

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-017544**Date Inspected:** 04-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:

This QA Inspector observed the following work in progress:

BAY 11**SMAW PROCESS:**

This QA Inspector observed ZPMC qualified welding personnel identified as 046769, 041271, Perform Shielded Metal Arc Welding (SMAW) on Lift 5 bracket stiffener. Joint identified as SD1-BRSA5-1-12A, 8B. 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-3213-Tc-U4b.

OBG Bike path stringer plate FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 054460, 040723, Perform Flux Core Arc Welding (FCAW) on OBG bike path plate. Joint identified as BK005B6-004-041, 042. 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. For more information see below attached picture number 2.

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OBG Bike path stringer plate FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 053869, 057266, Perform Flux Core Arc Welding (FCAW) on OBG bike path plate. Joint identified as BK004A8-028-015, 016. ZPMC QC Identified as Lijun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132 and WPS-B-T-2133.

This QA Inspector observed ZPMC qualified welding personnel identified as 057180, 052075, Perform Flux Core Arc Welding (FCAW) on OBG bike path plate. Joint identified as BK004A8-028-047, 048, 049, 050. ZPMC QC Identified as Lijun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132 and WPS-B-T-2133.

SMAW PROCESS:

This QA Inspector observed ZPMC qualified welding personnel identified as 052930, Perform Shielded Metal Arc Welding (SMAW) on pad eye of façade plate. Joint identified as SD1-SFSA4-1A/B-2, 3, 4. ZPMC QC Identified as Yin Chun Fang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2112-Pad eye.

HEAT STRAIGHTENING

This QA Inspector observed the following work in progress:

ZPMC personnel heat straightening on OBG bike path member identified as BK004A7-029. Distortion appeared to be caused by welding of the material about 18mm. ZPMC Quality Control (QC) inspector identified as Mr. Li Peng Fei was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) HSR1 (B) 9343.

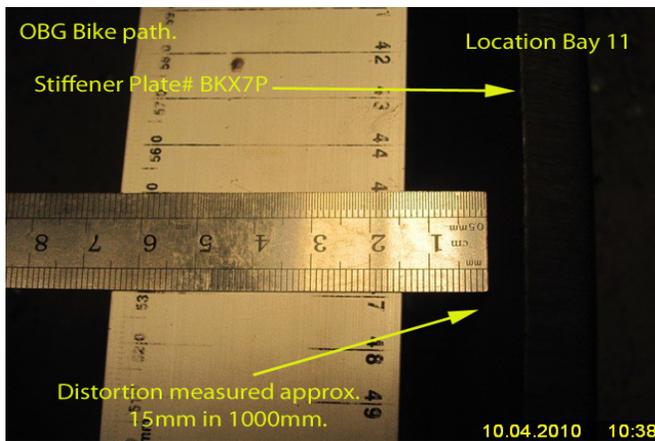
BAY 11

During the Caltrans Quality Assurance in-process observations of the fabrication of OBG Bike path plate BK005B-004, this Quality Assurance Inspector (QA) discovered the following issue, Excessive distortion of a stiffener on the Bike Path BK005B-004. It appears the stiffener was distorted prior to fit-up and welding. The Bike path stiffener identified as BKX7P. The weld is identified as: BK005B5-004-016/017. The distortion measured by this QA inspector is 15mm per 1000mm in Bike path stiffener (BKX7P). The effected stiffener plate is located in between BKX8A and BKX8C stringer plate. The Material thickness for plate is 10 mm. This OBG bike path Plate is located in Sub assembly Bay#11. This QA Inspector generated incident report for this date. For further information, please see the attached pictures below.

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

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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 Michael Ng Phone: 15921845703, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Shailesh

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer