

**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 #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCR-000508**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 16-Nov-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0481**Type of problem:****Welding****Concrete****Other****Welding****Curing****Procedural****Bridge No:** 34-0006**Joint fit-up****Coating****Other****Component:** Segment 7AW Weld Joint FB and Flange at PP49**Procedural****Procedural****Description:**

**Reference Description:** Repairs of Transverse indications by the Contractor without prior Engineer's approval in OBG Segment 7AW

**Description of Non-Conformance:**

During a random observation of Magnetic Particle Testing (MT) performed by ABFJV MT technicians and ZPMC MT technicians of the OBG Segment 7AW welds. The Caltrans Quality Assurance (QA) inspector observed a total five (5) Transverse Indications located at welds SSD13-PP48-004, 005 and SSD13-PP49-004, 005. ZPMC personal completed these weld repairs without prior Engineer approval or utilizing an approved Critical Weld Repair procedure (CWR).

**Applicable reference:**

-Special Provisions Section 8.3 Welding; In addition to the provisions in AWS D1.5, Section 3.7.4 and Section 12.17, Third-time repairs of welds or base metals, regardless of NDT method, and all repairs of cracks require prior approval of the engineer.

-Special Provisions Section 8-3 Welding; "The Engineer shall be notified immediately in writing when welding problems, deficiencies, base metal repairs, or any other type of repairs not submitted in the WQCP are

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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-AWS D1.5-2002 Section 3.7.4; Prior approval of the Engineer shall be obtained for repairs to base metal, repair of major or delayed cracks, or for a revised design to compensate for deficiencies.

-AWS D1.5-2002 Section 6.3.1; The Inspector shall make certain that all WPS's are qualified in conformance with Section 5 of this code. The Inspector shall make certain that each welding operation is covered by a written WPS and that such WPS's are available to the welders and Inspectors for reference.

**Who discovered the problem:** Hiranch Patel

**Name of individual from Contractor notified:** Peter Shaw

**Time and method of notification:** 1600 hours, Verbal

**Name of Caltrans Engineer notified:** Ching Chao and Bill Howe

**Time and method of notification:** 1700 hours, Verbal

**QC Inspector's Name:** Zhang Wei

**Was QC Inspector aware of the problem:** Yes No

**Contractor's proposal to correct the problem:**

N/A

**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 Mazen Wahbeh, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Carreon,Albert	Lead Reviewer/Task Leader
<b>Reviewed By:</b>	Wahbeh,Mazen	SMR

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**DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge**

333 Burma Road  
Oakland CA 94607  
Tel: Fax:

**NON-CONFORMANCE REPORT TRANSMITTAL**

**To:** AMERICAN BRIDGE/FLUOR, A JV  
375 BURMA ROAD  
OAKLAND CA 95607

**Date:** 11-Dec-2009

**Contract No:** 04-0120F4  
04-SF-80-13.2 / 13.9

**Dear:** Mr. Charles Kanapicki

**Job Name:** SAS Superstructure

**Attention:** Mr. Thomas Nilsson Project/Fabrication Manager

**Document No:** 05.03.06-000471

**Subject:** NCR No. ZPMC-0481

**Reference Description:** Repairs of Transverse indications by the Contractor without prior Engineer's approval in OBG Segment 7AW

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

**Material Location:** OBG **Lift:** 07

**Remarks:**

During a random observation of Magnetic Particle Testing (MT) performed by ABFJV MT technicians and ZPMC MT technicians of the OBG Segment 7AW welds. The Caltrans Quality Assurance (QA) inspector observed a total five (5) Transverse Indications located at welds SSD13-PP48-004, 005 and SSD13-PP49-004, 005. ZPMC personal completed these weld repairs without prior Engineer approval or utilizing an approved Critical Weld Repair procedure (CWR).

**Action Required and/or Action Taken:**

Submit CWR procedure to the engineer for approval. Missed MT indications have become a chronic problem. Provide the appropriate training to MT technicians to minimize future occurrences.

**Transmitted by:** Bill Howe

**Attachments:** ZPMC-0481

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao

**File:** 05.03.06

## NCR PROPOSED RESOLUTION

**To:** CALTRANS - SAS Superstructure  
333 Burma Road  
Oakland CA 94607

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000471

**Subject:** NCR No. ZPMC-0481

**Dated:** 11-Jan-2010

**Contract No.:** 04-0120F4  
04-SF-80-13.2 / 13.9

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000467 Rev: 00

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**Contractor's Proposed Resolution:**

**Reference Resolution:** This NCR is written for repairs of transverse cracks without an approved CWR, when in fact there was a CWR. CWR B-CWR913. also, the weld joints referenced in the NCR are incorrect.

This NCR is written for repairs of transverse cracks without an approved CWR, when in fact there was a CWR. CWR B-CWR913. also, the weld joints referenced in the NCR are incorrect. Please see the ZPMC letter of response. ZPMC requests closure of this NCR.

**Submitted by:** Lawton, Steve

**Attachment(s):** ABF-NPR-000467R00;

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**Caltrans' comments:**

**Status:** REJ

**Date:** 11-Jan-2010

Response letter is not sufficient to close this NCR. Please provide the requested documentation.

**Submitted by:** Howe, Bill

**Attachment(s):**

**Date:** 11-Jan-2010



No. B-571

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2010-1-10**

**REGARDING: NCR-000508(ZPMC-0481)**

With this letter of response, ZPMC requests withdraw of CT NCR-000508(ZPMC-0481), what mentioned that CT Inspector observed repairs of transverse indications without approved CWR..

- B-CWR913 reflected to these transverse indications has got approved by Engineer prior to repair.
- These fillet welds have been changed into CJP, so the correct weld IDs are: SSD13-PP48-005 & SSD13-PP49-004.
- A misunderstanding occurred by this CT inspector.

Based on the above responses, ZPMC requests withdraw of this NCR.

**ATTACHMENT:**

NCR-000508(ZPMC-0481)

*[Handwritten signature]*  
1/10/10



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333 Burma Road  
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Tel: Fax:

**NON-CONFORMANCE REPORT TRANSMITTAL**

**To:** AMERICAN BRIDGE/FLUOR, A JV  
375 BURMA ROAD  
OAKLAND CA 95607

**Date:** 11-Dec-2009

**Contract No:** 04-0120F4  
04-SF-80-13.2 / 13.9

**Dear:** Mr. Charles Kanapicki  
**Attention:** Mr. Thomas Nilsson Project/Fabrication Manager  
**Subject:** NCR No. ZPMC-0481

**Job Name:** SAS Superstructure  
**Document No:** 05.03.06-000471

**Reference Description:** Repairs of Transverse indications by the Contractor without prior Engineer's approval in OBG Segment 7AW

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**Lift:** 07

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**Transmitted by:** Bill Howe

**Attachments:** ZPMC-0481

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao  
**File:** 05.03.06

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.25B

**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT**

Location: Changxing Island, Shanghai, P.R. China

Report No: NCR-000508

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 16-Nov-2009

Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

NCR #: ZPMC-0481

**Type of problem:**Welding  Concrete  Other Welding  Curing  Procedural Joint fit-up  Coating  Other Procedural  Procedural  Description: 

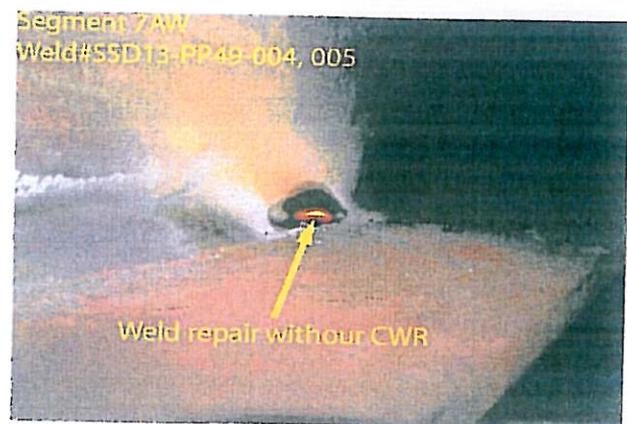
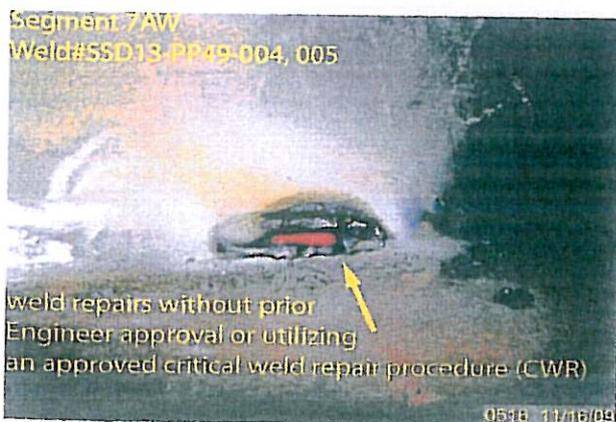
Bridge No: 34-0006

Component: Segment 7AW Weld Joint FB and Flange at PP49

**Reference Description:** Repairs of Transverse indications by the Contractor without prior Engineer's approval in OBG Segment 7AW

**Description of Non-Conformance:**

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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(Continued Page 2 of 2)

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**Time and method of notification:** 1600 hours, Verbal

**Name of Caltrans Engineer notified:** Ching Chao and Bill Howe

**Time and method of notification:** 1700 hours, Verbal

**QC Inspector's Name:** Zhang Wei

**Was QC Inspector aware of the problem:**  Yes  No

**Contractor's proposal to correct the problem:**

N/A

**Comments:**

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**Inspected By:** Carreon,Albert

Lead Reviewer/Task Leader

**Reviewed By:** Wahbeh,Mazen

SMR

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCS-000686**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 11-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0481**Type of problem:**

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b>
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Date the Non-Conformance Report was written:** 16-Nov-2009**Description of Non-Conformance:**

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**Contractor's proposal to correct the problem:**

N/A

**Corrective action taken:**

Contractor submitted CWR for repairs and repairs have been found acceptable.

**Did corrective action require Engineer's approval?** Yes No**If so, name of Engineer providing approval:****Date:****Is Engineer's approval attached?** Yes No**Comments:**

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**Inspected By:** Simonis, Jim

Quality Assurance Inspector

**Reviewed By:** Wahbeh, Mazen

QA Reviewer