**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 #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

# WELDING INSPECTION REPORT

**Resident Engineer:** Pursell, Gary
**Address:** 333 Burma Road
**City:** Oakland, CA 94607

**Report No:** WIR-004066
**Date Inspected:** 08-Oct-2008

**Project Name:** SAS Superstructure
**Prime Contractor:** American Bridge/Fluor Enterprises, a JV
**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

**OSM Arrival Time:** 2230
**OSM Departure Time:** 730
**Location:** Shanghai, China

**CWI Name:** Sun Bo

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Inspected CWI report:** | ☑ Yes | ☐ No | ☐ N/A | **CWI Present:** | ☑ Yes | ☐ No | |
| **Electrode to specification:** | ☑ Yes | ☐ No | ☐ N/A | **Rod Oven in Use:** | ☐ Yes | ☐ No | ☑ N/A |
| **Qualified Welders:** | ☑ Yes | ☐ No | ☐ N/A | **Weld Procedures Followed:** | ☑ Yes | ☐ No | ☐ N/A |
| **Approved Drawings:** | ☑ Yes | ☐ No | ☐ N/A | **Verified Joint Fit-up:** | ☑ Yes | ☐ No | ☐ N/A |
| | | | | **Approved WPS:** | ☑ Yes | ☐ No | ☐ N/A |
| | | | | **Delayed / Cancelled:** | ☐ Yes | ☑ No | ☐ N/A |

**Bridge No:** 34-0006
**Component:** OBG-PMT

**Summary of Items Observed:**

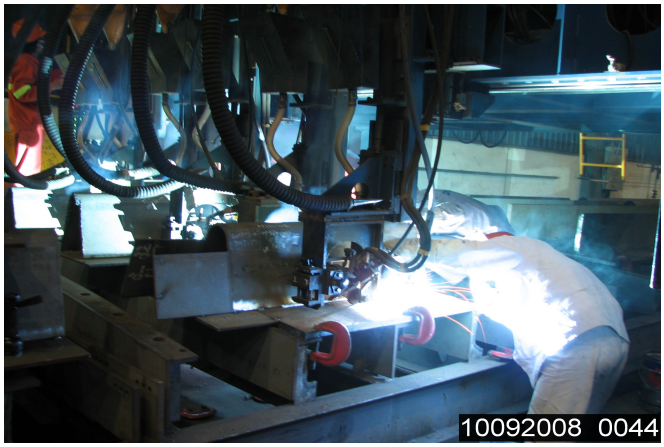
Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe the fitup, welding and related activities associated with the fabricating of Caltrans Orthotropic Box Girder (OBG) and Tower, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

| Item | Description | WBS | Dwg No. | Status |
|---|---|---|---|---|
| 1 | PMT<br>OBG | NA | NA | Welding & Macroetch Sa |

Bay 1: Caltrans QA inspector monitored OBG Production Monitoring Test (PMT) for deck panels DP585-002 and DP364-001. The magnetic particle test (MT) of the tack welds was performed by ZPMC QC/MT inspector. The visual inspection of tack welds and root gap was performed by ABF, ZPMC and Caltrans. The start time for welding of the PMT is 00:44 hours and completion time 01:22 hours, 10-09-08. Caltrans QA inspector verified and documented the welding amperage, voltage and travel speed during the gas metal arc welding (GMAW) and submerged arc welding (SAW) process, welds 1 thru 6. At the completion of the GMAW root pass and SAW cover pass. The welds were visually inspected by ABF, ZPMC and Caltrans. Caltrans QA inspector witness ZPMC QC/UT inspector identified as Xu Wei inspect the welds for depth of penetration and conformance. Caltrans QA inspector identified designated locations for macroetch sampling per contract requirements. The macroetch specimens were evaluated with a 7X optical comparator and accepted by ZPMC, ABF and Caltrans. See Caltrans U-ribs PMT Inspection Sheet, dated 10-09-2008 and ZPMC production monitoring test plate inspection report, dated 10-09-2008 for additional information. The following picture illustrates welding of the PMT and macroetch sampling.

# WELDING INSPECTION REPORT

*( Continued Page 2 of 2 )*




**Summary of Conversations:**

As identified within the contents of this report.

**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 Ady Velasco, 138-1694-2685, who represents the Office of Structural Materials for your project.

| | | |
|---|---|---|
| **Inspected By:** | Hasler,Mike | Quality Assurance Inspector |
| **Reviewed By:** | Cuellar,Robert | QA Reviewer |