

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



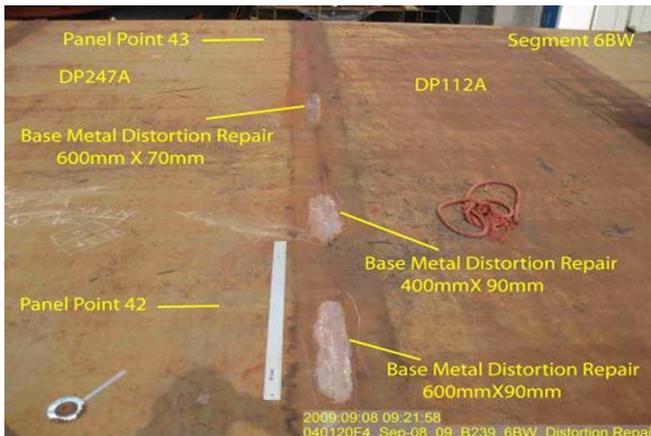
Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-000430**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 08-Sep-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0404**Type of problem:**

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b> OBG Segment 6BW Deck Panel
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Reference Description:** Non-approved base metal repair distortion repair**Description of Non-Conformance:**

The Quality Assurance (QA) Inspector observed that a base material distortion repair was performed on Deck Plate 247A in a total of three (3) locations. The unapproved repair ran parallel to the Deck Panel longitudinal splice weld No. SEG029\*-005 between PP41 and PP43. An approximate length of 1200mm x 90mm of filler material was deposited along the splice weld of plate side DP247A to correct the distortion of the deck at the splice weld. This base material distortion repair was performed without the approval of the Engineer.

**Applicable reference:**

- Standard Specifications (99) section 55-3.02 Straightening of Material "If straightening is necessary, it shall be done by methods acceptable to the Engineer. Details for methods proposed for straightening shall be submitted in writing to the Engineer prior to their use.
- AWS D1.5 2002 section 6.3.1 "The Inspector shall make certain that all WPSs are qualified in conformance with Section 5 of this code. The Inspector shall make certain that each welding operation is covered by a written WPS and that such WPSs are available to the welders and Inspectors for reference".
- Special Provisions Section 8.3 "Quality Control (QC) shall be the responsibility of the Contractor. As a

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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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:** Rodney Patterson

**Name of individual from Contractor notified:** Peter Shaw

**Time and method of notification:** 1000 hours, verbal

**Name of Caltrans Engineer notified:** Bill Howe

**Time and method of notification:** 0800 hours, verbal

**QC Inspector's Name:** Lei Tao

**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.

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<b>Inspected By:</b>	Tsang, Eric	SMR
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<b>Reviewed By:</b>	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:** 28-Sep-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:** 05.03.06-000393

**Subject:** NCR No. ZPMC-0404

**Reference Description:** Non-approved base metal repair distortion repair

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:

The Quality Assurance (QA) Inspector observed that a base material distortion repair was performed on Deck Plate 247A in a total of three (3) locations. The unapproved repair ran parallel to the Deck Panel longitudinal splice weld No. SEG029\*-005 between PP41 and PP43. An approximate length of 1200mm x 90mm of filler material was deposited along the splice weld of plate side DP247A to correct the distortion of the deck at the splice weld. This base material distortion repair was performed without the approval of the Engineer.

### Action Required and/or Action Taken:

Propose a resolution for the identified recurring non-conformance which constitutes a systematic problem on both materials/workmanship and quality control issues with revised procedures to remedy the defected work and to prevent future occurrences. A response for the resolution of this issue is expected within 14 days.

**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0404

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

**File:** 05.03.06

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000393

**Subject:** NCR No. ZPMC-0404

**Dated:** 16-Oct-2009

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000378 Rev: 00

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### Contractor's Proposed Resolution:

**Reference Resolution:** ZPMC will submit NDT documentation showing that the base metal was not adversely affected by the repair. These documents will be submitted at a later date.

ZPMC will submit NDT documentation showing that the base metal was not adversely affected by the repair. These documents will be submitted at a later date. Once documents are submitted ZPMC will request closure. Currently, ZPMC requests that this non conformance proposed resolution be approved, with action pending.

**Submitted by:**

**Attachment(s):** ABF-NPR-000378R00

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**Caltrans' comments:**

**Status:** AAP

**Date:** 29-Oct-2009

The contractor's proposed resolution is accepted with actions pending to close the NCR.

**Submitted by:** Chao, Ching

**Date:** 29-Oct-2009

**Attachment(s):**

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000393

**Subject:** NCR No. ZPMC-0404

**Dated:** 11-Jan-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000378 Rev: 01

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**Contractor's Proposed Resolution:**

**Reference Resolution:** ZPMC has now included all repair and inspection documents and requests closure of this NCR.  
ZPMC has now included all repair and inspection documents and requests closure of this NCR.

**Submitted by:** Lawton, Steve

**Attachment(s):** ABF-NPR-000378R01;

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**Caltrans' comments:**

**Status:** CLO

**Date:** 11-Jan-2010

Documentation received is sufficient to close this NCR.

**Submitted by:** Howe, Bill

**Attachment(s):**

**Date:** 11-Jan-2010



No. B-557

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2010-1-6**

**REGARDING: NCR-000430(ZPMC-0404)**

With this letter of response, ZPMC requests closure of CT NCR-000430(ZPMC-0404), what mentioned that QA observed non-approved base metal battering in 6BW.

ZPMC performed buttering at several base metal areas in order to fix the distortion found after Deck Panel Splice Welding. After that MT & UT were performed to warrant the quality of base metal and affected weld. This weld has been accepted by Green Tag Procedure, related Tag ID is 11157. And the Final VT for this segment has been performed and accepted by ZPMC & ABF.

With the taken actions and according to CT's comments in NPR, ZPMC provides the NDT documentation & FVT sheet, hoping CT could take a review and consider close this NCR.

**ATTACHMENT:**

ABF-NPR-000378 R0

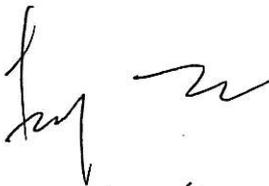
NCR-000430(ZPMC-0404)

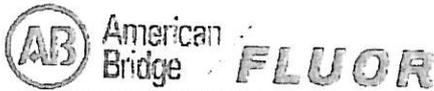
VT REPORT FOR SEG029\*-005

B787-MT-17581

B787-UT-7004R1-2

B-FVT-028

  
1/7/10



AMERICAN BRIDGE/FLUOR ENTERPRISES, a JV

P.O. BOX 23223 Oakland, CA 94623

Phone (510) 419-0120 / Fax (510) 839-0666

NCR PROPOSED RESOLUTION

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

Dated: 16-Oct-2009

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

Attention: Pursell, Gary
Resident Engineer

Job Name: SAS Superstructure

Ref: 05.03.06-000393

Document No.: ABF-NPR-000378 Rev: 00

Subject: NCR No. ZPMC-0404

Contractor's Proposed Resolution:

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Submitted by:

Attachment(s): ABF-NPR-000378R00

Caltrans' comments:

Status: AAP

Date: 29-Oct-2009

The contractor's proposed resolution is accepted with actions pending to close the NCR.

Submitted by: Chao, Ching

Date: 29-Oct-2009

Attachment(s):



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 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-000430

**Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Date:** 08-Sep-2009

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

**NCR #:** ZPMC-0404

**Type of problem:**

Welding  Concrete  Other

Welding  Curing  Procedural

Joint fit-up  Coating  Other

Procedural  Procedural  Description:

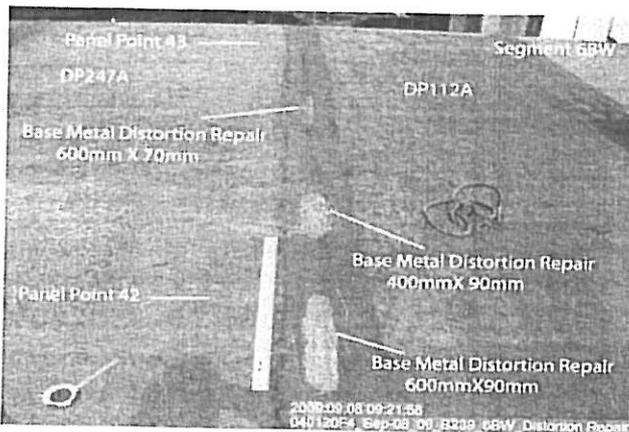
**Bridge No:** 34-0006

**Component:** OBG Segment 6BW Deck Panel

**Reference Description:** Non-approved base metal repair distortion repair

**Description of Non-Conformance:**

The Quality Assurance (QA) Inspector observed that a base material distortion repair was performed on Deck Plate 247A in a total of three (3) locations. The unapproved repair ran parallel to the Deck Panel longitudinal splice weld No. SEG029\*-005 between PP41 and PP43. An approximate length of 1200mm x 90mm of filler material was deposited along the splice weld of plate side DP247A to correct the distortion of the deck at the splice weld. This base material distortion repair was performed without the approval of the Engineer.



*Green tag # 11157*

**Applicable reference:**

- Standard Specifications (99) section 55-3.02 Straightening of Material "If straightening is necessary, it shall be done by methods acceptable to the Engineer. Details for methods proposed for straightening shall be submitted in writing to the Engineer prior to their use.
- AWS D1.5 2002 section 6.3.1 "The Inspector shall make certain that all WPSs are qualified in conformance with Section 5 of this code. The Inspector shall make certain that each welding operation is covered by a written WPS and that such WPSs are available to the welders and Inspectors for reference".
- Special Provisions Section 8.3 "Quality Control (QC) shall be the responsibility of the Contractor. As a

*10070 MT*

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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( Continued Page 2 of 2 )

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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:** Rodney Patterson

**Name of individual from Contractor notified:** Peter Shaw

**Time and method of notification:** 1000 hours, verbal

**Name of Caltrans Engineer notified:** Bill Howe

**Time and method of notification:** 0800 hours, verbal

**QC Inspector's Name:** Lei Tao

**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.

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**Inspected By:** Tsang, Eric

SMR

**Reviewed By:** Wahbeh, Mazen

SMR

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# 梁段最终目检通知单

## Final VT Request Sheet

报验单编号

(Sheet No): B - FVT - 028

ABF签收人&时间

ABF receiver & time: \_\_\_\_\_

我们要求对如下构件进行报验。请在检验完成后尽快给予批准。

We make request for inspection of the below items. Your earliest acceptance after inspection will be appreciated.

检验地点 (Inspection place)	outside blasting shop
构件名称 (Name of Component)	BBW
构件图号 (Drawing No. of Component)	SEC 029
检验时间 (Time)	2009.09.10
施工队 (Sub contractor name)	Shi Tian Gang

Yes No

Yes No

Yes No

焊缝区域校火是否结束?

Yes  No

返修是否结束?

Yes  No  
Repair complete?

探伤是否结束?

Yes  No  
NDT complete?

Weld Area Heat Straightening Complete?

检验结论:

**RESULT OF INSPECTION:**

接受/ACCEPT

拒收及理由/Reject and Reasons

Zhang Wei  
ZPMC CWI signature & date:

09.09.10

接受/ACCEPT

拒收及理由/Reject and Reasons

[Signature]  
ABF Representative Signature & date:

10-09-09

接受/ACCEPT

拒收及理由/Reject and Reasons

\_\_\_\_\_  
Caltrans Representative Signature & date:

**DEPARTMENT OF TRANSPORTATION**

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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-000463**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 20-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0404**Type of problem:**

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

**Date the Non-Conformance Report was written:** 08-Sep-2009**Description of Non-Conformance:**

The Quality Assurance (QA) Inspector observed that a base material distortion repair was performed on Deck Plate 247A in a total of three (3) locations. The unapproved repair ran parallel to the Deck Panel longitudinal splice weld No. SEG029\*-005 between PP41 and PP43. An approximate length of 1200mm x 90mm of filler material was deposited along the splice weld of plate side DP247A to correct the distortion of the deck at the splice weld. This base material distortion repair was performed without the approval of the Engineer.

**Contractor's proposal to correct the problem:**

Perform NDT to verify the welds are in conformance with Contract specifications.

**Corrective action taken:**

Contractor performed Magnetic Particle Testing to verify the welds 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?** 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, who represents the Office of Structural Materials for your project.

**Inspected By:** Simonis, Jim

Quality Assurance Inspector

**Reviewed By:** Wahbeh, Mazen

QA Reviewer