

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-003159**Date Inspected:** 21-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1730**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** Wang Sai Fa**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 observe production welding of Tower components and perform Ultrasonic Testing verification of OBG components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Tower Heavy Machinery Shop Bay 1

The Caltrans QA Inspector observed ZPMC welder Mr. Xu Xiushui performing Submerged Arc Welding (SAW) root pass on Tower Skin plate A Complete Joint Penetration (CJP) weld joint SSD1-SA16 A/G 43A in the 1G position. Welding procedure specification WPS-B-T-2221-B-U3C-S-1 was posted for the above mentioned root pass. The following welding variables were recorded, amperage 490, volts 30.0, travel speed 450 mm/min., with a heat input of 1.96 kJ/mm. The above mentioned welding appeared to meet the requirements of AWS D1.5 (2002) and applicable contract documents.

The Caltrans QA Inspector observed ZPMC welder Ms. Xu Yan performing Submerged Arc Welding (SAW) fill passes on Tower Skin plate A CJP weld joint NSD1-SA33 A/F 24B in the 1G position. Welding procedure specification WPS-B-T-2221-B-U3C-S was posted for the above mentioned fill passes. The following welding variables were recorded, amperage 672, volts 31.8, travel speed 590 mm/min., with a heat input of 2.17 kJ/mm. The above mentioned welding appeared to meet the requirements of AWS D1.5 (2002) and applicable contract documents.

Tower Heavy Machinery Shop Bay 2

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

The Caltrans QA Inspector observed ZPMC welder Mr. Xin Yongliu performing Submerged Arc Welding (SAW) fill passes on Tower Skin plate A CJP weld joint ESD1-SA237 A/F 12B in the 1G position. Welding procedure specification WPS-B-T-2221-B-U3C-S was posted for the above mentioned fill passes. The following welding variables were recorded, amperage 670, volts 33.0, travel speed 605 mm/min., with a heat input of 1.99 kj/mm. The above mentioned welding appeared to meet the requirements of AWS D1.5 (2002) and applicable contract documents.

Sub assembly shops Bay 1 and 7

The Caltrans QA performed Ultrasonic Testing (UT) verification of U-rib diaphragm plate CJP welds DP562-001 welds 115 through 120 and Floor Beam diaphragm FB039-001-079 R-1. The above mentioned weld joint appear to be in general conformance with AWS D1.5 (2002) table 6.3.. Please the see the attached UT report TL-6027 generated on this date for further information. Please see the attached photo of U-rib diaphragm weld.



Summary of Conversations:

No relevant conversations 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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer
