

**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-021659**Date Inspected:** 09-Mar-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:** Zho 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 12BE~ 12CE

This QA Inspector observed ZPMC qualified welding personnel identified as 067752 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE12C-001; located On Orthotropic Box Girder (OBG) Bottom Plate to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Critical Welding Repair Report (CWRR) was B-CWR2811 Rev 3. This QA Inspector observed the base material appears to have been being preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-1G (1F) FCM-Repair-1. See attached photo for further details.

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## WELDING INSPECTION REPORT

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### Segment 12AW

This QA Inspector observed ZPMC qualified welding personnel identified as 046709 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CA3012-001; located On Orthotropic Box Girder (OBG) Edge Plate to Side Plate Hold back CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhou Peng. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Zhou Peng was onsite monitoring the welding variables. 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.

### Cross Beam 17

This QA Inspector observed ZPMC qualified welding personnel identified as 044504 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CB3001A-017-004; located On Orthotropic Box Girder (OBG) Bottom Plate to Side Plate Hold Back CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

### Segment 12AW

This QA Inspector observed ZPMC qualified welding personnel identified as 044504 perform Shielded Metal Arc Welding (SMAW), weld joint identified as FB3081-001-128; located On Orthotropic Box Girder (OBG) Bottom Plate to Floor Beam Plate (FL3) Hold Back CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

### Segment 12AE

This QA Inspector observed ZPMC qualified welding personnel identified as 052010 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3001E-004; located On Orthotropic Box Girder (OBG) Deck Panel Diaphragm to Floor Beam Flange Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2112-FCM-1.

### Segment 12AE

This QA Inspector observed ZPMC qualified welding personnel identified as 040484 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3002K-004; located On Orthotropic Box Girder (OBG) Deck Panel Diaphragm to Floor Beam Flange Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element

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# WELDING INSPECTION REPORT

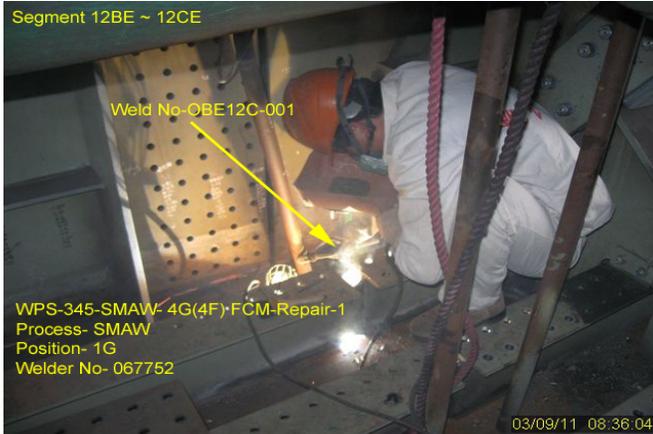
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prior to welding. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2112-FCM-1.

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

**Reviewed By:** Peterson,Art

QA Reviewer

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