

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023317**Date Inspected:** 05-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) Chanxing Island **Location:** Shanghai, China**CWI Name:** Mr. LIU HUA JIE**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 Segment**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

This QA inspector randomly observed the following work:

1. INPROCESS:

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing Submerge Arc Welding of Complete Joint Penetration welds joining the deck plate to deck plate transverse splice weld joint located on 13AE+13BE. The weld is designated as OBE13-002. The welder is identified as 058100. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess Submerge Arc Welding appears to be progressing in compliance with WPS-B-T-2221-B-U2-S-4. This QA inspector found without proper document weld metal has removed after cover pass weld completion of deck plate to deck plate transverse splice weld joint due to misalignment. ZPMC QC agrees to make the proper document before welding. Further weld detail mention in attached picture.

ZPMC welding personnel performing Flux Core Arc Welding of Repair weld for the deck panel diaphragm weld

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joint located on 13AW. The weld is designated as SEG3013K-022. The welder is identified as 048696. ZPMC QC Mr. SHEN JIAN BO was onsite monitoring the welding variables. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-345-FCAW-3G (3F) - ESAB-Repair. The weld repair report number is named as WR-20648.

ZPMC welding personnel performing Flux Core Arc Welding of Repair weld for the floor beam to I-rib stiffener weld joint located on 13AW. The weld is designated as SEG3013M-123. The welder is identified as 048433. ZPMC QC Mr. SHEN JIAN BO was onsite monitoring the welding variables. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-345-FCAW-3G (3F) - ESAB-Repair. The weld repair report number is named as WR-20695.

ZPMC welding personnel performing Shielded Metal Arc Welding of Repair weld for the K plate to I-rib stiffener weld joint located on 13AW. The weld is designated as SEG3013AA-098. The welder is identified as 067609. ZPMC QC Mr. SHEN JIAN BO was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1. The weld repair report number is named as WR-20812.

ZPMC welding personnel performing Flux Core Arc Welding of Complete Joint Penetration welds joining the bottom plate to bottom plate transverse splice weld joint located on 13AE+13BE at cross beam side. The weld is designated as OBE13B-001. The welder is identified as 066746 & 066763. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-2231-ESAB.

2. NDT:

Ultrasonic Testing (UT):

UT carried out for the ZPMC submitted Notification No 09031.

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10 % of CJP welds that has been previously tested and accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. The members are identified as tee joint between floor beam web weld joint located on 12CW at Panel Point (PP-115.2), cross beam side. This QA inspector generated a UT (TL-6027) report for this date. Weld identification numbers were (FB3089 Punch List Item 256).

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

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Summary of Conversations:

No relevant 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 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Pillai,Santosh

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer