

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-001811**Date Inspected:** 20-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1800**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:	Hu Wei Qing			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		

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 Mock-up, 77M, 89M, 114M, orthotropic box girders (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 U-rib Diaphragm Plate	NA	NA	Welding in progress.

OBG Bay 1: Caltrans QA Inspector observed flux cored arc welding (FCAW) interior diaphragm plate to u-rib. The welder is identified as Mr. Zhao Changshuang, welder identification number 059400, welding a fillet weld in the vertical position, using welding procedure specification WPS-B-T-2133, Revision 2. The weld is identified as DP297-001-088. Caltrans QA measured current welding parameters at approximately 205 amps, 25.5 volts and 105 millimeters per minute (mm/min) travel speed. The FCAW welding consumable is verified and identified as Supercored /71H, classification E71T-1, diameter 1.4 mm. Caltrans QA observed ZPMC Quality Control (QC), Mr. Chen Shiqang monitoring welding activities at the workstation. The following digital pictures illustrate welding in progress.

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- 2 U-rib NA NA Welding in progress.

OBG Bay 1: Caltrans QA Inspector observed flux cored arc welding (FCAW) u-rib splice weld. The welder is identified as Mr. Dong Yi Qun, welder identification number 059450, welding a complete joint penetration (CJP) weld in the vertical position, using welding procedure specification WPS-B-T-2133-B-U2-F. The weld is identified as DP004-001-010. Caltrans QA measured current welding parameters at approximately 205 amps, 25.0 volts and 105 millimeters per minute (mm/min) travel speed. The FCAW welding consumable is verified and identified as Supercored /71H, classification E71T-1, diameter 1.4 mm. Caltrans QA observed ZPMC Quality Control (QC), Mr. Chen Shiqang monitoring welding activities at the workstation. The following digital pictures illustrate welding in progress.



- 3 OBG Side Plate NA NA Welding in progress.

New OBG Building: Caltrans QA Inspector observed submerged arc welding (SAW), complete joint penetration (CJP) plate splice weld on subassembly identified as side plate SP22 to SP14. The welder operator is identified as Ms. Wang Min, welder identification number 048496. The welder is using welding procedure specification WPS-B-T-2221-B-L2c-S-1, Revision 0. Caltrans QA measured current welding parameters at approximately 545 amps, 30.5 volts and 420mm/min (millimeters per minute) travel speed. Preheat and interpass temperatures were verified during welding activities. The preheat temperature prior to the start of welding measures more than 30 degrees Celsius but less than 230 degrees Celsius during maximum interpass temperature verification. Caltrans QA observed ZPMC Quality Control (QC/CWI), Mr. Hu Wei Qing was present during QA observations.

Summary of Conversations:

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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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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