

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-018810**Date Inspected:** 19-Dec-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:** 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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune 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:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

WELDING:**Segment 11EE**

This QA Inspector observed ZPMC qualified welding personnel identified as 040320 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG074A-012; located On Orthotropic Box Girder (OBG) Bottom Plate to Side Plate CJP Weld; The Welding Repair Report (CWRR) was B-CWR2479. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1. See attached photo for further details.

Segment 11EE

This QA Inspector observed ZPMC qualified welding personnel identified as 040320 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG074A-011; located On Orthotropic Box Girder (OBG) Bottom

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Plate to Side Plate CJP Weld; The Welding Repair Report (CWRR) was B-CWR2467. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1.

Segment 12AW ~ 12BW

This QA Inspector observed ZPMC qualified welding personnel identified as 040656 perform Flux Core Arc Welding (FCAW), weld joint identified as OBW12D-002; located On Orthotropic Box Girder (OBG) Side Plate to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhu Zhong Hai. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-B-U2-FCM-1. See attached photo for further details.

Segment 12BE

This QA Inspector observed ZPMC qualified welding personnel identified as 053871 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3002A-001; located On Orthotropic Box Girder (OBG) Bottom Plate to Side Plate Transverse Splice CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Liu Hua Jie. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-B-U2-FCM-1.

Segment 12AE

This QA Inspector observed ZPMC qualified welding personnel identified as 047353 perform Flux Core Arc Welding (FCAW), weld joint identified as SEG3001X-051; located On Orthotropic Box Girder (OBG) Bottom Plate to Longitudinal Diaphragm PJP Weld; ZPMC Quality Control (QC) is identified as Mr. Liu Hua Jie. The welding variables recorded by QC appeared to comply with applicable WPS-B-T-2232-ESAB.

NDT:

Segment 11BE (FL-3 I-Rib Hold Back Weld)

This QA Inspector performed Magnetic Particle Testing (MPT) Verification Inspection of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report on this date. The members are identified as Orthotropic Box Girder (OBG) components. The weld designations Verified are as follows.

SEG68E-016, 017

SEG68D-176, 177, 149, 150

FB28B-013, 014, 005, 006

SSD18-100-177, 178

BP027A-038, 039

Nondestructive testing (NDT) notification No. 07841

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

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

No significant 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 phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Prabhune,Manoj

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer