

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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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-018327**Date Inspected:** 29-Nov-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:** 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

**WELDING:****Segment 11EE**

This QA Inspector observed ZPMC qualified welding personnel identified as 040320 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CA094-002; located On Orthotropic Box Girder (OBG) Deck Plate to Edge Plate Transverse CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-TC-U4b-FCM-1. See attached photo for further details.

**Segment 11EE**

This QA Inspector observed ZPMC qualified welding personnel identified as 047353 perform Flux Core Arc

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# WELDING INSPECTION REPORT

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Welding (FCAW), weld joint identified as SEG074A-012; located On Orthotropic Box Girder (OBG) Bottom Plate to Side Plate Transverse CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with applicable WPS-B-T-2233-ESAB. See attached photo for further details.

## Segment 12AE

This QA Inspector observed ZPMC qualified welding personnel identified as 040320 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CA3001-002; located On Orthotropic Box Girder (OBG) Deck Plate to Edge Plate Transverse CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-TC-U4b-FCM-1.

## Segment 11AW

This QA Inspector observed ZPMC qualified welding personnel identified as 053486 perform Flux Core Arc Welding (FCAW), weld joint identified as TR2A-PP096-002; located On Orthotropic Box Girder (OBG) Traveler Rail PJP 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-T-2233-TC-U4b-F.

## Segment 11EW

This QA Inspector observed ZPMC qualified welding personnel identified as 049220 perform Flux Core Arc Welding (FCAW), weld joint identified as TR2A-PP108-002; located On Orthotropic Box Girder (OBG) Traveler Rail PJP 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-T-2233-ESAB

NDT:

## Segment 11BW ~ 11CW

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.

OBW11A-001, 002, 003, 004, 005

Nondestructive testing (NDT) notification No. 07536

## HEAT STRAIGHTENING:

This QA Inspector observed the following work in progress:

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) member identified as Cross Beam 16 Side Plate. Distortion appeared to be caused by Welding. ZPMC Quality Control (QC) inspector identified as Mr. Li Yang was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat

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# WELDING INSPECTION REPORT

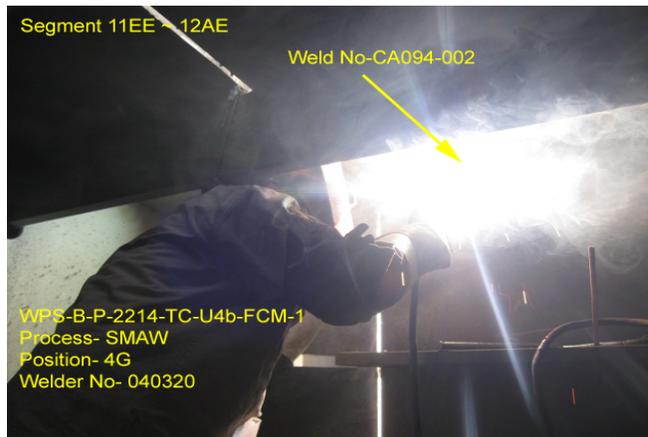
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Straightening Report HSR1 (B) 9908.

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.

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**Inspected By:** Prabhune,Manoj

Quality Assurance Inspector

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**Reviewed By:** Peterson,Art

QA Reviewer