

**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-000996**Date Inspected:** 28-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 600**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:** Cui Yiru**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 Floor Beams**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Dan Hernandez was present to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Item Description	WBS	Dwg No.	Status
1 OBG Floor Beams			In Progress

Caltrans QA Inspector observed flux cored arc welding (FCAW) in progress of Floor Beam FB022-01-080 splice weld. The weld joint is a Complete Joint Penetration (CJP), butt-joint. The welder was observed welding root pass in the 1G position. The approved welder is identified as Mr. Liu Kaige # 044830 using welding procedure specification WPS-B-T-2231-B-U2-F1. Caltrans QA measured current welding parameters at approximately 261 amps, 29 volts and 540 millimeters per minute (mm/min). Preheat and interpass temperatures were verified during welding activities and were within approved WPS minimum and maximum range. FCAW welding consumable is verified and identified as Supercored 71H, classification E71T-1, diameter 1.4 mm (.055 inches). ZPMC Quality Control (QC) Certified Welding Inspector (CWI) Mr. Cui Yiru was observed monitoring welding activities at the work station.

QA Inspector observed ZPMC personal perform Ultrasonic Testing (UT) lamination checks on floor beam butt-joint splice welds on the following floor beams-FB008-03-026, FB007-03-026, FB010-03-026, FB015-02-026 and FB008-01-026.

**Summary of Conversations:**

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# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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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.

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