

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, China**Report No:** NCR-000793**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 10-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0755**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: BP3070A, 13CW
Procedural	Procedural	Description:	

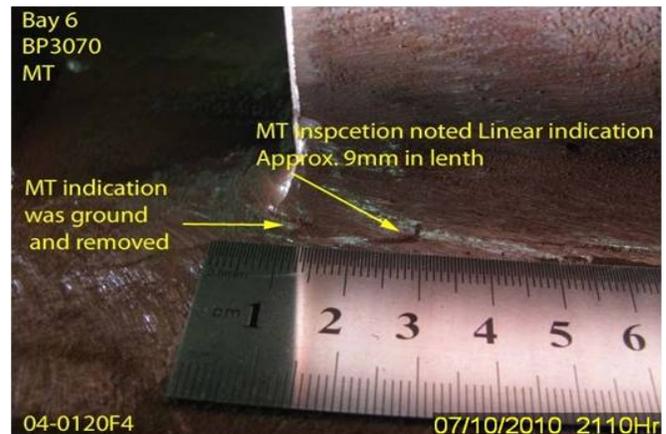
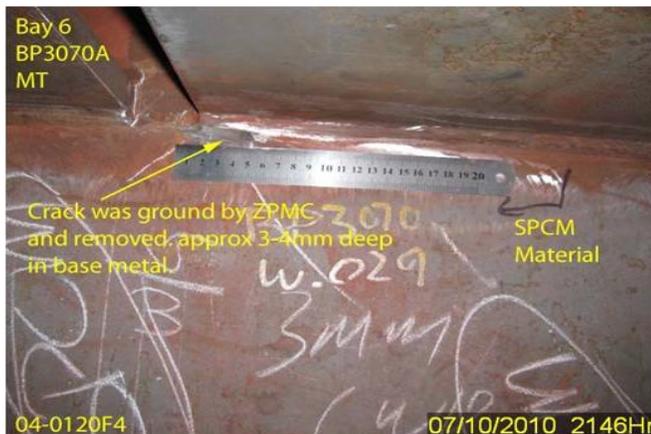
Reference Description: Missed MT Indication**Description of Non-Conformance:**

During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder(OBG) Bottom Plate, this Quality Assurance Inspector (QA) discovered the following issue:

- Weld identified as: BP3070-029.
- One Longitudinal crack indication at the toe of the weld was missed by ZPMC.
- The "Y" location is approximately 10mm from the end of the stiffener.
- Length of Crack is 9mm.
- The fillet weld size as measured by QA is 8 mm.
- Bottom Plates are located in the OBG Sub assembly Bay#6.
- This component is SPCM material.

The Notice of Witness Inspection Number (NWIT) is 06168. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.

The attached photographs provide additional detail.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

AWS D1.5 2002 Section 6 figure 6.8 – specifies for fillet weld size of 8mm the maximum discontinuity length is approximately 2.5mm.

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

Who discovered the problem: Ken Riley

Name of individual from Contractor notified: Mr. Chen Ji Wei

Time and method of notification: 10:10_07-10-10_Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 10:00_7/12/10_Email

QC Inspector's Name: Liu Fa Wei

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

NA

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,(818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Devey,Jim	SMR
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Reviewed By:	Wahbeh,Mazen	SMR
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NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000750

Subject: NCR No. ZPMC-0755

Dated: 12-Aug-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000736 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has performed the repair of this indication and attached the subsequent MT report denoting acceptance of this weld.

ZPMC has performed the repair of this indication and attached the subsequent MT report denoting acceptance of this weld. ZPMC and ABFJV have held several meetings with the NDT department regarding missed indications. A disciplinary action procedure has been developed as well as an incentive procedure regarding this issue. We have stressed the point of being more thorough with inspections and to provide a cross checking for designated welds and or if questions arise regarding indications. ZPMC has also performed an internal training with the MT operators. ZPMC requests closure of this NCR.

Submitted by: Lawton, Steve

Attachment(s): ABF-NPR-000736R00;

Caltrans' comments:

Status: CLO

Date: 17-Aug-2010

The proposed resolution is acceptable. This NCR is considered closed.

Submitted by: Woo, Laraine

Date: 17-Aug-2010

Attachment(s):



No. B-837

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-08-11

REGARDING: NCR-000793(ZPMC-0755)

ZPMC is providing the NDT record show the missed indication has been repaired and was tested to be acceptable. To reduce the same case from occurring ZPMC has performed an internal MT refresh training to all the MT operators on July 31, 2010. Based on this ZPMC is requesting closure of this NCR.

ATTACHMENT:

NCR-000793(ZPMC-0755)

B787-MT-24845 R2

Im w

8/11/10



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: 13-Jul-2010

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

Dear: Mr. Charles Kanapicki
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Job Name: SAS Superstructure

Subject: NCR No. ZPMC-0755
Document No.: 05.03.06-000750

Reference Description: Missed MT Indication

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: 13

Remarks:

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- Length of Crack is 9mm.
- The fillet weld size as measured by QA is 8 mm.
- Bottom Plates are located in the OBG Sub assembly Bay#6.
- This component is SPCM material.

The Notice of Witness Inspection Number (NWIT) is 06168. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.

Action Required and/or Action Taken:

Proposed a resolution for the identified non-conformance with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Laraine Woo Transportation Engineer

Attachments: ZPMC-0755

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao, Bill Casey
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, China **Report No:** NCR-000793
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 10-Jul-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0755

Type of problem:

- Welding Concrete Other
- Welding Curing Procedural **Bridge No:** 34-0006
- Joint fit-up Coating Other **Component:** BP3070A, 13CW
- Procedural Procedural Description:

Reference Description: Missed MT Indication

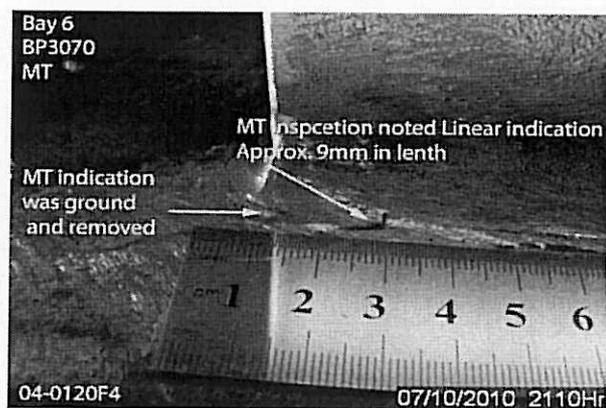
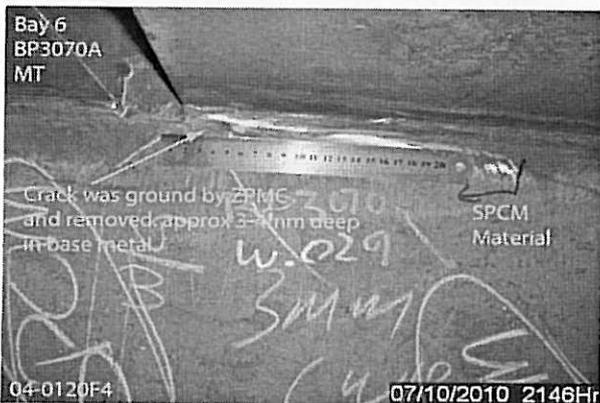
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

AWS D1.5 2002 Section 6 figure 6.8 – specifies for fillet weld size of 8mm the maximum discontinuity length is approximately 2.5mm.

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

Who discovered the problem: Ken Riley

Name of individual from Contractor notified: Mr. Chen Ji Wei

Time and method of notification: 10:10_07-10-10_Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 10:00_7/12/10_Email

QC Inspector's Name: Liu Fa Wei

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

NA

Comments:

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Inspected By:	Devey,Jim	SMR
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, China**Report No:** NCS-000719**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 17-Aug-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0755**Type of problem:**

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

Date the Non-Conformance Report was written: 10-Jul-2010**Description of Non-Conformance:**

During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder(OBG) Bottom Plate, this Quality Assurance Inspector (QA) discovered the following issue:

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The attached photographs provide additional detail.

Contractor's proposal to correct the problem:

Repair said indication and perform NDT required to verify weld quality.

Corrective action taken:

Contractor supplied post repair NDT documentation verifying repair meets Contract weld quality requirements. ZPMC has instituted disciplinary actions as well as incentives to prompt inspectors to perform more thorough inspections. Supplemental training has also been provided to NDT technicians.

Did corrective action require Engineer's approval? **Yes** **No**

If so, name of Engineer providing approval:

Date:

Is Engineer's approval attached?

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Yes No

Comments:

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Inspected By:	Simonis,Jim	Quality Assurance Inspector
Reviewed By:	Wahbeh,Mazen	QA Reviewer
