

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-001229**Date Inspected:** 12-Jan-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island

CWI Name:	Sha Zhi			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, Larry Viars was present to observe welding operations and Magnetic Particle Testing (MT) of the Orthotropic Box Girder (OBG), for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector Viars performed random areas MT of the OBG side plates welds SP041-01-001 thru SP041-01-010 and SP047-01-015 thru SP047-01-028. Magnetic Particle Testing was performed after ZPMC Quality Control (QC) completed their testing. The random Magnetic Particle Testing mentioned above appeared to meet the requirements of AWS D1.5.

Caltrans QA Inspector Viars observed ZPMC QC personnel Heat Straightening Bottom Plate BP003 (20 mm thick by 16 meter Long). Upon reviewing Heat Straightening report HSR 1 (B) 160. An area was noted 300 mm from plate splice weld at T stiffener BP003-01-019 that was reported by ZPMC to be distorted 35 mm prior to heat straightening. This area was measured by Caltrans Inspectors, Alfredo Acuna, Tim McClendon and Larry Viars. A total of 16 measurements were taken in an area 2080 mm long by 260 mm in width. The highest distortion measurement recorded was 21 mm (1580 mm from the splice weld at the cut line). Special Provision states that the contractor will not heat straighten an area more than 3 mm in 1000 mm. ZPMC QC Mr. Shen Xue Jun stated it was ZPMC interpretation that 3 mm in 1000 mm was cumulative and that a 16 meter plate could have 48 mm of distortion prior to requesting engineering approval.

Summary of Conversations:

As identified within the contents of this report.

WELDING INSPECTION REPORT

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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
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Reviewed By:	Cuellar,Robert	QA Reviewer
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