

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-000740**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-May-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0703**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: CB10 Side Panel
Procedural	Procedural	Description:	

Reference Description: Unknown Material being tacked onto a CB10 Side Panel not conforming to the AWS D1.5 Section 12 Requirement

Description of Non-Conformance:

During Quality Assurance (QA) random in-process observations of the fabrication of Cross Beam CB10, this QA inspector discovered the following issue:

- During fit-up of Cross Beam CB10 side panel to FL3 panel of OBG segment 8CE, ZPMC personnel had temporarily tack welded a steel plate at the south end of side panel (SP205A) of CB10.
- Side Panel – SP205A is identified on the approved shop drawings as Seismic Performance Critical Member (SPCM).
- The size and length of the tack weld do not meet the requirements of AWS D1.5 2002, Table 12.2.
- The approved Shop drawing does not specify any weld in this area.
- No fabrication procedure was available with QC.
- The material composition of the temporary steel plate is not known.
- Cross Beam 10 is located in the Trial Assembly.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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."

AWS D1.5-2002 Section 12.13.1.1 Location: All tack welds used in assembly shall be located within the joint unless otherwise approved by the Engineer.

AWS D1.5-2002 Table 12.2: Specifies tack welds outside the joint shall be a minimum of 75mm in length and refers to footnote 3 which specifies. "Tack welds outside the joint shall require the Engineer's approval".

Who discovered the problem: Shailesh Wadkar

Name of individual from Contractor notified: He Yong

Time and method of notification: 5/23/10, Verbal – 14:00

Name of Caltrans Engineer notified: Sean Eagen

Time and method of notification: 5/24/10, Verbal – 11:00

QC Inspector's Name: Feng Ya Jun

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:	Wahbeh, Mazen	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: 24-May-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: 05.03.06-000697

Subject: NCR No. ZPMC-0703

Reference Description: Unknown Material being tacked onto a CB10 Side Panel not conforming to the AWS D1.5 Section 12 Requirement

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: Xbeam **Lift:** 08

Remarks:

During Quality Assurance (QA) random in-process observations of the fabrication of Cross Beam CB10, this QA inspector discovered the following issue:

- During fit-up of Cross Beam CB10 side panel to FL3 panel of OBG segment 8CE, ZPMC personnel had temporarily tack welded a steel plate at the south end of side panel (SP205A) of CB10.
- Side Panel – SP205A is identified on the approved shop drawings as Seismic Performance Critical Member (SPCM).
- The size and length of the tack weld do not meet the requirements of AWS D1.5 2002, Table 12.2.
- The approved Shop drawing does not specify any weld in this area.
- No fabrication procedure was available with QC.
- The material composition of the temporary steel plate is not known.
- Cross Beam 10 is located in the Trial Assembly.

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: Sean Eagen Transportation Engineer

Attachments: ZPMC-0703

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: 05.03.06-000697

Subject: NCR No. ZPMC-0703

Dated: 11-Jun-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000700 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: When the temporary attachments are removed, ZPMC will perform NDT of the base metal to ensure there was no damage.

When the temporary attachments are removed, ZPMC will perform NDT of the base metal to ensure there was no damage. In addition, ZPMC will issue an internal NCR to notify work crews that temporary attachments should adhere to the same standards as other welds. Based on this proposal ZPMC requests that this NCR be approved, with actions pending.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000700R00

Caltrans' comments:

Status: REJ

Date: 15-Jun-2010

The areas where unidentified material was tacked welded shall be ground out such that any impurities introduced are removed. MT should then be performed and the base metal repaired per approved methods. Additionally, a description of the measures being taken to ensure that similar non-conformances do not occur in the future.

Submitted by: Eagen, Sean

Attachment(s):

Date: 15-Jun-2010

NCR PROPOSED RESOLUTION

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

Dated: 15-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-000700 Rev: 01

Ref: 05.03.06-000697

Subject: NCR No. ZPMC-0703

Contractor's Proposed Resolution:

Reference Resolution: Please see ZPMC's comments for closure.

Please see ZPMC's comments for closure.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000700R01;

Caltrans' comments:

Status: CLO

Date: 19-Jul-2010

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

Submitted by: Woo, Laraine

Date: 19-Jul-2010

Attachment(s):



No. B-823

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-7-15

REGARDING: NCR-000740(ZPMC-0703)

ZPMC acknowledged this problem and has written an internal NCR. The area where unidentified material was tacked welded have been ground out and fixed. ZPMC is providing the NDT record what shows the acceptance of this area after repair. Based on this, please consider closure of this NCR.

ATTACHMENT:

NCR-000740(ZPMC-0703)

B787-MT-24777

B787-MT-24778

Log sw

7/15/10



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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: 24-May-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: 05.03.06-000697

Subject: NCR No. ZPMC-0703

Reference Description: Unknown Material being tacked onto a CB10 Side Panel not conforming to the AWS D1.5 Section 12 Requirement

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Material Location: Xbeam

Lift: 08

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Action Required and/or Action Taken:

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Transmitted by: Sean Eagen Transportation Engineer

Attachments: ZPMC-0703

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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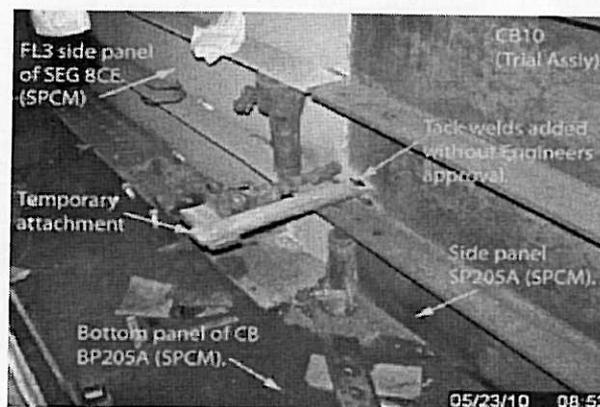
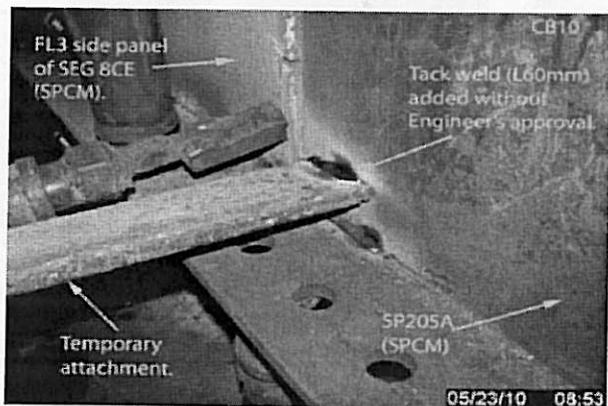
(707) 649-5493

Contract #: 04-0120F4

City: 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-000740**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-May-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0703**Type of problem:**Welding Concrete Other Welding Curing Procedural Joint fit-up Coating Other Procedural Procedural Description:**Bridge No:** 34-0006**Component:** CB10 Side Panel**Reference Description:** Unknown Material being tacked onto a CB10 Side Panel not conforming to the AWS D1.5 Section 12 Requirement**Description of Non-Conformance:**

During Quality Assurance (QA) random in-process observations of the fabrication of Cross Beam CB10, this QA inspector discovered the following issue:

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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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".

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Who discovered the problem: Shailesh Wadkar

Name of individual from Contractor notified: He Yong

Time and method of notification: 5/23/10, Verbal – 14:00

Name of Caltrans Engineer notified: Sean Eagen

Time and method of notification: 5/24/10, Verbal – 11:00

QC Inspector's Name: Feng Ya Jun

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: 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-000704**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 19-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0703**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: 23-May-2010**Description of Non-Conformance:**

During Quality Assurance (QA) random in-process observations of the fabrication of Cross Beam CB10, this QA inspector discovered the following issue:

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- The approved Shop drawing does not specify any weld in this area.
- No fabrication procedure was available with QC.
- The material composition of the temporary steel plate is not known.
- Cross Beam 10 is located in the Trial Assembly.

Contractor's proposal to correct the problem:

Remove temporary welds, repair base metal, and perform NDT required to verify weld quality.

Corrective action taken:

Contractor submitted post repair NDT documentation verifying base metal has been repaired and repair welds meet Contract weld quality requirements.

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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QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Inspected By: Simonis,Jim

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer