

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, PRC**Report No:** NCR-000157**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 06-Jul-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0148**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: 114m Tower Mock-up
Procedural	Procedural	Descriptor:	Bolted Longitudinal Splice Plate

Reference Description: 04-0120F4 Special Provisions**Description of Non-Conformance:**

Caltrans Quality Assurance Inspector Greg Bertlesman observed ZPMC utilizing a mechanical 5 ton jacking device to aid in the installation of high strength bolts through Skin "D" Longitudinal Stiffener, mp1011, between welds MUSC-MA110-8 and MUSC-MA110-10. The use of jacking devices is not included in the approved fabrication procedure. Attached is a photograph of the deviation from the approved fabrication plan.

Applicable reference:

Special Provisions, Section 10-1.59, "Steel Structures", subsection "Fabrication" page 313: "For each mock-up, the Contractor shall prepare a written fabrication and welding sequence. The fabrication and welding sequence shall be submitted for review by the Engineer, and approval shall be given before the mock-up is fabricated. The Engineer shall witness all fit-up and welding for each mock-up."

**Who discovered the problem:** Greg, Bertlesman, Quality Assurance Inspector

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Name of individual from Contractor notified: Don Walton, ABFJV Quality Control Inspector

Time and method of notification: 07/06/08; 1300; Verbal notification

Name of Caltrans Engineer notified: Scott Kennedy

Time and method of notification: 07/08/08;0900; Verbal

QC Inspector's Name: Li Xiu Yang, ZPMC Quality Control Inspector

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

None at this time.

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 Josh Ishibashi, who represents the Office of Structural Materials for your project.

Inspected By: Ishibashi,Josh

SMR

Reviewed By: Ishibashi,Josh

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-Jul-2008

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

Dear: Mr. Charles Kanapicki
Job Name: SAS Superstructure

Attention: Mr. Dave Williams Consultant
Document No: 05.03.06-000131

Subject: NCR No. ZPMC-0148

Reference Description: Failure to follow Approved Procedure / Bolt Jacking / 114m Mock-up

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: Tower **Lift:**

Remarks:

Caltrans Quality Assurance observed ZPMC utilizing a mechanical 5 ton jacking device to aid in the installation of high strength bolts through Skin "D" Longitudinal Stiffener, mp1011, between welds MUSC-MA110-8 and MUSC-MA110-10. The use of jacking devices is not included in the approved fabrication procedure.

Action Required and/or Action Taken:

Propose a resolution that ensures that this systematic non-conformance with regard to the failure to follow the approved procedures will not continue to occur and the steps taken by the welding Quality Control Manager to prevent future failure to follow the submitted and approved procedures. The implementation of changes in procedure by ZPMC Production without submission and approval and failure of Quality Control to ensure that approved procedures are followed for the 114m Mock-up resulted in the previous issuance of NCR ZPMC-0088.

In the event that the Contractor's intent is to modify the procedure, a revised procedure must be submitted for review and approval prior to being implemented.

Transmitted by: Scott Kennedy Sr. Bridge Engineer

Attachments: ZPMC-0148

cc: Rick Morrow, Gary Pursell, Mark Woods, Doug Coe

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000131

Subject: NCR No. ZPMC-0148

Dated: 25-Aug-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000103 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ABFJV has notified ZPMC to follow the fabrication procedure as written

ZPMC used jacking devices for ease of alignment. If jack are required in production ZPMC will add to fabrication procedure for approval by the engineer. ABFJV has notified ZPMC to follow the fabrication procedure as written.

Submitted by: Mackey, Kim

Attachment(s): ABF-NPR-000103R00

Caltrans' comments:

Status: CLO

Date: 08-Jan-2009

Per State Letter 05.03.01-003242 dated January 7, 2009, the 114m Tower Section Mock-up was successfully completed. The Department concurs that Non-Conformance ZPMC-0148 is closed. As noted in ABF-CAL-LTR-000766, the Department understands that the appropriate fabrication plans will be modified in accordance with Special Provision Section 10-1.59, "Steel Structures," subsection "Working Drawings" through the FCN process.

The use of jacks for installing bolts shall not be used in production.

Submitted by: Wright, Doug

Attachment(s):

Date: 08-Jan-2009

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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, PRC**Report No:** NCS-000147**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 08-Jan-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0148**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: 06-Jul-2008**Description of Non-Conformance:**

Caltrans Quality Assurance Inspector Greg Bertlesman observed ZPMC utilizing a mechanical 5 ton jacking device to aid in the installation of high strength bolts through Skin "D" Longitudinal Stiffener, mp1011, between welds MUSC-MA110-8 and MUSC-MA110-10. The use of jacking devices is not included in the approved fabrication procedure.

Contractor's proposal to correct the problem:

ZPMC used jacking devices for ease of alignment. If jacking devices are required in production ZPMC will add it to fabrication procedure for approval by the engineer. ABFJV has notified ZPMC to follow the fabrication procedure as written.

Corrective action taken:

Fabrication procedure has been modified and the 114m mock-up has been fabricated successfully. Letter No. 05.03.01-003242 concluded the successful completion of the 114m mock-up on January 7, 2009.

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 Serge Sinevod, who represents the Office of Structural Materials for your project.

Inspected By: Sinevod, Serge

Quality Assurance Inspector

Reviewed By: Wahbeh, Mazen

QA Reviewer