

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022602**Date Inspected:** 07-Apr-2011**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. An Qing Xing**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 Segment**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) – NWIT Document No: 008757

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 13CW. The weld designations reviewed are as follows:

1. SEG3015B-242, 246, 250, 254, 258, 101
2. SEG3015K-234, 239, 244, 249, 223, 228
3. SEG3015K-233, 238, 243, 248, 253, 189
4. SEG3015F-313, 293, 298, 303, 308, 205
5. SEG3015K-224

Description of Incident: During the Quality Assurance Ultrasonic Testing (UT) verification of weld located on OBG Segment 13CW, this Quality Assurance Inspector (QA) discovered the following issue:

- ZPMC QC personnel have tested and accepted a weld that did not meet the Visual Testing (VT) requirements of the contract documents.
- One (1) Class "A" indication measuring approximately 25mm in length.

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- The Indication rating is +7dB and length approximately 25mm.
- The nominal thickness of the plate is 22mm and depth of the indication approximately 19mm.
- The indication is located on the weld joint identified as SEG3015K-224.
- The “Y” location for this indication is approximately 35mm from top of this RS Stiffener.
- The weld is a Complete Joint Penetration (CJP) “T” weld joint joining Side Plate RS Stiffener to Floor Beam (FB3224A) at panel point 123.
- This weld did not meet the Visual Testing (VT) requirements of the contract documents due to incomplete welding at the cope hole.
- The indication is clearly marked by QA on/near the weld.
- This weld is designated as non Seismic Performance Critical Member (non SPCM).
- OBG Segment 13CW is located in Bay 14 West Side.
- The Notice of Witness Inspection Number (NWIT) is 008757
- The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.
- As per the contract documents, ZPMC’s QC personnel are required to perform 100% UT inspection of this weld. See the attached picture.

Bay 14

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG3020BB-002 located on Vertical Shear Plate to Anchor Plate of OBG Segment 14W. ZPMC Welders are identified as 037932 and 067765. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3020BB-056 located on Vertical Shear Plate to Anchor Plate of OBG Segment 14W. ZPMC Welders are identified as 069841 and 066261. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3020BB-065 located on Vertical Shear Plate to Anchor Plate of OBG Segment 14W. ZPMC Welder is identified as 045246. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3020BB-029 located on Vertical Shear Plate to Anchor Plate of OBG Segment 14W. ZPMC Welder is identified as 045246. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

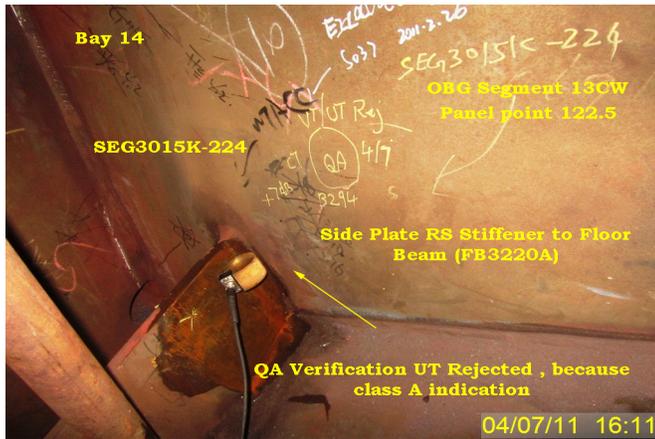
SMAW repair welding of weld joint SEG3014H-131, 132 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 13BW. ZPMC Welder is identified as 066179. ZPMC Quality Control (QC) is identified as Mr. Liu Fang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2114-FCM-1.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable

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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.

Inspected By:	Kumar,Vibin	Quality Assurance Inspector
Reviewed By:	Patel,Hiranch	QA Reviewer
