

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-009981**Date Inspected:** 06-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

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

**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

1AW+1BW

SMAW repair welding on excavation on weld joint 008 located on OBW1A.

Welder is identified as Mr. Feng Huajun (066258). ZPMC QC is identified as Wu Li Yang.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #875.

SMAW repair welding on excavation on weld joint 008 located on OBW1A.

Welder is identified as Mr. Li Wenguo (066261). ZPMC QC is identified as Wu Li Yang.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #875.

SMAW repair welding on excavation on weld joint 008 located on OBW1A.

Welder is identified as Mr. Qie Jianzhou (067571). ZPMC QC is identified as Wu Li Yang.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and

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CWR repair procedure #875.

BK1

FCAW welding on excavation on weld joint 007 located on BK001-020.

Welder is identified as Mr. Zang Hanming (220066). ZPMC QC is identified as Wu Li Yang.

The welding variables recorded by QC appeared to comply with WPS-345-FCAW-3G (3F)-Repair-1 and repair procedure WR8429.

1AW+1AAW

SMAW repair welding on excavation on weld joint 003 located on OBE1A.

Welder is identified as Mr. Zang Yanbo (045196). ZPMC QC is identified as Xu Yumin.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR repair procedure #868.

Y location of excavation areas noted welder (045196) performed the repair work is at 270mm and 630mm of the bottom plate and bike path weld joint.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle (MT) Technician performing MT on various locations in the trial assembly yard. Locations are as followed:

1AW+1BW

Excavation areas at OBW1A-007 side plate (external) weld joint on segment 1W. Y locations (pulled from bottom plate) and numbers of MT Indications observed are as followed:

1. Y location 3195mm (off bottom plate). 2 MT transverse indications observed.
2. Y location 3800mm (off bottom plate). 2 MT transverse indications observed.
3. Y location 6400mm (off bottom plate). 3 MT transverse indications observed.
4. Y location 8170mm (off bottom plate). 0 MT transverse indications observed.

Excavation areas at OBW1A-006 side plate (external) weld joint on segment 1W. Y locations (pulled from bottom plate) and numbers of MT Indications observed are as followed:

1. Y location 150mm (off bottom plate). 2 MT transverse and 1 longitudinal indications observed.

Excavation areas at OBW1A-007 side plate (external) weld joint on segment 1W. Y locations (pulled from bottom plate) and numbers of MT Indications observed are as followed:

1. Y location 270mm (off bottom plate). 0 MT transverse indications observed.
2. Y location 630mm (off bottom plate). 0 MT transverse indications observed.
3. Y location 840mm (off bottom plate). 3 MT transverse indications observed.

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- 4. Y location 850mm (off bottom plate). 0 MT transverse indications observed.
- 5. Y location 2000mm (off bottom plate). 0 MT transverse indications observed.
- 6. Y location 2420mm (off bottom plate). 0 MT transverse indications observed.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### 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 Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

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

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