

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



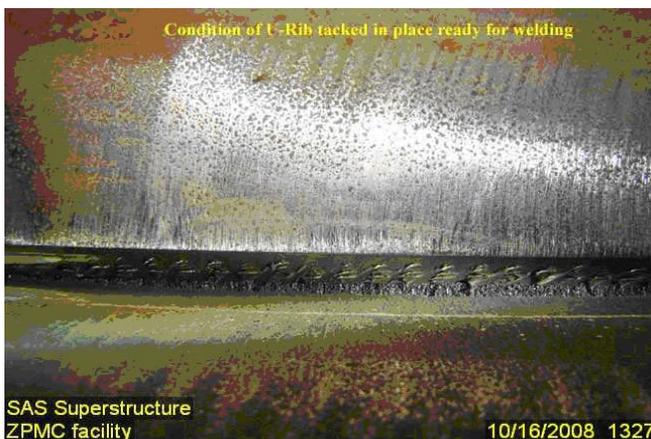
Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-000205**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 16-Oct-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0183**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Deck Panels
Procedural	Procedural	Description: OBG Closed Ribs	

Reference Description: PJP Non uniform groove face**Description of Non-Conformance:**

Surfaces to be welded do not conform to workmanship requirements for preparation of base metal. Groove faces of closed ribs welded to deck panels were not smooth or uniform. This is typical on all U-Ribs that have been manufactured to date. Please reference NCR-ZPMC-0070 dated Feb. 15, 2008. The Contractor has indicated (via ABF-CAL-LTR-000626, dated 14 August) that the nibbler teeth would be replaced on a more frequent basis, and that surfaces would be repaired via grinding before welding. This remain, however, an ongoing issues. Included below are digital pictures of the closed rib PJP groove face discrepancy.

**Applicable reference:**

AWS D1.5, Section 3.2.1: "Surfaces and edges to be welded shall be smooth, uniform, and free from fins, tears, cracks, and other discontinuities which would adversely affect the quality or strength of the weld. Surfaces to be welded and surfaces adjacent to a weld shall also be free from loose or thick scale, slag, rust, moisture, grease, and other foreign material that would prevent proper welding or produce objectionable fumes."

Who discovered the problem: Caltrans QA Inspector Timothy McClendon

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Name of individual from Contractor notified: ABF Representative Peter Ferguson, Dan Raynor

Time and method of notification: Verbal 10:00 Thursday 16-Oct-08

Name of Caltrans Engineer notified: Jason Tom

Time and method of notification: Verbal 10:00 Thursday 16-Oct-08

QC Inspector's Name:

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 Peter Dautermann, who represents the Office of Structural Materials for your project.

Inspected By: Dautermann,Peter

SMR

Reviewed By: Dautermann,Peter

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: 23-Oct-2008

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

Dear: Mr. Charles Kanapicki

Job Name: SAS Superstructure

Attention: Mr. Michael Flowers Project Executive

Document No: 05.03.06-000176

Subject: NCR No. ZPMC-0183

Reference Description: PJP Non uniform groove face

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:

Surfaces to be welded do not conform to workmanship requirements for preparation of base metal. Groove faces of closed ribs welded to deck panels were not smooth or uniform.

Please refer to the attached NCR #ZPMC-0183 for details.

Action Required and/or Action Taken:

A response for the resolution of this issue is expected within 14 days.

Transmitted by: Ching Chao

Attachments: ZPMC-0183

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, 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: 05.03.06-000176

Subject: NCR No. ZPMC-0183

Dated: 28-Oct-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000177 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: As shown in the photos and physically verified, it appears that the equipment should be adjusted as the surface profile deteriorates.

As shown in the photos and physically verified, it appears that the equipment should be adjusted as the surface profile deteriorates, CT has quoted AWS D1.5 Section 3.2.1 stating surfaces and edges shall be smooth, uniform etc.. so as not to adversely affect the quality of strength of the weld. ABF does not agree that the surface profile shown will affect the quality and strength of the weld, however, ABF does recognize that some of the dimensions of the weld preparations shown do not comply with the welding procedure/fabrication plan and request ZPMC to make the necessary adjustments for this purpose.

Submitted by:

Attachment(s): ABF-NPR-000177R00

Caltrans' comments:

Status: A&P

Date: 10-Nov-2008

The response is acceptable, but the Non-Conformance is not closed.

Please provide documentation that the welds are acceptable. The Department will review the Contractor's proposal to close Non-Conformance ZPMC-0183 at that time.

Submitted by: Wright, Doug

Date: 11-Nov-2008

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000176

Subject: NCR No. ZPMC-0183

Dated: 03-Dec-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000177 **Rev:** 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has acknowledged the deficiency by generating an internal NCR stating preventive actions and enhanced inspections.

ZPMC has acknowledged the deficiency by generating an internal NCR stating preventive actions and enhanced inspections. The state has requested weld inspection documents, however, the NCR does not list DP number or weld numbers. This NCR was generated at the material preparation stage. Weld inspection reports for deck panels are located within the welding reports. Weld quality is also verified during the green tagging process. ZPMC requests closure of this NCR.

Submitted by:

Attachment(s): ABF-NPR-000177R01; Doc to close this NCR

Caltrans' comments:

Status: CLO

Date: 16-Dec-2008

The proposed resolution is acceptable. The Department concurs that Non-Conformance ZPMC-0183 is closed.

Submitted by: Wright, Doug

Date: 16-Dec-2008

Attachment(s):



TRANSMITTAL LETTER

PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE

DATE: 12/01/2008

TO: RUBY/ ABFJV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: CALTRANS NCR FOR CLOSURE

SUBMITTED FOR YOUR APPROVAL.

ENCLOSED WITH THIS TRANSMITTAL IS ONE

- (1) COPY OF LETTER OF RESPONSE WITH NO.B-321 FOR CLOSURE.
- (2) COPY OF NCR WITH NUMBER NCR-000205(ZPMC-0183).
- (3) COPY OF INTERNAL NCR REPORT

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:

Rosemary
PLAN HOLDER

Dec 1st, 2008 14:30 pm
DATE

ABFJV
COMPANY

PHONE NO.

PLAN NUMBER: N/A
#R787-QCP-102



No. B-320 221

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2008-12-1

REGARDING: NCR-000205(ZPMC-0183)

With this letter of response, ZPMC requests closure for Caltrans NCR-000205 (ZPMC-0183). We have instructed the work staff that he must assure the groove surface reached smooth quality before going ahead to the next step. But if some areas were not uniform to the specification, he can repair by free-hand grinding.

Because there is no any trace information in the non-conformance report for the weld and panel number, therefore ZPMC can't provide any documentation to support the good weld quality. But we consider the corresponding quality information can be found in the submitted weekly report.

Therefore ZPMC considers the NCR-000205 (ZPMC-0183) can be closed

Please check the attached documentation for acceptance and close the NCR-000205 (ZPMC-0183).

ATTACHMENT:

NCR-000205 (ZPMC-0183)

ZPMC internal non-conformance report

Zhao Shuangbao

2008-12-1

Handwritten signature
ABS QCM
1 DEC. 08



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-115 (NCR-000205)

Item: 顶板 U-rib 切割焊接面不匀整
 名称描述: PJP Non uniform groove face
 Item Number: 件号:
 Drawing: 图号:

Location: BAY 1
 位置: OBG 顶板车间
 Date:
 日期: 2008-10-27

Description of Nonconformance:

不符合项状态描述:

Surfaces to be welded do not conform to workmanship requirements for preparation of base metal. Groove faces of closed ribs welded to deck panels were not smooth or uniform. This is typical on all U-ribs that have been manufactured to date. Please reference NCR-ZPMC-0070 dated Feb.15,2008. The Contractor has indicated (via ABF-CAL-LTR-000626,DATED 14 August) that the nibbler teeth would be replaced on a more frequent basis, and that surfaces would be repaired via grinding before welding. This remain, however, an ongoing issues. Included below are digital pictures of the closed rib PJP groove face discrepancy.

Applicable reference, AWS D1.5, Section 3.2.1.

加洲检验员 Timothy McClendon 在顶板制作车间发现, 顶板 U-rib 切割焊接面没有按照要求做好焊前准备, U 肋焊前的表面未达到手工制作工艺要求, 坡口面不光滑、匀整。在此之前打坡口的 U-rib 都发现此问题。请查阅 NCR-ZPMC-0070, 2008 年 2 月 15 日下发的 NCR, ZPMC 内部 NCR 编号为 NCR-B-017。对于机加工的坡口面, 承包商应该在焊前将坡口面打磨光滑。然而, 至今, 承包商也没有进行具体的实施。

引用标准: AWS D 1.5, 第 3.2.1 章节。

Work By: zhaoyunjun
 施工方: 准备: Shen Xuejun 2008.10.27
 Reviewed by QCE: 质量工程师批准: Zhu Shuangbo
 Drawing Error 图纸错误
 Material Defect 材料缺陷
 Fabrication Error 制作错误
 Other 其他原因

Disposition: Use as is 回用
 Repair 返修
 Reject 拒收

Recommendation:

建议:

机加工后的 U 肋坡口表面打磨或打磨光滑, 确认后
 格后进入下道工序, 加强处理过程管控。
 Grooves faces of closed ribs welded to deck panels shall be smooth or uniform
 via grinding. Make sure they meet the requirements before moving to another step.
 In have inspection in the process.

Prepared by: Xiong Wenhui (熊文辉)
 准备 质量经理批准: Huiwang 12/1

Reason for Nonconformance:

不符合原因:

U肋和加工后坡口表面没有打磨或进行打磨处理若在要求后进入下道工序。

Groove faces of closed ribs welded to deck panels were not smooth or uniform, therefore they don't conform to workmanship requirements for preparation of base metal.

Prevention of Re-occurrence:

预防措施:

U肋和加工后,对坡口表面进行用打磨机打磨处理光滑,并加强处理过程中的监控。

Groove faces of closed ribs welded to deck panels shall be smooth or uniform via grinding after machining.

Enhance inspection in the process.

Approved by/批准: Xiong Wenhui

Technical Justification for Use-As-Is/Repair:

Attachment

Non-attachment

回用或返修的技术依据:

附件

无附件

回用。以后U肋和加工后,一定将表面杂质、铁锈清理干净,打磨光滑,保证焊接质量,同时一定要加强处理过程中的监控,对相关人员进行教育和培训,杜绝此问题再次发生。

Use as is. Groove faces shall be smooth or uniform by grinding after machining to ensure the welding quality later. Enhance supervisory and control of the process, performance education and training of the relevant personnel in order to put an end to such mistakes.

Reviewed /批准:

Tang Yongbo 30.08

Verification:

Acceptable

Unacceptable

确认:

可接受

不可接受

Verified by QCI/质检确认:

Summei 0705331

Reviewed by QCA/质检主任审核:

Hulkang 12.1

#R787-QCP-1300

08.11.30



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: 23-Oct-2008

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

Dear: Mr. Charles Kanapicki
Attention: Mr. Michael Flowers Project Executive

Job Name: SAS Superstructure

Subject: NCR No. ZPMC-0183

Document No: 05.03.06-000176

Reference Description: PJP Non uniform groove face

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:

Surfaces to be welded do not conform to workmanship requirements for preparation of base metal. Groove faces of closed ribs welded to deck panels were not smooth or uniform.

Please refer to the attached NCR #ZPMC-0183 for details.

Action Required and/or Action Taken:

A response for the resolution of this issue is expected within 14 days.

Transmitted by: Ching Chao

Attachments: ZPMC-0183

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

02.02:15.04

05.03.06-000176,NCT

Received
NCT-000176 23 Oct 08

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection



Bay Area Branch
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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, PRC

Report No: NCR-000205

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 16-Oct-2008

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

NCR #: ZPMC-0183

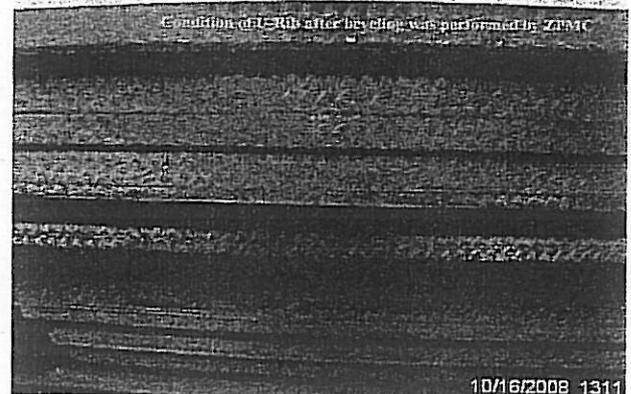
Type of problem:

Welding Concrete Other
Welding Curing Procedural Bridge No: 34-0006
Joint fit-up Coating Other Component: Deck Panels
Procedural Procedural Description: OBG Closed Ribs

Reference Description: PJP Non uniform groove face

Description of Non-Conformance:

Surfaces to be welded do not conform to workmanship requirements for preparation of base metal. Groove faces of closed ribs welded to deck panels were not smooth or uniform. This is typical on all U-Ribs that have been manufactured to date. Please reference NCR-ZPMC-0070 dated Feb. 15, 2008. The Contractor has indicated (via ABF-CAL-LTR-000626, dated 14 August) that the nibbler teeth would be replaced on a more frequent basis, and that surfaces would be repaired via grinding before welding. This remain, however, an ongoing issues. Included below are digital pictures of the closed rib PJP groove face discrepancy.



Applicable reference:

AWS D1.5, Section 3.2.1: "Surfaces and edges to be welded shall be smooth, uniform, and free from fins, tears, cracks, and other discontinuities which would adversely affect the quality or strength of the weld. Surfaces to be welded and surfaces adjacent to a weld shall also be free from loose or thick scale, slag, rust, moisture, grease, and other foreign material that would prevent proper welding or produce objectionable fumes."

Who discovered the problem: Caltrans QA Inspector Timothy McClendon

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Name of individual from Contractor notified: ABF Representative Peter Ferguson, Dan Raynor

Time and method of notification: Verbal 10:00 Thursday 16-Oct-08

Name of Caltrans Engineer notified: Jason Tom

Time and method of notification: Verbal 10:00 Thursday 16-Oct-08

QC Inspector's Name:

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 Peter Dautermann, who represents the Office of Structural Materials for your project.

Inspected By: Dautermann, Peter

SMR

Reviewed By: Dautermann, Peter

SMR

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, PRC**Report No:** NCS-000125**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 12-Dec-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0183**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component:
Procedural	Procedural	Description:	

Date the Non-Conformance Report was written: 16-Oct-2008**Description of Non-Conformance:**

Surfaces to be welded do not conform to workmanship requirements for preparation of base metal. Groove faces of closed ribs welded to deck panels were not smooth or uniform. This is typical on all U-Ribs that have been manufactured to date. Please reference NCR-ZPMC-0070 dated Feb. 15, 2008. The Contractor has indicated (via ABF-CAL-LTR-000626, dated 14 August) that the nibbler teeth would be replaced on a more frequent basis, and that surfaces would be repaired via grinding before welding. This remain, however, an ongoing issues.

Contractor's proposal to correct the problem:

ZPMC has acknowledged the deficiency by generating an internal NCR stating preventive actions and enhanced inspections. The state has requested weld inspection documents, however, the NCR does not list DP number or weld numbers. This NCR was generated at the material preparation stage. Weld inspection reports for deck panels are located within the welding reports. Weld quality is also verified during the green tagging process. ZPMC requests closure of this NCR.

Corrective action taken:

Closed by Caltrans Construction. METS closed the NCR based on Construction's direction.

Did corrective action require Engineer's approval? Yes No**If so, name of Engineer providing approval:** Stanley Ku and Doug Wright**Date:** 12-Dec-2008**Is Engineer's approval attached?** Yes No Email of concurrence on file.**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 Sang Le, who represents the Office of Structural Materials for your project.

Inspected By: Dautermann, Peter

Quality Assurance Inspector

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Reviewed By: Dautermann,Peter

QA Reviewer