

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-017966**Date Inspected:** 24-Oct-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. 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 Segment and Bike Path**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.

Magnetic Particle Testing (MT) – NWIT Document No's: 007081

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 Barrier. The weld designations reviewed are as follows:

1. W5-SB1-002-128,131,82,54,95,86
2. W5-SB13A-013-27,45,13,130,95,86,128
3. W5-SB1-032-128,131,87,55,85,86
4. W5-SB1D-003-130,15,13,131,95,86
5. W5-SB1-016-128,131,56,24,95,86

Ultrasonic Testing (UT) – NWIT Document No: 007088

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 Bike Path. The weld designations reviewed are as follows:

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1. BK004A1-009-008
2. BK004A3-009-010, 005
3. BK004A5-009-007, 008
4. BK004A5-009-115, 125, 121, 131
5. BK004ASD1-009-018, 021

Description of Incident: During random Quality Assurance visual verification of welds located on OBG Component steel barrier, Caltrans (CT) Quality Assurance Inspector (QA) discovered that four (4) Longitudinal Linear Indications with each measuring approximately 20 to 25mm in length. The indications were found on barriers identified as W5- SB1-013-008, W5- SB1-032-002, W5- SB1-029-042, and W5- SB2-002-033. These welds are fillet weld joints, joining the diaphragm (W5-P-5) to web flange stiffener (W5-P-4). The diaphragm to web flange stiffener is identified as non Seismic Performance Critical Member (non SPCM). The indications are clearly marked on the material near the weld OBG Component Steel barriers are located in Bay#16. The indications were discovered visually and confirmed by Magnetic particle Testing (MT) by Caltrans QA. The Longitudinal Linear Indications are located within an area that had been previously inspected by ZPMC Quality Control (QC) personnel. As per contract documents ZPMC is required to perform 100% Visual Testing (VT) of these welds. See the attached picture.

Bay 14

This QA Inspector observed the following work in progress:

Submerged Arc Welding (SAW) welding of weld joint SEG3232-001-004 located on the deck plate to deck plate splice joint of OBG Segment 13CW. Welder is identified as 045270. ABF Quality Control (QC) is identified as Mis. Lv Yun. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2221-B-L2c-S-2.

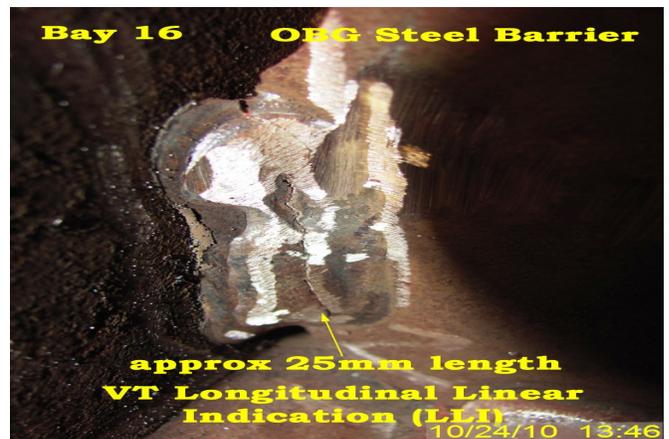
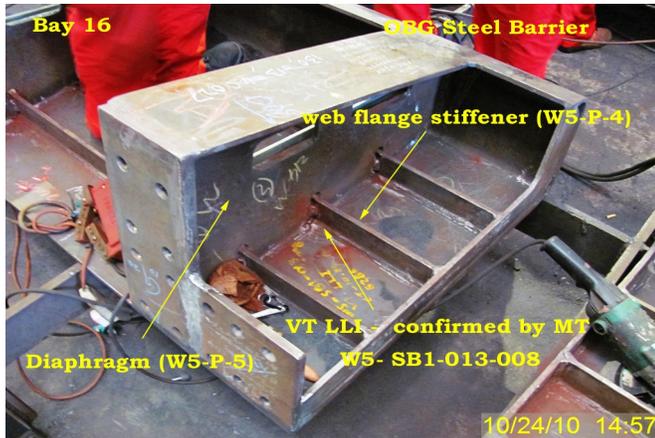
SAW welding of weld joint SEG3020AZ-004 located on the side plate to side plate splice joint of OBG Segment 13CW. Welder is identified as 207237. ABF Quality Control (QC) is identified as Mis. Lv Yun. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2221-B-L2c-S-2.

SAW welding of weld joint SEG3020AZ-004 located on the anchor plate to anchor plate splice joint of OBG Segment 14E. Welder is identified as 044771. ABF Quality Control (QC) is identified as Mr. Zhong Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2221-B-L2c-S-2.

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

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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: McClendon,Timothy

QA Reviewer