

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-000095**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 14-Mar-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0093**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: DP-006-001
Procedural	Procedural	Descriptor:	OBG Deck Panel

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

The Contractor used an unapproved WPS and performed repairs without receiving prior Engineer approval. The Contractor used a FCAW process on the closed rib weld at the transition between the closed rib and the run-off tab. The FCAW process has not been approved for closed rib welding. The Contractor discovered linear indications in the area welded with FCAW and proceeded to perform repairs without Engineer approval. This occurred on closed rib U16 (weld #8) of OBG deck panel DP-006-001.

Applicable reference:

AWS D1.5, Section 1.9: "All production welding shall be performed in conformance with the provisions of an approved Welding Procedure Specification (WPS)...."
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."

Who discovered the problem: Sherri Brannon**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 at 11:40 on 03-14-2008**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.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Inspected By: Lowry,Patrick

Quality Assurance Inspector

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: 05.03.06-000059

Subject: NCR No. ZPMC-0093

Reference Description: The Contractor used an unapproved WPS and 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.

Enclosed please find the following items:

Material Location: OBG **Lift:** 03

Remarks:

The Contractor used a FCAW process on the closed rib weld at the transition between the closed rib and the run-off tab. The FCAW process has not been approved for closed rib welding. The Contractor discovered linear indications in the area welded with FCAW and proceeded to perform repairs without Engineer approval. This occurred on closed rib U16 (weld #8) of OBG deck panel DP-006-001.

Action Required and/or Action Taken:

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0093

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: 05.03.06-000059

Subject: NCR No. ZPMC-0093

Dated: 19-Aug-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000076 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: Contractor repaired closed ribs to box shell plate using non approved methods. Fabricator has generated root pass repair procedure submitted to the State 7-15-08, 634R4

Please see attached letter.

Submitted by: Kanapicki, Charles

Attachment(s): ABF-NPR-000076R00;

Caltrans' comments:

Status: REJ

Date: 11-Sep-2008

The response is not acceptable. Submittal 634R04 referenced in this NPR has been Returned for Correction. Please provide documentation of the actual 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-08-0171

Attention: Gary Pursell

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

Subject: NCR# ZPMC-0093

Mr. Pursell:

This letter is issue to provide formal response addressing the proposed resolution to NCR# ZPMC-0093.

The Contractor repaired closed ribs to box shell plate using repair methods and procedures that were not previously approved by the engineer.

The fabricator has generated a root pass repair procedure. This repair procedure was submitted to the State on 15 July 2008 submittal No. 634R4

The repairs performed on the root pass as stated above were performed per the same methods and WPS that are documented within the Root Pass repair procedure.

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: 05.03.06-000059

Subject: NCR No. ZPMC-0093

Dated: 24-Sep-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000076 **Rev:** 01

Contractor's Proposed Resolution:

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

Please see attached.

Submitted by:

Attachment(s): ABF-NPR-000076R01;

Caltrans' comments:

Status: CLO

Date: 06-Nov-2008

The proposed resolution is acceptable. The welds in question were accepted as shown on the attached NDT reports. The Department concurs that Non-Conformance ZPMC-0093 is closed.

Submitted by: Wright, Doug

Date: 06-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: 05.03.06-000059

Dear: Mr. Charles Kanapicki

Attention: Mr. Dave Williams Consultant

Subject: NCR No. ZPMC-0093

Reference Description: The Contractor used an unapproved WPS and 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.

Enclosed please find the following items:

Material Location: OBG

Lift: 03

Remarks:

The Contractor used a FCAW process on the closed rib weld at the transition between the closed rib and the run-off tab. The FCAW process has not been approved for closed rib welding. The Contractor discovered linear indications in the area welded with FCAW and proceeded to perform repairs without Engineer approval. This occurred on closed rib U16 (weld #8) of OBG deck panel DP-006-001.

Action Required and/or Action Taken:

Transmitted by: Stanley Ku Sr. Bridge Engineer
Attachments: ZPMC-0093

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-000095

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 14-Mar-2008

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-006-001
 Procedural Procedural Descripton: OBG Deck Panel

Reference Description:

Description of Non-Conformance:

The Contractor used an unapproved WPS and performed repairs without receiving prior Engineer approval. The Contractor used a FCAW process on the closed rib weld at the transition between the closed rib and the run-off tab. The FCAW process has not been approved for closed rib welding. The Contractor discovered linear indications in the area welded with FCAW and proceeded to perform repairs without Engineer approval. This occurred on closed rib U16 (weld #8) of OBG deck panel DP-006-001.

Applicable reference:

AWS D1.5, Section 1.9: "All production welding shall be performed in conformance with the provisions of an approved Welding Procedure Specification (WPS)...."
 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."

Who discovered the problem: Sherri Brannon

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 at 11:40 on 03-14-2008

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.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Inspected By: Lowry,Patrick

Quality Assurance Inspector

Reviewed By: Lowry,Patrick

QA Reviewer



Visual Weld Inspection Report
 焊缝目视检查报告

周数: 32
 日期: 2008.06.15

B-VI 544B

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

Project No.:
项目编号:

ZP06-787

Quality Assurance Manager
-Approval
质量控制经理:

Hustady

Girder/梁:
Tower/塔:
Representative:
质检代表:

OBG Urb

NA

CWI:
检验员:

Luigi T. ...
Luigi T. ...
07/20/08

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
DP006-001-001	062265	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP006-001-002	059403	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP006-001-003	059421	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP006-001-004	062265	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP006-001-005	059421	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP006-001-006	062265	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP006-001-007	059378	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA
DP006-001-008	059468	2G	JW-3	✓	✓	✓	✓	✓	✓	✓	Acc	NA	NA

After root weld

After cover pass

After CWR or WRR No.:

After HSR No.:

Others

#R787-QCP-593

"✓" 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-1644 DATE日期 2008.06.15 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: DP57B OBG U-RIB		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4	
REFERENCING CODE 参考规范编码 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. 28 ST , 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	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X-S 12/14mm
WELDING PROCESS 焊接方法	GMAW	TYPE OF JOINT 焊缝类型	T-JOINT

WELD I.D. 焊缝编号	DISCONTINUITY 不连续处			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
DP006-001-001				ACC.		10%MT
DP006-001-002				ACC.		10%MT
DP006-001-003				ACC.		10%MT
DP006-001-004				ACC.		10%MT
DP006-001-005				ACC.		10%MT
DP006-001-006				ACC.		10%MT
DP006-001-007				ACC.		10%MT
DP006-001-008				ACC.		10%MT
BLANK						

EXAMINED BY 主探 <i>Way Wei</i>	REVIEWED BY 审核 <i>Li Liming</i> 2008.06.15
LEVEL-II SIGN 签名 / DATE日期 08.06.15	LEVEL-II SIGN / DATE日期
质量经理 / QCM	用户 CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

DEPARTMENT OF TRANSPORTATION

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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-000111**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 06-Nov-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0093**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: 14-Mar-2008**Description of Non-Conformance:**

The Contractor used an unapproved WPS and performed repairs without receiving prior Engineer approval. The Contractor used a FCAW process on the closed rib weld at the transition between the closed rib and the run-off tab. The FCAW process has not been approved for closed rib welding. The Contractor discovered linear indications in the area welded with FCAW and proceeded to perform repairs without Engineer approval. This occurred on closed rib U16 (weld #8) of OBG deck panel DP-006-001.

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