

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-000959**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 28-Dec-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0918**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: 13AE Bottom/Side Panel
Procedural	Procedural	Description: QA found 2 missed UT indications	

Reference Description: QA found 2 missed transverse UT indications in Lift 13AE Bottom Panel to Side Panel splice

Description of Non-Conformance:

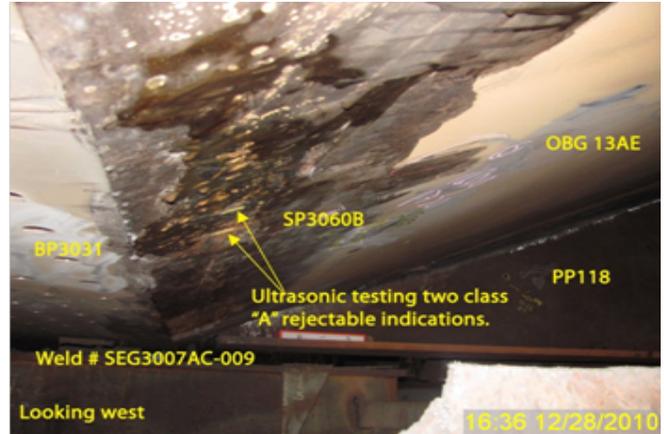
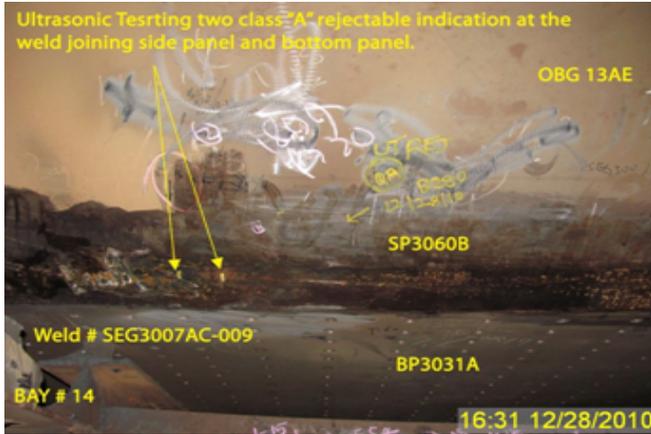
During the Quality Assurance (QA) Ultrasonic Testing (UT) review of welds located on Orthotropic Box Girder (OBG) Segment 13AE, this QA Inspector discovered the following issues:

- Two (2) transverse linear Class "A" rejectable indications measuring approximately 10 and 8mm in length.
- The weld is identified as SEG3007AC-009.
- Material thickness is 22mm.
- The depths of the indications are approximately 17 and 15mm respectively.
- The indications dB ratings are -5 and -1 respectively.
- The weld is Complete Joint Penetration (CJP) corner joints, joining bottom plate to side plate.
- Bottom plate identified as BP3031A
- Side plate identified as SP3060B
- The welds are not designated as Seismic Performance Critical Material (Non SPCM).
- The indications are clearly marked near the welds.
- The Y distances measured approximately 1720 and 1800mm respectively.
- The OBG segment 13AE is located in the bay 14.

The Notice of Witness Inspection (NWIT) No. is 007956. The indications are located within an area previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform 100% UT inspection of these welds.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

AWS D1.5-02 Section 6; Table 6.3 specifies a class "A" indication as having a rating of 8dbs and under for material thicknesses 20mm through 38mm.

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

Who discovered the problem: Shrikant Utekar

Name of individual from Contractor notified: Lee ManKit

Time and method of notification: 14:30_12/28/10_Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 15:30_12/29/10_E-mail

QC Inspector's Name: Wang Lu (Testino)

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
 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: 30-Dec-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-0918

Job Name: SAS Superstructure
Document No: 05.03.06-000916

Reference Description: QA found 2 missed transverse UT indications in Lift 13AE Bottom Panel to Side Panel splice

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) Ultrasonic Testing (UT) review of welds located on Orthotropic Box Girder (OBG) Segment 13AE, this QA Inspector discovered the following issues:
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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 the issue is expected within 7 days.

Transmitted by: Laraine Woo Transportation Engineer

NCT

(Continued Page 2 of 2)

Attachments: ZPMC-0918

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000916

Subject: NCR No. ZPMC-0918

Dated: 13-Jan-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000909 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution:

"Please see ZPMC's comments"

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000909R00;

Caltrans' comments:

Status: CLO

Date: 13-Jan-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0918 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 13-Jan-2011



No. B-965

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2011-01-13

REGARDING: NCR-000959(ZPMC-0918)

ZPMC acknowledged this problem and has issued an internal NCR. ZPMC has repaired the indications noted in the NCR and is providing NDT documentation after the repair to show the indication has been removed. ABFJV has noted which inspector was responsible for this missed indications and is monitoring his performance as well as all inspector performance, if he continues to miss indications disciplinary action will be undertaken. Based on these actions, ZPMC requests closure of this NCR.

ATTACHMENT:

NCR-000959(ZPMC-0918)

B787-UT-18042 R1

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

1/13/2011



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: 30-Dec-2010

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: 05.03.06-000916

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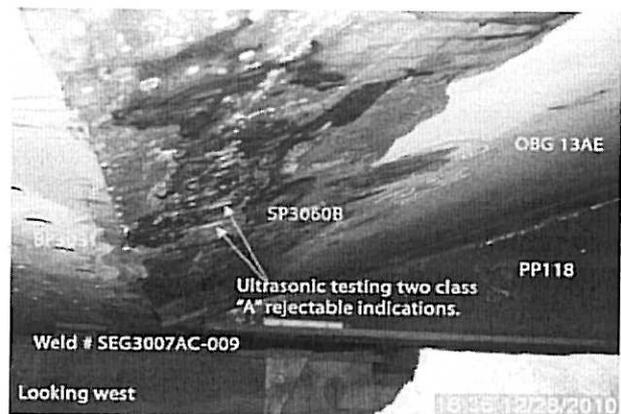
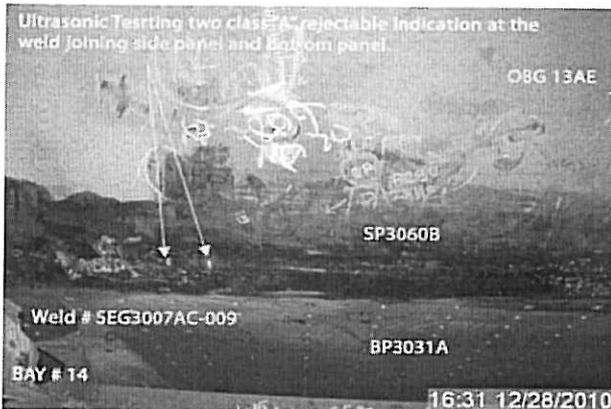
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



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Name of individual from Contractor notified: Lee ManKit

Time and method of notification: 14:30_12/28/10_Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 15:30_12/29/10_E-mail

QC Inspector's Name: Wang Lu (Testino)

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

913



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-18042R1 DATE 2011.01.12 PAGE 1 OF 1 Revision No: 0

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

ITEMS NAME: 13AE BOTTOM PLATE SPLICE DRAWING NO.: SEG3007AC CALTRANS CONTRACT NO.: 04-0120F4
 部件名称 图号 加州工程编号

REFERENCING CODE 参考规范 AWS D1.5-2002 ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002(Table 6.3) PROCEDURE NO. 程序编号 ZPQC-UT-01

WELDING PROCESS 焊接方法 SAW JOINT TYPE 焊缝类型 T JOINT CALIBRATION DUE DATE 仪器校正有效期 Dec. 28ST, 2011

EQUIPMENT 设备 MANUFACTURER 制造商 GE MODEL NO. 样式编号 USM35 SERIAL NO. 序列编号 10526a

CALIBRATION BLOCK 试块 AWS IIW BLOCK TYPE II COUPLANT 耦合剂 C.M.C MATERIAL/THICKNESS 材料厚度 A709-50T-2 60/22mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
AMERICA	70°	2.25MHz	0.75×0.625 in				
Reference Level 参考灵敏度						20dB	

Base metal inspected per AWS D1.5-2002 Section 6.19.5 0° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注	
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)							
					a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From'X 距X	From'Y 距Y			
SEG3007AC-009	1R1	70				40									ACC.	100%
	2R1	70				40									ACC.	100%

AFTRE B-WR19717

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EXAMINED BY 主探 *Quiluanfu* REVIEWED BY 审核 *Tangjinyi shan*

LEVEL - II SIGN / DATE *2011.1.12* LEVEL - II SIGN / DATE *2011.1.12*

质量经理 / QCM *Luji* 用户 CUSTOMER

签字 SIGN / 日期 DATE *2011.1.12* 签字 SIGN / 日期 DATE

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DIVISION OF ENGINEERING SERVICES

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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, P.R. China**Report No:** NCS-000934**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 13-Jan-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0918**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: 28-Dec-2010**Description of Non-Conformance:**

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Contractor's proposal to correct the problem:

Contractor will remove the indications and repair the weld, providing the NDT report to prove the weld is acceptable. ZPMC will issue an internal NCR to the QC personnel involved and monitor his performance, taking disciplinary actions if he continues to miss indications.

Corrective action taken:

Contractor removed the indications and repaired the weld, and provided the NDT reports to prove the weld is acceptable. Contractor issued an internal NCR to the QC personnel and monitor his performance.

