

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-020291**Date Inspected:** 12-Dec-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:** Mr. Geng Wei**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:** BAY 14 OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Robert A. DeArmond was present during the time noted above and conducted observations relative to the work being performed.

OBG BAY 3

Ultrasonic Testing (UT)

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a UT report for this date. All components were as listed on NWIT notification no. 07749. The member(s) is/are identified as Side Panel to stiffeners. The weld designations reviewed are as follows:

SP3121-001-072, 067, 062, 057, 052

SP3122-001-017/022

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 4 )

---

### OBG BAY 14

This QA Inspector observed the following work in progress:

During random in process inspection of Orthotropic Box Girder; (OBG) member identified as DP3091-001 weld number(s) 018. This QA Inspector observed weld repair of complete joint penetration weld joint(s). ZPMC Quality Control personnel previously tested and rejected portions of this weld.

FCAW welding of complete joint penetration weld joint(s) located on Diaphragm Plate to Deck Plate identified as noted above. Welder is identified as welder no. 044830. The welding variables recorded by ZPMC QC identified as Zong Guo Hui appeared to comply with applicable WPS(s) WPS-345-FCAW-2G-(2F)-ESAB

During random in process inspection of Orthotropic Box Girder; (OBG) member identified as DP3105-001 weld number(s) 024 this QA Inspector observed weld repair of complete joint penetration weld joint(s). ZPMC Quality Control personnel previously tested and rejected portions of this weld.

FCAW welding of complete joint penetration weld joint(s) located on Diaphragm Plate to Deck Plate identified as noted above. Welder is identified as welder no. 044830. The welding variables recorded by ZPMC QC identified as Zong Guo Hui appeared to comply with applicable WPS(s) WPS-345-FCAW-2G-(2F)-ESAB

During random in process inspection of Orthotropic Box Girder; (OBG) member identified as DP3102-001 weld number(s) 248 this QA Inspector observed weld repair of complete joint penetration weld joint(s). ZPMC Quality Control personnel previously tested and rejected portions of this weld.

FCAW welding of complete joint penetration weld joint(s) located on Diaphragm Plate to Deck Plate identified as noted above. Welder is identified as welder no. 044830. The welding variables recorded by ZPMC QC identified as Zong Guo Hui appeared to comply with applicable WPS(s) WPS-345-FCAW-2G-(2F)-ESAB

### OBG BAY 13

This QA Inspector observed the following work in progress:

During random in process inspection of Tower; (SAS) member identified as 13 AE Tower Saddle Grillage, weld number(s) 030 this QA Inspector observed weld repair of complete joint penetration weld joint(s). ZPMC Quality Control personnel previously tested and rejected portions of this weld.

SMAW welding of complete joint penetration weld joint(s) located on Grillage assembly as noted above. Welder is identified as welder no. 050232. The welding variables recorded by ZPMC QC identified as Zhan Hai Feng appeared to comply with applicable WPS(s) WPS-345-SMAW-3G (3F)-FCM-Repair and CWR B-CWR-2432

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 4 )

---

During random in process inspection of Tower; (SAS) member identified as 13 AE Tower Saddle Grillage, weld number(s) 032 this QA Inspector observed weld repair of complete joint penetration weld joint(s). ZPMC Quality Control personnel previously tested and rejected portions of this weld.

SMAW welding of complete joint penetration weld joint(s) located on Grillage assembly as noted above. Welder is identified as welder no. 066422. The welding variables recorded by ZPMC QC identified as Zhan Hai Feng appeared to comply with applicable WPS(s) WPS-345-SMAW-3G (3F)-FCM-Repair and CWR B-CWR-2433

During random in process inspection of Tower; (SAS) member identified as 13 AE Tower Saddle Grillage, weld number(s) 035 this QA Inspector observed weld repair of complete joint penetration weld joint(s). ZPMC Quality Control personnel previously tested and rejected portions of this weld.

SMAW welding of complete joint penetration weld joint(s) located on Grillage assembly as noted above. Welder is identified as welder no. 050232. The welding variables recorded by ZPMC QC identified as Zhan Hai Feng appeared to comply with applicable WPS(s) WPS-345-SMAW-3G (3F)-FCM-Repair and CWR B-CWR-2434

During random in process inspection of Tower; (SAS) member identified as 13 AE Tower Saddle Grillage, weld number(s) 051 this QA Inspector observed weld repair of complete joint penetration weld joint(s). ZPMC Quality Control personnel previously tested and rejected portions of this weld.

SMAW welding of complete joint penetration weld joint(s) located on Grillage assembly as noted above. Welder is identified as welder no. 037996. The welding variables recorded by ZPMC QC identified as Zhan Hai Feng appeared to comply with applicable WPS(s) WPS-345-SMAW-3G (3F)-FCM-Repair and CWR B-CWR-2435

During random in process inspection of Tower; (SAS) member identified as 13 AE Tower Saddle Grillage, weld number(s) 066 this QA Inspector observed weld repair of complete joint penetration weld joint(s). ZPMC Quality Control personnel previously tested and rejected portions of this weld.

SMAW welding of complete joint penetration weld joint(s) located on Grillage assembly as noted above. Welder is identified as welder no. 037996. The welding variables recorded by ZPMC QC identified as Zhan Hai Feng appeared to comply with applicable WPS(s) WPS-345-SMAW-3G (3F)-FCM-Repair and CWR B-CWR-2436

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

---

# WELDING INSPECTION REPORT

( Continued Page 4 of 4 )

---



## Summary of Conversations:

As mentioned above between QA and QC concerning this project

## 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 Jim Devy 150-002-6784, who represents the Office of Structural Materials for your project.

---

**Inspected By:** DeArmond,Robert

Quality Assurance Inspector

---

**Reviewed By:** Riley,Ken

QA Reviewer