

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-000754**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 02-Jun-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0717**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: OBG Segment 10CW Corner Assembly Diaphragm
Procedural	Procedural	Description:	

Reference Description: QA found 3 MT Indications after the contractor's had tested and accepted the welds for Segment 10CW Corner Assembly Diaphragm to Edge Plate Stiffener

Description of Non-Conformance:

During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds located on Segment 10CW, QA Inspectors discovered Three (3) Longitudinal Linear indications on the following welds:

- Weld #CSD3-PP092-092: One Longitudinal linear indication measuring approximately 27 mm in length.
- This weld is a Fillet Weld joining the Corner Assembly Diaphragm identified as X151B (SPCM) to Edge Plate Stiffener identified as RS88FB.
- The weld is designated as Seismic Performance Critical Material (SPCM).

- Weld #SSD22-PP093.5-140: One Longitudinal linear indication measuring approximately 12 mm in length.
- This weld is a Fillet Weld joining the Corner Assembly Diaphragm identified as X36B to Edge Plate Stiffener identified as RS89F.

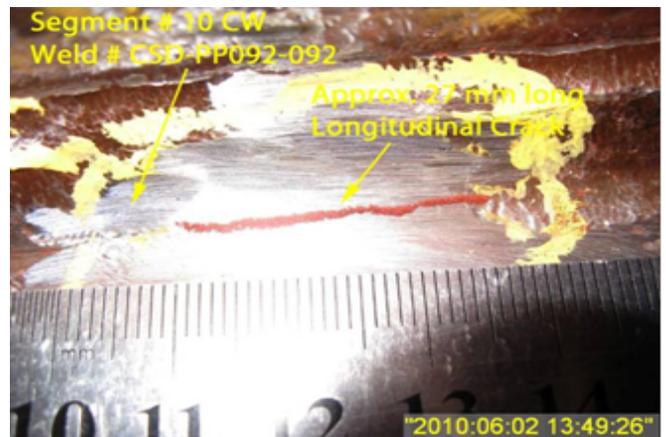
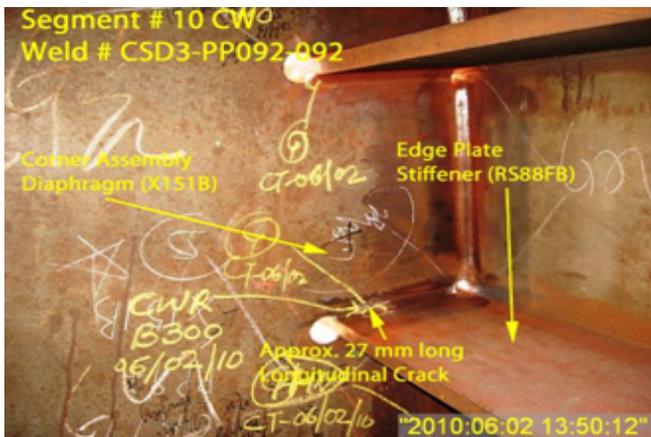
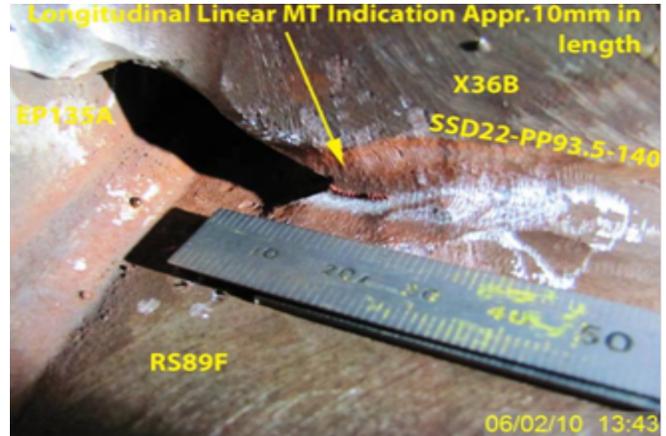
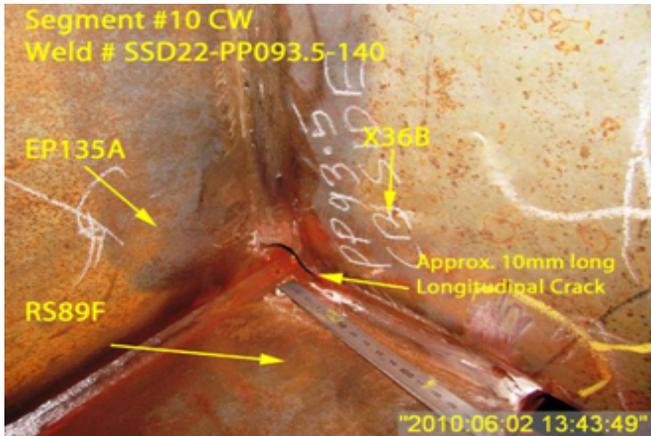
- Weld #SSD22-PP093.5-144: One Longitudinal linear indication measuring approximately 9 mm in length.
- This weld is a Fillet Weld joining the Corner Assembly Diaphragm identified as X36B to Edge Plate Stiffener identified as RS89F.

- All indications are clearly marked on the material near the weld.
- OBG segment 10CW is located outside west of Bay#16.

The Notice of Witness Inspection Number (NWIT) is 005839. The indications are located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

AWS D1.5-2002 Section 6.5.1: "The Inspector shall make certain that the size, length, and location of all welds conform to the requirements of this code and to the detail drawings and that no unspecified welds have been added without approval".

AWS D1.5-2002 Section 3.3.8 Temporary welds: "Temporary welds shall be subject to the same WPS requirements as final welds." "Temporary welds at other locations shall be shown on the shop drawings."

Who discovered the problem: Subhasis Bera & Vikram Singh

Name of individual from Contractor notified: Yang Chao

Time and method of notification: 1600 hours, 06/02/10, Verbal

Name of Caltrans Engineer notified: Sean Eagen

Time and method of notification: 1400 hours, 06/03/10, Verbal

QC Inspector's Name: Li Ping

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

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

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: 03-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: 05.03.06-000712

Subject: NCR No. ZPMC-0717

Reference Description: QA found 3 MT Indications after the contractor's had tested and accepted the welds for Segment 10CW Corner Assembly Diaphragm

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) Magnetic Particle Testing (MT) review of welds located on Segment 10CW, QA Inspectors discovered Three (3) Longitudinal Linear indications on the following welds:

- Weld #CSD3-PP092-092: One Longitudinal linear indication measuring approximately 27 mm in length.
- This weld is a Fillet Weld joining the Corner Assembly Diaphragm identified as X151B (SPCM) to Edge Plate Stiffener identified as RS88FB.
- The weld is designated as Seismic Performance Critical Material (SPCM).

- Weld #SSD22-PP093.5-140: One Longitudinal linear indication measuring approximately 12 mm in length.
- This weld is a Fillet Weld joining the Corner Assembly Diaphragm identified as X36B to Edge Plate Stiffener identified as RS89F.

- Weld #SSD22-PP093.5-144: One Longitudinal linear indication measuring approximately 9 mm in length.
- This weld is a Fillet Weld joining the Corner Assembly Diaphragm identified as X36B to Edge Plate Stiffener identified as RS89F.

- All indications are clearly marked on the material near the weld.
- OBG segment 10CW is located outside west of Bay#16.

The Notice of Witness Inspection Number (NWIT) is 005839. The indications are located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.

Action Required and/or Action Taken:

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.

NCT

(Continued Page 2 of 2)

Transmitted by: Sean Eagen Transportation Engineer

Attachments: ZPMC-0717

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

Dated: 11-Jun-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-000709 Rev: 00

Ref: 05.03.06-000712

Subject: NCR No. ZPMC-0717

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-000709R00

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: 05.03.06-000712

Subject: NCR No. ZPMC-0717

Dated: 21-Jun-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000709 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has repaired the indications and is providing NDT to show that the weld is acceptable. ZPMC has written and internal NCR.

ZPMC has repaired the indications and is providing NDT to show that the weld is acceptable. ZPMC has written and internal NCR. In addition, ABFJV and ZPMC's QA Manager are having a meeting to discuss the issues of missed indications in the OBG and determine a better way to prevent the missed indications. Please note the weld IDs referenced in the NCR were incorrect and the relevant reports ZPMC is providing show the correct weld IDs. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000709R01;

Caltrans' comments:

Status: CLO

Date: 27-Jun-2010

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0717 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 27-Jun-2010



No. B-795

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-6-21

REGARDING: NCR-000754(ZPMC-0717)

ZPMC acknowledges the three indications were missed and is providing the NDT records show these indications have been removed, repaired and are now acceptable. Please be noticed the correct welds' ID are in attached NDT report. Based on this, please consider closure of this NCR.

ATTACHMENT:

NCR-000754(ZPMC-0717)

B787-MT-23718 R1

B787-UT-23719 R1

John Z
6/21/10



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

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375 BURMA ROAD
OAKLAND CA 95607

Date: 03-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: 05.03.06-000712

Subject: NCR No. ZPMC-0717

Reference Description: QA found 3 MT Indications after the contractor's had tested and accepted the welds for Segment 10CW Corner Assembly Diaphragm

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- Quality Control (QC) not performed in conformance with contract documents.
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Material Location: OBG **Lift:** 10

Remarks:

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File: 05.03.06

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Contract #: 04-0120F4City: 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-000754**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 02-Jun-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0717**Type of problem:**Welding Concrete Other Welding Curing Procedural Bridge No: 34-0006Joint fit-up Coating Other Component: OBG Segment 10CW Corner Assembly DiaphragmProcedural Procedural Description:

Reference Description: QA found 3 MT Indications after the contractor's had tested and accepted the welds for Segment 10CW Corner Assembly Diaphragm to Edge Plate Stiffener

Description of Non-Conformance:

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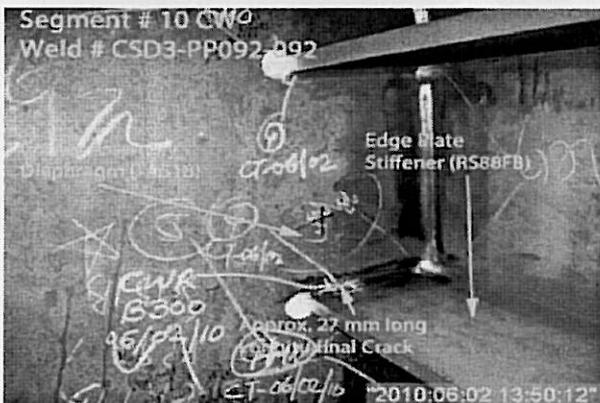
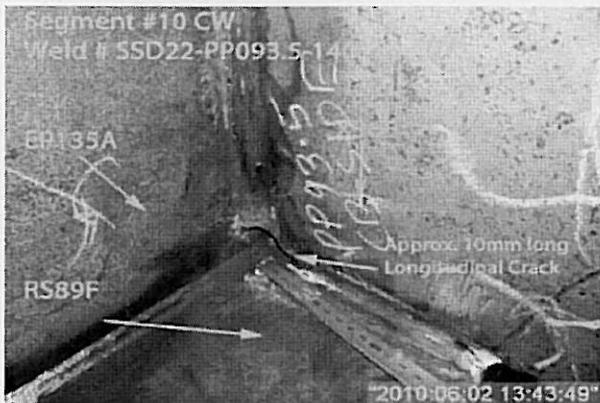
-All indications are clearly marked on the material near the weld.

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



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Time and method of notification: 1600 hours, 06/02/10, Verbal

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Time and method of notification: 1400 hours, 06/03/10, Verbal

QC Inspector's Name: Li Ping

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

Comments:

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

Office of Structural Materials for your project.

Inspected By: Tsang, Eric

SMR

Reviewed By: Devey, Jim

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-000699**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 27-Jun-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0717**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: 02-Jun-2010**Description of Non-Conformance:**

During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds located on Segment 10CW, QA Inspectors discovered Three (3) Longitudinal Linear indications on the following welds:

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-OBG segment 10CW is located outside west of Bay#16.

The Notice of Witness Inspection Number (NWIT) is 005839. The indications are located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.

Contractor's proposal to correct the problem:

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

Corrective action taken:

