

**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-021310**Date Inspected:** 25-Feb-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 12AW**

This QA Inspector observed ZPMC qualified welding personnel identified as 067993 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP3045-001-333; located On Orthotropic Box Girder (OBG) Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhou Peng. The Welding Repair Report (WRR) was B-WR20149. 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-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 044504 perform Shielded Metal Arc

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## WELDING INSPECTION REPORT

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Welding (SMAW), weld joint identified as CA3003-006; located On Orthotropic Box Girder (OBG) Deck Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Zhu. The Critical Welding Repair Report (CWRR) was B-CWR2808 .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. Wang Zhu was onsite monitoring the welding variables. 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.

### Segment 12BW

This QA Inspector observed ZPMC qualified welding personnel identified as 041713 perform Shielded Metal Arc Welding (SMAW), weld joint identified as LD3022-001-87; located On Orthotropic Box Girder (OBG) Side Plate to Edge Plate 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 a torch 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-2112-FCM-1.

### Segment 12BW

This QA Inspector observed ZPMC qualified welding personnel identified as 057333 perform Shielded Metal Arc Welding (SMAW), weld joint identified as LD3021-001-059; located On Orthotropic Box Girder (OBG) Side Plate to Edge Plate 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 a torch 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-2114-FCM-1.

### Segment 12BE ~ 12CE

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.

SP3017-001-038  
SP3018-001-038  
SP3019-001-048  
BP3004-001-040  
BP3005-001-040  
BP3006-001-038

Nondestructive testing (NDT) notification No. 08389

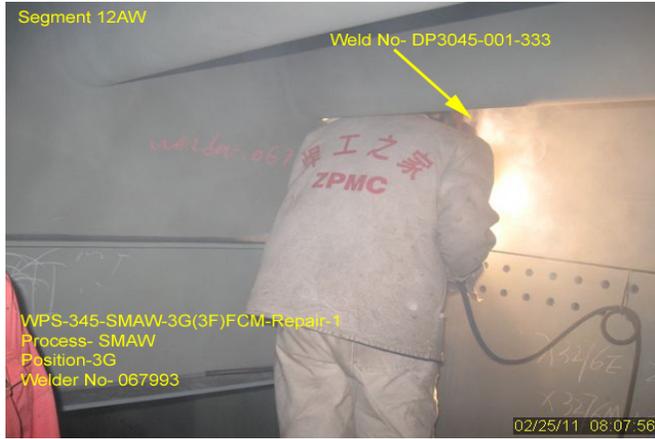
Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.

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

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