

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-023862**Date Inspected:** 20-May-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:** Zhu 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

DCP:

BAY 10

This QA received ZPMC inspection notification sheet 09190 to perform dimensional inspection of traveler rails identified as 26BK1-001, 3025TR1-001, 3026TR1-001, 3007TR2-001, and 3023TR1-001. Dimensional inspections performed on each of these traveler rails include, but is not limited to, overall length, thickness at typical section, Flange width at typical section, rail sweep, Depth typical section. The results of the inspection were recorded on Caltrans (CT) QA form "OBG DCP Hand Measurements Survey: Traveler Rails and submitted to CT QA lead for review.

WELDING:

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Segment 13CW

This QA Inspector observed ZPMC qualified welding personnel identified as 057220 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3015A-012 ; located On Orthotropic Box Girder (OBG) Side Plate to Bottom Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. An Qinxiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. An Qinxiang was onsite monitoring the welding variables. 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 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 067947 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013R-221 ; located On Orthotropic Box Girder (OBG) Floor Beam to Longitudinal Diaphragm CJP Weld; ZPMC Quality Control (QC) is identified as Mr. An Qinxiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR20828. ZPMC Quality Control (QC) Mr. An Qinxiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 3G (3F) FCM-Repair-1. See attached photo for further details.

Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 203871 perform Flux Cored Arc Welding (FCAW), weld joint identified as SEG3013R-213 ; located On Orthotropic Box Girder (OBG) Floor Beam to I-Rib CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR20805. ZPMC Quality Control (QC) Mr. Zhang Lin was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 3G (3F) FCM-Repair-1.

Segment 13CW

This QA Inspector observed ZPMC qualified welding personnel identified as 044541 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SP3113-001-078 ; located On Orthotropic Box Girder (OBG) Floor Beam to I-Rib CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR20719. ZPMC Quality Control (QC) Mr. Zhang Lin 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 13CW

This QA Inspector observed ZPMC qualified welding personnel identified as 066156 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3015H-207 ; located On Orthotropic Box Girder (OBG) Floor Beam to I-Rib CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Critical Repair Report (WRR) was B-WR20901. ZPMC Quality Control (QC) Mr. Zhang Lin was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 3G (3F) FCM-Repair-1.

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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 James Devey - 15000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhune,Manoj	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer
