

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.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, China**Report No:** NCR-000904**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Nov-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0866**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Segment 13AE
Procedural	Procedural	Description:	

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

During Caltrans QA in process observations of the fabrication of OBG lift 13, Segment 13AE; this QA 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:

4. Welding (4E)
5. Postweld Thermal Treatment (5B)

NOTE: The above references are relative to sections 4 ~ 5 of the NEW WELD PROCEDURE (Rager/McQuaid) and the corresponding paragraph letters.

ISSUE 4E:

The weld is identified as SEG3007U-237

The welding process used was SMAW

The weld is a CJP joining LD 3026 to second stiffener from top at PP 119+1500.

The weld is not SPCM

Component is located in bay 14.

ISSUE 5B:

The weld is identified as SEG3007K-035.

The welding process used was FCAW.

The weld is a CJP joining LD 3025 to FB 3123 at PP 119+1500.

The thickness of the part observed to be 25mm X 20mm.

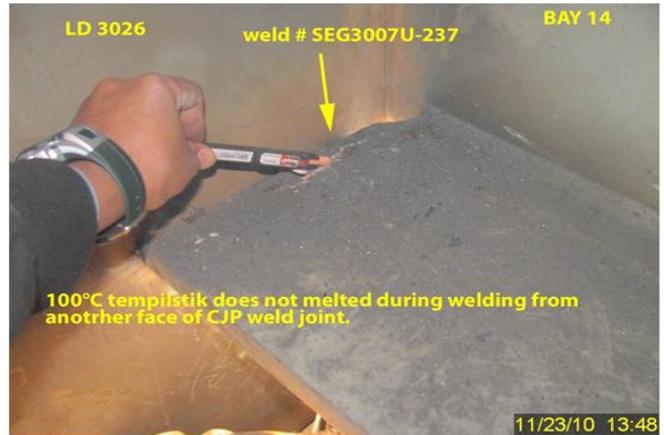
The weld is not SPCM

Component is located in Bay 14.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

See attached photos below.



Applicable reference:

NEW WELD PROCEDURE (Rager / McQuaid)

4) Welding.

E. Preheat shall be maintained in accordance with Section 3.k.~ 3.n. of this procedure.

5) Postweld Thermal Treatment.

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

Who discovered the problem: Umesh D. Gaikwad

Name of individual from Contractor notified: Peter Shaw

Time and method of notification: 14:20hrs, Verbal, 11-23-10

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 19:00hrs, Email, 11-24-10

QC Inspector's Name: Wang Lu (Testino)

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
Job Name: SAS Superstructure

Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Document No: 05.03.06-000861

Subject: NCR No. ZPMC-0866

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:

During Caltrans QA in process observations of the fabrication of OBG lift 13, Segment 13AE, this QA 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:
 4. Welding (4E)
 5. Postweld Thermal Treatment (5B)

NOTE: The above references are relative to sections 4 ~ 5 of the NEW WELD PROCEDURE (Rager/McQuaid) and the corresponding paragraph letters.

ISSUE 4E:
 The weld is identified as SEG3007U-237
 The welding process used was SMAW
 The weld is a CJP joining LD 3026 to second stiffener from top at PP 119+1500.
 The weld is not SPCM
 Component is located in bay 14.

ISSUE 5B:
 The weld is identified as SEG3007K-035.
 The welding process used was FCAW.
 The weld is a CJP joining LD 3025 to FB 3123 at PP 119+1500.
 The thickness of the part observed to be 25mm X 20mm.
 The weld is not SPCM
 Component is located in Bay 14.

NCT

(Continued Page 2 of 2)

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-0866

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: 05.03.06-000861

Subject: NCR No. ZPMC-0866

Dated: 01-Dec-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000859 Rev: 00

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-000859R00

Caltrans' comments:

Status: REJ

Date: 03-Dec-2010

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

Submitted by: Chao, Ching

Attachment(s):

Date: 03-Dec-2010

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000861

Subject: NCR No. ZPMC-0866

Dated: 08-Dec-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000859 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-000859R01

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: 05.03.06-000861

Subject: NCR No. ZPMC-0866

Dated: 01-Mar-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000859 Rev: 02

Contractor's Proposed Resolution:

Reference Resolution: ZPMC is providing acceptable NDT of the welds referenced in the NCR and requests closure of this NCR.
ZPMC is providing acceptable NDT of the welds referenced in the NCR and requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000859R02;

Caltrans' comments:

Status: CLO

Date: 02-Mar-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0866 is closed.

Submitted by: Eagen, Sean

Date: 02-Mar-2011

Attachment(s):



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-18958R1 DATE 2010.12.07 PAGE 1 OF 2 Revision No: 0

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

ITEMS NAME: 13AE DRAWING NO.: SEG3007 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 SMAW JOINT TYPE 焊缝类型 T-JOINT CALIBRATION DUE DATE 仪器校正有效期 Dec. 28ST, 2010

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 IIV BLOCK TYPE II COUPLANT 耦合剂 C.M.C MATERIAL/THICKNESS 材料厚度 A709M-345T2/F2 18/20/25/45mm

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	0.75in×0.625in				
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		
NR-054 SEG3007K-035	1R1	70.6	A			40								ACC.	100%
SEG3007K-037	1R1	70.6	A			40								ACC.	100%
	2R1	70.6	A			40								ACC.	100%
SEG3007H-004	1R1	70.6	A			42								ACC.	100%
	2R1	70.6	A			42								ACC.	100%
	3R1	70.6	A			42								ACC.	100%
	4R1	70.6	A			42								ACC.	100%
	5R1	70.6	A			42								ACC.	100%

EXAMINED BY 主探 Xue Hanrong REVIEWED BY 审核 XU Ronggang

LEVEL - II SIGN 1 DATE 20/10.12.07 LEVEL - II SIGN 1 DATE 20/10.12.07

质量经理 / QCM Hu Jianhua 用户 CUSTOMER _____
 签字 SIGN / 日期 DATE 20/10.12.07 签字 SIGN / 日期 DATE _____



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-18308 DATE 2010.12.14 PAGE 1 OF 2 Revision No: 0

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

ITEMS NAME: 部件名称	LONGITUDINAL DIAPHRAGM	DRAWING NO.: 图号	SEG3007U	CALTRANS CONTRACT NO.: 04-0120F4 加州工程编号
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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
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WELDING PROCESS 焊接方法 FCAW	JOINT TYPE 焊缝类型 T-JOINT	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 ST , 2010
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EQUIPMENT 设备 UT SCOPE	MANUFACTURER 制造商 AMERICA	MODEL NO. 样式编号 EPOCH-4B	SERIAL NO. 序列编号 07015091
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CALIBRATION BLOCK 试块 AWS IIW BLOCK TYPE II	COUPLANT 耦合剂 C.M.C	MATERIAL/THICKNESS 材料厚度 A709M-345T2/F2 25/35mm
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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		
SEG3007U-227	1	70	A	1	52	40	4	+8	10	72	35	-4	270	REJ.	100%
SEG3007U-229	1	70	A	1	57	40	8	+9	25	123	26	-13	150	REJ.	100%
SEG3007U-231		70				40								ACC.	100%
SEG3007U-233	1	70	A	1	50	40	2	+8	20	51	18	-5	40	REJ.	100%
	2	70	A	1	55	40	6	+9	30	107	33	-20	230	REJ.	100%
SEG3007U-235		70				40								ACC.	100%
SEG3007U-237		70				40								ACC.	100%
SEG3007U-239		70				40								ACC.	100%

EXAMINED BY 主探 <i>Cui Qingjuan</i> LEVEL - II SIGN 1 DATE 20/0.12.14	REVIEWED BY 审核 <i>Tang Xinyi Shan</i> LEVEL II SIGN 1 DATE 20/0.12.14
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质量经理 / QCM <i>Lu Jianhua</i> 签字 SIGN / 日期 DATE 20/0.12.14	用户 CUSTOMER 签字 SIGN / 日期 DATE
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REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-18308 DATE 2010.12.14 PAGE 2 OF 2 Revision No: 0

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		
SEG3007U-241		70				40								ACC.	100%
SEG3007U-243	1	70	A	1	54	40	6	+8	15	47	17	-15	70	REJ.	100%
SEG3007U-245	1	70	A	1	54	40	6	+8	55	75	34	-16	90	REJ.	100%
SEG3007U-247	1	70	A	1	42	40	4	+8	20	79	29	-12	91	REJ.	100%
SEG3007U-249		70				40								ACC.	100%
SEG3007U-158	1	70	A	1	46	40	0	+6	15	25	9	-17	240	REJ.	100%
SEG3007U-160	1	70	A	1	52	40	4	+8	20	72	25	-11	90	REJ.	100%
SEG3007U-162		70				40								ACC.	100%
SEG3007U-190		70				40								ACC.	100%
SEG3007U-198	1	70	A	1	49	40	1	+8	40	22	7	-17	170	REJ.	100%
SEG3007U-209		70				40								ACC.	100%
SEG3007U-165		70				40								ACC.	100%
SEG3007U-167	1	70	A	1	56	40	7	+9	35	118	28	-10	90	REJ.	100%
SEG3007U-169		70				40								ACC.	100%

BLANK

EXAMINED BY 主探 <i>Cui Qingyuan</i> LEVEL - II SIGN / DATE 20/0.12.14	REVIEWED BY 审核 <i>Tang Xingshan</i> LEVEL - II SIGN / DATE 20/0.12.14
质量经理 / QCM <i>Li Jianhua</i> 签字 SIGN / 日期 DATE 20/0.12.14	用户 CUSTOMER 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, China**Report No:** NCS-000903**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 02-Mar-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0866**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:**

During Caltrans QA in process observations of the fabrication of OBG lift 13, Segment 13AE; this QA 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:

4. Welding (4E)
5. Postweld Thermal Treatment (5B)

NOTE: The above references are relative to sections 4 ~ 5 of the NEW WELD PROCEDURE (Rager/McQuaid) and the corresponding paragraph letters.

ISSUE 4E:

The weld is identified as SEG3007U-237

The welding process used was SMAW

The weld is a CJP joining LD 3026 to second stiffener from top at PP 119+1500.

The weld is not SPCM

Component is located in bay 14.

ISSUE 5B:

The weld is identified as SEG3007K-035.

The welding process used was FCAW.

The weld is a CJP joining LD 3025 to FB 3123 at PP 119+1500.

The thickness of the part observed to be 25mm X 20mm.

The weld is not SPCM

Component is located in Bay 14.

