

**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-000493**Date Inspected:** 21-Sep-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**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:** 114 D,E**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe the welding of the Caltrans Mock-up #77.00 and #114.00, for the San Francisco Oakland bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector observed ZPMC shop personnel performing Shielded Metal Arc Welding (SMAW) welding at Mock-up #114.00 Skin Plate E sub assembly MA109 longitudinal stiffener tack welds. ZPMC QA inspector Mr. Xu Jun stated, tack welding was being performed in accordance with WPS-B-P-2212-TC-U5b. The following digital picture illustrates the tack welding in progress. Air carbon arc gouging by ZPMC personnel was being performed on Mock-up 114.00 #A119 CD corner internal connection root pass. QA Inspector Viars observed welding operations of #114.00 Mock-up Skin D SA MA113 weld #8 root pass. Flux Cored Arc Welding (FCAW) was performed in the 2G position WPS-T-2232-TC-U5-F

Caltrans QA Inspector observed ZPMC QC nondestructive technician, Mr. Lujian Ping monitoring welding operations of Mock-up 114.00 Skin D sub assembly MA113 stiffener plate root pass of weld #8. Preheating of excavation areas on mock-up 114.00 MA101 stiffener welds and #114 mock-up Skin D MA110 weld #1 filler passes were in progress. QA inspector Viars recorded the following welding variables of #114 Mock-up Skin D sub assembly MA113 weld #8 root pass. Amperage 330, Voltage 30.4 with a travel speed of 307 mm/min.

The Caltrans QA Inspector monitored welding operations of #114.00 Skin D and E. Caltrans QA Inspector observed that the welding operations appeared to be in general conformance with AWS D1.5 2002 requirements.

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# WELDING INSPECTION REPORT

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## 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
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<b>Reviewed By:</b>	Cuellar,Robert	QA Reviewer
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