

**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-004395**Date Inspected:** 22-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1430**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2130**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	N/A	<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>	OBG	

**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Erik Prue was present to perform Ultrasonic Testing (UT) and Radiographic film review of Orthotropic Box Girder (OBG) components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

**OBG Assembly Bay # 2**

This Quality Assurance (QA) inspector arrived at ZPMC in Shanghai China for observation of Orthotropic Bridge Girders (OBG) and Self Anchored Suspension (SAS) Bridge. This QA inspector received notification from day shift task leader to perform conventional Ultrasonic (A scan) Inspection for tack welds on deck panels. The inspection is preliminary prior to using the phased array system to verify indications found with conventional Ultrasonic testing. This QA inspector performed UT on deck panel DP406-001, 5 ribs, 10 welds, 260 total tack welds. Weld 6 scanned 26 locations with 1 indication, weld 7 scanned 26 locations with 2 indications, weld 8 scanned 26 locations with 4 indications, weld 9 scanned 26 locations with 3 indications, and weld 10 scanned 26 locations with 2 indications. Welds 1 through 5 were scanned by QA UT Inspector Steve Hall. Please see U-rib Deck Panel Tack Weld Assessment report dated 22 October, 2008 for specific locations of indications.

This QA inspector performed UT on deck panel DP042-002, 4 ribs, 8 welds, 208 total tack welds. Weld 1 scanned 25 locations with 5 indications, weld 2 scanned 25 locations with 4 indications, weld 3 scanned 25 locations with 1 indication, weld 4 scanned 25 locations with 0 indications, weld 5 scanned 25 locations with 1 indication, weld 6 scanned 25 locations with 2 indications, weld 7 scanned 25 locations with 2 indications, and weld 8 scanned 25 locations with 2 indications. Tack welds at "Y" location 605 for welds 1 through 8 are inaccessible due to external diaphragm plate welded over tack weld areas. Please see U-rib Deck Panel Tack Weld Assessment report dated 22

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October, 2008 for specific locations of indications.

QA Inspector reviewed ABF and ZPMC QC accepted radiographic (RT) film for WPS complete joint penetration (CJP) welds. Radiographic film for welds reviewed were; HP2008096Y2-1 and HP2008096Y2-1. RT film for WPS plate welds appear to be acceptable to AWS D1.5 (2002) and special provisions. For details please see radiographic film report TL-6029 dated 22 October, 2008.

No other activities observed.

**Summary of Conversations:**

No significant conversations this day.

**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 Peter Dauterman, 15002199593, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Prue,Erik	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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