

**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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016193**Date Inspected:** 01-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China**CWI Name:** Mr. Geng Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segments**Summary of Items Observed:**

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

Ultrasonic Testing (UT) – Document No: 006316

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 Segment Longitudinal Diaphragm. The weld designations reviewed are as follows:

1. LD3036-001-075
2. LD3036-001-108
3. LD3036-001-141
4. LD3036-001-174
5. LD3036-001-207
6. LD3036-001-234
7. LD3033-001-064
8. LD3033-001-097

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This QA inspector observed ZPMC qualified welding personnel identified as 044780 perform Submerged Arc

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Welding (SAW) Welding on OBG Segment 13CE, weld joint identified as SEG3011A-006. ZPMC QC is identified as Mr. Zhou Lin. 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.

This QA inspector observed ZPMC qualified welding personnel identified as 214945 perform Flux Core Arc Welding (FCAW) Welding on OBG Segment 13CE, weld joint identified as SEG3011A-006. ZPMC QC is identified as Mr. Zhou Lin. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-B-U2-F.

This QA inspector observed ZPMC qualified welding personnel identified as 045270 perform Submerged Arc Welding (SAW) Welding on OBG Segment 13BW, weld joint identified as SEG3014A-004. ZPMC QC is identified as Mr. Wang Xu. 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.

This QA inspector observed ZPMC qualified welding personnel identified as 044801 perform Flux Core Arc Welding (FCAW) Welding on OBG Segment 13BE, weld joint identified as SEG3009A-005. ZPMC QC is identified as Mr. Zhang Lin. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-B-U2-F.

### OBG Segment 12CW

This QA inspector observed ZPMC qualified welding personnel identified as 201215 perform FCAW welding on OBG Segment 12CW, weld joint identified SEG3006S\*-056. ZPMC QC is identified as Mr. Wang Wei Ming. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-2G (2F)-FCM-Repair.

### Bay 16

This QA inspector observed ZPMC qualified welding personnel identified as 040344 perform Flux Core Arc Welding (FCAW) Welding on Longitudinal Diaphragm of OBG Segment 13CW, weld joint identified as LD3036-001-082, 083, 148 and 149. ZPMC QC is identified as Mr. Xia Chun Hui. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

This QA inspector observed ZPMC qualified welding personnel identified as 201583 perform FCAW Welding on Longitudinal Diaphragm of OBG Segment 13CW, weld joint identified as LD3036-001-214, 215, 271 and 272. ZPMC QC is identified as Mr. Xia Chun Hui. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

This QA inspector observed ZPMC qualified welding personnel identified as 040344 and 201583 perform FCAW Welding on Longitudinal Diaphragm of OBG Segment 13CW, weld joint identified as LD3036-001-166, 167, 199 and 200. ZPMC QC is identified as Mr. Xia Chun Hui. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

### Visual Inspection after Blast

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### Segment 10BW

This QA Inspector performed a preliminary random visual inspection after the grit blast of the interior components of the deck panel, floor beams and corner assemblies of this segment. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel are aware of these areas and were present during the inspection.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the 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 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Kumar,Vibin	Quality Assurance Inspector
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<b>Reviewed By:</b>	McClendon,Timothy	QA Reviewer
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