

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, China**Report No:** NCR-000902**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Nov-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0864**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Weld DP3104-001
Procedural	Procedural	Description:	

Reference Description: New Weld Procedure Not Being Followed (Rager/McQuaid)**Description of Non-Conformance:**

Caltrans QA in process observations of the fabrication of DP-3104-001 discovered the following issue(s):
 ZPMC welding personnel did not appear to be following the NEW WELD PROCEDURE (Rager / McQuaid)
 The following requirements were not followed:

5. Postweld Thermal Treatment (5A, 5B, 5D)

NOTE: The above reference is relative to section 5 of the NEW WELD PROCEDURE (Rager/McQuaid) and the corresponding paragraph letters.

The weld is identified as DP-3104-001-44

The welding process used was Flux Cored Arc Welding (FCAW)

The area was being preheated using electric strip heaters.

The weld is a Fillet joining Closed Rib to Deck Panel Diaphragm

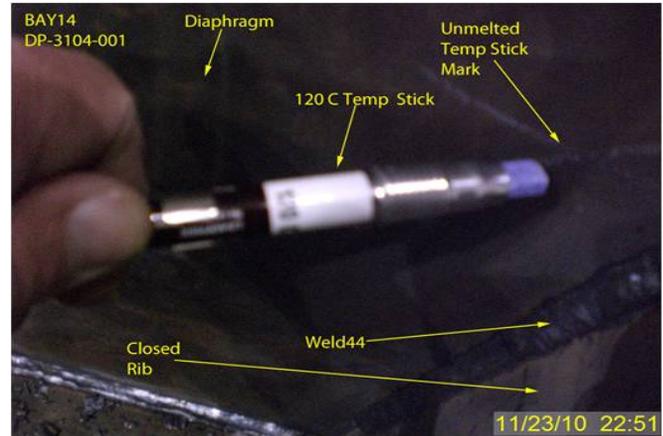
The weld is not SPCM

DP-3104-001 is located in bay 14

See photos below :

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

NEW WELD PROCEDURE (Rager / McQuaid)

5) Postweld Thermal Treatment.

A. After welding is completed but before the temperature falls below that of the preheat temperature, post heat shall be applied to maintain the temperature in the area of the weld at 165 C - 225°C.

B. Post weld heating shall be maintained for a minimum of 1.5 hours for material base metal thickness of 25mm or less.

D. After the post weld heating time has been reached the repair shall be cooled by removing the heating source and leaving the blankets in place.

Who discovered the problem: Brett W Rice

Name of individual from Contractor notified: Bao Qian

Time and method of notification: 22:45 hours 11/23/10 Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 19:00_11/24/10_Email

QC Inspector's Name: Wang Lu

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

NA

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 Mazen Wahbeh,(818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Devey,Jim

SMR

Reviewed By: Wahbeh,Mazen

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: 25-Nov-2010

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

Dear: Mr. Charles Kanapicki
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Subject: NCR No. ZPMC-0864

Job Name: SAS Superstructure
Document No: 05.03.06-000859

Reference Description: New Weld Procedure Not Being Followed (Rager/McQuaid)

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:** 13

Remarks:

Caltrans QA in process observations of the fabrication of DP-3104-001 discovered the following issue(s):
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5. Postweld Thermal Treatment (5A, 5B, 5D)

NOTE: The above reference is relative to section 5 of the NEW WELD PROCEDURE (Rager/McQuaid) and the corresponding paragraph letters.

The weld is identified as DP-3104-001-44
 The welding process used was Flux Cored Arc Welding (FCAW)
 The area was being preheated using electric strip heaters.
 The weld is a Fillet joining Closed Rib to Deck Panel Diaphragm
 The weld is not SPCM
 DP-3104-001 is located in bay 14

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Laraine Woo Transportation Engineer
Attachments: ZPMC-0864

NCT

(*Continued Page 2 of 2*)

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Contract Files, Ching Chao, Bill Casey

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Dated: 01-Dec-2010

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

Attention: Siegenthaler, Peter
Resident Engineer

Job Name: SAS Superstructure

Ref: 05.03.06-000859

Document No.: ABF-NPR-000857 **Rev:** 00

Subject: NCR No. ZPMC-0864

Contractor's Proposed Resolution:

Reference Resolution: As this NCR was written without a contractual basis it should be withdrawn.

The "NEW WELD PROCEDURE (Rager/McQuaid)" quoted as the basis for this NCR is not a contract document only a recommendation from the QA/QC Committee. If the Department wants to incorporate the QA/QC committee's recommendations as a contract requirement a contract change order should be issued. As this NCR was written without a contractual basis it should be withdrawn.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000857R00

Caltrans' comments:

Status: REJ

Date: 03-Dec-2010

CT acknowledges contractor's response. However, successful NDT will close this NCR.

Submitted by: Chao, Ching

Date: 03-Dec-2010

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000859

Subject: NCR No. ZPMC-0864

Dated: 08-Dec-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000857 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: We understand your response and we will not submit the normal NCR closure package with NDT reports for this and expect that CT will close these as the green tags for these components are issued.

We understand your response and we will not submit the normal NCR closure package with NDT reports for this and expect that CT will close these as the green tags for these components are issued.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000857R01

Caltrans' comments:

Status: REJ

Date: 09-Dec-2010

Normal NCR closure package with NDT reports shall be submitted with the NPR to close out the NCR.

Submitted by: Woo, Laraine

Date: 09-Dec-2010

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000859

Subject: NCR No. ZPMC-0864

Dated: 22-Feb-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000857 Rev: 02

Contractor's Proposed Resolution:

Reference Resolution:

See attached NDT results to show the weld is acceptable. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000857R02;

Caltrans' comments:

Status: CLO

Date: 23-Feb-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0864 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 23-Feb-2011

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, China**Report No:** NCR-000902**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Nov-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0864**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Weld DP3104-001
Procedural	Procedural	Description:	

Reference Description: New Weld Procedure Not Being Followed (Rager/McQuaid)**Description of Non-Conformance:**

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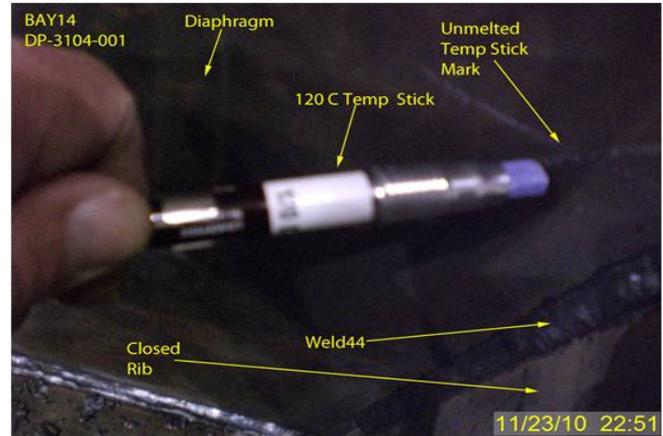
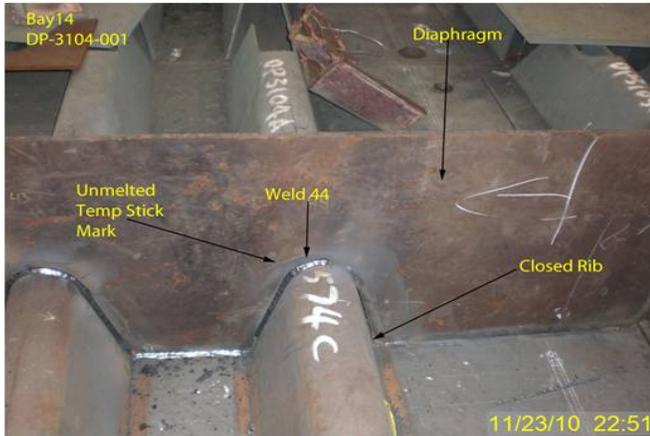
The weld is not SPCM

DP-3104-001 is located in bay 14

See photos below :

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

NEW WELD PROCEDURE (Rager / McQuaid)

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Time and method of notification: 22:45 hours 11/23/10 Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 19:00_11/24/10_Email

QC Inspector's Name: Wang Lu

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

NA

Comments:

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Inspected By: Devey,Jim SMR

Reviewed By: Wahbeh,Mazen SMR



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-33841		DATE日期 2010.12.25		PAGE OF页码 23/27	Revision No: 0	
PROJECT NO. 工程编号: ZP06-787			CONTRACTOR: 用户: CALTRANS			
DRAWING NO. 图号: DP3102/3103/3104 13CE DECK CONNECTION PLATE			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 , 2010			
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 DA-400S	SERIAL NO. 连续编号 17364			
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 12/14mm			
WELDING PROCESS 焊接方法	FCAW	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			
DP3104-001-043				ACC.		100%MT
DP3104-001-044				ACC.		100%MT
DP3104-001-053				ACC.		100%MT
DP3104-001-054				ACC.		100%MT
DP3104-001-064				ACC.		100%MT
DP3104-001-065				ACC.		100%MT
DP3104-001-076				ACC.		100%MT
DP3104-001-077				ACC.		100%MT
DP3104-001-085				ACC.		100%MT
DP3104-001-086				ACC.		100%MT
DP3104-001-095				ACC.		100%MT
DP3104-001-096				ACC.		100%MT
DP3104-001-105				ACC.		100%MT
DP3104-001-106				ACC.		100%MT
DP3104-001-118				ACC.		100%MT
DP3104-001-119				ACC.		100%MT
EXAMINED BY 主探 Gu Yunwu <i>Gu Yunwu</i> 12/25/10			REVIEWED BY 审核 <i>Wangwei</i> 12/25/10			
LEVEL - II SIGN 签名 / DATE日期			LEVEL-II SIGN / DATE日期			
质量经理 / QCM <i>Lu Jianhua</i>			用户CUSTOMER			
签字 SIGN / 日期 DATE			签字 SIGN / 日期 DATE			

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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, China**Report No:** NCS-000922**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Feb-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0864**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: 23-Nov-2010**Description of Non-Conformance:**

Caltrans QA in process observations of the fabrication of DP-3104-001 discovered the following issue(s):
ZPMC welding personnel did not appear to be following the NEW WELD PROCEDURE (Rager / McQuaid)
The following requirements were not followed:

5. Postweld Thermal Treatment (5A, 5B, 5D)

NOTE: The above reference is relative to section 5 of the NEW WELD PROCEDURE (Rager/McQuaid) and the corresponding paragraph letters.

The weld is identified as DP-3104-001-44

The welding process used was Flux Cored Arc Welding (FCAW)

The area was being preheated using electric strip heaters.

The weld is a Fillet joining Closed Rib to Deck Panel Diaphragm

The weld is not SPCM

DP-3104-001 is located in bay 14

See photos below :

Contractor's proposal to correct the problem:

Contractor will provide the NDT report to prove the weld is acceptable.

Corrective action taken:

Contractor provided the NDT report. The report shows the weld is acceptable.

Did corrective action require Engineer's approval?

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Yes No

If so, name of Engineer providing approval:

Date:

Is Engineer's approval attached? Yes No

Comments:

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Inspected By: Ng,Michael

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer