

**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-008473**Date Inspected:** 12-Aug-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

**CWI Name:** Xu Xian Ping  
**Inspected CWI report:** Yes No N/A  
**Electrode to specification:** Yes No N/A  
**Qualified Welders:** Yes No N/A  
**Approved Drawings:** Yes No N/A

**CWI Present:** Yes No  
**Rod Oven in Use:** Yes No N/A  
**Weld Procedures Followed:** Yes No N/A  
**Verified Joint Fit-up:** Yes No N/A  
**Approved WPS:** Yes No N/A  
**Delayed / Cancelled:** Yes No N/A

**Bridge No:** 34-0006**Component:** OBG & TOWER Components**Summary of Items Observed:**

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

**BAY 2****Magnetic Particle Testing**

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. LD018-020-006;007;008 - Green Tag # 010198
2. LD018-019-002;003;004 - Green Tag # 010197
3. LD017-020-006;007;008 - Green Tag # 010196
4. LD017-019-002;003;004 - Green Tag # 010195
5. LD001-037-002;003;004 - Green Tag # 010175
6. LD001-038-002;003;004 - Green Tag # 010176
7. LD002-037-002;003;004 - Green Tag # 010177
8. LD002-038-002;003;004 - Green Tag # 010178
9. LD003-047-002;003;004 - Green Tag # 010179
10. LD003-048-002;003;004 - Green Tag # 010180
11. LD003-049-002;003;004 - Green Tag # 010181

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12. LD003-050-002;003;004 - Green Tag # 010182
13. LD004-047-002;003;004 - Green Tag # 010183
14. LD004-048-002;003;004 - Green Tag # 010184
15. LD004-049-002;003;004 - Green Tag # 010185
16. LD004-050-002;003;004 - Green Tag # 010186
17. LD005-009-002;003;004 - Green Tag # 010187
18. LD007-009-002;003;004 - Green Tag # 010188
19. LD014-013-002;003;004 - Green Tag # 010194
20. LD013-013-002;003;004 - Green Tag # 010193
21. LD009-007-002;003;004 - Green Tag # 010189
22. LD010-007-002;003;004 - Green Tag # 010190
23. LD011-019-002;003;004 - Green Tag # 010191
24. LD012-019-002;003;004 - Green Tag # 010192

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #23 located on Floor Beam FB3010 – 001. Welder is identified as 045209. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F – 1.

SAW process welding of weld joint #023 located on Floor Beam FB3010 – 001. Welder is identified as 250050. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

FCAW process welding of weld joint #050 located on Floor Beam FB3037 – 001. Welder is identified as 045209. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F – 1.

BAY 3

### Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. SSD10A-PP098-006 - Green Tag # 009975  
a) FB003-179-008; 020
2. SSD12-PP098-006 - Green Tag # 009976  
a) FB003-183-008; 020

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #003 located on Cross Beam CB202B – 014. Welder is identified as 058102. ZPMC QC is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2211 – B – U2.

FCAW process welding of weld joint #001 located on Cross Beam CB202B – 014. Welder is identified as 208035.

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ZPMC QC is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F – 1.

### BAY 5

#### Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. TR1B-PP023-003; 004 – Green Tag # 009784
2. TR1B-PP017-003; 004 – Green Tag # 009784

### BAY 6

#### Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. BP3009-001-008~019; 044~055
2. SP3044-001-044~067; 032~044; 070; 081~096
3. SP3015-001-025~048;061~072;129~134 – Green Tag # 009392

#### Ultrasonic Testing

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. BP3019-001-009; 010; 015; 016; 028; 029; 032; 033 – Green Tag # 009394
2. SP3044-001-069; 072 – Green Tag # 009393
3. SP3015-001-095; 141 – Green Tag # 009392
4. BP3009-001-006; 007 – Green Tag # 009391

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #20 located on WD1 – A305 – 77M – 1. Welder is identified as 066416. ZPMC QC is identified as Su Zhen Rong. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2112.

SMAW process welding of weld joint #51 located on WD1 – A305 – 77M – 1. Welder is identified as 066416. ZPMC QC is identified as Su Zhen Rong. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2112.

### BAY 7

#### Ultrasonic Testing

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC

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Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. EP3004-001-028
2. EP3010-001-017

This QA Inspector observed the following work in progress:

SAW process welding of weld joint #001 located on Edge Plate EP3001 – 001. Welder is identified as 054458. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

FCAW process welding of weld joint #022 located on Edge Plate EP3010 – 001. Welder is identified as 053609. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

SAW process welding of weld joint #021 located on Edge Plate EP3004 – 001. Welder is identified as 054458. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

BAY 8

This QA Inspector observed the following work in progress:

SAW process welding of weld joint #001 located on Cross Beam CB202D – 013. Welder is identified as 207463. ZPMC QC is identified as Zhang Jing Xin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

SAW process welding of weld joint #002 located on Cross Beam CB202D – 013. Welder is identified as 207463. ZPMC QC is identified as Zhang Jing Xin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

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

**Summary of Conversations:**

No Relevant Conversations.

**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 - 15000422372, who represents the Office of Structural Materials for your project.

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

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