

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-022078**Date Inspected:** 02-Jan-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:** Liu Yang**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 Segment 13BW, DP Transverse Splice

This QA Inspector performed verification Ultrasonic Testing [ABF UT Report No: UT-13W-007 (R1)] in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a separate data sheet that Caltrans QA generates after performing a joint inspection with ABF ultrasonic testing personnel. The location of the inspection was identified as weld between two plates of deck panels of segment 13BW. The weld designations were as;

DP3137-001-161

DP3136-001-191

DP3135-001-017

BAY 14, OBG Segment 13CW, DP Transverse Splice

This QA Inspector performed verification Ultrasonic Testing [ABF UT Report No: UT-13W-009 (R1)] in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

recorded on a separate data sheet that Caltrans QA generates after performing a joint inspection with ABF ultrasonic testing personnel. The location of the inspection was identified as weld between two plates of deck panels of segment 13CW. The weld designations were as;

DP3148-001-009

DP3149-001-137

DP3150-001-137

DP3151-001-137

DP3152-001-137

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

Bay 14

OBG Seg 13AW

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3013K-028 [Floor Beam (FB) 3191A to K-Plate KP3014A, complete joint penetration (CJP) weld, at PP119+1500]. The welder is identified as 067588 and was observed welding in the 3G position. ZPMC QC was identified as Liu Feng. The welding variables recorded by QC appeared to comply with WPS: B-P-2213-TC-U4b-FCM-1.

The SMAW process on weld joint no: SEG3013AH-017 (FB3180A to KP3009A, CJP weld, at PP118.35). The welder is identified as 037748 and was observed welding in the 3G position. ZPMC QC was identified as Liu Feng. The welding variables recorded by QC appeared to comply with WPS: B-P-2213-TC-U4b-FCM-1.

OBG Segment 14W

Repair welding of weld joint no: SEG3020V-075 [FB3316A to Longitudinal Diaphragm (LD) 3049A, CJP weld at PP125]. The welder is identified as 066038 and was observed welding in the 3G position. Welding process was identified as SMAW. ZPMC QC was identified as Sun Tian Liang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per Critical Welding Repair Report (CWR): B-CWR 2622 Rev-0.

Repair welding of weld joint no: SEG3020Q-058 (FB3320A to LD3049A, CJP weld at PP126). The welder is identified as 047864 and was observed welding in the 3G position. Welding process was identified as SMAW. ZPMC QC was identified as Sun Tian Liang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per CWR: B-CWR 2620 Rev-0.

Repair welding of weld joint no: SEG3020R-033 (FB3320A to LD3048A, CJP weld at PP126). The welder is identified as 051348 and was observed welding in the 3G position. Welding process was identified as SMAW. ZPMC QC was identified as Sun Tian Liang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per CWR: B-CWR 2621 Rev-0.

The FCAW process on weld joint no: SEG3013F-029 (FB3336A to LD3049A, fillet weld at PP128). The welder is

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

identified as 045276 and was observed welding in the 3F position. ZPMC QC was identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with WPS: B-T-2133-ESAB.

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

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
