

**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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015977**Date Inspected:** 26-Jul-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:** Gong Wai**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 13AW, weld No. SP3101-001-001~022. The welders are identified as #044795/044774. ZPMC QC is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2132.

FCAW in the 2F position for the OBG Segment 13AW, weld No. SP3101-001-023~044. The welders are identified as #044830/044790. ZPMC QC is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2132.

Ultrasonic Testing (UT)

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as segment 11CE weld joints.

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The welds designation reviewed are as follows:

SEG070A-001,002,003  
CA087-003,004  
SSD20-PP101-002,009,131  
CSD2-PP101.5-101,105

Magnetic Particle Testing (MPT) for lift13 Longitudinal Diaphragm

This Quality Assurance (QA) Inspector performed Visual inspection and verification of Magnetic Particle Testing (MT) 15% for OBG Suspender Brackets SB74E and SB78E. This QA inspector generated a (MT) report for this date .This area was previously tested and accepted by ZPMC QC MT technicians.

The Weld Designation is as follows

SB019-074-002,003,023,024,028,030,041,042,048,053,057,063,065,066

At suspender Brackets SB78E during visual the QA Inspector found a slag inclusion approximately 12mm in length at weld area .The weld number is identified as SB019-074-060. The QA Inspector inform to ZPMC QC Mr. Li Ming Yang to make weld repair report and repair that slag inclusion area.

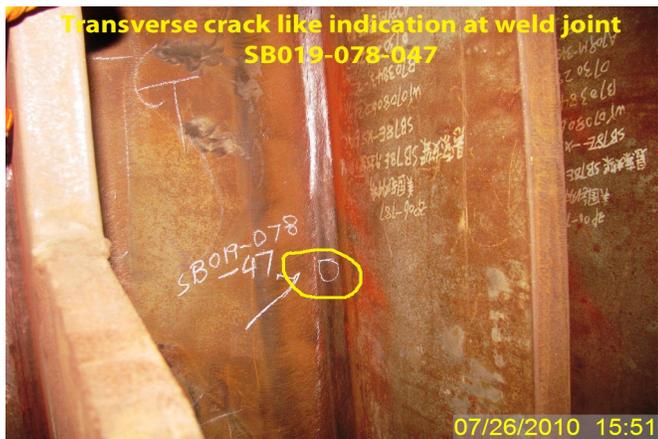
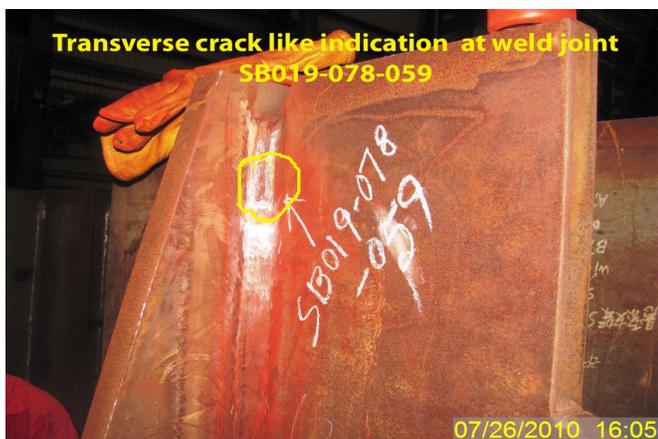
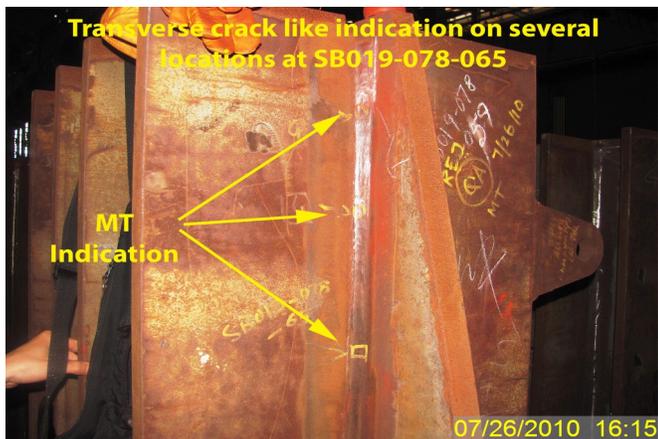
During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on Suspender Bracket SB78E, this Quality Assurance (QA) Inspector discovered fifteen(15) Linear indications on the following welds:  
-Weld # SB019-078-047: Two (2) Transverse linear indications measuring approximately 4mm ~5mm in length.  
Weld # SB019-078-059: Ten (10) Transverse linear indications measuring approximately 3mm~5mm in length.  
Weld # SB019-078-065: Three (3) Transverse linear indications measuring approximately 3mm~7mm in length.  
All indications are clearly marked on the material near the weld. All welds are designated as Non Seismic Performance Critical Material (Non SPCM). All welds are fillet welds joining between Middle web plate (X56CC) to Stiffeners(X55). OBG Suspender Bracket SB78E is located in Bay#19.The Notice of Witness Inspection Number (NWIT) is 06286. The indications are located inside an area that has been previously tested by ZPMC Quality Control (QC) personnel.

The QA Inspector generated an incident report on this date.

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

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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.

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<b>Inspected By:</b>	Bera,Subhasis	Quality Assurance Inspector
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<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer
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