

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 #: 04-0120F4
 Cty: SF/ALA Rte: 80 PM: 13.2/13.9
 File #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, P.R. China

Report No: NCR-000967

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 11-Jan-2011

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

NCR #: ZPMC-0926

Type of problem:

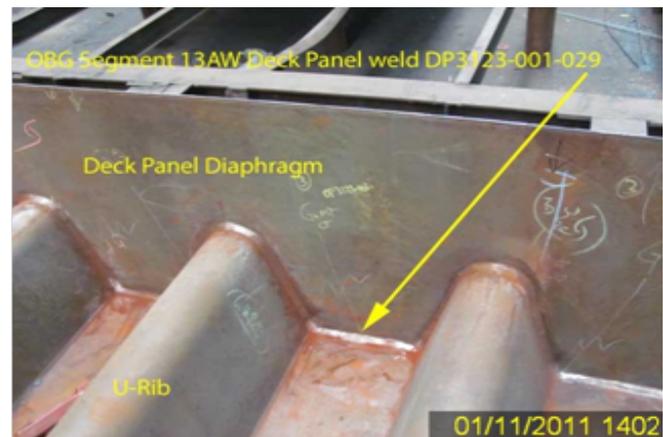
Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Segment 13AW Deck Panel
Procedural	Procedural	Description: Missed MT indication	

Reference Description: QA found 1 missed MT indication in Segment 13AW Deck Panel

Description of Non-Conformance:

During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds located on Segment 13AW, this QA Inspector discovered the following issues:

- One (1) Longitudinal linear indication measuring approximately 20mm in length.
- This weld is identified as: DP3123-001-029.
- This weld is a fillet weld joining the deck panel (DP3123 SPCM) to the deck panel diaphragm (X4080D).
- The weld is designated on the contract drawings as a Fracture Critical Weld (FCW).
- This OBG deck panel is located in Bay 14.
- The Notice of Witness Inspection Number (NWIT) is 08130.
- The Contractor's Quality Control (QC) personnel have performed 100% Magnetic Particle Testing of these welds.



Applicable reference:

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.

Who discovered the problem: Larry Viars

Name of individual from Contractor notified: Peter Shaw

Time and method of notification: 1430 hours, 1/11/11, Verbal

Name of Caltrans Engineer notified: Sean Eagen

Time and method of notification: 0830 hours, 1/12/11, Email

QC Inspector's Name: Wang Lu

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
----------------------	-------------	-----

Reviewed By:	Wahbeh, Mazen	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: 12-Jan-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: 05.03.06-000924

Subject: NCR No. ZPMC-0926

Reference Description: QA found 1 missed MT indication in Segment 13AW Deck Panel

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:

During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds located on Segment 13AW, this QA Inspector discovered the following issues:

- One (1) Longitudinal linear indication measuring approximately 20mm in length.
- This weld is identified as: DP3123-001-029.
- This weld is a fillet weld joining the deck panel (DP3123 SPCM) to the deck panel diaphragm (X4080D).
- The weld is designated on the contract drawings as a Fracture Critical Weld (FCW).
- This OBG deck panel is located in Bay 14.
- The Notice of Witness Inspection Number (NWIT) is 08130.
- The Contractor's Quality Control (QC) personnel have performed 100% Magnetic Particle Testing of these welds.

Action Required and/or Action Taken:

Propose a resolution for this non-conformance and provide documentation that the deficiency has been brought into compliance with the contract requirements. Propose a resolution that addresses the apparent failure of Quality Control to identify the indication. Additionally, 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-0926

cc: Rick Morrow, 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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000924

Subject: NCR No. ZPMC-0926

Dated: 20-Jan-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000916 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has repaired the missed indication and is providing the MT done after to show that it is acceptable

ZPMC has repaired the missed indication and is providing the MT done after to show that it is acceptable. The inspector responsible for missing this indication has been removed from the project, to prevent future occurrences. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000916R00;

Caltrans' comments:

Status: CLO

Date: 20-Jan-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0926 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 20-Jan-2011



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-34935R1		DATE日期 2011.01.18	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: DP3123 13AW DECK PLATE SPLICE		CALTRANS CONTRACT NO.: 加州工程编号 04-0050F4		
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 USA	MODEL NO. 样式编号 MODEL #ES-X	SERIAL NO. 连续编号 13979	
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/F2 20/14/18mm	
WELDING PROCESS 焊接方法	SMAW	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			
DP3123-001-029	1R1			ACC.		100%MT
AFTER B-CWR2750 REV0						
BLANK						

EXAMINED BY主探 Tao Linying <i>Tao Linying</i> 2011.1.18	REVIEWED BY 审核 <i>Yao Chunping</i> 2011.1.18
LEVEL - II SIGN 签名 / DATE日期	LEVEL-II SIGN / DATE日期
质量经理 / QCM <i>[Signature]</i> 2011.1.18	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: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000924

Subject: NCR No. ZPMC-0926

Dated: 27-Jan-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000916 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has removed the indication and is providing the NDT after to show that the indication is no longer present. ZPMC has removed the indication and is providing the NDT after to show that the indication is no longer present. The inspector who was responsible has been retrained and his performance is being monitored. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000916R01;

Caltrans' comments:

Status: CLO

Date: 27-Jan-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0926 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 27-Jan-2011



No. B-969

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2011-1-21

REGARDING: NCR-000967(ZPMC-0926)

ZPMC acknowledged this problem and has issued an internal NCR. This indication has been removed, repaired and re-tested to be acceptable. ZPMC is providing the NDT record and is requesting closure of this NCR.

ATTACHMENT:

NCR-000967(ZPMC-0926)

B787-MT-34935 R1

Zhangwei
1/21/2011



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: 12-Jan-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: 05.03.06-000924

Subject: NCR No. ZPMC-0926

Reference Description: QA found 1 missed MT indication in Segment 13AW Deck Panel

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:

During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds located on Segment 13AW, this QA Inspector discovered the following issues:

- One (1) Longitudinal linear indication measuring approximately 20mm in length.
- This weld is identified as: DP3123-001-029.
- This weld is a fillet weld joining the deck panel (DP3123 SPCM) to the deck panel diaphragm (X4080D).
- The weld is designated on the contract drawings as a Fracture Critical Weld (FCW).
- This OBG deck panel is located in Bay 14.
- The Notice of Witness Inspection Number (NWIT) is 08130.
- The Contractor's Quality Control (QC) personnel have performed 100% Magnetic Particle Testing of these welds.

Action Required and/or Action Taken:

Propose a resolution for this non-conformance and provide documentation that the deficiency has been brought into compliance with the contract requirements. Propose a resolution that addresses the apparent failure of Quality Control to identify the indication. Additionally, 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-0926

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

File: 05.03.06

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 #: 04-0120F4

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-000967

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 11-Jan-2011

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

NCR #: ZPMC-0926

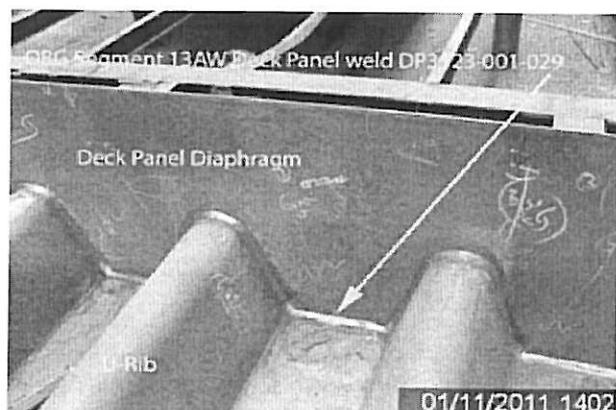
Type of problem:Welding Concrete Other Welding Curing Procedural Bridge No: 34-0006Joint fit-up Coating Other Component: Segment 13AW Deck PanelProcedural Procedural Description: Missed MT indication

Reference Description: QA found 1 missed MT indication in Segment 13AW Deck Panel

Description of Non-Conformance:

During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds located on Segment 13AW, this QA Inspector discovered the following issues:

- One (1) Longitudinal linear indication measuring approximately 20mm in length.
- This weld is identified as: DP3123-001-029.
- This weld is a fillet weld joining the deck panel (DP3123 SPCM) to the deck panel diaphragm (X4080D).
- The weld is designated on the contract drawings as a Fracture Critical Weld (FCW).
- This OBG deck panel is located in Bay 14.
- The Notice of Witness Inspection Number (NWIT) is 08130.
- The Contractor's Quality Control (QC) personnel have performed 100% Magnetic Particle Testing of these welds.

**Applicable reference:**

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.

Who discovered the problem: Larry Viars

Name of individual from Contractor notified: Peter Shaw

Time and method of notification: 1430 hours, 1/11/11, Verbal

Name of Caltrans Engineer notified: Sean Eagen

Time and method of notification: 0830 hours, 1/12/11, Email

QC Inspector's Name: Wang Lu

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

Reviewed By: Wahbeh, Mazen SMR

NCR 926



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-34935R1		DATE 日期 2011.01.18		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: DP3123 13AW DECK PLATE SPLICE			CALTRANS CONTRACT NO.: 加州工程编号 04-0050F4			
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 USA	MODEL NO. 样式编号 MODEL #ES-X	SERIAL NO. 连续编号 13979			
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/F2 20/14/18mm			
WELDING PROCESS 焊接方法	SMAW	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			
DP3123-001-029	1R1			ACC.		100%MT
AFTER B-CWR2750 REV0						
BLANK						
EXAMINED BY 主探 Tao Linying <i>Tao Linying</i> 2011.1.18			REVIEWED BY 审核 <i>Yao Chunping</i> 2011.1.18			
LEVEL - II SIGN 签名 / DATE 日期			LEVEL - II SIGN / DATE 日期			
质量经理 / QCM <i>[Signature]</i>			用户 CUSTOMER			
签字 SIGN / 日期 DATE 2011.1.18			签字 SIGN / 日期 DATE			

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, P.R. China**Report No:** NCS-000926**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 27-Jan-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0926**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: 11-Jan-2011**Description of Non-Conformance:**

During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds located on Segment 13AW, this QA Inspector discovered the following issues:

- One (1) Longitudinal linear indication measuring approximately 20mm in length.
- This weld is identified as: DP3123-001-029.
- This weld is a fillet weld joining the deck panel (DP3123 SPCM) to the deck panel diaphragm (X4080D).
- The weld is designated on the contract drawings as a Fracture Critical Weld (FCW).
- This OBG deck panel is located in Bay 14.
- The Notice of Witness Inspection Number (NWIT) is 08130.
- The Contractor's Quality Control (QC) personnel have performed 100% Magnetic Particle Testing of these welds.

Contractor's proposal to correct the problem:

Contractor proposes to remove the indication, and repair the weld. Contractor will perform the NDT to prove the weld is acceptable after repair. ZPMC will take disciplinary action against the QC personnel responsible.

Corrective action taken:

Contractor removed the indication and repaired the weld. The NDT report for the repair shows the weld is acceptable. The QC inspector has been removed from the Project.

Did corrective action require Engineer's approval? Yes No**If so, name of Engineer providing approval:****Date:****Is Engineer's approval attached?** Yes No**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 Wahbeh, Mazen 818-292-0659, who represents the Office of Structural Materials for your project.

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Inspected By: Ng,Michael

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer