

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-022656**Date Inspected:** 15-Apr-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:

BAY 14, OBG 14E (NWIT # 08832)

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.

SEG3019AG-036, 037

EP3027-001-097, 098

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

Bay 14

OBG Seg 14W:

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020BB-038 [Vertical Shear Plate

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(VSP) SA3447A to Top Anchorage Plate (AP) 3015A, complete joint penetration (CJP) weld at panel point (PP) 125 to PP126]. The welders are identified as 037932 and 066261 and were observed welding in 4G position. ZPMC Quality Control (QC) was identified as Zhu Lin. The welding variables recorded by this QC appeared to comply with welding procedure specification (WPS): B-P-2214-Tc-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020U-591 [Anchor Plate (AP) 3032A to AP3014A and AP3015A, CJP weld at PP126]. The welders are identified as 066179 and 066361 and were observed welding in 4G position. ZPMC QC was identified as 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 nos: SEG3020X-004 and 005 [Longitudinal Diaphragm (LD) 3049A to Top AP3016A, CJP weld at PP125 to PP125.5 and PP125.5 and PP126 (for the respective welds)]. The welders are identified as 066002 and 069841 and were observed welding in 4G position. ZPMC QC was identified as 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: SEG3020C-029 [Block out Bottom Plate sub-assembly (SA) 3416C to FB3348A, CJP weld at PP128.7]. The welders are identified as 045246 and 067942 and were observed welding in 4G position. ZPMC QC was identified as 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: SEG3020M-009 [Deck Panel (DP) diaphragm X4817D of DP3174A to FB3328A, CJP weld at PP127]. The welder is identified as 067520 and was observed welding in 2G position. ZPMC QC was identified as Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-P-2212-Tc-U4b-FCM-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020R-002 (DP diaphragm X4816A of DP3174A to Top AP3019A, CJP weld at PP128). The welders are identified as 048433 and 203871 and were observed welding in 2G position. ZPMC QC was identified as Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-T-2232-ESAB.

The FCAW process on weld joint no: SEG3020G-001 (DP diaphragm X4857A of DP3173A to DP diaphragm X4856A of DP3174A, CJP weld at PP128). The welder is identified as 201583 and was observed welding in 3G position. ZPMC QC was identified as Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-T-2233-ESAB.

The FCAW process on weld joint no: SEG3020J-001 (DP diaphragm X4857A of DP3173A to DP diaphragm X4856H of DP3174A, CJP weld at PP126). The welder is identified as 045143 and was observed welding in 3G position. ZPMC QC was identified as Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-T-2233-ESAB.

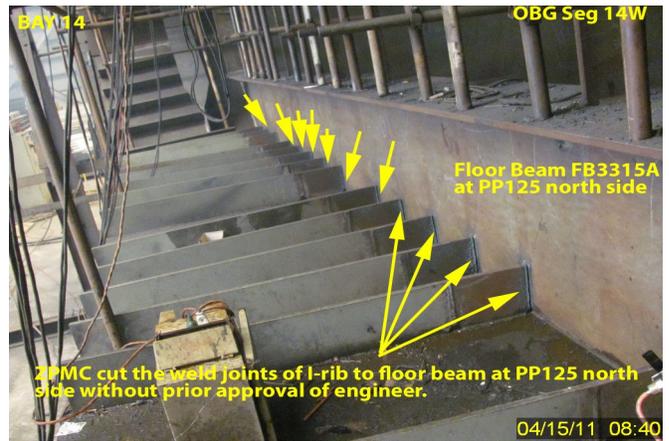
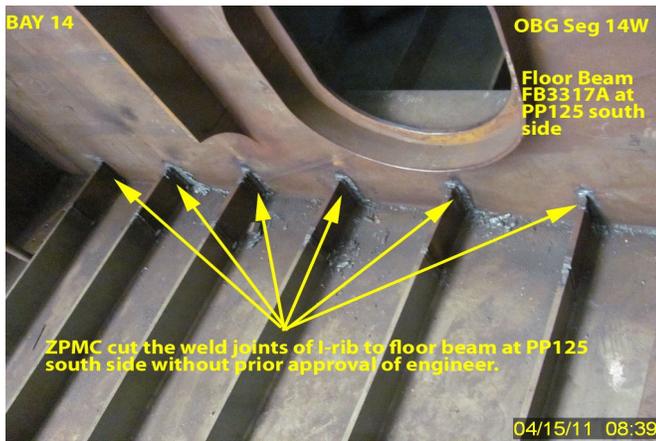
The FCAW process on weld joint no: SEG3020Q-056 (DP diaphragm X4816B of DP3173A to Top AP3018A, CJP weld at PP126). The welder is identified as 203871 and was observed welding in 2G position. ZPMC QC was identified as Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-T-2232-ESAB.

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During random in process visual inspection this QA Inspector observed the weld joints joining I-rib stiffeners RS3516A to Floor Beam (FB) 3315A and I-rib stiffeners RS3504L to Floor Beam (FB) 3317A were cut at panel point PP125 without prior approval of engineer. This issue has been discussed with ZPMC CWI Mr. An Qing Xiang and CT Lead QA Inspector. ZPMC CWI Mr. An Qing Xiang informed this QA Inspector that ZPMC will prepare Welding Repair Report (WRR) for these weld joints. Attached photograph provide additional details.

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
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Reviewed By:	Peterson,Art	QA Reviewer
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