo for further details.

OBG Seg 11CW and Seg 11DW:

This QA Inspector observed ABF personnel doing Ultrasonic Testing (UT) of weld joint no: OBW11C-002 [Side Panel (SP) to SP – transverse splice; CJP weld]. ZPMC QC was identified as Zhou Peng. See attached photo for further details.

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



Summary of Conversations:

No significant conversations were reported on this date.

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; phone: 15000422372., who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar,Sailesh	Quality Assurance Inspector
----------------------	----------------	-----------------------------

Reviewed By:	Dsouza,Christopher	QA Reviewer
---------------------	--------------------	-------------