

**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-019141**Date Inspected:** 08-Jan-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:** Liu Hua Jie**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**

This QA Inspector observed ZPMC qualified welding personnel identified as 046704 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3005M-90; located On Orthotropic Box Girder (OBG) Bottom Plate to Bottom Plate CJP Weld; The Welding Repair Report (WRR) was B-WR20086. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 2G (2F) FCM-Repair-1. See attached photo for further details.

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## WELDING INSPECTION REPORT

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### Segment 12BE ~ 12CE

This QA Inspector observed ZPMC qualified welding personnel identified as 044515 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SP3018-001-026; located On Orthotropic Box Girder (OBG) Side Plate T-Rib to T-Rib Hold Back Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2112-FCM-1

### Segment 12BE ~ 12CE

This QA Inspector observed ZPMC qualified welding personnel identified as 050289 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SP3017-001-027; located On Orthotropic Box Girder (OBG) Side Plate T-Rib to T-Rib Hold Back Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2112-FCM-1

### HEAT STRAIGHTENING:

This QA Inspector observed the following work in progress:

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) member identified as Segment 12AW ~ 12BW Deck Plate to Deck Plate Transverse Splice CJP Weld. Distortion appeared to be caused by Welding. ZPMC Quality Control (QC) inspector identified as Mr. Zhou Peng was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report HSR (B) 445. See attached photo for further details.

### NDT:

#### Segment 12AW ~ 12BW (T –Rib Hold Back)

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.

SP3046-001-019,020

SP3047-001-019,020

SP3048-001-015,016

SP3050-001-007,008

SP3051-001-007,008

SP3052-001-017,018

Nondestructive testing (NDT) notification No.08099

### Segment 11EW & 11EE

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

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# WELDING INSPECTION REPORT

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report on this date. The members are identified as Orthotropic Box Girder (OBG) components. The weld designations Verified are as follows.

CSD9-PP108-152, 153

CSD7-PP108-162, 163

Nondestructive testing (NDT) notification No.08100

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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<b>Inspected By:</b>	Prabhune,Manoj	Quality Assurance Inspector
<b>Reviewed By:</b>	Peterson,Art	QA Reviewer

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