

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018635**Date Inspected:** 12-Dec-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), Changxing Island **Location:** Shanghai, China**CWI Name:** Lv Li Qing**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**Summary of Items Observed:**

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

Magnetic Particle Testing:-

BAY#14

This QA inspector performed Magnetic Particle Testing (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 member is identified as OBG Segment 14E. The weld designation reviewed is as follows:

SEG3019AZ-005,015

In process Inspection:-

BAY#14

This QA Inspector observed the following work in progress:

FCAW in the 3F position for the OBG Segment 13AE Floor Beam to Longitudinal Diaphragm. The weld joint was designated as: SEG3007M-016. The welder is identified as #062782. ZPMC QC is identified as Mr. Wang Xu. The welding variables recorded by QC appear to comply with WPS-B-T-2133-ESAB.

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This QA Inspector observed the following work in progress:

FCAW in the 3F position for the OBG Segment 13AE Floor Beam to Longitudinal Diaphragm. The weld joint was designated as: SEG3007D-211. The welder is identified as #044795. ZPMC QC is identified as Mr. Wang Xu. The welding variables recorded by QC appear to comply with WPS-B-T-2133-ESAB

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: DP3102-001-254 located on OBG Segment 13 Deck panel. Welder is identified as #066746. ZPMC QC is identified as Mr. Zhong Guo Hui. Welding was performed according to the Critical weld repair report B-CWR2399 and UT report number: B787-UT-18346. The welding variables recorded by QC appeared to comply with the WPS-345-FCAW-2G(2F)-ESAB-Repair-FCM. Please see the attached picture.

This QA inspector observed the following work in progress:

FCAW welding of weld joint no: DP3105-001-137 located on OBG Segment 13 Deck panel. Welder is identified as #044830. ZPMC QC is identified as Mr. Zhong Guo Hui. Welding was performed according to the weld repair report B-WR18493 and UT report number: B787-UT-18349. The welding variables recorded by QC appeared to comply with the WPS-345-FCAW-2G(2F)-ESAB-Repair.

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: SEG3007E-035 located on OBG Segment 13AE Bottom panel stiffener to FB3116. Welder is identified as #200113. ZPMC CWI is identified as Mr. Lv Li Qing. Welding was performed according to the weld repair report B-WR18362 and UT report number: B787-UT-18483. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-3G(3F)-Repair. Please see the attached picture.

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: SEG3007M-227 located on OBG Segment Bottom panel stiffener to FB3113. Welder is identified as #215553. ZPMC CWI is identified as Mr. Lv Li Qing. Welding was performed according to the weld repair report B-WR18461 and UT report number: B787-UT-18366. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-3G(3F)-Repair.

This QA Inspector observed the following work in progress:

SMAW in the 4G position for the OBG Segment 14AE Side Panel to FL3. The weld joint was designated as: SEG3007AD-22. The welder is identified as #037723. ZPMC QC is identified as Mr. Wang Xu. The welding variables recorded by QC appear to comply with WPS-B-P-2214-TC-U4B-FCM-1.

This QA Inspector observed the following work in progress:

SMAW in the 4G position for the OBG Segment 14AE Side Panel to FL3. The weld joint was designated as: SEG3007AD-23. The welder is identified as #067609. ZPMC QC is identified as Mr. Wang Xu. The welding variables recorded by QC appear to comply with WPS-B-P-2214-TC-U4B-FCM-1.

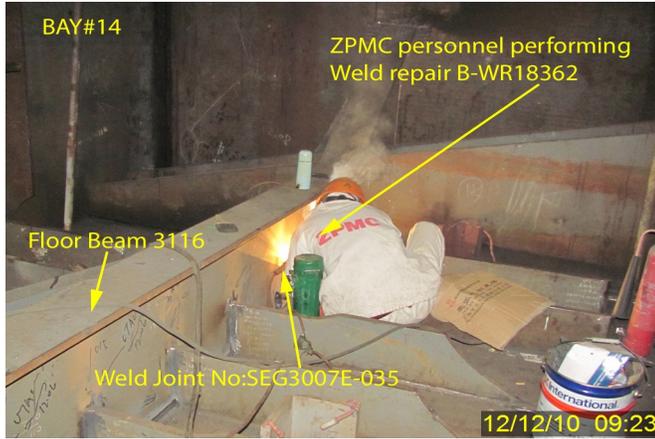
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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# WELDING INSPECTION REPORT

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## Summary of Conversations:

No Relevant Conversation.

## 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.

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**Inspected By:** Pillai,Pandaram

Quality Assurance Inspector

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**Reviewed By:** Patel,Hiranch

QA Reviewer