

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

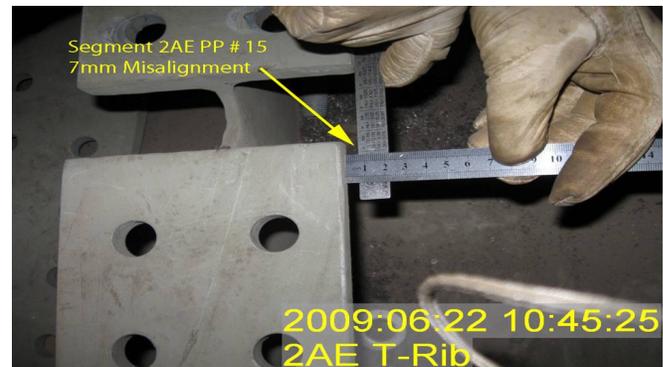
Quality Assurance and Source Inspection



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

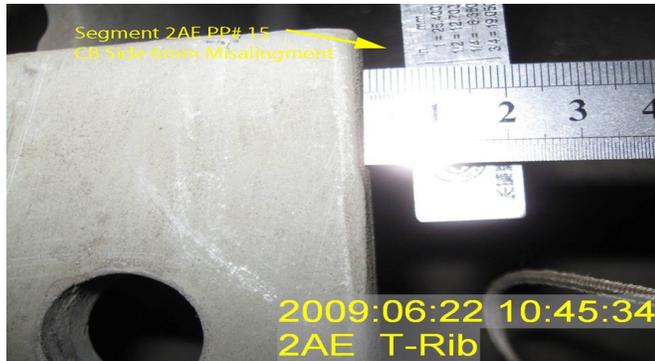
Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCR-000338**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 22-Jun-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0312**Type of problem:****Welding****Concrete****Other****Welding****Curing****Procedural****Bridge No:** 34-0006**Joint fit-up****Coating****Other****Component:** OBG Segment 2AE**Procedural****Procedural****Description:****Reference Description:** T-Stiffener Misalignment, Side Panel, Segment 2AE**Description of Non-Conformance:**

Caltrans Quality Assurance (QA) Inspector observed misalignment between T-stiffeners on the side panel of OBG Segment 2AE (crossbeam side) at Panel Point 15. The misalignment between T-stiffeners was measured to be 7mm.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

AWS D1.5-2002, Section 3.3.3: "Parts to be joined by groove welds shall be carefully aligned. Theoretical alignment shall not exceed 10% of the thickness of the thinner part joined, but in no case shall be more than 3mm."

Caltrans Special Provisions, Section 10-1.59: "Steel Structure- Design Details-G.2- Misalignment between discontinuous members shall not exceed 10% of the thickness of the thinner member or 3mm, whichever is less."
"

Who discovered the problem: S. Manjunath Math
Name of individual from Contractor notified: David Wu
Time and method of notification: 10:30, Verbal
Name of Caltrans Engineer notified: Stanley Ku
Time and method of notification: 13:00, Verbal
QC Inspector's Name: Lay Tao
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) 1500-042-2360, who represents the Office of Structural Materials for your project.

Inspected By:	Guest, Skyler	SMR
Reviewed By:	Wahbeh, Mazen	SMR



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: 05-Jul-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: 05.03.06-000304

Subject: NCR No. ZPMC-0312

Reference Description: T-Stiffener Misalignment, Side Panel, Segment 2AE

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:** 02

Remarks:

Caltrans Quality Assurance (QA) Inspector observed misalignment between T-stiffeners on the side panel of OBG Segment 2AE (crossbeam side) at Panel Point 15. The misalignment between T-stiffeners was measured to be 7mm. ZPMC proceeded welding the joint with this fit-up misalignment.

Please see attached NCR ZPMC-312 for details.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to address the material/workmanship issue and prevent future occurrences.

Transmitted by: Ching Chao

Attachments: ZPMC-0312

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, 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: 05.03.06-000304

Subject: NCR No. ZPMC-0312

Dated: 14-Aug-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000295 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has provided an internal NCR to identify this nonconformance as well as providing all relative inspection documentation. ZPMC requests closure of this NCR.

ZPMC has provided an internal NCR to identify this nonconformance as well as providing all relative inspection documentation. ZPMC requests closure of this NCR.

Submitted by:

Attachment(s): ABF-NPR-000295R00;

Caltrans' comments:

Status: CLO

Date: 19-Aug-2009

The proposed resolution is acceptable. The stiffeners in question have subsequently been brought into alignment, and green tagged as shown in the attached documents. The Department concurs that Non-Conformance ZPMC-0312 is closed.

Submitted by: Wright, Doug

Date: 19-Aug-2009

Attachment(s):



No. B-441

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2009-8-11

REGARDING: NCR-000338 (ZPMC-312)

With this letter of response, ZPMC requests closure for Caltrans NCR-000338 (ZPMC-312). We agree what describe in the non-conformance report, and we have removed the complete weld of the T-rib and side plate, after adjusting the misalign we fix the right location and re-weld for the fillet joint. Meanwhile we have completed the final tight for the splice plate and got the green tag with the three parties.

By the way the corresponding item in the punchlist already be closed out by the supervisor and engineer, so base on the above explanation and attached documentations, ZPMC applies to close the caltrans's report NCR-000338 (ZPMC-312).

Please reference attached document for acceptance and closure the NCR-000338 (ZPMC-312).

ATTACHMENT:

NCR-000338 (ZPMC-312)

ZPMC internal NCR

The QA approval request form (bolting)

ShaoShuangbao

2009.8.11



Nonconformance Report

不符合项报告

Project Name: S.F.O.B.B
 项目名称: 美国加州海湾大桥

NCR Number:
 NCR 编号: NCR-B-214 (ZPMC-0312)

Item: T-Stiffener Misalignment
 名称描述: T 肋错边

Item Number:
 件号: N/A

Drawing:
 图号: 2AE

Location: Trail assembly yard
 位置: 总拼后场

Date:
 日期: 2009-07-08

Description of Nonconformance:

不符合项状态描述:

Caltrans Quality Assurance Inspector observed misalignment between T-stiffener on the side panel of OBG Segment 2AE(crossbeam side) at panel point 15. The misalignment between T-stiffeners was measured to be 7mm.

加州检验员在 2AE 的 PP15 斜底板 T 肋 (联系梁侧) 发现错边。错边量达到 7mm.

Work By: Xiaofan Prepared by: Wang Reviewed by QCE: Shuangbao
 施工方: Xiaofan 准备: 07.7.9 质量工程师批准: 07.7.9

Drawing Error Material Defect Fabrication Error Other
 图纸错误 材料缺陷 制作错误 其他原因

Disposition: Use as is Repair Reject
 处理措施: 回用 返修 拒收

Recommendation:

建议:

Prepared by: _____ Approved by QCA: _____
 准备 质量经理批准

Reason for Nonconformance:

不符合原因: 由于 2AE 的 PP15 斜底板 T 肋 错边,
Per 2AE PP15 side plate T-rib misalignment.

预防措施: 加强检查或监控. Enhance inspection and supervision.
 Approved by/批准: Guo Jun 09.7.15

Technical Justification for Use-As-Is/Repair: Attachment Non-attachment

回用或返修的技术依据:

已经调整
Have been adjusted!
 附件 无附件

Reviewed /批准: 张利义 7.20/09

Verification: Acceptable Unacceptable
 确认: 可接受 不可接受

Verified by QCI/质检确认: _____ Reviewed by QCA/质检主任审核: _____



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 Date: 05-Jul-2009
 375 BURMA ROAD
 OAKLAND CA 95607 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: 05.03.06-000303
 Subject: NCR No. ZPMC-0313
 Reference Description: Excessive Root Opening

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: Xbeam Lift:

Remarks:

During random in-process visual inspection of Crossbeam CB10 Deck panel in Bay # 3, Caltrans Quality Assurance (QA) Inspector observed the root opening of weld CB202B010-003 to measure from 7mm to 9mm. This joint has been tack welded into position. This root opening exceeds the tolerances specified in the specified WPS and AWS D1.5 2002 requirement.
 Please see attached NCR ZPMC-313 for details.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to correct the material/workmanship issue and prevent future occurrences.

Transmitted by: Ching Chao

Attachments: ZPMC-0313

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

Handwritten mark: OPK

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-000338

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 22-Jun-2009

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

NCR #: ZPMC-0312

Type of problem:

Welding Concrete Other Welding Curing Procedural

Bridge No: 34-0006

Joint fit-up Coating Other

Component: OBG Segment 2AE

Procedural Procedural Description:

Reference Description: T-Stiffener Misalignment, Side Panel, Segment 2AE

Description of Non-Conformance:

Caltrans Quality Assurance (QA) Inspector observed misalignment between T-stiffeners on the side panel of OBG Segment 2AE (crossbeam side) at Panel Point 15. The misalignment between T-stiffeners was measured to be 7mm.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

AWS D1.5-2002, Section 3.3.3: "Parts to be joined by groove welds shall be carefully aligned. Theoretical alignment shall not exceed 10% of the thickness of the thinner part joined, but in no case shall be more than 3mm."

Caltrans Special Provisions, Section 10-1.59: "Steel Structure- Design Details-G.2- Misalignment between discontinuous members shall not exceed 10% of the thickness of the thinner member or 3mm, whichever is less."

Who discovered the problem: S. Manjunath Math
Name of individual from Contractor notified: David Wu
Time and method of notification: 10:30, Verbal
Name of Caltrans Engineer notified: Stanley Ku
Time and method of notification: 13:00, Verbal
QC Inspector's Name: Lay Tao
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) 1500-042-2360, who represents the Office of Structural Materials for your project.

Inspected By: Guest, Skyler	SMR
Reviewed By: Wahbeh, Mazen	SMR

QA APPROVAL REQUEST FORM (BOLTING)

Components T Stiffener Splice (interior North SP at CB Location)
 (构件号) _____

Panel Point 14-16 Date 6/23/09 ²³ ^{MATH 6278}
 (日期)

Lift/OBG Segment 2AE Green Tag Number 80
 (塔吊装段/OBG 桥段) (绿标签号)

Bolt Size M22*65
 (螺栓直径)

Average Torque Value (kN*m) / (扭距值)
0.47

ROCAP # (旋转值)	DHGM220033	Conformance (合格)		
		ZPMC	ABF	CT
Contact Surface between Splice/ Shim/ Component 介于结合处/垫片/构件的接合面		OK	OK	OK
Permanent Bolts Installed 安装永久的固定螺栓		OK	OK	OK
Appropriate Turn of Nut Pretension 相应的螺栓预紧固圈数		OK	OK	OK
Tension Verification: 10% Tested Bolts Tested: 180 Total Bolts: 1568 螺栓拉力试验: 测试 10% 经过测试的螺栓数: 总的螺栓数:		OK	OK	OK

[Signature]
ZPMC Team Representative

6/23/09
Date

David W.
ABF Team Representative

6/23/09
Date

MATH 6278
CT Team Representative

7/8/09
Date

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-000353**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 30-Nov-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0312**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: 22-Jun-2009**Description of Non-Conformance:**

Caltrans Quality Assurance (QA) Inspector observed misalignment between T-stiffeners on the side panel of OBG Segment 2AE (crossbeam side) at Panel Point 15. The misalignment between T-stiffeners was measured to be 7mm.

Contractor's proposal to correct the problem:

Adjust stiffener placement to correct out of tolerance alignment.

Corrective action taken:

Stiffener placement was adjusted and verified to be within Contract tolerances by three party survey including representatives from Caltrans, ABF and ZPMC. NCR was signed off of first shipment punchlist.

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