

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-020928**Date Inspected:** 27-Nov-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) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. AN QIANG XING**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 (SMAW) of Repair weld for the edge plate to side plate hold back weld joint located on 11DE+11EE at bike path side. The weld is designated as CA094-006(11DE) & CA090-002(11EE). The welder is identified as 044515. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1. The weld repair report number is named as WR-17820.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the side plate to side plate transverse splice weld joint located on 11DE+11EE at cross beam side. The weld is designated as OBE11C-007. The welder is identified as 044515. ZPMC QC Mr. AN QING XING was onsite monitoring the

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welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1. The weld repair report number is named as CWR-2292.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the edge plate to side plate hold back weld joint located on 11DE+11EE at cross beam side. The weld is designated as CA093-001(11DE) & SEG072A-046(11EE). The welder is identified as 044515. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1.

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Complete Joint Penetration (CJP) welds joining the traveler rail bracket weld joint located on 11DW. The weld is designated as TR1D-PP105-008. The welder is identified as 053486. ZPMC QC Mr. ZHU ZHONG HAI was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2233-TC-U4c-F.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the edge plate to deck plate hold back weld joint located on west side of 11EE at bike path side. The weld is designated as CA094-005. The welder is identified as 044515. ZPMC QC Mr. AN QING XING was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1. The weld repair report number is named as WR-17821.

2. NDT:

Magnetic Particle Testing (MT):

MT carried out as per the ZPMC submitted Notification No 07511.

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: SSD24-PP105.5-168, 169, 170, SEG072D-173, 174, 175, SEG072E-022, 023, 024.

Ultrasonic Testing (UT):

UT carried out as per the ZPMC submitted Notification No 07522.

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. This QA inspector generated a (UT) (TL-6027) report for this date. The QA Inspector generated a TL-6027 UT report on this date. Weld identification numbers were SSD27-PP105-171, SSD27-PP105-099, SSD27-PP105-029, SSD27-PP105-222, SSD27-PP105-103, SSD27-PP105-104.

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
