

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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018369**Date Inspected:** 21-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), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Xu Le Fung.**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:** Tower and 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 Changxing Island in Shanghai, China. QA observed and/or found the following:

NDT:

BAY 11:

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 Bike Path Stringer plate. The weld designations reviewed are as follows.

BK008A3-002-014, 029, BK008A7-002-132, 006, 066, 127, BK008A6-002-068, 069

BK008A7-002-010, 064

BK008A7-002-090, 172, 033, 088, BK008A6-002-112, 113, BK008A4-002-053, 069

NDT Notification No-07436

BAY 11:

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 Bike Path. The weld designations reviewed are as follows.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

BK004A2-053-014 (One Repair Point)

NDT Notification No-07435

BAY 10

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 Splice plate U Rib. The weld designations reviewed are as follows.

GGL-MQ-1958-11-1, 2, GGL-MQ-1958-27-1, 2, GGL-MQ-1958-45-1, 2,

GGL-MQ-1958-35-1, 2, GGL-MQ-1958-38-1, 2, GGL-MQ-1958-32-1, 2,

NDT Notification No-07444

This QA Inspector observed the following work in progress:

BAY 10:

OBG Bike path, FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 053869 Perform Flux Core Arc Welding (FCAW) on OBG Bike path. Joint identified as BK004A6-032-021, 158, 115, 116. ZPMC QC Identified as Yu Zhi Lai. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2133.

This QA Inspector observed ZPMC qualified welding personnel identified as 040533 Perform Flux Core Arc Welding (FCAW) on OBG Bike path. Joint identified as BK004A8-032-021, 022, 115, 116. ZPMC QC Identified as Yu Zhi Lai. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2133.

This QA Inspector observed ZPMC qualified welding personnel identified as 040533 Perform Flux Core Arc Welding (FCAW) on OBG Bike path. Joint identified as BK004A8-032-029, 030. ZPMC QC Identified as Yu Zhi Lai. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132.

This QA Inspector observed ZPMC qualified welding personnel identified as 052075 Perform Flux Core Arc Welding (FCAW) on OBG Bike path. Joint identified as BK004A5-027-122, 125, 128, 131. ZPMC QC Identified as Yu Zhi Lai. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2233-B-U3-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 057258, 056200, 052493, Perform Shielded Metal Arc Welding (SMAW) on OBG Bike path side plate. Joint identified as BK004A1-032-044. ZPMC QC Identified as Libin. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-Tc-U5b. For more information see below attached picture number 1.

OBG Bike Path Repair Welding, SMAW process:

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

This QA Inspector observed ZPMC qualified welding personnel identified as 056364, Perform Shielded Metal Arc Welding (SMAW) on OBG Bike Path Deck plate base metal repair depth observed 3~4mm. Bike Path identified as BK004A-029. ZPMC QC Identified as Lijun with temporary welding repair report WRR-B-WR14889. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-1G (1F) Repair. For more information see below attached picture number 2.

BAY 11:

Tower SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 054460, 044541, Perform Shielded Metal Arc Welding (SMAW) on Tower Bracket Stiffener lift 5. Joint identified as SD1-BRSA5-1-4B, 5B, 1B. ZPMC QC Identified as Libin. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-Tc-U5b.

Lift 6, FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040723, 053316 Perform Flux Core Arc Welding (FCAW) on Lift 6 Assembly plate. Joint identified as WSD1-FCSA6-4-4, 3. ZPMC QC Identified as Shao Hai Lang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132.

Lift 6, SAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 056975 Perform Submerged Arc Welding (SAW) on Lift 6 Assembly plate. Joint identified as SSD1-DPSA6-5-2. ZPMC QC Identified as Libin. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2221-B-U3c-S-2.

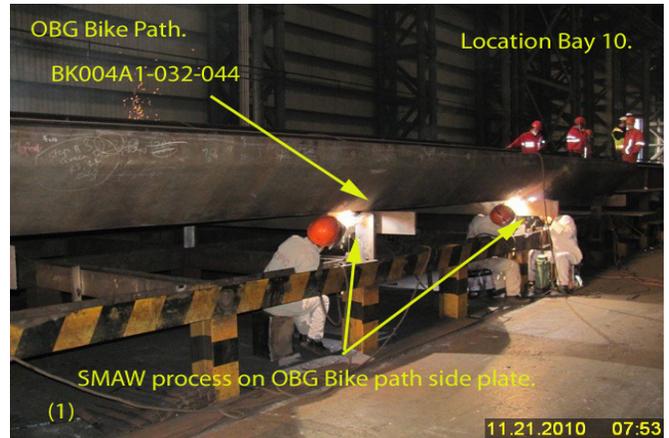
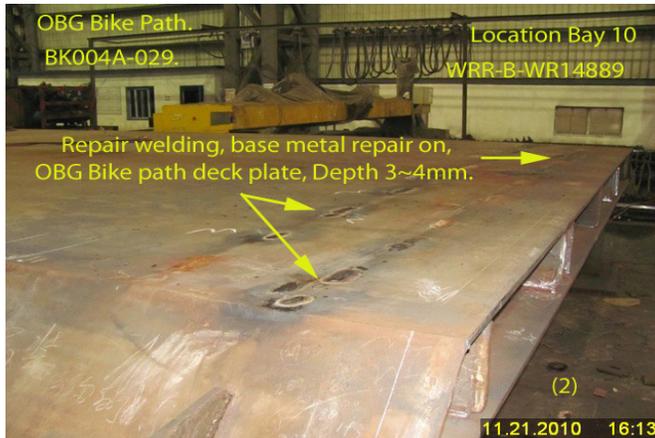
OBG Bike path, FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 205649, 042218 Perform Flux Core Arc Welding (FCAW) on OBG Bike path. Joint identified as BK005B5-004-123, 124, 126, 127, 110, 111, 113, 114. ZPMC CWI Identified as Yu Dong Ping. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132.

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

WELDING INSPECTION REPORT

(Continued Page 4 of 4)



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 Thomas Ho phone : 150002048250, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Shailesh Quality Assurance Inspector

Reviewed By: Clifford,William QA Reviewer