

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-020946**Date Inspected:** 23-Feb-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:** Zho 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:** 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 12BW ~ 12CW**

This QA Inspector observed ZPMC qualified welding personnel identified as 046709 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW12C-001; located On Orthotropic Box Girder (OBG) Bottom Plate to Bottom Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhou Peng. The Welding Repair Report (WRR) was B-WR20263. This QA Inspector observed the base material appears to have been being preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Zhou Peng was onsite monitoring the welding variables. 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 12CE

This QA Inspector observed ZPMC qualified welding personnel identified as 044504 perform Shielded Metal Arc

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Welding (SMAW), weld joint identified as CA3004-002; located On Orthotropic Box Girder (OBG) Side Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The Critical Welding Repair Report (CWRR) was B-CWR2810 .This QA Inspector observed the base material appears to have been being preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. 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 12BE ~ 12CE

This QA Inspector observed ZPMC qualified welding personnel identified as 044504 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CA3003-006; located On Orthotropic Box Girder (OBG) Deck Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The Critical Welding Repair Report (CWRR) was B-CWR2808 .This QA Inspector observed the base material appears to have been being preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-2G (2F) FCM-Repair-1.

Segment 12BW ~ 12CW

This QA Inspector observed ZPMC qualified welding personnel identified as 040611 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW12E-001; located On Orthotropic Box Girder (OBG) Side Plate to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhou Peng. The Welding Repair Report (WRR) was B-WR20193 .This QA Inspector observed the base material appears to have been being preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Zhou Peng was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1.

Segment 12BE ~ 12CE

This QA Inspector observed ZPMC qualified welding personnel identified as 047353 perform Flux Cored Arc Welding (FCAW), weld joint identified as OBE12E-002; located On Orthotropic Box Girder (OBG) Side Plate to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The Critical Welding Repair Report (CWRR) was B-CWR2805 .This QA Inspector observed the base material appears to have been being preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-FCAW-3G(3F)ESAB-Repair.

Segment 12AW ~ 12BW

This QA Inspector performed Ultrasonic Testing (UT) Verification inspection of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as Orthotropic Box Girder (OBG) components. The weld designations verified are as follows.

DP3049-001-040

EP3010-001-021

SP3049-001-056, 058

DP3039-001-026

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

EP3007-001-065

SP3034-001-078, 081

Nondestructive testing (NDT) notification No. 08373

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



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