

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-023259**Date Inspected:** 02-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:** An Qing Xiang**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:

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

TA YARD

OBG Seg 14W:

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020D-038 [Deck Panel (DP) diaphragm of DP 3172A to Floor Beam (FB) 3343A, Complete Joint Penetration (CJP) weld at Panel Point (PP) 128.3]. The welder is identified as 066695 and was observed welding in 2G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-T-2232-ESAB. Attached photograph provide additional details.

The FCAW process on weld joint no: SEG3020E-001 [DP diaphragm of DP 3173A to FB 3343A, CJP weld at PP 128.3]. The welder is identified as 067949 and was observed welding in 2G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-T-2232-ESAB.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

The FCAW process on weld joint no: SEG3020V-024 [DP diaphragm of DP 3184A to top anchorage plate (AP) PL3519A, CJP weld at PP 125]. The welder is identified as 066881 and was observed welding in 2G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-T-2232-ESAB.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020AH-002 [Side Panel (SP) 3144B to Edge Panel (EP) 3029A, CJP weld at PP125 to PP127]. The welder is identified as 037932 and was observed welding in 2G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-P-2212-Tc-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020F-001 [EP 3029A to FB 3336A, CJP weld at PP128]. The welder is identified as 037748 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.

Repair welding of weld joint no: SEG3020AL-087 [I-rib on SP 3140B to FB 3321A, CJP weld at PP 126]. The welder is identified as 067707 and was observed welding in the 3G position. Welding process was identified as SMAW. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair (CWR) Report : B-CWR 2906 Rev-1.

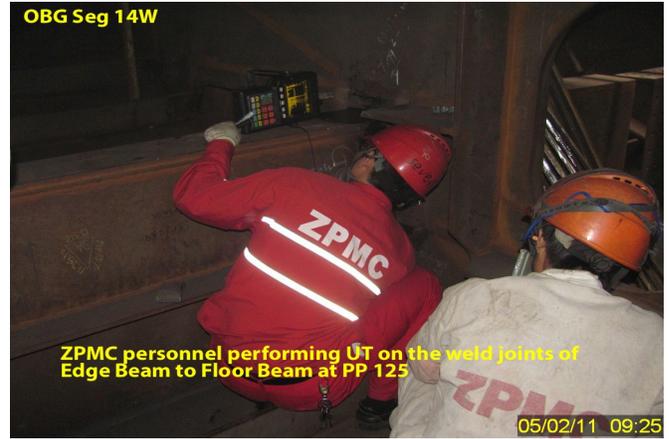
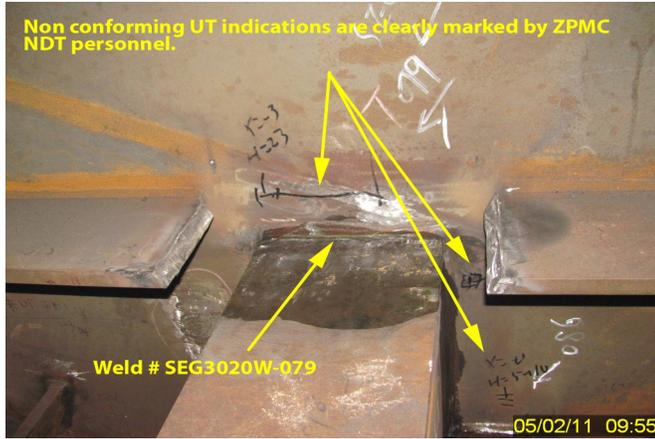
Repair welding of weld joint no: SEG3020AQ-025 [Top AP PL3591A to SP 3144B, CJP weld in between PP 125 to PP126]. The welder is identified as 045246 and was observed welding in the 4G position. Welding process was identified as SMAW. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-4G(4F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair (CWR) Report: B-CWR 2923 Rev-1.

During random in process inspection this QA Inspector observed that ZPMC NDT personnel were performing Ultrasonic Testing (UT) on weld joints SEG3020W-079, 080 and 086 [joining Edge Beam (EB) 3059A to FB 3317A at PP 125]. During inspection several non-conforming indications were observed by ZPMC NDT personnel. These indications were clearly marked on the weld joints. See attached photograph for further 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: Peterson,Art

QA Reviewer