

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-000701**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 24-Mar-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0668**Type of problem:****Welding****Concrete****Other****Welding****Curing****Procedural****Bridge No:** 34-0006**Joint fit-up****Coating****Other****Component:** Traveler Rail Bracket for Lift 5E**Procedural****Procedural****Description:**

Reference Description: Tightening the Bolts of U-Rib Splices not conforming to the approved procedure
(Traveler Rail Bracket for Lift 5E)

Description of Non-Conformance:

Caltrans Assistant Structural Representative observed and reported the following bolt tensioning issue to this Quality Assurance Inspector (QA):

-ZPMC personnel were observed match marking A325 High Strength (HS) nut and bolt combinations after final tensioning had been performed.

-The applicable contract documents specify that the contractor use the "turn of the nut" method to tension A325 HS bolts. See applicable reference below for details.

-The effected traveler rail brackets are located on lift 5E, between "E" lines 2 and 3 (bike path side) @ Panel Points (PP) 029, 030, 031, 032, 033, 034, 035 and 036.

**Applicable reference:**

SFOBB Project HS Bolt Installation and Inspection Plan Section 6.3: "Tightening"

-6.3.1 After preliminary tightening, match-mark each nut, bolt and steel surface in straight line.

-6.3.2 Using Table 1, apply the required turns to preform final tightening. Bolt head shall be held when rotate

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

the nut. When completed visually check the match-marks and compare with Table 1.

Who discovered the problem: Aaron Prchlik

Name of individual from Contractor notified: David Wu

Time and method of notification: 1700 hours, 03-24-10, Verbal

Name of Caltrans Engineer notified: Sean Eagen

Time and method of notification: 730 hours, 03-25-10, Verbal

QC Inspector's Name: Lay 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.

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: 25-Mar-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-0668

Job Name: SAS Superstructure
Document No: 05.03.06-000658

Reference Description: Tightening the Bolts of U-Rib Splices not conforming to the approved procedure (Traveler Rail Bracket for Lift 5E)

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:** 05

Remarks:

Caltrans Assistant Structural Representative observed and reported the following bolt tensioning issue to this Quality Assurance Inspector (QA):

- ZPMC personnel were observed match marking A325 High Strength (HS) nut and bolt combinations after final tensioning had been performed.
- The applicable contract documents specify that the contractor use the “turn of the nut” method to tension A325 HS bolts. See applicable reference below for details.
- The effected traveler rail brackets are located on lift 5E, between “E” lines 2 and 3 (bike path side) @ Panel Points (PP) 029, 030, 031, 032, 033, 034, 035 and 036.

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-0668

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

Dated: 29-Mar-2010

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

Attention: Pursell, Gary
Resident Engineer **05.03.06-000658**

Job Name: SAS Superstructure

Document No.: ABF-NPR-000636 Rev: 00

Ref: 05.03.06-000659
Subject: NCR No. ZPMC-0668

Contractor's Proposed Resolution:

Reference Resolution: The verification was successful and on the approved bolting procedure and witnessed by a CT inspector.

All the bolts in traveler rail brackets were tested to ensure that they met the required torque of 435N*M for tension verification. No nut or bolt was turned relative to its matching component by application of required torque. The verification was successful and on the approved bolting procedure and witnessed by a CT inspector. The proper bolting procedure has been reviewed with the bolting crew in question and ZPMC has issued an internal NCR. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua
Attachment(s): ABF-NPR-000636R00

Caltrans' comments:

Status: CLO
Date: 05-Apr-2010

This proposed resolution is acceptable. The Department concurs that Non-Conformance ZPMC-0668 is closed.

Submitted by: Eagen, Sean
Attachment(s):

Date: 05-Apr-2010

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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-000712**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 05-Apr-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0668**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: 24-Mar-2010**Description of Non-Conformance:**

Caltrans Assistant Structural Representative observed and reported the following bolt tensioning issue to this Quality Assurance Inspector (QA):

-ZPMC personnel were observed match marking A325 High Strength (HS) nut and bolt combinations after final tensioning had been performed.

-The applicable contract documents specify that the contractor use the "turn of the nut" method to tension A325 HS bolts. See applicable reference below for details.

-The effected traveler rail brackets are located on lift 5E, between "E" lines 2 and 3 (bike path side) @ Panel Points (PP) 029, 030, 031, 032, 033, 034, 035 and 036.

Contractor's proposal to correct the problem:

Perform tension verification testing on bolts in question.

Corrective action taken:

Contractor performed tension verification testing on traveler rail bracket bolts at the specified torque. None of the nuts or bolts turned relative to their matching component by application of the required torque.

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