

**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-000905**Date Inspected:** 18-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** Lujian Ping**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, 89 and 114**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe the Ultrasonic Testing (UT) of the Caltrans Mock-up # 114.00 and Magnetic Particle testing (MT) of Mock-up #114.00, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Magnetic Particle testing was performed by ZPMC QC Mr. Zhou Dongyun on 89 Meter Mock-up Skin A sub assembly MA21 longitudinal stiffener welds # 1, 7, 13 and 19 Partial Joint Penetration. Mr. Dongyun found the above mentioned welds to be acceptable. Caltrans QA Inspector Viars performed random MT of the above mentioned welds.

Caltrans QA Inspector observed ZPMC QC Ultrasonic technicians Mr. Li Liming and Ms. E Shuiqin performing Ultrasonic Testing on Mock-up # 114.00 Skin A upper and lower sections Complete Joint Penetration (CJP) welds for the longitudinal stiffener welds. Ultrasonic Testing was for the second repair of the upper and lower sections. Mock-up 114 Skin A Lower had repair areas on weld # 2 and 3. Mock-up 114 A upper section had repair areas on welds # 3, 5 and 7. Ms. E Shuiqin performed 70 degree shear wave testing from the A and B surfaces on the above mentioned weld joints. Mr. Liming performed straight beam testing and 45 degree shear wave from the A and B surfaces. Testing from surface C was not completed by the end of the shift. No preliminary test results were given by ZPMC personnel. Mr. Shen Xue Jun stated, this was the second repair for the 114 Meter Mock-up Skin Plate A upper and lower sections and that testing would be completed on the following shift. Please see the attached photo below that illustrates Mr. Liming performing UT.

The Caltrans QA Inspector performed Magnetic Particle examinations of the 89.00 meter Mock-up and monitored

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Ultrasonic Testing of Mock-up # 114.00 Skin plate A upper and lower sections. Caltrans QA Inspector observed that the testing appeared to be in general conformance with AWS D1.5 2002 requirements. See MT report TL6028 generated on this date for further information.



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

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<b>Inspected By:</b>	Viars,Larry	Quality Assurance Inspector
<b>Reviewed By:</b>	Cuellar,Robert	QA Reviewer

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