

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-000097**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 09-Mar-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0095**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: DP-042-002
Procedural	Procedural	Descriptor:	OBG Deck Panel

Reference Description:**Description of Non-Conformance:**

The Contractor performed repairs without receiving prior Engineer approval. The Contractor performed repairs on a closed rib to box shell plate weld and on base metal that was damaged during performance of the SAW cover pass. The damage was caused when one of the flux hoppers on the Gantry closed rib welding machine ran out of flux. This occurred on closed rib U-128, weld 001 of OBG deck panel DP-042-002.

Applicable reference:

Special Provisions, Section 10-1.59 Steel Structures, Subsection Welding of Closed Ribs to Box Shell Plate (p. 328): "Repair welding methods and procedures shall be approved by the Engineer."

Contractor's Welding Quality Control Plan, Section 9.2.1.2: "Prior approval of the Engineer shall be obtained for repairs to base metal...."

Who discovered the problem: Tim McClendon, Larry Viars**Name of individual from Contractor notified:****Time and method of notification:****Name of Caltrans Engineer notified:** Stanley Ku**Time and method of notification:** Verbal notification on 03-13-2008**QC Inspector's Name:** ZPMC QC Inspector Mr. Chen Xi**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 Patrick Lowry, 916-227-5719, who represents the Office of Structural Materials for your project.

Inspected By: Lowry, Patrick

Quality Assurance Inspector

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Reviewed By: Lowry,Patrick

QA Reviewer



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 Enterprises, a JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 24-Mar-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: 05.03.06-000061

Subject: NCR No. ZPMC-0095

Reference Description: The Contractor performed repairs without receiving prior Engineer approval.

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 - No Response Required.

Material Location: OBG **Lift:** 03

Remarks:

The Contractor performed repairs on a closed rib to box shell plate weld and on base metal that was damaged during performance of the SAW cover pass. The damage was caused when one of the flux hoppers on the Gantry closed rib welding machine ran out of flux. This occurred on closed rib U-128, weld 001 of OBG deck panel DP-042-002.

Action Required and/or Action Taken:

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0095

cc: Rick Morrow, Gary Pursell, Brian Boal, Jason Tom

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000061

Subject: NCR No. ZPMC-0095

Dated: 19-Aug-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000086 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC understands the requirements of AWS D1.5-02 and the Special Provisions to obtain the approval of the Engineer prior to performing critical weld repairs.

Please see attached.

Submitted by: Kanapicki, Charles

Attachment(s): ABF-NPR-000086R00;

Caltrans' comments:

Status: REJ

Date: 11-Sep-2008

The response is not acceptable. Please provide documentation of the repair performed, and documentation that the required Non-Destructive Testing of the repaired area is acceptable.

Submitted by: Wright, Doug

Attachment(s):

Date: 11-Sep-2008



American
Bridge

FLUOR

A JOINT VENTURE

August 19, 2008

Reply to: SL-ABF-08-0181

Attention: Gary Pursell

Reference: San Francisco Oakland Bay SAS Bridge Superstructure
Caltrans Contract No. 04-0120F4
ABF Job No. 660110

Subject: NCR# ZPMC-0095

Mr. Pursell:

This letter is issue to provide formal response addressing the proposed resolution to NCR# ZPMC-0095.

ZPMC understands the requirements of AWS D1.5-02 and the Special Provisions to obtain the approval of the Engineer prior to performing critical weld repairs. Future critical weld repairs shall be submitted for approval prior to perform the repair.

Please feel free to contact me directly if you require assistance or further clarification.

Sincerely,

Nate Lindell
Quality Assurance Manager
AMERICAN BRIDGE / FLUOR JV

cc: file

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000061

Subject: NCR No. ZPMC-0095

Dated: 24-Sep-2008

Contract No.: 04-0120F 4
04-SF-80-13.2 / 13.9

Job Name: SAS Superstructure

Document No.: ABF-NPR-000086 **Rev:** 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC requests closure of this NCR based on the attached documentation.

Please find attached.

Submitted by:

Attachment(s): ABF-NPR-000086R01;

Caltrans' comments:

Status: CLO

Date: 06-Nov-2008

The proposed resolution is acceptable. The repair procedure was submitted as part of ABF-SUB-634R06, and approved as noted. Also, the welds in question were accepted as shown on the attached NDT reports. The Department concurs that Non-Conformance ZPMC-0095 is closed.

Submitted by: Wright, Doug

Date: 07-Nov-2008

Attachment(s):



No. B-295

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2008-8-28

REGARDING:

NCR-000069/000070/000078/000114/000095/000098/000097/000115/000118/000084/000123

With this letter of response, ZPMC requests closure for Caltrans NCR-000069/000070/000078/000114/000095/000098/000097/000115/000118/000084/000123 (ZPMC-0067/0068/0076/0110/0093/0096/0095/0111/0113/0082/0119). All of the non-conformance reports describe it is that zpmc repair the deck panel in the work process without received the engineer approval. As considered the welding continuity in the workshop, we directly repaired the defects which caused by the cease-arc, so that the panel fabrication can keep on performing. But not waiting for the CWR report approval for a few days. At the same time we had provided the repair procedure for welding process to government's approval. Then ZPMC can repair any defects in process following that procedure.

Furthermore we also attach the correlative VT and NDT reports which after repair and the final inspection, So that it's can prove those deck panel have reached the special requirements.

So ZPMC considers

NCR-000069/000070/000078/000114/000095/000098/000097/000115/000118/000084/000123 can be closed.

Please reference attached documentation for acceptance and closure the NCR-000069/000070/000078/000114/000095/000098/000097/000115/000118/000084/000123.

ATTACHMENT:

NCR-000069/000070/000078/000114/000095/000098/000097/000115/000118/000084/000123 (ZPMC-0067/0068/0076/0110/0093/0096/0095/0111/0113/0082/0119)

VT and MT reports which in the repair process

FVT and final MT reports for the deck panels

Zhuo Shuangbao

2008.8.28.

Thomas W Lamb
ABF QCM
9 SEPT. 08



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 Enterprises, a JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 24-Mar-2008

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

Job Name: SAS Superstructure

Document No: 05.03.06-000061

Dear: Mr. Charles Kanapicki
Attention: Mr. Dave Williams Consultant
Subject: NCR No. ZPMC-0095

Reference Description: The Contractor performed repairs without receiving prior Engineer approval.

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 - No Response Required.

Material Location: OBG

Lift: 03

Remarks:

The Contractor performed repairs on a closed rib to box shell plate weld and on base metal that was damaged during performance of the SAW cover pass. The damage was caused when one of the flux hoppers on the Gantry closed rib welding machine ran out of flux. This occurred on closed rib U-128, weld 001 of OBG deck panel DP-042-002.

Action Required and/or Action Taken:

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0095

cc: Rick Morrow, Gary Pursell, Brian Boal, Jason Tom

File: 05.03.06

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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-000097

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 09-Mar-21

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

NCR #: ZPMC-

Type of problem:

Welding Concrete Other
 Welding Curing Procedural Bridge No: 34-0006
 Joint fit-up Coating Other Component: DP-042-002
 Procedural Procedural Descriptor: OBG Deck Panel

Reference Description:

Description of Non-Conformance:

The Contractor performed repairs without receiving prior Engineer approval. The Contractor performed repairs on a closed rib to box shell plate weld and on base metal that was damaged during performance of the SAW cover pass. The damage was caused when one of the flux hoppers on the Gantry closed rib welding machine ran out of flux. This occurred on closed rib U-128, weld 001 of OBG deck panel DP-042-002.

Applicable reference:

Special Provisions, Section 10-1.59 Steel Structures, Subsection Welding of Closed Ribs to Box Shell Plate (p. 328): "Repair welding methods and procedures shall be approved by the Engineer."

Contractor's Welding Quality Control Plan, Section 9.2.1.2: "Prior approval of the Engineer shall be obtained for repairs to base metal...."

Who discovered the problem: Tim McClendon, Larry Viars

Name of individual from Contractor notified:

Time and method of notification:

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: Verbal notification on 03-13-2008

QC Inspector's Name: ZPMC QC Inspector Mr. Chen Xi

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 Patrick Lowry, 916-227-5719, who represents the Office of Structural Materials for your project.

Inspected By: Lowry, Patrick

Quality Assurance Inspector

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Reviewed By: Lowry,Patrick

QA Reviewer



周数 38
日期 2008.07.25

Visual Weld Inspection Report
焊缝目视检查报告

Girder/梁: OBG Urib
Tower/塔: NA

Caltrans Contract No. 加州合同编号 04-0120F4
Project No.: 项目名称 San Francisco Oakland Bay Bridge 美国
海湾大桥

Representative: 质检代表: *Thao Suwanphoo*
CWI: 检验员: *Smiller 91071551*

Project No.: ZP06-787
项目编号:

Quality Assurance Manager
~Approval
质量控制经理: *Howard*

Weld No. 焊缝编号	Welder I.D.# 焊工识别号	Location 位置	Welding consumables 焊接材料	Undercut 咬边	Porosity 气孔	Over lap 焊缝	Crater 弧坑	Arc strike 电弧擦伤	Spatters 飞溅	Crack 裂纹	Accept or Reject 接受或拒收	Repair 返修	Accept or Reject after repair 返修后接受或拒收
DP042-002-001	059468	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP042-002-002	059378	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP042-002-003	059361	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP042-002-004	059421	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP042-002-005	059361	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP042-002-006	059421	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP042-002-007	059403	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP042-002-008	059416	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA

After root weld
 After CWR or WRR No.:

After cover pass
 After HSR No.:

Others

HR787-QCP-603
"✓" is no defects. "X" is defects. "NA" is not applicable.



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-2387 DATE日期 2008.07.25 PAGE OF页码 1/1 Revision No: 0

PROJECT NO. 工程编号: ZP06-787 CONTRACTOR: 用户: CALTRANS

DRAWING NO. 图号: DP42 OBG U-RIB CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4

REFERENCING CODE 参考规范编号 AWS D1.5-2002 ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002 PROCEDURE NO. 程序编号 ZPQC-MT-01 CALIBRATION DUE DATE 仪器校正有效期 Dec. 28th, 2008

EQUIPMENT 设备 MT YOKE MANUFACTURER 制造商 PARKER MODEL NO. 样式编号 B310S SERIAL NO. 连续编号 5395 5617 5620

MAGNETIZING METHOD 磁化方法 Continuous magnetic yoke 磁轭式连续法 CURRENT 电流 AC

PARTICLE TYPE 磁粉类型 Dry magnet powder 干磁粉 YOKE SPACING 磁轭间距 70~150mm

MATERIAL TO BE EXAMINED 检测材料 WELDING 焊接件 CASTING 铸件 FORGING 锻造 Material & thickness 母材,厚度 A709M-345T2-X-S 12/14mm

WELDING PROCESS 焊接方法 SAW TYPE OF JOINT 焊缝类型 T-JOINT

WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
DP042-002-001				ACC.		10%MT
DP042-002-002				ACC.		10%MT
DP042-002-003				ACC.		10%MT
DP042-002-004				ACC.		10%MT
DP042-002-005				ACC.		10%MT
DP042-002-006				ACC.		10%MT
DP042-002-007				ACC.		10%MT
DP042-002-008				ACC.		10%MT

BLANK

EXAMINED BY 主操 Wang Wei REVIEWED BY 审核 Zhai Dongjun

LEVEL - II SIGN 签名 / DATE日期 08.07.25 LEVEL-II SIGN / DATE日期 08.7.25

质量经理 / QCM 用户 CUSTOMER

签字 SIGN / 日期 DATE 签字 SIGN / 日期 DATE

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000061

Subject: NCR No. ZPMC-0095

Dated: 01-Oct-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000086 **Rev:** 02

Contractor's Proposed Resolution:

Reference Resolution: APPROVED, ACTION PENDING should be an option for those NCRs where Caltrans agrees with our proposed resolution but where the actual corrective action and/or supporting documentation is forthcoming.

ABF JV respectfully requests that the status of this NCR be changed to APPROVED, ACTION PENDING

It appears from the response that the Department agrees with ABF JV's proposed resolution and will close the NCR when the acceptable documentation is submitted. Therefore, ABF JV respectfully requests that the status of this NCR be changed to APPROVED, ACTION PENDING.

Submitted by: Kanapicki, Charles

Attachment(s): ABF-NPR-000086R02

Caltrans' comments:

Status: CLO

Date: 06-Nov-2008

Non-Conformance ZPMC-0095 was closed in response to NPR-0086R01.

Submitted by: Wright, Doug

Attachment(s):

Date: 07-Nov-2008

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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(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-000110**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 06-Nov-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0095**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: 09-Mar-2008**Description of Non-Conformance:**

The Contractor performed repairs without receiving prior Engineer approval. The Contractor performed repairs on a closed rib to box shell plate weld and on base metal that was damaged during performance of the SAW cover pass. The damage was caused when one of the flux hoppers on the Gantry closed rib welding machine ran out of flux. This occurred on closed rib U-128, weld 001 of OBG deck panel DP-042-002.

Contractor's proposal to correct the problem:

VT and MT reports for the welds in question were submitted by the Contractor.

Corrective action taken:

Although the Contractor's response does not address the systemic issue where the Contractor continues to perform repairs without notifying the Engineer, METS closed the NCR based on Team China 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:** 06-Nov-2008**Is Engineer's approval attached?** Yes No Email of concurrence to close NCR is 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

Reviewed By: Dautermann, Peter

QA Reviewer