

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-017591**Date Inspected:** 23-Oct-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. Qiu Wen.**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 10

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 Tower lift 3 Façade opening door hinge. The weld designations reviewed are as follows.

HW-SAW1-99M-(N)-1-1, 2-1,

HW-SAW1-89M-(N)-1-1, 2-1,

HW-SAW1-99M-(E)-1-1, 2-1, 3-1,

HW-SAW1-109M-(W)-1-1, 2-1, 3-1,

NDT Notification No-07075

BAY 10

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

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reviewed are as follows.

BK004A3-025-002, 010,
BK004A5-025-002, 008

NDT Notification No-07078

This QA Inspector observed the following work in progress:

BAY 11:

SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 041271, Perform Shielded Metal Arc Welding (SMAW) on Lift 5 Bracket stiffener. Joint identified as ND1-BRSA5-2-6B. ZPMC QC Identified as Zhao Mao Mao. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3212-Tc-U5b.

Repair welding SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 202100, Perform Shielded Metal Arc Welding (SMAW) on Splice (connect) Plate. Plate identified as SA5-5 (ZP06-787-J1071) quantity of plate 7 nos. ZPMC QC Identified as Zhao Mao Mao with welding repair report WRR-T-WR3552. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-2G (2F) Repair.

OBG Bike path plate FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040723, Perform Flux Core Arc Welding (FCAW) on OBG bike path plate. Joint identified as BK004ASD1-017-001, 002, 003, 004. ZPMC QC Identified as Xu Jie. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-Tc-U4c-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 040704, 053316, Perform Flux Core Arc Welding (FCAW) on OBG bike path plate. Joint identified as BK004A1-019-043. ZPMC QC Identified as Xu Jie. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2232-B-U2-F.

BAY 10

OBG Bike path plate Repair welding FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 053869, 040302, Perform Flux Core Arc Welding (FCAW) on OBG bike path plate. Joint identified as BK004A1-027-043. ZPMC QC Identified as Yu Zhi Lai with welding repair report WRR- B-WR16107. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-FCAW-2G (2F) Repair.

BAY 10

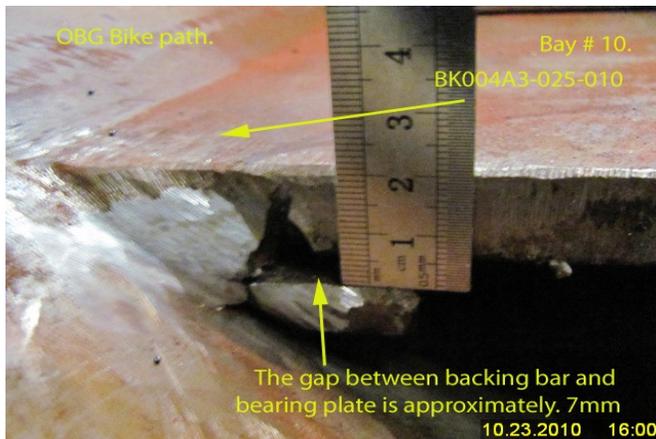
During the Caltrans Quality Assurance (QA) in-process observations of the fabrication of OBG Bike path plate BK004A-025, this QA Inspector discovered the following issue: Steel backing was not properly placed and held in

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intimate contact with the base metal. The gap between steel backing and bearing stiffener plate is observed approximately 7mm. The weld is Complete Joint Penetration (CJP) with steel backing joining the Bearing Plate and End Plate (side plate) of bike path. The weld is identified as: BK004A3-025-010. The member is located in bay # 10. The Notice of Witness Inspection Number (NWIT) is 07078. The attached photographs provide additional detail. This QA Inspector generated incident report for this date.

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



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
