

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-017055**Date Inspected:** 25-Sep-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:** Yu Dong Ping, Qiu Wen**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/TOWER**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 11, OBG BIKE PATH (NWIT # 06762)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15%, Ultrasonic Testing (UT) of approximately 10% and random Visual Testing (VT) of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector has generated MT and UT reports for this date. The member(s) are identified as OBG components. The weld designations reviewed are as follows:

BK004A1-017-008, 005 (GREEN TAG NO. 14332)

BAY 10, OBG BIKE PATH, AFTER HSR (NWIT # 06761)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15%, Ultrasonic Testing (UT) of approximately 10% and random Visual Testing (VT) of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector has generated MT and UT reports for this date. The member(s) are identified as OBG components. The weld designations reviewed are as follows:

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BK004A1-032-009 (GREEN TAG NO. 13686R1)

BAY 11, OBG BIKE PATH (NWIT # 06769)

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 member(s) are identified as OBG components. The weld designations reviewed are as follows:

BK004A3-018-026

BK004A7-018-007, 008, 217

BK004A3-018-051, 052

BK004A7-018-073, 074, 019, 020, 079, 080

BK004A4-018-014

BK004A7-018-025, 026, 085, 086

BK004A7-018-226, 129, 223, 160, 168

BK004A5-018-016~019, 021~023, 036~039, 042, 043

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

BAY 10, OBG BIKE PATH

During random in process inspection this QA inspector observed that ZPMC personnel performing surface repair on the weld joints of bike path by using Shielded Metal Arc Welding (SMAW) process for BK004A-027 of bike path. Welder is identified as 040268. ZPMC QC is identified as Mr. Li Jun. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2F(2G)-REPAIR.

BAY 10, OBG BIKE PATH

During random in process inspection this QA inspector observed that ZPMC personnel performing fit up by using Shielded Metal Arc Welding (SMAW) process for stringer plate to deck plate of bike path BK004A-029. Welders are identified as 054547 and 057186. ZPMC QC is identified as Mr. Li Jun. The welding variables recorded by QC appeared to comply with WPS-B-T-2112.

BAY 10, NORTH TOWER LIFT 5

During random in process inspection this QA inspector observed that ZPMC personnel performing welding by using

Shielded Metal Arc Welding (SMAW) process for the lifting lug on skin C of North Tower lift 5. Welders is identified as 050289. ZPMC CWI is identified as Mr. Qiu Wen. The welding variables recorded by QC appeared to comply with WPS-B-T-4213-Tc-U5b-2.

During the Quality Assurance Magnetic Particle Testing (MT) review of fillet welds located on OBG bike path BK004A-018, this Quality Assurance (QA) Inspector discovered the following issues:

-One (1) transverse crack found on the weld measuring approximately 6mm in length.

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- Y location of the indication is measured to be 2160mm from one side.
- The indication is clearly marked on the weld joint.
- The weld is identified as: BK004A3-018-052.
- The Weld is a fillet weld joining the stringer plate (8C) to the deck plate of bike path.
- The member is located in bay 11.

The Notice of Witness Inspection Number (NWIT) is 06769. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. The attached photographs provide additional detail. This issue has an incident report.

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: Carreon,Albert

QA Reviewer