

**DEPARTMENT OF TRANSPORTATION**  
 DIVISION OF ENGINEERING SERVICES  
 Office of Structural Materials  
 Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4  
 Cty: SF/ALA Rte: 80 PM: 13.2/13.9  
 File #: 69.28

**WELDING INSPECTION REPORT**

**Resident Engineer:** Pursell, Gary  
**Address:** 333 Burma Road  
**City:** Oakland, CA 94607

**Report No:** WIR-000030  
**Date Inspected:** 02-Dec-2006

**Project Name:** SAS Superstructure **OSM Arrival Time:** 800  
**Prime Contractor:** American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1700  
**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

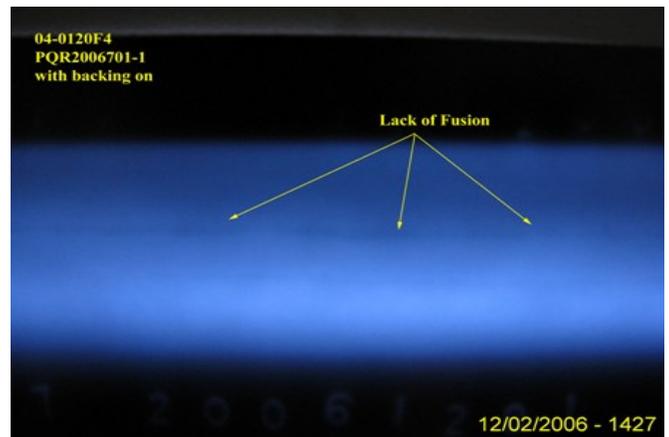
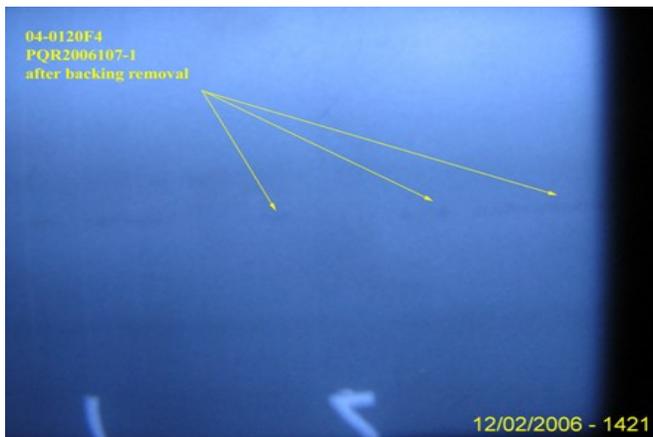
<b>CWI Name:</b>	Liu Liu	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes	No N/A
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes	No N/A
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes	No N/A
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes	No N/A
		<b>Delayed / Cancelled:</b>	Yes	No N/A
<b>Bridge No:</b>	34-0006	<b>Component:</b>	N/A	

**Summary of Items Observed:**

Office of Structural Materials Quality Assurance Inspector (QA), Mark Wright observed quality control functions related to procedure qualification (PQR) testing at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

Item	Description	WBS	Dwg No.	Status
1				

The QA Inspector reviewed the Radiographic Testing (RT) film for 1G (horizontal) Flux Core Arc Welding (FCAW) Procedure Qualification (PQR) identified as HP-2006107-1. The QA Inspector observed linear indications on the film which did not comply with figure 6.8 of AWS D1.5-2002.



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# WELDING INSPECTION REPORT

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2

The QA Inspector observed welding of a Procedure Qualification (PQR) test plate identified as HP-2006119-1. The test was conducted using Gas Metal Arc Welding (GMAW), Supertech SM-70, electrode in the 1G (flat) position to AWS D1.5, Section 5.13 (Production Procedure). The QA Inspector observed ZPMC Quality Control (QC) recording the essential variable (amps, volts, travel speed) for each pass and randomly verified the parameters using a Fluke amperage / voltage meter and a stopwatch.

### Summary of Conversations:

The QA Inspector spoke with ZPMC Quality Control (QC) regarding the RT film for PQR HP-2006107-1 and informed them that the film would be rejected due to linear indications wagon tracks located on the film. The QC Inspector stated that the backing would be removed and re-shot with X-ray. The QA Inspector stated that this was not in compliance with the Special Provisions for this contract. The Special provisions state that the backing shall remain in place for the radiographic testing of the PQR.

### 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>	Wright,Mark	Quality Assurance Inspector
<b>Reviewed By:</b>	McClary,David	QA Reviewer

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