

**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-018123**Date Inspected:** 12-Nov-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:** Li Yang**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:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

**OBG # TRIAL ASSEMBLY YARD (11DE-11EE)**

This QA Inspector along with QA inspector Mr. Manjunath S Math performed the dimensional survey inspection to verify the root gap and offset on the transverse splice weld of segment 11DE and segment 11EE. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11DE to Segment 11EE – PP 106 to PP 107

**OBG # TRIAL ASSEMBLY YARD (11DW-11EW)**

This QA Inspector along with QA inspector Mr. Manjunath S Math performed the dimensional survey inspection to verify the root gap and offset on the transverse splice weld of segment 11DW and segment 11EW. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11DW to Segment 11EW – PP 106 to PP 107

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

---

### OBG # TRIAL ASSEMBLY YARD (11AE)

This QA Inspector along with QA inspector Mr.Manjunath S Math performed dimensional joint survey inspection after heat straightening on the floor beam to verify the flatness using 1500mm straight edge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11AE – PP 96

### OBG # TRIAL ASSEMBLY YARD (11BE)

This QA Inspector along with QA inspector Mr.Manjunath S Math performed dimensional joint survey inspection after heat straightening on the floor beam to verify the flatness using 1500mm straight edge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11BE – PP 98 and PP 99

This QA Inspector randomly observed the following work in progress:

### OBG # TRIAL ASSEMBLY YARD (11BW and 11CW)

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 027 in the (1G) flat position on counterweight connection plate piece mark no. OBW11. The location was the complete joint penetration groove weld joining the counterweight connection plate with the edge panel of 11BW and 11CW. The welder ID was 057333. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-B-U2-F.

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 027 in the (4G) overhead position on counterweight connection plate piece mark no. OBW11. The location was the complete joint penetration groove weld joining the counterweight connection plate with the edge panel of 11BW and 11CW. The welder ID was 041713. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-B-U2-F.

For additional information please reference the pictures below:

### OBG # TRIAL ASSEMBLY YARD (11DW-11EW)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 007 in the (4G) overhead position on side panel piece mark no. OBW11C. The location was the transverse splice weld joining segment 11DW and 11EW at counterweight side. The welder ID was 037996. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 009 in the (4G)

---

---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

---

overhead position on side panel piece mark no. OBW11C. The location was the transverse splice weld joining segment 11DW and 11EW at crossbeam side. The welder ID was 066258. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

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



### Summary of Conversations:

No relevant 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 15000422372, who represents the Office of Structural Materials for your project.

---

**Inspected By:** Manikandan, Murugan

Quality Assurance Inspector

---

**Reviewed By:** Peterson, Art

QA Reviewer