

**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-000282

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

**Date:** 21-May-2009

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

**NCR #:** ZPMC-0256

### 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 3BE
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Reference Description:** Bolt Traceability, Segment 3BE

### Description of Non-Conformance:

The Contractor failed to segregate used (previously tensioned) fasteners from new fasteners to prevent reuse. Observations of the bolting activities in 3BE revealed one bolt keg marked as size (24 x 80mm) A325 bolts that actually contained both new and used (20 x 70mm) A325 bolts, nuts, and washers.



### Applicable reference:

Standard Specifications and Specifications for Structural Joints Using ASTM A325 bolts, Section 2, Fastener Components, paragraphs:

2.2 Storage of Fastener Components,

2.3.3 Reuse

**Who discovered the problem:** Mark J. Miller

**Name of individual from Contractor notified:** Kevin Chen

**Time and method of notification:** 2009/05/21, 16:00, Verbal

**Name of Caltrans Engineer notified:** Stanley Ku

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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**Time and method of notification:** 2009/05/22, 12:30, Verbal

**QC Inspector's Name:** Wang Lu

**Was QC Inspector aware of the problem:** Yes No

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

**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 Skyler Guest, +(86) 1500.042.2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Guest,Skyler	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-May-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:** 05.03.06-000248

**Subject:** NCR No. ZPMC-0256

**Reference Description:** Bolt Traceability, Segment 3BE

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:**

### Remarks:

The Contractor failed to segregate used (previously tensioned) fasteners from new fasteners to prevent reuse. Observations of the bolting activities in 3BE revealed one bolt keg marked as size (24 x 80mm) A325 bolts that actually contained both new and used (20 x 70mm) A325 bolts, nuts, and washers.

### Action Required and/or Action Taken:

Please propose a resolution for the identified non-conformance to prevent future occurrences. Means shall be taken to avoid using of used galvanized ASTM A325 bolts.

**Transmitted by:** Stanley Ku Sr. Bridge Engineer

**Attachments:** ZPMC-0256

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Brian Boal, Doug Coe, Jason Tom, 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:** 05.03.06-000248

**Subject:** NCR No. ZPMC-0256

**Dated:** 03-Aug-2009

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000278 Rev: 00

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**Contractor's Proposed Resolution:**

**Reference Resolution:** ZPMC has responded to this NCR and has attached documents as evidence of completion. ZPMC requests closure of this NCR.

ZPMC has responded to this NCR and has attached documents as evidence of completion. ZPMC requests closure of this NCR.

**Submitted by:**

**Attachment(s):** ABF-NPR-000278R00;

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**Caltrans' comments:**

**Status:** CLO

**Date:** 06-Aug-2009

The proposed resolution is acceptable. Staff has been instructed as to the proper procedures for handling and storage, and this has not been a recurring issue. The Department concurs that Non-Conformance ZPMC-0256 is closed.

**Submitted by:** Wright, Doug

**Date:** 06-Aug-2009

**Attachment(s):**



No. B-424

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2009-7-29**

**REGARDING: NCR-000282 (ZPMC-0256)**

With this letter of response, ZPMC requests closure for Caltrans NCR-000282 (ZPMC-0256). We agree what describe in the non-conformance report, but should be clarified here as follow:

1. the 20\*70mm bolt in the non-conformance report is a mistake and we can't find that type in the ZPMC storage and assure not used in the segment some splice parts.
2. before install the production bolt we will first fix the nut and washer into the bolt to make sure the thread is exact, but the revealed bolts will not be fix together, so we think there is no possible to make confusion even if the style is same.
3. the sub-contractor happen here is too lazy and should separate two keg for new and used bolts, we have instructed the staff with the fabrication procedure, especially the handing and storage paragraph.
4. we have removed the used final tight bolt each time and make our own record, and also remind we have separately stored in the site container.

So base on the above explanation, ZPMC applies to close the caltrans's report NCR-000282 (ZPMC-0256).

Please reference attached documentation for acceptance and closure the NCR-000282 (ZPMC-0256).

**ATTACHMENT:**

**NCR-000282 (ZPMC-0256)**

*Zhao Shuangbao*

*2009. 7. 29*



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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:** 28-May-2009

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

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**Job Name:** SAS Superstructure

**Attention:** Mr. Thomas Nilsson Project/Fabrication Manager  
**Document No:** 05.03.06-000248

**Subject:** NCR No. ZPMC-0256

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**Action Required and/or Action Taken:**

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**Transmitted by:** Stanley Ku Sr. Bridge Engineer

**Attachments:** ZPMC-0256

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Brian Boal, Doug Coe, Jason Tom, Ching Chao

**File:** 05.03.06

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**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT**

**Location:** Changxing Island, Shanghai, P.R. China

**Report No:** NCR-000282

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

**Date:** 21-May-2009

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

**NCR #:** ZPMC-0256

**Type of problem:**

**Welding**  **Concrete**  **Other**

**Welding**  **Curing**  **Procedural**

**Bridge No:** 34-0006

**Joint fit-up**  **Coating**  **Other**

**Component:** OBG Segment 3BE

**Procedural**  **Procedural**  **Description:**

**Reference Description:** Bolt Traceability, Segment 3BE

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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**Time and method of notification:** 2009/05/22, 12:30, Verbal

**QC Inspector's Name:** Wang Lu

**Was QC Inspector aware of the problem:**  Yes  No

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

**Comments:**

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**Inspected By:** Guest, Skyler

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-000413**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 25-Dec-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0256**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:** 21-May-2009**Description of Non-Conformance:**

The Contractor failed to segregate used (previously tensioned) fasteners from new fasteners to prevent reuse. Observations of the bolting activities in 3BE revealed one bolt keg marked as size (24 x 80mm) A325 bolts that actually contained both new and used (20 x 70mm) A325 bolts, nuts, and washers.

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

Properly identify the bolts.

**Corrective action taken:**

ZPMC has responded that they will segregate the bolts and provide proper storage.

**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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**Inspected By:** Tsang, Eric

Quality Assurance Inspector

**Reviewed By:** Wahbeh, Mazen

QA Reviewer