

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021301**Date Inspected:** 03-Mar-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. ZHU ZHONG HAI**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 Shielded Metal Arc Welding of Complete Joint Penetration welds joining the bottom plate to side plate hold back weld joint located on 12AW+CB-17 at Panel Point (PP-110). The weld is designated as CB3001A-017-016(CB-17). The welder is identified as 040320. ZPMC QC Mr. LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2212-TC-U4b-FCM-1. Further weld detail mention in attached picture.

ZPMC welding personnel performing Shielded Metal Arc Welding of Fillet welds joining the deck plate to I-stiffener weld joint located on 12AE at Panel Point (PP-110 to 111). The weld is designated as SEG3001Y-138. The welder is identified as 040270. ZPMC QC Mr. LI YANG was onsite monitoring the welding variables. The

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inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2114-FCM-1. Further weld detail mention in attached picture.

ZPMC welding personnel performing Shielded Metal Arc Welding of Fillet welds joining the deck plate to I-stiffener weld joint located on 12AE at Panel Point (PP-110 to 111). The weld is designated as SEG3001Y-128. The welder is identified as 044504. ZPMC QC Mr. LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2114-FCM-1. Further weld detail mention in attached picture.

ZPMC welding personnel performing Shielded Metal Arc Welding of Fillet welds joining the deck plate to I-stiffener weld joint located on 12AE at Panel Point (PP-110 to 111). The weld is designated as SEG3001Y-137. The welder is identified as 068764. ZPMC QC Mr. LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2114-FCM-1. Further weld detail mention in attached picture.

ZPMC welding personnel performing Flux Core Arc Welding of Fillet welds joining the intermittent panel point stiffener weld joint located on 12BE at Panel Point (PP-112.5). The weld is designated as OBE12C3-PP112.5-001. The welder is identified as 040367. 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-2132-ESAB.

ZPMC welding personnel performing Flux Core Arc Welding of Fillet welds joining the intermittent panel point stiffener weld joint located on 12BE at Panel Point (PP-113.5). The weld is designated as OBE12C3-PP113.5-001. The welder is identified as 040367. 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-2132-ESAB.

ZPMC welding personnel performing Shielded Metal Arc Welding of Repair weld for the deck plate to deck plate transverse splice weld joint located on 12BW+12CW at cross beam side. The weld is designated as OBW12A-002. The welder is identified as 046709. ZPMC QC Mr. WANG ZHU was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-1G (1F)-FCM-Repair-1. The weld repair report number is named as CWR-2844.

2. NDT:

Magnetic Particle Testing (MT):

MT carried out as per the ZPMC submitted Notification No 08442.

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area that has been previously tested and accepted by ZPMC MT technicians. This QA Inspector generated a TL-6028 MT report on this date. The weld designation numbers is as follows: DP3022-001-024, DP3022-001-015,016 & DP3033-001-009,010.

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



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