

**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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003814**Date Inspected:** 05-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xue Le Feng**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 and Tower**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe fabrication and perform Ultrasonic Testing (UT) of Orthotropic Box Girder (OBG) and Tower components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

**Sub Assembly Shop Bay # 1**

The Caltrans QA performed UT Verification testing of ZPMC Quality Control (QC) tested and accepted OBG U-rib diaphragm plate CJP welds DP595-001 welds 182, 183, 192 and 193. No relevant indications were noted during testing. Please see UT report TL-6027 generated on this date for further information.

**Tower Heavy Machinery Shop Bay # 1**

The Caltrans QA Inspector observed ZPMC personnel milling miscellaneous tower components. No welding was observed during this shift.

**Tower Heavy Machinery Shop Bay # 2**

The Caltrans QA observed welder stencil numbers # 066471, 067037, 068864 and 068919 performing semi automated FCAW welding in the 2G position on Tower Skin Plate C Longitudinal Stiffener Partial Joint Penetration (PJP) welds ESD1-SA296 A/E 11, 12, 15 and 16. QA observed ZPMC QC monitoring welding parameters and observed ZPMC personnel performing interpass cleaning prior to additional weld passes. The

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

above mentioned welding appeared to be in general conformance with posted Welding Procedure Specification WPS-B-T-2332-TC-P5-F.

The Caltrans QA Inspector observed ZPMC welder stencil # 066421 performing Flux Cored Arc Welding (FCAW) in the 1G position on Skin E longitudinal stiffener CJP fill passes on weld ESD1-SA216 G/K 31A. The skin plate was vertically positioned to perform welding of the stiffeners in the 1G position. QA observed ZPMC CWI Mr. Jiang Jian Fei periodically monitoring and recording welding variables. The above mentioned welding appeared to be in general conformance with the posted Welding Procedure Specification WPS-B-T-2231-TC-U5-F.

### Summary of Conversations:

Only General conversations between QA and QC occurred 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 Ryan Smith, (858) 232-6799, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Viars,Larry	Quality Assurance Inspector
----------------------	-------------	-----------------------------

---

<b>Reviewed By:</b>	Lanz,Joe	QA Reviewer
---------------------	----------	-------------