

**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-012351**Date Inspected:** 27-Feb-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

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes No N/A	
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes No N/A	
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes No N/A	
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes No N/A	
		<b>Delayed / Cancelled:</b>	Yes No N/A	
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG Components	

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Hiranch Patel, was present during the times noted above for observations relative to the work being performed.

**Segment-9DW**

During random Quality Assurance Visual review of welds located on segment 9DW, this Quality Assurance Inspector (QA) discovered the following issues:

-Nine (9) linear indications measuring approximately 4 mm and 50 mm in length.

-The indications are clearly marked on the material near the weld.

-The welds are identified as:

1. FB003-140-005, Longitudinal crack, approximately 50mm in length@ PP80, Y location-9500mm from Counter Weight side.

2. FB003-140-004, Transverse crack, approximately 6mm in length@ PP80, Y location-8270mm from Cross Beam side.

3. FB011-025-004, total seven (7) Transverse cracks, measuring approximately 4mm to 8mm in Length and Y locations is as given below.

- Indication 1- 9220 mm from Counter Weight side.
- Indication 2&3- 6440 mm from Counter Weight side.
- Indication 4&5- 6320 mm from Counter Weight side.
- Indication 6&7- 1040 mm from Counter Weight side.

-These welds are Fillet weld joining the Floor beam Web to Flange.

- The Floor beam Web to Flange is identified as non SPCM.

# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

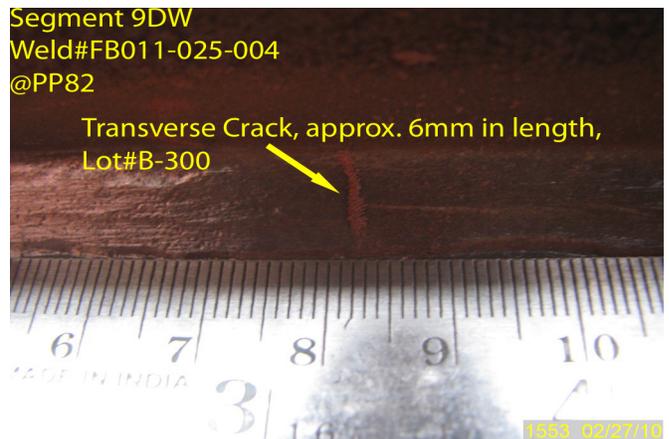
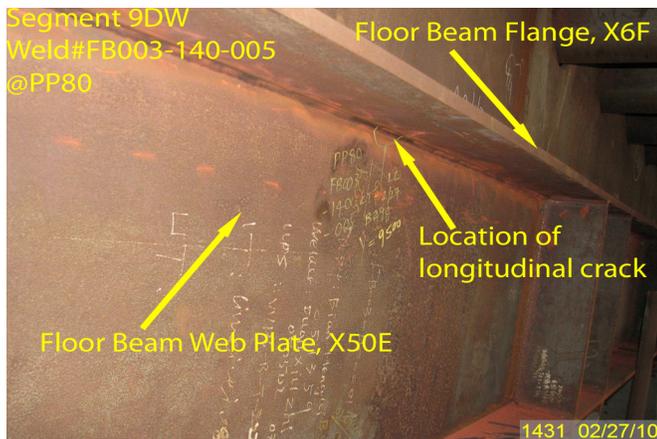
- These welds are designated as non Seismic Performance Critical Member (non SPCM).
  - OBG segment 9DW is located in outside yard, behind OBG Bay#14.
  - The indications were discovered visually and confirmed by Magnetic particle Testing (MT) by Caltrans QA.
  - ZPMC Quality Control Personnel have performed 25% Magnetic Particle Testing of these welds.
- For further information, see the attached pictures below. Please see incident report on this date.

## Segment 9DW

This QA inspector performed VT of approximately 100% of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as OBG Components. The weld designations reviewed are as follows. For further information, please see attached pictures.

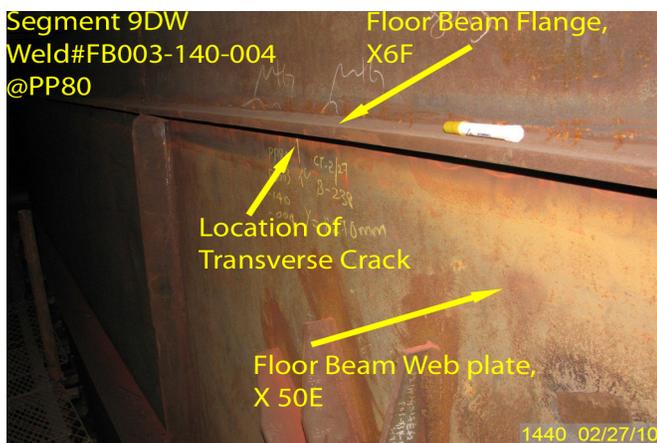
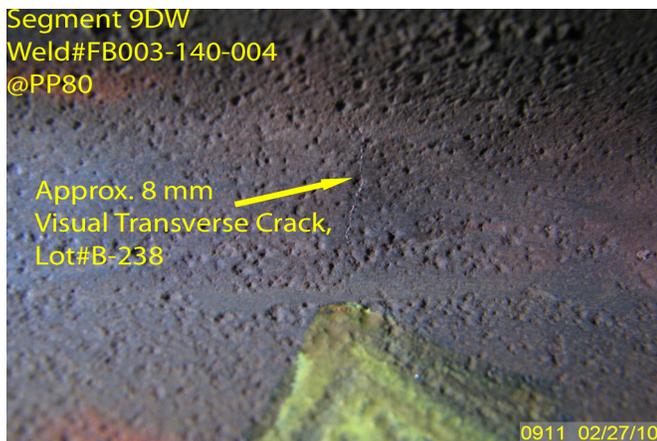
- (FB003A-004/005)@ PP80
- (FB011A-003/004)@ PP80
- (FB039-003-092/93)@ PP80
- (FB003-145-004)@ PP82
- (FB011-025-004)@ PP82
- (FB027-007-093)@ PP82

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



# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )



## 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.

**Inspected By:** Patel,Hiranch

Quality Assurance Inspector

**Reviewed By:** McClendon,Timothy

QA Reviewer