

**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-011882**Date Inspected:** 30-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wu Zhi Cheng**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

Trial Assembly Area

This QA Inspector observed the following work in progress:

SMAW in the 3G position for the OBG Segment 6AW to 6BW Edge Plate to Edge Plate for repair, weld No. OBW6-001R1. The welder is identified as #048659. ZPMC QC is identified as Mr. Feng Ya Jun. The welding variables recorded by QC appear to comply with WPS-345-SMAW-3G(3F)-FCM-REPAIR-1. The weld repair report is B-CWR1140.

SMAW in the 1G position for the OBG Segment 6AE Side Plate to Bottom plate for repair, weld No. SEG028B-005-001R1. The welder is identified as #048659. ZPMC QC is identified as Mr. Chang Yong Gang. The welding variables recorded by QC appear to comply with WPS-345-SMAW-1G(1F)-FCM-REPAIR-1. The weld repair report is B-CWR1145.

During the Quality Assurance (QA) random in-process visual inspection of welds located on Orthotropic Box Girder (OBG) segment 6AE, this Quality Assurance Inspector (QA) discovered that ZPMC was observed welding a fillet over an excessive root gap of 12mm. The approved drawing SEG28M details using a fillet weld at these joints. The welds are identified as: SEG028M-50/51. These welds are located in between panel point 40 (PP) and

# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

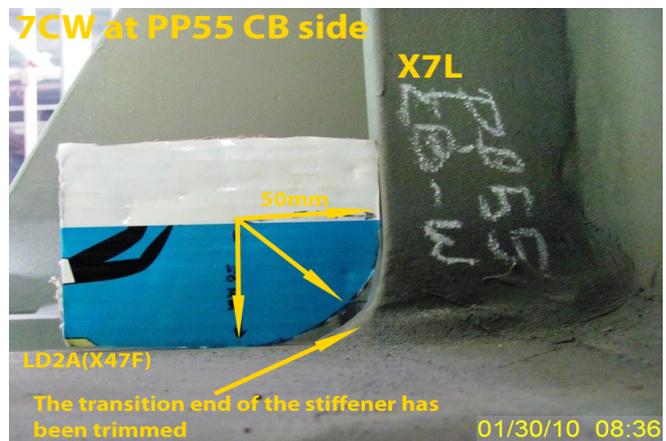
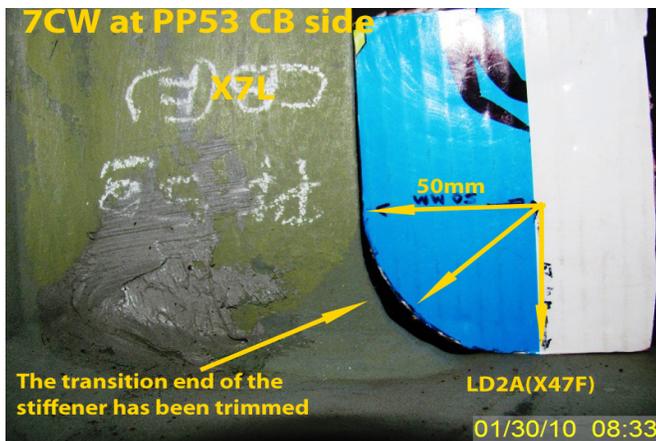
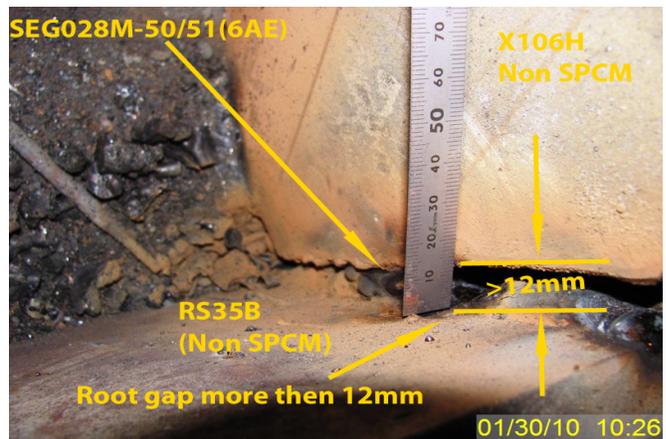
PP41 on the Cross Beam side. The weld is designated as Non Seismic Performance Critical Material (Non SPCM). The welds join "I" Stiffener Plate RS35B, Non SPCM to "T" Stiffener X106H, Non SPCM.

This QA Inspector generated an incident report for this date.

During the Quality Assurance (QA) random in-process visual inspection of the OBG segments 7BW and 7CW in the Trial Assembly area, this QA inspector discovered that the R=50mm portion at the transition end of the X7 stiffener to Longitudinal Diaphragm has been trimmed and found four location does not comply with the approved drawing (OBG Standards- Floor beam Details-X7). The 1st Weld joint is identified as SEG035C-032 at PP51 Crossbeam Side. The 2nd Weld joint is identified as SEG035B-040 at PP52 Counter weight Side. The 3rd Weld joint is identified as SEG037C-023 at PP53 Crossbeam Side. The 4th Weld joint is identified as SEG035C-008 at PP55 Crossbeam Side. All joints are Partial Joint Penetration (PJP) as per WD20W, weld joint connecting the vertical floor beam flange (stiffener) X7 to the Longitudinal Diaphragm flange plate.

This QA Inspector generated an incident report for this date.

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



## Summary of Conversations:

---

---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

---

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.

---

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

---