

**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-005803**Date Inspected:** 22-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1830**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 630**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Shi Lei, Chen Likun and Le Li	<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 Assembly, Tower	

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Joe Alaniz was present during the times noted above for observations relative to the work being performed.

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 25% of the area previously tested by ZPMC MT personnel. This QA Inspector generated a TL-6028 MT report on this date. The weld designation numbers is as follows:

Bay 1

FB210-1-002:

003, 004, 10, 24, 27, 28, 42, 47 and 48

FB210-001:

003, 004, 24, 27, 28, and 42

FB210-1-001:

003, 004, 10, 27, 28, and 42

FB210-002:

005, 008, 007, 27, 28, and 41

This QA Inspector performed Ultrasonic Testing (UT) on approximately 15% of CJP on the OBG floor beam welds previously accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6. 3. The QA Inspector observed no rejectable indications at the time of testing. The QA Inspector generated a TL-6027 UT report on this date. Welds UT verified were identified as listed below

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### Bay 2

FB012-028-023

FB011-032-021

FB012-033-021, 062

This QA Inspector observed the following work in progress:

### Bay 10

ZPMC welding personnel Mrs. Xu Kaozhen (051413) performing groove welding of weld joint SSD1-FBSA3-1A/C-29 and SSD1-FBSA3-1A/C-30. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process. ZPMC QC identified Mr. Chen Likun and was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-U3C-S-2.

ZPMC's qualified welding personnel's identified as Mr. Hu Fenjian (067877), Mr. Wang Qingbo (068501) and Mr. Ding Guielieng (058498) perform FCAW welding on weld joints identified NSD1-SA223L/E-9, NSD1-SA223C/E-1, 2, 3, 4 and NSD1-SA223C/E-9, 10, 11 and 12. ZPMC QC identified Mr. Chen Likun was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-4332-TC-P5-F.

ZPMC's qualified welding personnel identified as Mr. Jiang Zhou (040201) perform FCAW (repair) welding on weld joint identified as SSD1-TL5B/L-4A/B. ZPMC QC identified Mr. Chen Likun was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-2G (2F)-Repair.

### Bay 11

ZPMC's qualified welding personnel identified as Mr. Guo Xianwei (255865) perform SMAW (Fit up) welding on weld joint identified as WSD1-T16 B/L-3A. ZPMC QC identified Mr. Le Li was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2214-C-U2.

### Bay 14

ZPMC welding personnel Mr. Wang Lanying (045265) performing groove welding of weld joint SEG003\*-003. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process. ZPMC QC identified Mr. Shi Lei and was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B/L2c-S-2.

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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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