

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-004125**Date Inspected:** 11-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2230**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 830**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Sun Bo	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 & Tower	

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 OBG Bay 1: Caltrans QA inspector monitored OBG Production Monitoring Test (PMT) for deck panels DP575-001 and DP121-001. The magnetic particle test (MT) of the tack welds was performed by ZPMC QC/MT inspector, identified as Mr. Cai Xin Xin. 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 00:21 hours and completion time 01:02 hours, 10-12-08. 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 10-12-2008 and ZPMC production monitoring test plate inspection report, dated 10-12-2008 for additional information.	NA	NA	Welding & Macroetch Sa
2	Tower Diaphragm Plate	NA	NA	QAMT

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OBG

Bay 4: Caltrans QA inspector performed magnetic particle testing (MT) per ZPMC notification of witness inspection, document number 001180, dated October 11, 2008. The subassembly is identified as tower diaphragm plates, SSD1-SA104; splice welds 3A & 4A, ESD1-SA404; splice weld 1B and ESD1-SA381; splice weld 1B. Caltrans QA inspector observed that the cover pass welds have been 100% MT inspected and identified as accepted by ZPMC QC. Caltrans QA inspector performed ten-percent QAMT inspection of the weld cover-pass. The welds appeared to be in conformance with the project specifications. See Caltrans Magnetic Particle Test Report (TL-6028) dated October 11, 2008 for additional information. The following digital picture illustrates diaphragm plate SSD1-SA104A/B welds 3A & 4A, QAMT inspected welds.



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
