

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-000521
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 23-Nov-2009
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0494

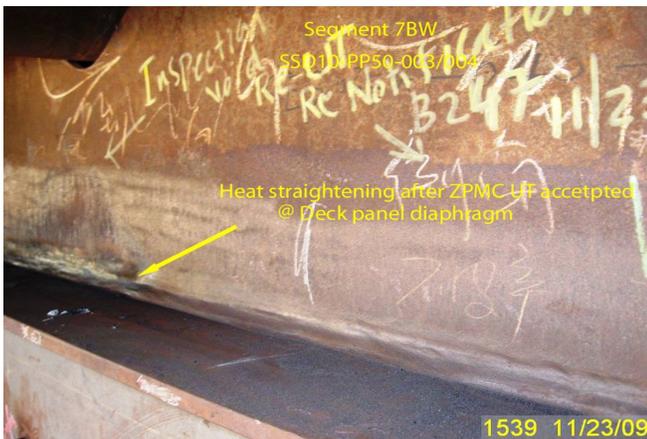
Type of problem:

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: OBG Segment 7BW
Procedural	Procedural	Description:	

Reference Description: The contractor did not perform the required NDT after Heat Straightening for Segment 7BW

Description of Non-Conformance:

This QA inspector received Notice of Inspection number 004705 on 11-22-09 for the Ultrasonic Testing (UT) of the deck panel diaphragm to floor beam flange Complete Joint Penetration weld after heat straightening for OBG segment 7BW. Upon arrival to the component this QA observed that ZPMC personnel did not complete the required NDT after heat straightening prior to notifying QA of inspection. The weld designation affected number is SSD10-PP50-003/004.



Applicable reference:

ZPMC WQCP Section 11.2.5.1- Final NDT shall be performed after heat straightening.

Contract Document (CCO 77)

Section 3.2- "Prior to submitting components for formal acceptance the contractor shall implement in-process verification that shall include the following;

Section 3.2.2- "All contract required non-destructive examination (NDE) has been performed and is documented on the component as being acceptable."

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Section 3.2.4- "All critical and non-critical weld repairs have been completed and re-inspected by the original method of inspection and are documented on the component as being acceptable."

Who discovered the problem: Chandra Sudalaimuthu

Name of individual from Contractor notified: Wei Jain Bo

Time and method of notification: 1530 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao and Bill Howe

Time and method of notification: 1630 hours, verbal

QC Inspector's Name: Li ping

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

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, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

Inspected By:	Carreon,Albert	Lead Reviewer/Task Leader
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-Dec-2009

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: 05.03.06-000527

Subject: NCR No. ZPMC-0494

Reference Description: The contractor did not perform the required NDT after Heat Straightening for Segment 7BW

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:** 07

Remarks:

This QA inspector received Notice of Inspection number 004705 on 11-22-09 for the Ultrasonic Testing (UT) of the deck panel diaphragm to floor beam flange Complete Joint Penetration weld after heat straightening for OBG segment 7BW. Upon arrival to the component this QA observed that ZPMC personnel did not complete the required NDT after heat straightening prior to notifying QA of inspection. The weld designation affected number is SSD10-PP50-003/004.

Action Required and/or Action Taken:

Provide notification to the engineer when UT is to be completed. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Bill Howe

Attachments: ZPMC-0494

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

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000527

Subject: NCR No. ZPMC-0494

Dated: 11-Jan-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000462 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC acknowledges that the NDT was not performed, however, the Notice of inspection is notification when ZPMC will begin inspection. ZPMC has performed the inspection and the records are attached.

ZPMC acknowledges that the NDT was not performed, however, the Notice of inspection is notification when ZPMC will begin inspection. ZPMC has performed the inspection and the records are attached. ZPMC requests closure of this NCR.

Submitted by: Lawton, Steve

Attachment(s): ABF-NPR-000462R00;

Caltrans' comments:

Status: CLO

Date: 11-Jan-2010

The documentation received is sufficient to close this NCR.

Submitted by: Howe, Bill

Date: 11-Jan-2010

Attachment(s):



No. B-570

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-1-9

REGARDING: NCR-000521(ZPMC-0494)

With this letter of response, ZPMC requests closure of CT NCR-000521(ZPMC-0494), what mentioned that CT Inspector observed heat straightening after NDT was performed.

- ZPMC has issued internal NCR.
- This fillet weld has been changed into CJP, so the correct weld ID is: SSD10-PP50-003.
- WWR was issued due to rejection was found by UT.
- UT after repair was performed to warrant weld quality.

Based on the taken actions and documentations, ZPMC requests closure of this NCR.

ATTACHMENT:

NCR-B-355(ZPMC-0494)

NCR-000521(ZPMC-0494)

B-WR8453

B787-UT-9505R1

A handwritten signature in black ink, appearing to be "Liu W", is written above the date.

1/9/10



Nonconformance Report

不符合项报告

Project Name: S.F.O.B.B
项目名称: 美国加州海湾大桥

NCR Number:
NCR 编号: NCR-B-355(ZPMC-0494)

Item: Not perform the required NDT
after Heat Straightening
名称描述: 校火后没有完成 NDT

Item Number:
件号: N/A

Drawing:
图号: N/A

Location: outside yard
位置: 外场

Date:
日期: 2009-12-31

Description of Nonconformance:

不符合项状态描述:

This QA inspector received Notice of Inspection number 004705 on 11-22-09 for the UT of the deck panel diaphragm to floor beam flange CJP weld after heat straightening for OBG segment 7BW. Upon arrival to component this QA observed that ZPMC personnel did not complete the required NDT after heat straightening prior to notifying QA of inspection. The weld designation affected number is SSD10-PP50-003/004.

加州检验员于 09 年 11 月 22 日收到预约单 004705, 内容为 OBG 7BW 顶板与横隔板 CJP 焊缝 UT 检验。但当检验员到现场时发现 ZPMC 校火后没有完成要求的 NDT 而提前通知加州进行报验。涉及的焊缝编号为: SSD10-PP50-003/004

B-WR8453. UT9505R1

Work By:
施工方:

Prepared by: *Zhangwei*
准备: 2010.1.4

Reviewed by QCE: *Zhou Shuangbin*
质量工程师批准: 1.4

Drawing Error Material Defect Fabrication Error Other
图纸错误 材料缺陷 制作错误 其他原因

Disposition: Use as is Repair Reject
处理措施: 回用 返修 拒收

Recommendation:

建议:

Prepared by: _____ Approved by QCA: _____
准备 质量经理批准

Reason for Nonconformance:

不符合原因:

Prevention of Re-occurrence:

预防措施:

Approved by/批准: _____

Technical Justification for Use-As-Is/Repair: Attachment Non-attachment
回用或返修的技术依据: 附件 无附件

Reviewed /批准: _____

Verification: Acceptable Unacceptable
确认: 可接受 不可接受

Verified by QCI/质检确认: _____ Reviewed by QCA/质检主任审核: _____

#R787-QCP-1300



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-Dec-2009

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: 05.03.06-000527

Subject: NCR No. ZPMC-0494

Reference Description: The contractor did not perform the required NDT after Heat Straightening for Segment 7BW

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- 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: 07

Remarks:

This QA inspector received Notice of Inspection number 004705 on 11-22-09 for the Ultrasonic Testing (UT) of the deck panel diaphragm to floor beam flange Complete Joint Penetration weld after heat straightening for OBG segment 7BW. Upon arrival to the component this QA observed that ZPMC personnel did not complete the required NDT after heat straightening prior to notifying QA of inspection. The weld designation affected number is SSD10-PP50-003/004.

Action Required and/or Action Taken:

Provide notification to the engineer when UT is to be completed. A response for the resolution of this issue is expected within 7 days.

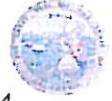
Transmitted by: Bill Howe

Attachments: ZPMC-0494

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

File: 05.03.06

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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-000521

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 23-Nov-2009

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

NCR #: ZPMC-0494

Type of problem:

- Welding Concrete Other
- Welding Curing Procedural
- Joint fit-up Coating Other
- Procedural Procedural Description:

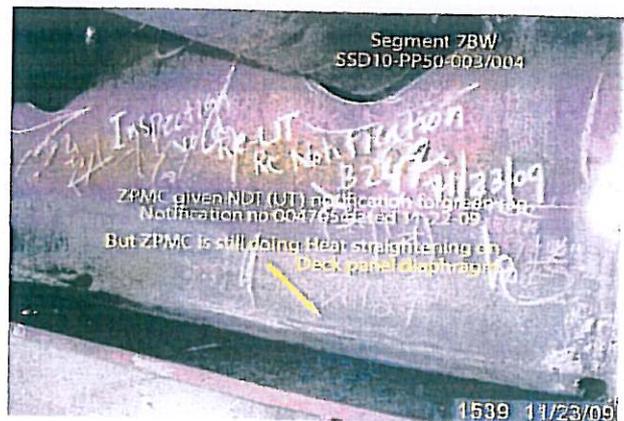
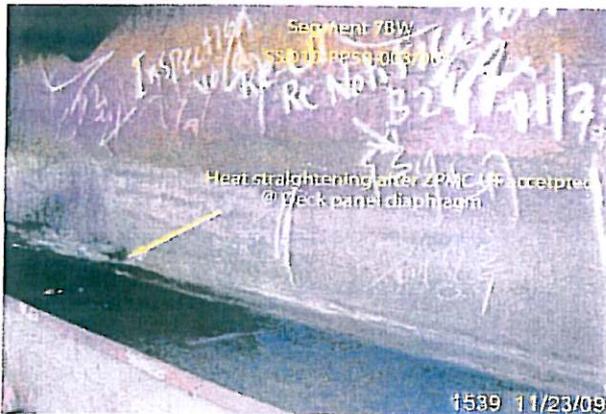
Bridge No: 34-0006

Component: OBG Segment 7BW

Reference Description: The contractor did not perform the required NDT after Heat Straightening for Segment 7BW

Description of Non-Conformance:

This QA inspector received Notice of Inspection number 004705 on 11-22-09 for the Ultrasonic Testing (UT) of the deck panel diaphragm to floor beam flange Complete Joint Penetration weld after heat straightening for OBG segment 7BW. Upon arrival to the component this QA observed that ZPMC personnel did not complete the required NDT after heat straightening prior to notifying QA of inspection. The weld designation affected number is SSD10-PP50-003/004.



Applicable reference:

ZPMC WQCP Section 11.2.5.1- Final NDT shall be performed after heat straightening.

Contract Document (CCO 77)

Section 3.2- "Prior to submitting components for formal acceptance the contractor shall implement in-process verification that shall include the following;

Section 3.2.2- "All contract required non-destructive examination (NDE) has been performed and is documented on the component as being acceptable."

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Section 3.2.4- "All critical and non-critical weld repairs have been completed and re-inspected by the original method of inspection and are documented on the component as being acceptable."

Who discovered the problem: Chandra Sudalaimuthu

Name of individual from Contractor notified: Wei Jain Bo

Time and method of notification: 1530 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao and Bill Howe

Time and method of notification: 1630 hours, verbal

QC Inspector's Name: Li ping

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

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, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

Inspected By: Carreon,Albert

Lead Reviewer/Task Leader

Reviewed By: Wahbeh,Mazen

SMR



焊缝返修报告

版本 Rev. No.

Welding Repair Report

0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No	SSD10	报告编号 Report No.	B-WR8453
合同号 Contract No.	04-0120F4	部件名称 Items Name	7BW DECK PLATE	NDT报告编号 Report No. of NDT	B787-UT-9505
项目编号 Project No.	ZP06-787				

焊缝缺陷描述:

Description of welding discontinuity:

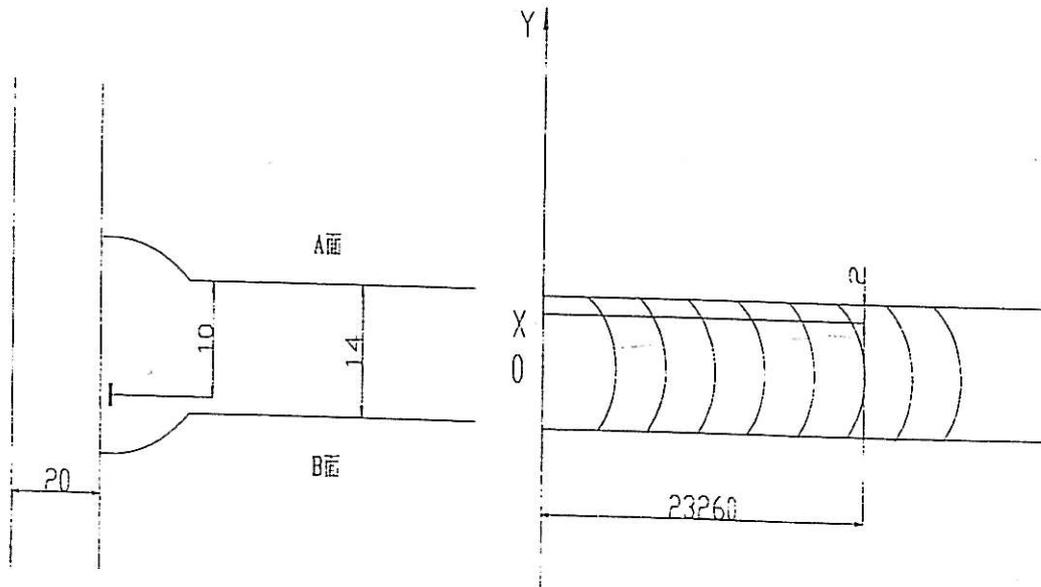
Rejected indication found by ultrasonic inspection is less than the maximum allowance aggregate length.

(UT探伤发现的缺陷总长度小于最大允许长度。) SSD10-PP050-003

检验员 (Inspector): Jin Feng 日期 (Date): 09.11.05

焊缝返修位置示意图:

Draft of welding discontinuity:



WELD NUMBER: SSD10-PP050-003

产生原因:

Caused:

1、焊道未及时处理干净。

1. Did not clear the weld pass completely in time.

车间负责人(Foreman): *Lizhiqiang* 日期(Date): *09.11.05*

处理意见

Disposition:

1. 从缺陷距离端面较近一侧 ($D \leq 0.65T$, D为缺陷深度, T为板厚) 采用碳刨或打磨的方法去除焊缝缺陷;

2. 参照返修焊接工艺规程 (WPS) 准备正确的接头型式; 预热和焊接;

3. 焊前对修补区域进行VT检测保证缺陷完全被清除;

4. 将修补区域打磨到与母材或邻近焊缝平齐;

5. 根据批准的车间图纸检查焊缝.

1. Gouge or grind from nearer side from metal edge ($D \leq 0.65T$, "D" is depth of defects, "T" is thickness of metal) to remove all defects;

2. Follow repair WPS for joint preparation, preheat, and weld deposit;

3. Verify with VT no defects remain in the weld joint prior to welding;

4. Grind the repaired area flush with base metal or the adjacent weld;

5. Check the welds according to the working drawings.

工艺:
Technical engineer

He Xiaolin

审核:
Approved by

Lu Jinhua

日期
Date *09.11.05*



焊缝返修报告

Welding Repair Report

版本 Rev. No.

0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No	SSD10	报告编号 Report No.	B-WR8453
合同号 Contract No.:	04-0120F4	部件名称 Items Name	7BW DECK PLATE	NDT报告编号 Report No. of NDT	B787-UT-9505
项目编号 Project No.:	ZP06-787				

纠正措施:

Correction action to prevent re occurrence:

1. 加强焊接监控和道间清理。

1. Improve monitoring of welding and interpass cleaning.

车间负责人(Foreman): Li Zhigang 日期(Date): 09.11.05

参照的WPS编号 Repair WPS No.	WPS-345-SMAW-2 G(2F)-FCM-Repair WPS-345-FCAW-2 G(2F)-FCM-Repair WPS-345-SMAW-4 G(4F)-FCM-Repair	工艺员 technologist	He Xiaohu 09.11.05
返修(碳刨)前预热温度 Preheat temperature before gouging	115°C	返修的缺陷 Description of discontinuity	ZF
焊前处理检查 Inspection before welding	Aa	焊前预热温度 Preheat temperature before welding	170°C
最大碳刨深度 Max. depth of gouging	10.	碳刨总长 Total length of gouging	23260
焊工 welder	203871	焊接类型 welding type	FCAW
焊接电流 Current	320	焊接电压 Voltage	31
		焊接位置 position	2G
		焊接速度 Speed	380
返修后检查 Inspection After repairing:			
外观检查 VT result	Aoc	检验员 Inspector	日期 Date
		Li Yanhua 07170701	09.11.20
NDT复检 NDT result	Aa	探伤员 NDT person	日期 Date
		Zhang	09.11.25
见证: Witness/Review:			
备注: Remark:			

#R787-QCP-900

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-000460**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 20-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0494**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-2009**Description of Non-Conformance:**

This QA inspector received Notice of Inspection number 004705 on 11-22-09 for the Ultrasonic Testing (UT) of the deck panel diaphragm to floor beam flange Complete Joint Penetration weld after heat straightening for OBG segment 7BW. Upon arrival to the component this QA observed that ZPMC personnel did not complete the required NDT after heat straightening prior to notifying QA of inspection. The weld designation affected number is SSD10-PP50-003/004.

Contractor's proposal to correct the problem:

Submit NDT documentation verifying the weld is in compliance.

Corrective action taken:

The Contractor submitted a WRR referencing repairs made to the weld after the NCR was issued along with NDT documentation verifying the weld is in compliance with Contract specifications. ZPMC also issued an internal NCR regarding this issue. The weld maps have been revised to show the new weld number resulting from the fillet to CJP change, and the weld will be incorporated into the as-built drawings.

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 Jim Simonis, who represents the Office of Structural Materials for your project.

Inspected By: Simonis, Jim

Quality Assurance Inspector

Reviewed By: Wahbeh, Mazen

QA Reviewer