

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-024475**Date Inspected:** 09-Jun-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), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Lu Hua Jie**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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Chang xing Island in Shanghai, China. QA observed and/or found the following:

BAY 6:

This QA Inspector performed randomly Visual Inspection and Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL-6027 (UT) report for this date. The member is identified as OBG Cross Beam CB 18. The weld designations reviewed are as follows.

FB3168-004-044

NDT Notification No-09406

This QA Inspector randomly observed the following work in progress.

SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 054467 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 13AW. Joint identified as FB3121-001-178. ZPMC QC Identified as Li Yang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2212-Tc-U4b-FCM-1.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector observed ZPMC qualified welding personnel identified as 215248 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 13AW. Joint identified as FB3178-001-169. ZPMC QC Identified as Li Yang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2212-Tc-U4b-FCM-1.

Repair welding, SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 066459 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 14 West. Joint identified as SEG3020AG-003. ZPMC QC Identified as Zhu Lin with Temporary welding repair report WRR-B-WR21208. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-3G (3F) FCM-Repair-1.

Repair welding, SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 044772 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 13AE+13BE. Joint identified as OBE13B-001~003. ZPMC QC Identified as Wang Li Yang with Critical welding repair report CWR-B-CWR2992 Rev 3. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F) FCM-Repair-1.

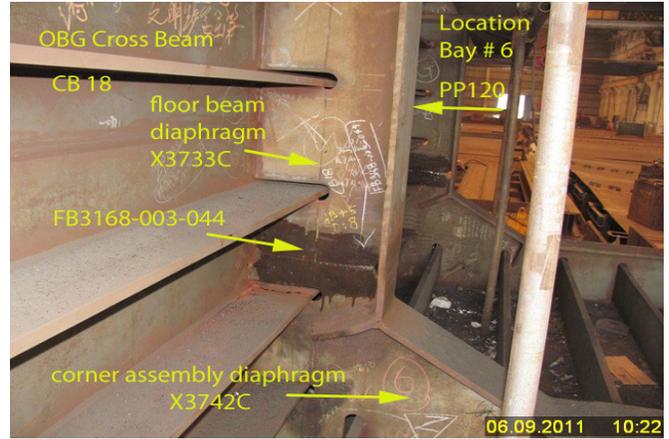
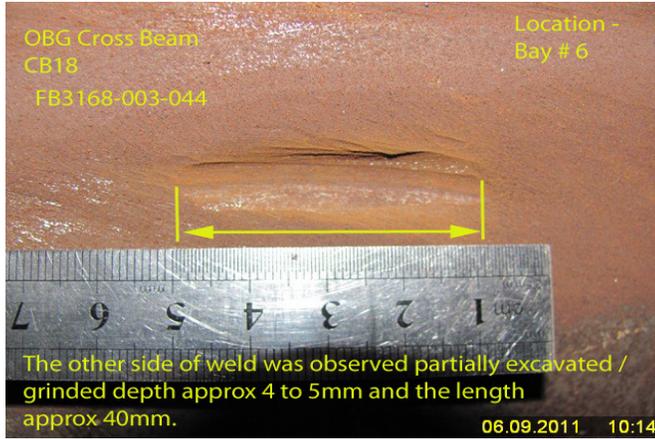
Description of Incident:

During the Quality Assurance Visual Inspection and Ultrasonic Testing (UT) review of welds located on OBG Cross Beam 18, this QA Inspector discovered the following issues: ZPMC Ultrasonic Testing (UT) technicians have tested and accepted a weld that did not meet the Visual Testing (VT) requirements of the contract documents. The weld is a Complete Joint Penetration (CJP) Butt-joint (joining the corner assembly diaphragm X3742C to floor beam diaphragm X3733C-Plate. The other side of weld was observed partially excavated/ground depth approx 4 to 5mm and the length approx 40mm. [at approx 150mm from side plate (SP) and no additional weld metal has been deposited. The weld is identified as FB3168-003-044 and is been accepted by ZPMC / ABF UT personnel. The weld is located at PP120. Material thickness is 12mm. The weld is designated as a Non Seismic Performance Critical Material (NON SPCM). The Notice of Witness Inspection Number (NWIT) is 09406. The indication is located within an area previously tested and accepted by ZPMC Quality control personal (See QC UT accepted chalk mark). For more information see below attached pictures and this QA inspector generated Incident report on this date.

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

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



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 Eric Tsang: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Shailesh	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer
