

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-024469**Date Inspected:** 02-Jun-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:** Mr. Lu 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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh 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 Chang xing Island in Shanghai, China. QA observed and/or found the following:

OBG Trial Assembly

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as OBG Segment 13BE. The weld designations reviewed are as follows.

AH3151-008, 010, 014, 015, 025, 027, 028, 029, 030, 031, 032, 033

AH3151A-007, 008, 013, 014, 009, 010, 016, 024, 028, 034, 040, 050, 051, 062, 066, 082, 085, 090, 096, 109, 110, 118, 112, 113, 037, 038, 041, 042,

NDT Notification No-09333

BAY 14:

This QA Inspector performed randomly Visual Inspection and Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6027 (UT) report for this date. The member is identified as OBG Segment 14 West Diaphragm Stiffener. The weld designations reviewed are as follows.

SEG3020AT-152, 153, 160, 163, 168, 171, 156, 157, 164, 167, 172, 175

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NDT Notification No-09337

This QA Inspector randomly observed the following work in progress.

SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 067656 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 13BE. Joint identified as SEG3009C-213. ZPMC QC Identified as Zhong Yang Gang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2211-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 044772 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 13BE. Joint identified as AH3151-075. ZPMC QC Identified as Zhong Yang Gang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2212-Tc-U4b-FCM-1.

FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 052696 Perform Flux Core Arc Welding (FCAW) on OBG Segment 13BE. Joint identified as SA7016-001-001, 004. ZPMC QC Identified as Zhong Yang Gang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 055491 Perform Flux Core Arc Welding (FCAW) on OBG Segment 13BE. Joint identified as SA7017-001-002, 003. ZPMC QC Identified as Zhong Yang Gang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 055564 Perform Flux Core Arc Welding (FCAW) on OBG Segment 13BE. Joint identified as SEG3009C-204. ZPMC QC Identified as Zhong Yang Gang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2233-ESAB.

Repair welding, SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 067752 Perform Shielded Metal Arc Welding (SMAW) on OBG Traveler Rail. Joint identified as TR3015TR1-001-001. ZPMC QC Identified as Sun Tian Liang with Temporary welding repair report WRR-B-WR21057. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1. For more information see below attached picture number 1.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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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,Shailesh	Quality Assurance Inspector
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Reviewed By:	Patterson,Rodney	QA Reviewer
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