**DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

# WELDING INSPECTION REPORT

**Resident Engineer:** Pursell, Gary
**Address:** 333 Burma Road
**City:** Oakland, CA 94607

**Report No:** WIR-015986
**Date Inspected:** 17-Jul-2010

**Project Name:** SAS Superstructure
**Prime Contractor:** American Bridge/Fluor Enterprises, a JV
**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

**OSM Arrival Time:** 700
**OSM Departure Time:** 1900
**Location:** Shanghai, China

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|---|---|---|---|---|---|---|---|
| **CWI Name:** | Xu Tao | | | **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 COMPONENT

**Summary of Items Observed:**

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

In process Inspection

Bay #14
This QA Inspector observed the following work in progress:

FCAW in the 2F position for the OBG Segment 13BE, weld No. SP3074-001-007~024. The welders are identified as #044774/044830. ZPMC QC is identified as Mr. Wang Xu. The welding variables recorded by QC appear to comply with WPS-B-T-2132.

SMAW in the 4G position for the OBG Segment 12AW, UT repair weld No. SEG3004*-006. The welder is identified as #037743. ZPMC QC is identified as Mr. Tang Ya Jun. The welding variables recorded by QC appear to comply with WPS-345-SMAW-4G(4F)-REPAIR.

SMAW in the 4G position for the OBG Segment 12AW, UT repair weld No. SEG3004*-027. The welder is identified as #047864. ZPMC QC is identified as Mr. Tang Ya Jun. The welding variables recorded by QC appear to comply with WPS-345-SMAW-4G(4F)-REPAIR.
SMAW in the 2G position for the OBG Segment 12BW, weld No. CA3009-004. The welder is identified as #045133. ZPMC QC is identified as Mr. Wang Wei Ming . The welding variables recorded by QC appear to

comply with WPS-B-P-2212-Tc-U4b-FCM-1.

Bay #16
This QA Inspector observed the following work in progress:

SAW in the 1G position for the OBG Segment 13BW Longitudinal Diaphragm, weld No. LD3305-001-002. The welder is identified as #250050. ZPMC QC is identified as Mr. Li Ming Yang. The welding variables recorded by QC appear to comply with WPS-B-T-2221-B-L2c-S-2.

SAW in the 1G position for the OBG Segment 13BW Longitudinal Diaphragm, weld No. LD3032-001-002. The welder is identified as #045265. ZPMC QC is identified as Mr. Xia Chun Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2221-B-L2c-S-2.

Out Side Yard
This QA Inspector observed the following work in progress:

SMAW in the 3G position for the OBG Segment 11DW, weld No. SEG071E-092. The welder is identified as #045246.ZPMC QC is identified as Mr. Li Ping. The welding variables recorded by QC appear to comply with WPS-345-SMAW-3G(3F)-FCM-REPAIR. The weld repair report is identified as B-WR-13991.

SMAW in the 4G position for the OBG Segment 11EE, weld No. SEG074A-010. The welder is identified as #054013. ZPMC QC is identified as Mr. Li Ping. The welding variables recorded by QC appear to comply with WPS-345-SMAW-4G(4F)-FCM-REPAIR. The weld repair report is identified as B-WR-11257.

SMAW in the 4F position for the OBG Segment 11DW, weld No. SEG071E-084/085. The welder is identified as #045868. ZPMC QC is identified as Mr. Li Ping. The welding variables recorded by QC appear to comply with WPS-345-SMAW-4G(4F)-REPAIR. The weld repair report is identified as B-WR-13991.

During random visual inspection at segment 12CW on Panel Point PP117, the QA Inspector found the linear transverse crack like indication on several locations at the base metal of Floor beam flange .The mention area was not welded due to tack weld crack at bay #14. Then the QA Inspector informed to ZPMC QC Personnel to perform Magnetic Particle Testing at mention area and more than 70% of the crack tack area found linear transverse indication on base metal of Floor Beam Flange.The QA inspector informed to ZPMC QC Mr. Wang wei Ming and ABF QA Mr. Wen Jian Bao to remove the indication and and do Magnetic Particle Testing for confirmation at those mention area. For more information see the attached photo.

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

# WELDING INSPECTION REPORT

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**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 150-0042-2372, who represents the Office of Structural Materials for your project.

# WELDING INSPECTION REPORT

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| **Inspected By:** | Bera,Subhasis | Quality Assurance Inspector |
| **Reviewed By:** | Patterson,Rodney | QA Reviewer |