

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-000511

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 16-Nov-2009

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

NCR #: ZPMC-0484

Type of problem:

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

Bridge No: 34-0006

Component: 6AW FL3 Floor Beam FB019-001

Reference Description: OBG 6AW Floorbeam FB019-001 does not meet the flatness requirement

Description of Non-Conformance:

During random visual inspection of OBG Segment 6AW at panel point 38, this QA Inspector observed the following distortion. The FL3 floor beam FB019-001 web plate designated as X19A was found distorted up to 15.5mm over 1000mm. The measurement was taken about 900mm below the upper flange plate.



Applicable reference:

AASHTO 11.4.13.2 Flatness of Panels: "The maximum deviation from detailed flatness or curvature of a panel shall not exceed the greater of 5mm or $D/(144 \cdot vT)$.

Who discovered the problem: Rodney Patterson

Name of individual from Contractor notified: Kevin Chen

Time and method of notification: 1400 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao and Bill Howe

Time and method of notification: 1500 hours, Verbal

QC Inspector's Name: Wang Lu

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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: 11-Dec-2009

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: 05.03.06-000474

Subject: NCR No. ZPMC-0484

Reference Description: OBG 6AW Floorbeam FB019-001 does not meet the flatness 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: OBG **Lift:** 06

Remarks:

During random visual inspection of OBG Segment 6AW at panel point 38, this QA Inspector observed the following distortion. The FL3 floor beam FB019-001 web plate designated as X19A was found distorted up to 15.5mm over 1000mm. The measurement was taken about 900mm below the upper flange plate.

Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval.

Transmitted by: Bill Howe

Attachments: ZPMC-0484

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: 05.03.06-000474

Subject: NCR No. ZPMC-0484

Dated: 11-Jan-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000466 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC request closure of this NCR as this NCR was written prior to ZPMC final dimensional inspection. A "random" observation should be considered a possible incident, but not elevated to NCR status.

ZPMC request closure of this NCR as this NCR was written prior to ZPMC final dimensional inspection. A "random" observation should be considered a possible incident, but not elevated to NCR status.

Submitted by: Lawton, Steve

Attachment(s): ABF-NPR-000466R00;

Caltrans' comments:

Status: REJ

Date: 11-Jan-2010

This NCR will remain open until documentation that the specified flatness has been achieved.

Submitted by: Howe, Bill

Date: 11-Jan-2010

Attachment(s):



No. B-565

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-1-9

REGARDING: NCR-000511(ZPMC-0484)

With this letter of response, ZPMC requests withdrawal of CT NCR-000511(ZPMC-0484), what mentioned that CT Inspector observed excessive flatness distortion.

It should be clarified by ZPMC that this CT inspector performed the flatness dimension measurement prior to ZPMC's. The flatness for this panel hasn't been accepted by ZPMC. So it could be understood to be in-process status. No non-conformance occurred.

Based on this, ZPMC requests withdrawal of this NCR.

ZPMC also hope such in-process inspection won't turn into NCR.

ATTACHMENT:

NCR-000511(ZPMC-0484)

By W
1/9/10

DEPARTMENT OF PUBLIC WORKS - BRIDGE DIVISION
393 Marina Road
Oakland, CA 94607
Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FUGRO, A JV
375 BURMA ROAD
OAKLAND CA 94607
Date: 11-Dec-2009
Contract No: 04-0120F4
04-SF-80-13.2 / 13.9
Job Name: SAS Superstructure
Document No: 05.03.06-050474

Dear: Mr. Charles Kanapicki
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Subject: NCR No ZPMC-0484

Reference Description: OBG 6AW Floorbeam FH019-001 does not meet the flatness 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: OBG

Lift: 06

Remarks:

During random visual inspection of OBG Segment 6AW at panel point 38, this QA Inspector observed the following distortion. The FL3 floor beam FH019-001 web plate designated as X19A was found distorted up to 15.5mm over 1000mm. The measurement was taken about 900mm below the upper flange plate.

Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval.

Transmitted by: Bill Howe

Attachments: ZPMC-0484

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao
File: 05.03.06

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) 649-5453

Contract #: 04-0120F4

City: 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-000511

Prime Contractor: American Bridge/Floor Enterprises, a JV

Date: 16-Nov-2009

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

NCR #: ZPMC-0484

Type of problem:

Welding Concrete Other Welding Curing Procedural

Bridge No: 34-0006

Joint fit-up Coating Other

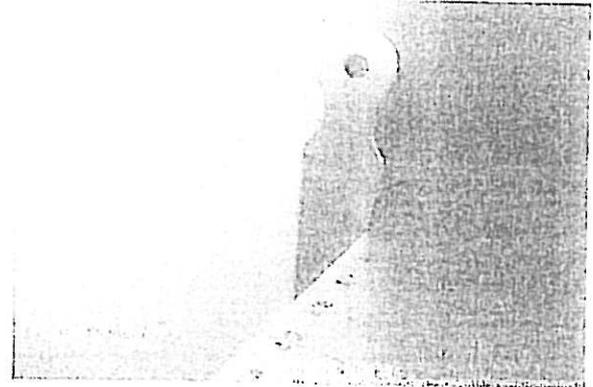
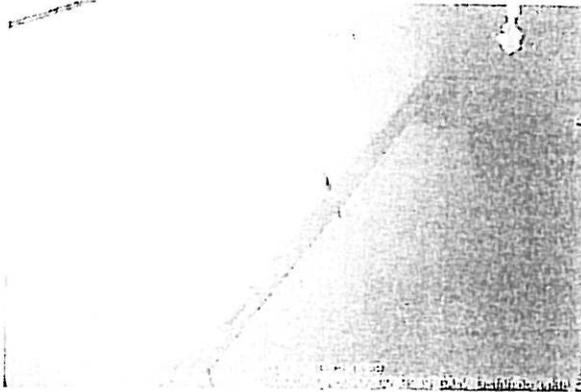
Component: 6AW FL3 Floor Beam FB019-001

Procedural Procedural Description:

Reference Description: OBG 6AW Floorbeam FB019-001 does not meet the flatness requirement

Description of Non-Conformance:

During random visual inspection of OBG Segment 6AW at panel point 38, this QA Inspector observed the following distortion. The FL3 floor beam FB019-001 web plate designated as X19A was found distorted up to 15.5mm over 1000mm. The measurement was taken about 900mm below the upper flange plate.



Applicable reference:

AASHTO 11.4.13.2 Flatness of Panels: "The maximum deviation from detailed flatness or curvature of a panel shall not exceed the greater of 5mm or $D/(144 \cdot vT)$."

Who discovered the problem: Rodney Patterson

Name of individual from Contractor notified: Kevin Chen

Time and method of notification: 1400 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao and Bill Howe

Time and method of notification: 1500 hours, Verbal

QC Inspector's Name: Wang Lu

QUALITY ASSURANCE - NON-COMFORMANCE REPORT

(Continued Page 2 of 2)

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

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000474

Subject: NCR No. ZPMC-0484

Dated: 20-Jan-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000466 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: There is no requirement for in process dimensional flatness at this stage of fabrication. ZPMC strongly requests that this NCR be closed and this item be tracked on the punchlist.

The in process flatness dimension documented in this NCR has the potential to be a non conformance if it is not corrected. As stated in ABFJV's earlier response, at the time this NCR was written work was in process and ZPMC had not accepted the dimensions at the time the NCR was written. There is no requirement for in process dimensional flatness at this stage of fabrication and the references applied should be applied after work by the fabricator is complete. If the Department wants to maintain visibility of this issue, it should be added to the punchlist for later follow up after ZPMC has completed the work and can be verified. ZPMC strongly requests that this NCR be closed and this item be tracked on the punchlist.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000466R01

Caltrans' comments:

Status: REJ

Date: 24-Jan-2010

The NCR was written when the segment was in the paint shop, and well after fabrication of the floorbeam had ceased. The segment currently sits in trial assembly, and no corrective action has been taken. The NPR can not be accepted without a proposal from the contractor to correct the non-compliance. The NCR will be on the punchlist regardless until the issue is resolved.

Submitted by: Chao, Ching

Attachment(s):

Date: 24-Jan-2010

NCR PROPOSED RESOLUTION

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

Dated: 10-Feb-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-000466 Rev: 02

Ref: 05.03.06-000474

Subject: NCR No. ZPMC-0484

Contractor's Proposed Resolution:

Reference Resolution: To close this NCR, once the distortion documented in this non conformance is corrected and the applicable documents that verify this are submitted ZPMC will request closure.

To close this NCR, once the distortion documented in this non conformance is corrected and the applicable documents that verify this are submitted ZPMC will request closure. Until they become available ZPMC requests that this proposal be accepted with action pending.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000466R02

Caltrans' comments:

Status: AAP

Date: 11-Feb-2010

AAP approved.

Submitted by: Howe, Bill

Date: 11-Feb-2010

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000474

Subject: NCR No. ZPMC-0484

Dated: 24-Feb-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000466 Rev: 03

Contractor's Proposed Resolution:

Reference Resolution: This item has been removed from the punchlist signifying that all parties, ABFJV, ZPMC and Caltrans, agree this issue has been resolved.

The measurements taken by the Department's representative were taken before ZPMC had had conducted their dimensional survey and had not been accepted by ZPMC. Therefore the NCR was written prematurely. Subsequently, ZPMC has heat straightened the member and is dimensionally acceptable to ZPMC and the Department. This item has been removed from the punchlist signifying that all parties, ABFJV, ZPMC and Caltrans, agree this issue has been resolved. Based on this ZPMC requests this NCR be closed or rescinded.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000466R03;

Caltrans' comments:

Status: CLO

Date: 25-Feb-2010

This NCR is closed.

Submitted by: Howe, Bill

Date: 25-Feb-2010

Attachment(s):



No. B-612

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-2-21

REGARDING: NCR-000511(ZPMC-0484)

With this letter of response, ZPMC requests withdrawal of CT NCR-000511(ZPMC-0484), what mentioned that OBG 6AW Floorbeam FB019-001 did not meet the flatness requirement.

- CT inspector performed flatness survey prior to ZPMC's. So this NCR is deemed to be Unjustified NCR.
- The related HSR was issued and approved by Engineer.
- After Heat Straightening the flatness was measured and accepted by both ZPMC & CT.
- The related punch list item 166 has been confirmed & closed by CT at 12-Feb-10.

Based on the responses above, ZPMC requests withdrawal of this NCR.

ATTACHMENT:

NCR-000511(ZPMC-0484)

[Handwritten signature]
2/21/10



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: 11-Dec-2009

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-0484

Document No: 05.03.06-000474

Reference Description: OBG 6AW Floorbeam FB019-001 does not meet the flatness 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: OBG

Lift: 06

Remarks:

During random visual inspection of OBG Segment 6AW at panel point 38, this QA Inspector observed the following distortion. The FL3 floor beam FB019-001 web plate designated as X19A was found distorted up to 15.5mm over 1000mm. The measurement was taken about 900mm below the upper flange plate.

Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval.

Transmitted by: Bill Howe

Attachments: ZPMC-0484

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao
File: 05.03.06

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

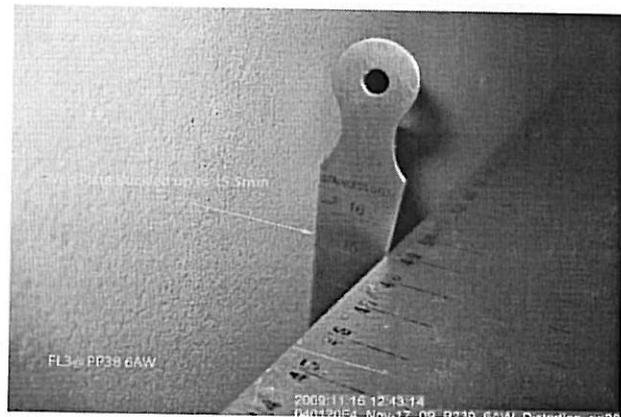
Quality Assurance and Source Inspection

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: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCR-000511**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 16-Nov-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0484**Type of problem:**Welding Concrete Other Welding Curing Procedural Joint fit-up Coating Other Procedural Procedural Description: **Bridge No:** 34-0006**Component:** 6AW FL3 Floor Beam FB019-001**Reference Description:** OBG 6AW Floorbeam FB019-001 does not meet the flatness requirement**Description of Non-Conformance:**

During random visual inspection of OBG Segment 6AW at panel point 38, this QA Inspector observed the following distortion. The FL3 floor beam FB019-001 web plate designated as X19A was found distorted up to 15.5mm over 1000mm. The measurement was taken about 900mm below the upper flange plate.

**Applicable reference:**

AASHTO 11.4.13.2 Flatness of Panels: "The maximum deviation from detailed flatness or curvature of a panel shall not exceed the greater of 5mm or $D/(144 \cdot vT)$."

Who discovered the problem: Rodney Patterson**Name of individual from Contractor notified:** Kevin Chen**Time and method of notification:** 1400 hours, Verbal**Name of Caltrans Engineer notified:** Ching Chao and Bill Howe**Time and method of notification:** 1500 hours, Verbal**QC Inspector's Name:** Wang Lu

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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

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 #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCS-000614**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 13-Apr-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0484**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: 16-Nov-2009**Description of Non-Conformance:**

During random visual inspection of OBG Segment 6AW at panel point 38, this QA Inspector observed the following distortion. The FL3 floor beam FB019-001 web plate designated as X19A was found distorted up to 15.5mm over 1000mm. The measurement was taken about 900mm below the upper flange plate.

Contractor's proposal to correct the problem:

Perform Heat Straightening to correct said dimensional issues.

Corrective action taken:

Heat Straightening was performed at said location to correct Floorbeam flatness issue. Subsequent Heat Straightening efforts were made to address dimensional issues with the Deck Plate Diaphragm. Additional reinforcement and NDT required in accordance with RFI2083 will be addressed in Oakland.

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:**

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 Jim Simonis 152.1675.3703, who represents the Office of Structural Materials for your project.

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