

**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-001239**Date Inspected:** 06-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:** Shanghai, China**CWI Name:** Fu Yu Hong**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:** Tower Mock-up and OBG**Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

Item Description	WBS	Dwg No.	Status
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1	Cracks on the PL 38A and 42A		
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ZPMC QC inspector Fu Yu Hong informed the QA inspector that two tack welds cracked at the junction of the WT stiffener RS9C and the bottom plate PL-38A on the panel BP-7, tack welder He Yu Mei.

In visual inspection performed by the QA inspectors Larry Viars, Dan Hernandez and Alfredo Acuna. Mr. Dan Hernandez found a cracked tack weld at the junction of WT shape RS9D to the plate 42-A. The QA inspector had a conversation with ZPMC QA inspector Fu Yu Hong. The QA inspector brought to the attention about the cracked tack weld missed by ZPMC QC. Mr. Fu Yu Hong informed that ZPMC would remove the tack completed, perform magnetic particle inspection and reweld the tack weld. The photograph below shows the cracked tack weld that it was not identified by ZPMC QC personnel.

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# WELDING INSPECTION REPORT

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3 UT verifications to the Reinforcement ring SA-274 Tower Mock-up 77 M

The QA inspector observed that ZPMC performed ultrasonic testing (UT) verifications after buttering the bevel for the base metal repair on the 150 degrees bent plate weld joint # 5 for the reinforcement ring SA-274 (which would connect to the diaphragm SA-95). ZPMC was verifying the base metal repair. The QA inspector had a conversation with ZPMC QC representatives Fu Yu Hong. Mr. Fu Yu Hong informed to the QA inspector that ZPMC buttered the bevel from the reinforcement ring for weld # 5 because one of the side was shorter(9 mm gap was measured on the pre-assembled). Mr. Fu Yu Hong added that ZPMC accepted the base metal repair after completing their UT verifications.



### Summary of Conversations:

As noted above.

### 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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**Inspected By:** Acuna,Alfredo

Quality Assurance Inspector

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**Reviewed By:** Cuellar,Robert

QA Reviewer