

**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-019140**Date Inspected:** 07-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 12AW ~ 12BW**

This QA Inspector observed ZPMC qualified welding personnel identified as 046704 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW12B-001; located On Orthotropic Box Girder (OBG) Bottom Plate to Bottom Plate CJP Weld; The Critical Welding Repair Report (CWRR) was B-CWR2679. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 4G (4F) FCM-Repair-1. See attached photo for further details.

**Segment 12AE ~ 12BE**

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## WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC qualified welding personnel identified as 050289 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW12-001; located On Orthotropic Box Girder (OBG) Edge Plate to Edge Plate CJP Weld; The Critical Welding Repair Report (CWRR) was B-CWR2680. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. 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 12BE

This QA Inspector observed ZPMC qualified welding personnel identified as 050289 perform Shielded Metal Arc Welding (SMAW), weld joint identified as BP3006-001-036; located On Orthotropic Box Girder (OBG) Bottom Plate T-Rib Hold Back Fillet 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-2112-FCM-1

### Segment 12CE

This QA Inspector observed ZPMC qualified welding personnel identified as 044515 perform Shielded Metal Arc Welding (SMAW), weld joint identified as BP3007-001-025 ; located On Orthotropic Box Girder (OBG) Bottom Plate T-Rib Hold Back Fillet 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-2112-FCM-1.

### Segment 12BE ~ 12CE

This QA Inspector observed ZPMC qualified welding personnel identified as 040367 perform Flux Core Arc Welding (FCAW), weld joint identified as OBE12E-003 ; located On Orthotropic Box Girder (OBG) Side Plate to Side Plate 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-345-SMAW 4G (4F) FCM-Repair-1.

NDT:

### Segment 12AW

This QA Inspector performed Ultrasonic Testing (UT) Verification inspection of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as Orthotropic Box Girder (OBG) components. The weld designations verified are as follows.

SEG3004T-009, 019

SEG3004W-009, 019

Nondestructive testing (NDT) notification No. 08077

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.

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# WELDING INSPECTION REPORT

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## 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