

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-000756**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 04-Jun-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0718**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: OBG Segment 10BW Bottom Plate
Procedural	Procedural	Description: Missed UT Indication by QC	

Reference Description: QA found 2 UT Indications after the contractor's had tested and accepted the welds for Segment 10BW Bottom Plate

Description of Non-Conformance:

During the Quality Assurance (QA) Ultrasonic Testing (UT) review of weld located on Segment 10BW, this QA Inspector discovered the following issue:

- A total of two (2) Class "A" indications measuring approximately 15-20mm in length.
- The 2 indications are located on the weld joint identified as SEG061A-005.
- The weld is a Complete Joint Penetration (CJP) butt weld joining the Bottom plate BP103A (PL747A) to Bottom plate BP49A (PL720A).

-The indication details are:

1. The D-rating is +7dB and length approximately 20mm.
The Thickness of the plate is 20mm and depth of the indication approximately 11mm.
The "Y" location for this indication approximately 3930mm one edge of the bottom plate to PP89 West side.
2. The D-rating is +6dB and length approximately 15mm.
The Thickness of the plate is 20mm and depth of the indication approximately 15mm.
The "Y" location for this indication approximately 4010mm one edge of the bottom plate to PP89 West side.

- The indications are clearly marked by the QA near the weld.
- OBG Segment 10BW is located in the outside yard on the north side of fabrication bay 19.

The Notice of Witness Inspection Number (NWIT) is 005887. The indications are located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform 100% UT inspection of this weld.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

AWS D1.5-2002, Section 6, Table 6.3; "Specifies a class A indication as having a dBs rating of +10 and lower for weld thicknesses 8mm through 20mm."

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: Vibin Kumar S

Name of individual from Contractor notified: Li Man Kit

Time and method of notification: 0900 hours, 06/05/10, Email

Name of Caltrans Engineer notified: Sean Eagen

Time and method of notification: 0700 hours, 06/07/10, 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, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Tsang, Eric	SMR
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Reviewed By:	Devey, Jim	SMR
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DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
 666 Feng Bin Road Room 708, Changxing Island
 Shanghai 201913 PR China
 Tel: 021-56856666 ext 207061 Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

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

Date: 07-Jun-2010

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: 05.03.06-000714

Subject: NCR No. ZPMC-0718

Reference Description: QA found 2 UT Indications after the contractor's had tested and accepted the welds for Segment 10BW Bottom Plate

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:** 10

Remarks:

During the Quality Assurance (QA) Ultrasonic Testing (UT) review of weld located on Segment 10BW, this QA Inspector discovered the following issue:

- A total of two (2) Class "A" indications measuring approximately 15-20mm in length.
- The 2 indications are located on the weld joint identified as SEG061A-005.
- The weld is a Complete Joint Penetration (CJP) butt weld joining the Bottom plate BP103A (PL747A) to Bottom plate BP49A (PL720A).

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- The indications are clearly marked by the QA near the weld.
- OBG Segment 10BW is located in the outside yard on the north side of fabrication bay 19.

The Notice of Witness Inspection Number (NWIT) is 005887. The indications are located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform 100% UT inspection of this weld.

Action Required and/or Action Taken:

NCT

(*Continued Page 2 of 2*)

Propose 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: Sean Eagen Transportation Engineer

Attachments: ZPMC-0718

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

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000714

Subject: NCR No. ZPMC-0718

Dated: 11-Jun-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000710 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC will provide NDT to show these welds are acceptable after the repairs are complete. Based on this proposal ZPMC requests that this NCR be approved, with actions pending.

ZPMC will provide NDT to show these welds are acceptable after the repairs are complete. Based on this proposal ZPMC requests that this NCR be approved, with actions pending.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000710R00

Caltrans' comments:

Status: AAP

Date: 14-Jun-2010

This proposed resolution is accepted, action pending. Please provide NDT results for these welds upon completion of the repairs.

Submitted by: Eagen, Sean

Date: 14-Jun-2010

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000714

Subject: NCR No. ZPMC-0718

Dated: 30-Jun-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000710 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has repaired the indication discovered in the NCR and has performed NDT after to show that the weld is acceptable.

ZPMC has repaired the indication discovered in the NCR and has performed NDT after to show that the weld is acceptable. To prevent further missed indications while performing UT. ZPMC inspectors will increase the acceptance criteria by +2dB to prevent missing these borderline indications. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000710R01;

Caltrans' comments:

Status: REJ

Date: 07-Jul-2010

The repair and NDT documentation submitted are acceptable. However, the Department cannot concur with the Contractor's proposal to increase the acceptance criteria by 2 dB. NDT shall be performed in accordance with D1.5 only.

Submitted by: Woo, Laraine

Attachment(s):

Date: 07-Jul-2010



No. B-809

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-6-30

REGARDING: NCR-000756(ZPMC-0718)

ZPMC is providing the NDT record show these indications have been removed, repaired and retested to be acceptable. To reduce the missed UT indication, ZPMC inspector will add +2dB than relevant code when performing UT testing. Based on this, ZPMC is requesting closure of this NCR.

ATTACHMENT:

N CR-000756(ZPMC-0718)

B787-UT-13304 R1

A handwritten signature in black ink, appearing to be 'J. M.' or similar, written in a cursive style.

6/30/10



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
666 Feng Bin Road Room 708, Changxing Island
Shanghai 201913 PR China
Tel: 021-56856666 ext 207061 Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

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

Date: 07-Jun-2010

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: 05.03.06-000714

Subject: NCR No. ZPMC-0718

Reference Description: QA found 2 UT Indications after the contractor's had tested and accepted the welds for Segment 10BW Bottom Plate

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:** 10

Remarks:

During the Quality Assurance (QA) Ultrasonic Testing (UT) review of weld located on Segment 10BW, this QA Inspector discovered the following issue:

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Action Required and/or Action Taken:

NCT

(Continued Page 2 of 2)

Propose 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: Sean Eagen Transportation Engineer

Attachments: ZPMC-0718

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, P.R. China

Report No: NCR-000756

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 04-Jun-2010

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

NCR #: ZPMC-0718

Type of problem:

Welding Concrete Other

Welding Curing Procedural Bridge No: 34-0006

Joint fit-up Coating Other Component: OBG Segment 10BW Bottom Plate

Procedural Procedural Description: Missed UT Indication by QC

Reference Description: QA found 2 UT Indications after the contractor's had tested and accepted the welds for Segment 10BW Bottom Plate

Description of Non-Conformance:

During the Quality Assurance (QA) Ultrasonic Testing (UT) review of weld located on Segment 10BW, this QA Inspector discovered the following issue:

- A total of two (2) Class "A" indications measuring approximately 15-20mm in length.
- The 2 indications are located on the weld joint identified as SEG061A-005.
- The weld is a Complete Joint Penetration (CJP) butt weld joining the Bottom plate BP103A (PL747A) to Bottom plate BP49A (PL720A).

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-The indications are clearly marked by the QA near the weld.

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The Notice of Witness Inspection Number (NWIT) is 005887. The indications are located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform 100% UT inspection of this weld.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

AWS D1.5-2002, Section 6, Table 6.3; "Specifies a class A indication as having a dBs rating of +10 and lower for weld thicknesses 8mm through 20mm."

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: Vibin Kumar S

Name of individual from Contractor notified: Li Man Kit

Time and method of notification: 0900 hours, 06/05/10, Email

Name of Caltrans Engineer notified: Sean Eagen

Time and method of notification: 0700 hours, 06/07/10, 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, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Tsang, Eric	SMR
Reviewed By:	Devey, Jim	SMR

NCR PROPOSED RESOLUTION

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

Dated: 13-Jul-2010

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

Attention: Pursell, Gary
Resident Engineer

Job Name: SAS Superstructure

Document No.: ABF-NPR-000710 Rev: 02

Ref: 05.03.06-000714

Subject: NCR No. ZPMC-0718

Contractor's Proposed Resolution:

Reference Resolution: ZPMC will adhere to the relevant inspection criteria when performing NDT. To prevent future missed indications ZPMC will verify any indications which are on the border of being rejectable.

ZPMC will adhere to the relevant inspection criteria when performing NDT. To prevent future missed indications ZPMC will verify any indications which are on the border of being rejectable. Based on this and previously submitted documentation, ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000710R02

Caltrans' comments:

Status: CLO

Date: 19-Jul-2010

The NDT documentation submitted and preventive measures taken by the Contractor are acceptable. This NCR is considered closed.

Submitted by: Woo, Laraine

Date: 19-Jul-2010

Attachment(s):

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

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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-000698**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 19-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0718**Type of problem:**

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

Date the Non-Conformance Report was written: 04-Jun-2010**Description of Non-Conformance:**

During the Quality Assurance (QA) Ultrasonic Testing (UT) review of weld located on Segment 10BW, this QA Inspector discovered the following issue:

- A total of two (2) Class "A" indications measuring approximately 15-20mm in length.
- The 2 indications are located on the weld joint identified as SEG061A-005.
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Contractor's proposal to correct the problem:

