

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-001007**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 08-May-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0965**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Lift 12 West Deck and Bottom Panel
Procedural	Procedural	Description:	

Reference Description: ZPMC performed base metal repair without prior Engineer's approval, repair documentation, preheat, and QC presence over 55 minutes

Description of Non-Conformance:

During Quality Assurance (QA) random in-process observations of the fabrication of OBG Lift 12CW, this Caltrans QA Inspector observed the following issues:

- ZPMC welding personnel was performing SMAW repair of deck plate base metal without prior Engineer's approval.
- Additionally, no contractor's QC monitored the repair process (55 minutes).
- The scope of the repair work is not known. No repair documentation or WPS are available.
- This QA observed that no preheat was performed prior to commencement of the repair.
- This QA was present in the area from 2015 hours to 2110 hours. Welding repair was being performed during this time.
- Caltrans QA lead inspector, Mr. Ken Riley notified ZPMC QA inspector Mr. Zhang Jiadi at approximately 2015 hours that no ZPMC QC CWI was present in the area. In the conversation, Mr. Zhang agreed to get a QC to look at this repair within 15 minutes.
- This QA departed the area at approximately 2110 hours after weld repairs stopped. The contractor's QC did not show up from 2015 to 2110 hours.

Area 1)

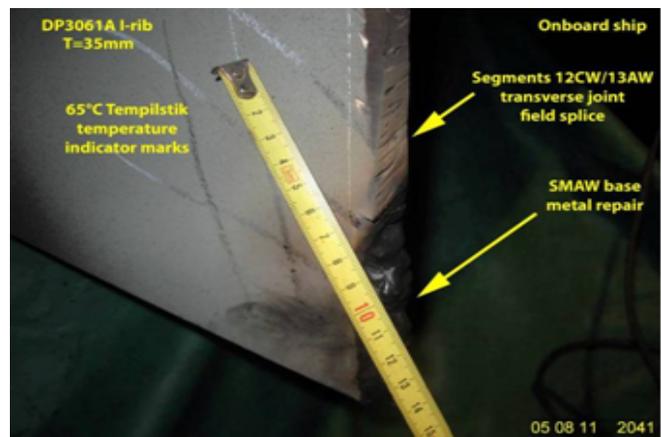
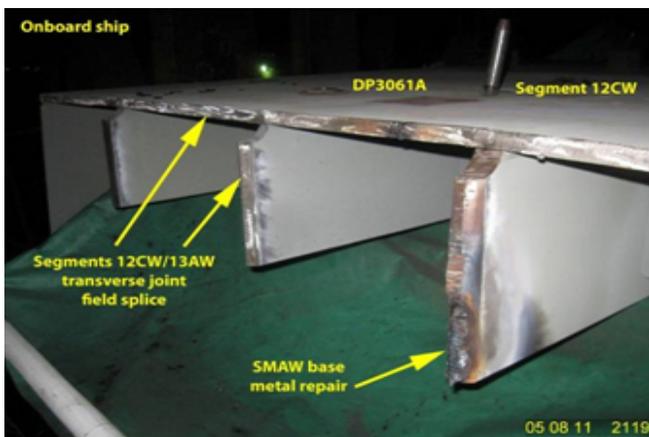
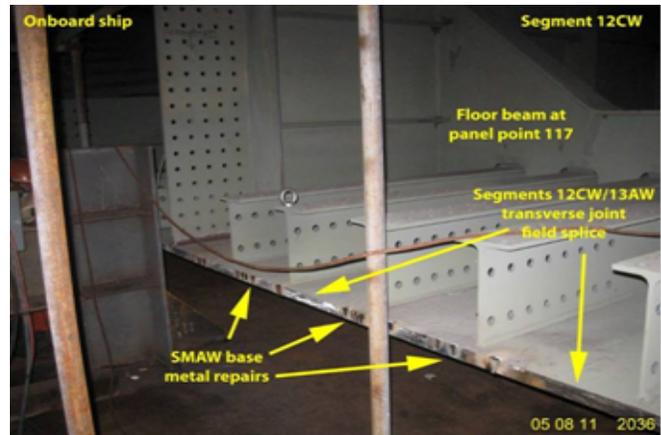
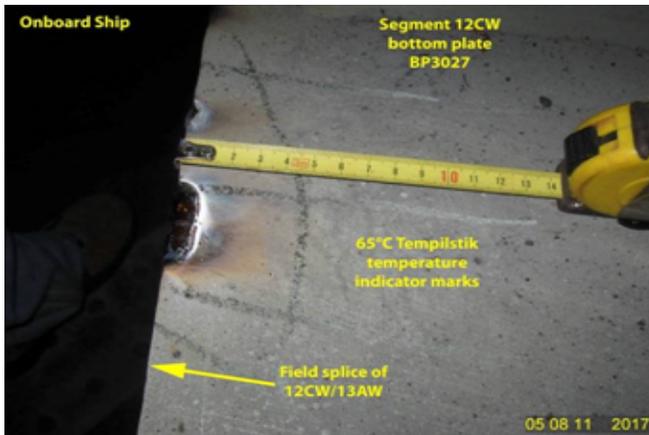
- The affected member is identified as DP3061A.
- The location of the repair area is at the east end of I-rib stiffener #RS3036F. Material thickness is 35mm. Material type is HPS-485WT2

Area 2)

- The affected member is identified as BP3027.
- The location of the repair area is at the east end of plate #PL3147B, between T-ribs identified as RS3060A and RS3060B. Material thickness is 28mm.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

AWS D1.5 2002 section 3.2.2.1: "...occasional notches or gouges in thermal-cut surfaces, resulting from improper operation of the cutting process, may, with the approval of the Engineer, be repaired by welding."

Special provisions 8-3.01: "The Engineer shall be notified immediately in writing when welding problems, deficiencies, base metal repairs or any other type of repairs not submitted in the WQCP are discovered and also of proposed repair procedures to correct them."

Caltrans Special Provisions, Section 8-3.01: "QC inspections shall be provided to ensure continuous inspection when any welding is being performed. Continuous inspection, as a minimum, shall include (1) having QC Inspectors continually present on the shop floor or project site when any welding operation is being performed, and (2) having a QC Inspector within such close proximity of all welders or operators so that inspections by the QC Inspector of each operation, at each welding location, shall not lapse for a period exceeding 30 minutes."

AWS D1.5 (2002), Section 4.2.7: requires the base metal temperature to be at or above the specified minimum temperature for a distance not less than 75mm in all directions from the point of welding.

Who discovered the problem: George Goulet

Name of individual from Contractor notified: Man Kit Li

Time and method of notification: 2115 hours, 5/8/2011, verbal

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

Name of Caltrans Engineer notified: Sean Eagen

Time and method of notification: 1700 hours, 5/9/2011, email

QC Inspector's Name: Zhang Jiadi

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

Inspected By:	Tsang, Eric	SMR
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Reviewed By:	Wahbeh, Mazen	SMR
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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: 10-May-2011

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: 05.03.06-000963

Subject: NCR No. ZPMC-0965

Reference Description: ZPMC performed base metal repair without prior Engineer's approval, repair documentation, preheat, and QC presence over 55 minutes.

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:** 12

Remarks:

During Quality Assurance (QA) random in-process observations of the fabrication of OBG Lift 12CW, this Caltrans QA Inspector observed the following issues:

- ZPMC welding personnel was performing SMAW repair of deck plate base metal without prior Engineer's approval.
- Additionally, no contractor's QC monitored the repair process (55 minutes).
- The scope of the repair work is not known. No repair documentation or WPS are available.
- This QA observed that no preheat was performed prior to commencement of the repair.
- This QA was present in the area from 2015 hours to 2110 hours. Welding repair was being performed during this time.
- Caltrans QA lead inspector, Mr. Ken Riley notified ZPMC QA inspector Mr. Zhang Jiadi at approximately 2015 hours that no ZPMC QC CWI was present in the area. In the conversation, Mr. Zhang agreed to get a QC to look at this repair within 15 minutes.
- This QA departed the area at approximately 2110 hours after weld repairs stopped. The contractor's QC did not show up from 2015 to 2110 hours.

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Area 2)

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- The location of the repair area is at the east end of plate #PL3147B, between T-ribs identified as RS3060A and RS3060B. Material thickness is 28mm.

Action Required and/or Action Taken:

Propose resolutions for the identified non-conformance items and document that the various deficiencies have been brought in compliance with contract requirements. Also propose a resolution that addresses the apparent failure of Quality Control to identify the

NCT

(*Continued Page 2 of 2*)

non-conformance. Provide documentation of the steps taken by the Quality Control Manager to prevent future occurrences.

The response for the resolution of this issue is requested within 7 days.

Transmitted by: Sean Eagen Transportation Engineer

Attachments: ZPMC-0965

cc: Rick Morrow, Peter Siegenthaler, Stanley Ku, Brian Boal, Contract Files, Bill Casey

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000963

Subject: NCR No. ZPMC-0965

Dated: 25-May-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000959 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution:

Please see ZPMC's comments

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000959R00;

Caltrans' comments:

Status: CLO

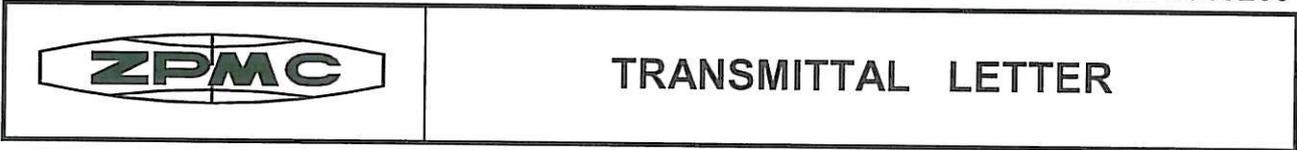
Date: 25-May-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0965 is closed.

Submitted by: Eagen, Sean

Date: 25-May-2011

Attachment(s):



PROJECT: S.F.O.B.B.

DATE:2011-05-25

TO: ROSEMARY/ABF JV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: OBG NCR

SUBMITTED FOR YOUR APPROVAL AND SUBMITTAL TO CALTRANS

ENCLOSED WITH THIS TRANSMITTAL IS ONE COPY OF

(01) LR: No. B-999

(02) NCR-001007(ZPMC-0965)

B787-MT-39279

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT

PLAN HOLDER:



RECEIVED 25 MAY 2011
DATE:



COMPANY:



PHONE NO.

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



No. B-999

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2011-05-25

REGARDING: NCR-001007(ZPMC-0965)

ZPMC QA personnel have talked with the floor QC to enhance the welding control on site. ZPMC is providing the NDT record to show the acceptance of these repaired areas. The punchlist item has been verified by department's representative. Based on this, ZPMC is request closure of this NCR.

ATTACHMENT:

NCR-001007(ZPMC-0965)

B787-MT-39279

A handwritten signature in black ink, appearing to be "J. M. R.", is located below the attachment list.

5/25/11

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Cty: 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-001007**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 08-May-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0965**Type of problem:**Welding Concrete Other Welding Curing Procedural

Bridge No: 34-0006

Joint fit-up Coating Other

Component: Lift 12 West Deck and Bottom Panel

Procedural Procedural Description:

Reference Description: ZPMC performed base metal repair without prior Engineer's approval, repair documentation, preheat, and QC presence over 55 minutes

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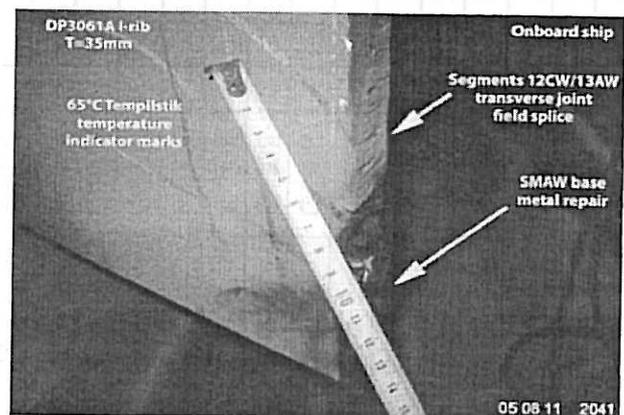
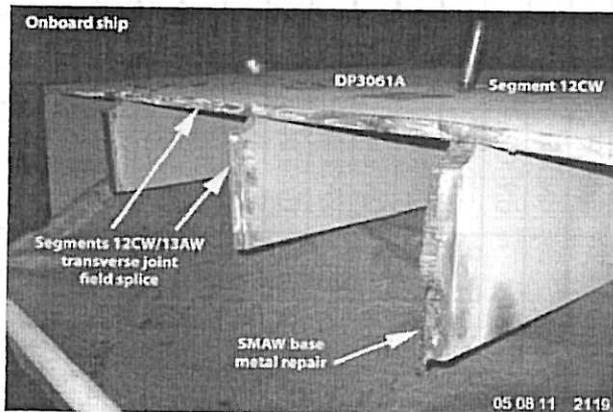
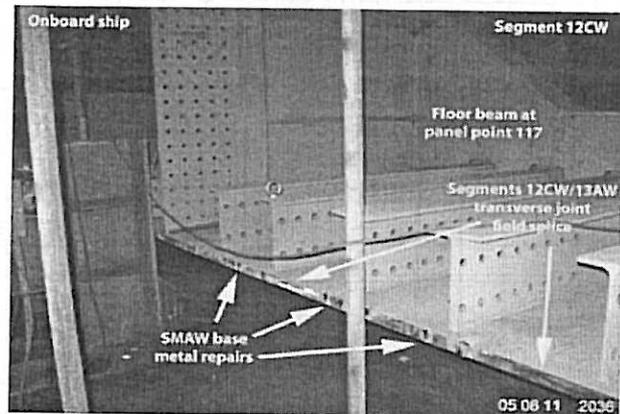
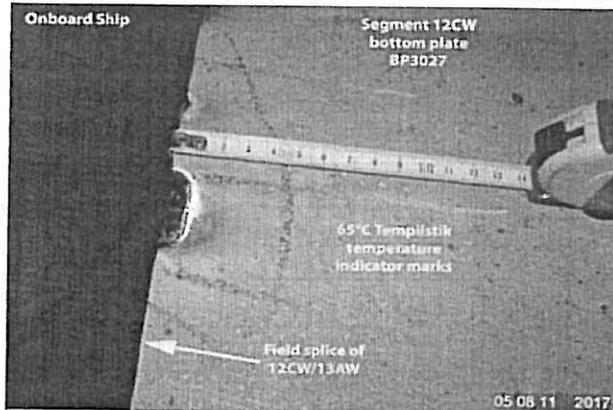
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

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Comments:

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Inspected By: Tsang, Eric 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-39279		DATE 日期 2011.05.10		PAGE OF 页码 1/1		Revision No: 0	
PROJECT NO. 工程编号: ZP06-787				CONTRACTOR: 用户: CALTRANS			
DRAWING NO. 12CW 图号:				CALTRANS CONTRACT NO.: 04-0120F4 加州工程编号			
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 , 2011	
EQUIPMENT 设备 MT YOKE		MANUFACTURER 制造商 PARKER		MODEL NO. 样式编号 B310S		SERIAL NO. 连续编号 7453	
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-345T2/485T2 35/28/10mm	
WELDING PROCESS 焊接方法		SMAW		TYPE OF JOINT 焊缝类型		CORNER 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				
RS3036F				ACC.		100%MT	
PL3147B				ACC.		100%MT	
BASE METAL PER AFTER B-CWR2129							
EXAMINED BY 主探 He Zhishun <i>Hezhishun</i> LEVEL - II SIGN 签名 / DATE 日期 2011.05.10 质量经理 / QCM <i>duji...</i>				REVIEWED BY 审核 <i>Wuqem</i> LEVEL-II SIGN / DATE 日期 2011.05.10 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, P.R. China**Report No:** NCS-000973**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 25-May-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0965**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: 08-May-2011**Description of Non-Conformance:**

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