

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-000302**Date Inspected:** 13-Jul-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Huang Wei**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:** PQR Macroetch Tests for Fillet Welds**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector Robert Cuellar is present at the fabrication facility of Zhenhua Port Machinery Company (ZPMC), LTD for the purpose of monitoring activities relative to the subsequent fabrication of the SFOBB Self Anchored Suspension Bridge. Also present are Caltrans representatives Mr. Dave McClary, Mr. Bruce Berger and Mr. Alfredo Acuna. Only observations by QA Inspector Robert Cuellar are being recorded within this report as follows,

**PQR HP2007145-1-Fillet Weld Soundness-Macroetch Tests-QA Lot # B26-029-07**

The Caltrans QA Inspector observed two fillet weld soundness welds that have been welded on to one test specimen. One side of the fillet weld soundness test macroetch was measured to an approximate 8mm single pass fillet weld and also a 16mm multiple pass fillet weld on the other side of the tee configuration. The Caltrans QA Inspector observed that in addition to the recorded CWI listed above, Mr. Jeff Evans of ABF and Ms Xie Ping of ZPMC are also present. The initial observation of the three (3) macroetch specimens was performed by Ms Xie Ping who applied scribed lines that reference the junction point where the depth of the fillet weld is required to satisfy. The Caltrans QA Inspector allowed Ms. Xie Ping to utilize the Caltrans QA Inspectors 7x eye magnifier at her own discretion. Ms. Xie Ping concluded her interpretation of the fillet weld soundness tests and voiced to Mr. Huang Wei in Chinese language that they are acceptable. ABF representative Mr. Jeff Evans and the Caltrans QA Inspector performed an examination of the presented fillet weld soundness test macroetch samples utilizing the Caltrans QA Inspectors Peak Lupe 7x eye magnifier. Based on the observation of the fillet weld soundness macroetch test samples it appears that such samples comply with AWS D1.5 (2002) sections 5.19.3.1 and 5.19.3.2.

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# WELDING INSPECTION REPORT

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PQR HP2007146-1-Fillet Weld Soundness-Macroetch Tests-QA Lot # B26-030-07

The Caltrans QA Inspector observed two fillet weld soundness welds that have been welded on to one test specimen. One side of the fillet weld soundness test macroetch was measured to an approximate 12mm single pass fillet weld and also a 12mm multiple pass fillet weld on the other side of the tee configuration. The Caltrans QA Inspector observed that in addition to the recorded CWI listed above, Mr. Jeff Evans of ABF and Ms Xie Ping of ZPMC are also present. The initial observation of the three (3) macroetch specimens was performed by Ms Xie Ping who applied a scribed line that references the junction point where the depth of the fillet weld is required to satisfy. The Caltrans QA Inspector allowed Ms. Xie Ping to utilize the Caltrans QA Inspectors 7x eye magnifier at her own discretion. Ms. Xie Ping concluded her interpretation of the fillet weld soundness tests and voiced to Mr. Huang Wei in Chinese language that the three macroetch specimens are not acceptable due to the lack of penetration. ABF representative Mr. Jeff Evans and the Caltrans QA Inspector performed an examination of the presented fillet weld soundness test macroetch samples utilizing the Caltrans QA Inspectors Peak Lupe 7x eye magnifier. Based on the observation of the fillet weld soundness macroetch test samples it appears that such samples do not comply with AWS D1.5 (2002) sections 5.19.3.1 and 5.19.3.2.

The Caltrans QA Inspector was presented with ZPMC, Mechanics Test Department records for these fillet weld soundness tests. Included below is a digital picture of ZPMC representative Ms Xie Ping performing evaluation of the macroetch fillet weld soundness specimens utilizing the Caltrans QA Inspectors Peak Lupe 7x magnifier.



## Summary of Conversations:

No conversations relative to 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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**Inspected By:** Cuellar,Robert

Quality Assurance Inspector

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**Reviewed By:** McClary,David

QA Reviewer