

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-005589**Date Inspected:** 22-Feb-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1845**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 645**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Guo Yan Fei	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:

Summary of Items Observed: On this date Caltrans OSM Quality Assurance (QA) Inspector Larry Viars was present during the times noted above for observations relative to the work being performed.

Bay 5-

This QA inspector performed Ultrasonic Testing of approximately 50% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as CJP Floor beam welds. The weld identification numbers are as follows, FB205-001-013, 016, 019, 022, FB-204-001-015, 018, 021, 024, FB204-004-015, 018, 021, 024 and FB204-002-037, 040, 043, 046.

Bay 9 - PMT

This QA inspector monitored OBG Production Monitoring Test (PMT) #1 and #2 for deck panels DP209-001 and DP291-001 at Gantry #2. Prior to PMT #1, the magnetic particle test (MT) of the tack welds was noted on the test panel as having been performed by ZPMC MT Inspector Wang Wei. The visual inspection of tack welds and root gap was performed by ABF Representative Huang Wen Guang (ABF), ZPMC CWI Guo Yan Fei (QC), and this QA inspector. The start time for welding of PMT #1 was approximately 0022 hours on 2/23/09 and welding was completed approximately at 0121 hours. The first PMT was rejected for overlap (130mm weld 6) and undercut (50mm weld 1) by ZPMC and ABF QC and this QA Inspector concurred. The start time for PMT #2 was approximately 0215 and the welding was completed at 0233. This QA inspector randomly verified and documented the welding amperage, voltage and travel speed during the gas metal arc welding (GMAW) and

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submerged arc welding (SAW) processes, welds 1 thru 6 at the completion of both the GMAW root pass and SAW cover pass. The welds were visually inspected by ABF, QC and this QA inspector. QC and ABF informed QA Inspector that all six welds were acceptable and QA inspector concurred. This QA inspector witnessed ZPMC Ultrasonic Testing (UT) inspector, identified as Xu Wei, perform UT on each of the 500 mm test welds for depth of penetration and conformance. This QA inspector selected fifteen designated locations for macroetch sampling per contract requirements. Each macroetch location was stamped by ZPMC personnel with the number 209, as well as the letter W, and an individual macroetch identifying number for each macroetch. After removal from each of the weld test specimens and polishing of the selected end, the macroetches were evaluated with a 7X optical comparator and a 10X optical comparator and accepted by QC, ABF, and this QA Inspector.

All fifteen sample macros appeared to meet requirements and were noted to appear acceptable. See Caltrans U-ribs PMT Inspection Sheet, ZPMC production monitoring test plate inspection report, and Caltrans Macro Etch Log - all dated 2/23/2009 for additional information.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Only general conversations between Caltrans 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 Eric Tsang 150 0042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
