

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 #: 04-0120F4
 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-000614

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 07-Jan-2010

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

NCR #: ZPMC-0587

Type of problem:

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Segment 6AE to 6BE T-Rib Stiffener Weld
Procedural	Procedural	Description:	

Reference Description: Welding was performed on Misaligned T-rib Stiffener to T-rib Stiffener splice joint at Segment 6AE/6BE

Description of Non-Conformance:

During the Quality Assurance (QA) random in-process visual inspection of T-Ribs stiffeners in the OBG Trial Assembly area, this QA inspector discovered the following issue:

-Three (3) T-Rib web welds between the 6AE to 6BE (transverse splice) were misaligned across the weld joints.

-The Side Panel (SP) weld joints are identified as:

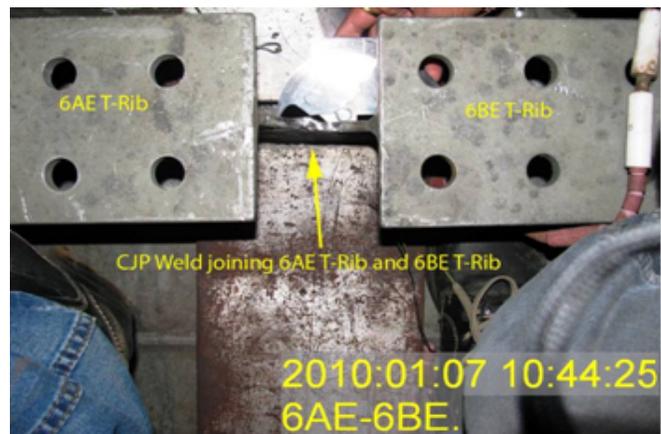
- 1) SP307-001-032 (3rd T-Rib on SP from top-BP side)
- 2) SP334-001-023 (12th T-Rib on SP from top-BP side)
- 3) SP526-002-070 (1st T-Rib on SP from top-CB side)

-These welds are complete joint penetration (CJP) butt weld.

-The SP material at the BP and CB side are designated as non Seismic Performance Critical Members (Non SPCM).

-The out of tolerance offset measurement across the welds were measured at 4mm.

-The maximum out of tolerance allowed per AWS D1.5 2002 is 3mm.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

-Special Provisions Section 10-1.59 Steel Structures, Shop Welding G item 2: Misalignment between discontinuous members shall not exceed 10% of the thickness of the thinner member or 3mm, whichever is less.

-AWS D1.5 (02) Section 3.3.3: "Parts to be joined by groove welds shall be carefully aligned. Where the parts are effectively restrained against bending due to eccentricity in alignment, the offset from theoretical alignment shall not exceed 10 percent of the thickness of the thinner part joined, but in no case shall be more than 3 mm (1/8)."

-Standard Specification July 1999, Section 55-3.09 Finished Members: Finish members shall be true to line and free from twists, bends and open joints.

-Standard Specification July 1999, Section 55-3.01 Quality of Workmanship: Workmanship and finish shall be equal to the best general practice in modern bridge shops.

Who discovered the problem: M.Manikandan

Name of individual from Contractor notified: Kevin Chen

Time and method of notification: 1600 hours, 01-07-10, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 0800 hours, 01-08-10, Verbal

QC Inspector's Name: Wuzhi Cheng

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.

Inspected By: Carreon,Albert

Lead Reviewer/Task Leader

Reviewed By: Wahbeh,Mazen

SMR



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: 08-Jan-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: 05.03.06-000577

Subject: NCR No. ZPMC-0587

Reference Description: Welding was performed on Misaligned T-rib Stiffener to T-rib Stiffener splice joint at Segment 6AE/6BE

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:** 06

Remarks:

During the Quality Assurance (QA) random in-process visual inspection of T-Ribs stiffeners in the OBG Trial Assembly area, this QA inspector discovered the following issue:

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 - 3) SP526-002-070 (1st T-Rib on SP from top-CB side)
- These welds are complete joint penetration (CJP) butt weld.
- The SP material at the BP and CB side are designated as non Seismic Performance Critical Members (Non SPCM).
- The out of tolerance offset measurement across the welds were measured at 4mm.
- The maximum out of tolerance allowed per AWS D1.5 2002 is 3mm.

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.

Transmitted by: Bill Howe Sr. Transportation Engineer

Attachments: ZPMC-0587

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: 05.03.06-000577

Subject: NCR No. ZPMC-0587

Dated: 18-Mar-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000627 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has cut the misaligned welds out and has realigned them. This correct alignment has been verified by the Department and this item has been removed from the punchlist to verify this.

REVISED ATTACHMENT, 03/24/10

ZPMC has cut the misaligned welds out and has realigned them. This correct alignment has been verified by the Department and this item has been removed from the punchlist to verify this. ZPMC is providing NDT documentation to show that the welds that were cut and rewelded are acceptable. Based on this ZPMC request closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000627R00;

Caltrans' comments:

Status: CLO

Date: 05-Apr-2010

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0587 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 05-Apr-2010



No. B-694

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-3-18

REGARDING: NCR-000614(ZPMC-0587)

ZPMC has cut off these three ribs to rectify the flatness issue. ZPMC is providing NDT records show after rectification these split welds and affected fillet welds were tested acceptable. Please be noticed the weld ID SP526-002-070 was confirmed to be SP527-001-051. After NDT verification this issue has been removed from punchlist by CT's representative. Based on this, ZPMC is requesting this NCR to be closed.

ATTACHMENT:

NCR-000614(ZPMC-0587)

B787-UT-11501

B787-MT-19782

B787-UT-11762

B787-MT-20773

A handwritten signature in black ink, appearing to be 'Jim' followed by a stylized flourish.

3/18/10



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: 08-Jan-2010

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-0587

Job Name: SAS Superstructure
Document No: 05.03.06-000577

Reference Description: Welding was performed on Misaligned T-rib Stiffener to T-rib Stiffener splice joint at Segment 6AE/6BE

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Material Location: OBG

Lift: 06

Remarks:

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Transmitted by: Bill Howe Sr. Transportation Engineer

Attachments: ZPMC-0587

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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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-000614

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 07-Jan-2010

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

NCR #: ZPMC-0587

Type of problem:

- Welding Concrete Other
- Welding Curing Procedural
- Joint fit-up Coating Other
- Procedural Procedural Description:

Bridge No: 34-0006

Component: Segment 6AE to 6BE T-Rib Stiffener Weld

Reference Description: Welding was performed on Misaligned T-rib Stiffener to T-rib Stiffener splice joint at Segment 6AE/6BE

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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Name of individual from Contractor notified: Kevin Chen

Time and method of notification: 1600 hours, 01-07-10, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 0800 hours, 01-08-10, Verbal

QC Inspector's Name: Wuzhi Cheng

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.

Inspected By: Carreon,Albert

Lead Reviewer/Task Leader

Reviewed By: Wahbeh,Mazen

SMR

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(707) 649-5453
(707) 649-5493

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-000605**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 14-Apr-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0587**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: 07-Jan-2010**Description of Non-Conformance:**

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Contractor's proposal to correct the problem:

Remove welds to correct alignment issue, reweld and perform NDT required to verify weld quality.

Corrective action taken:

Welds were removed and members were brought within acceptable alignment tolerance. The Contractor submitted NDT documentation verifying new welds as well as welds affected by repair procedures are in conformance with Contract specifications.

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
