

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-000457**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 24-Sep-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0430**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Crossbeam 14 Intermediate Web Plate CB202E
Procedural	Procedural	Description:	

Reference Description: Cold bending of SPCM Member: Crossbeam 14 Intermediate Web Plate CB202E**Description of Non-Conformance:**

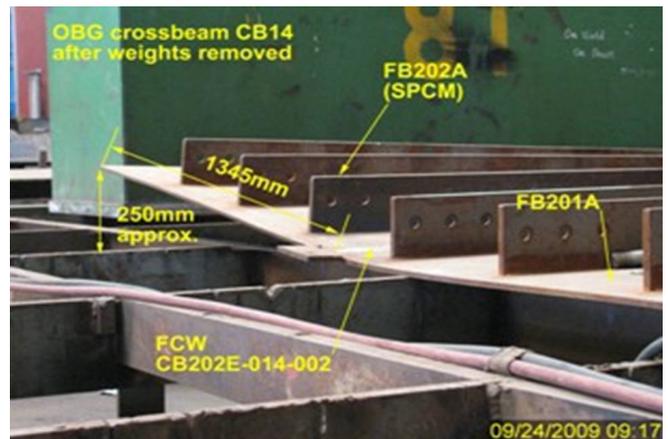
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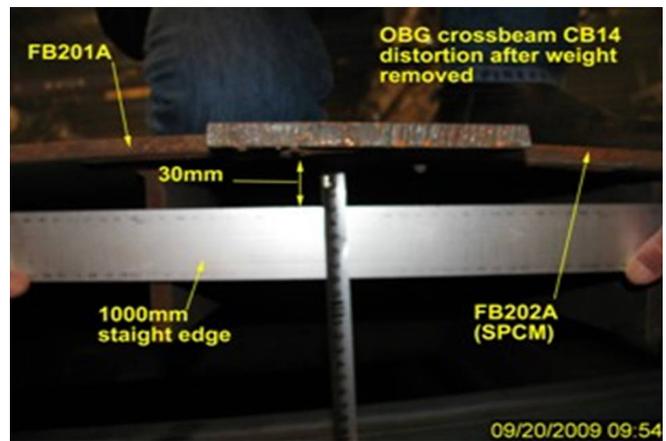
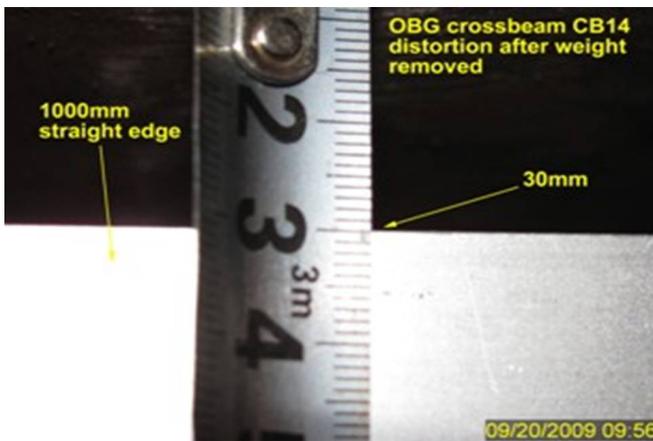
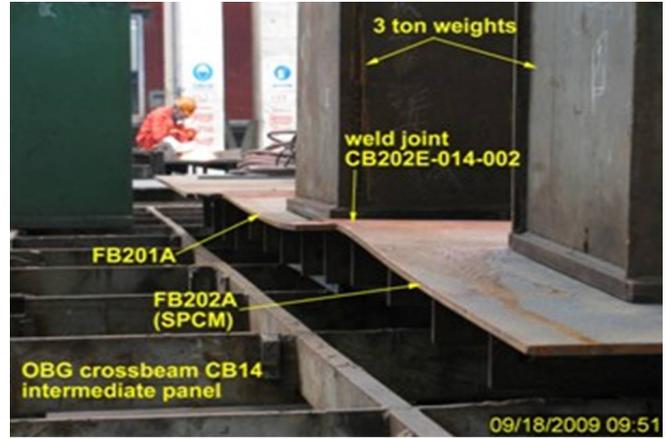
QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)



Applicable reference:

AWS D1.5 2002 section 12.12 "Cold bending shall be prohibited for all fracture critical steels."

Who discovered the problem: Steve Hall

Name of individual from Contractor notified: Wang Wen Bin

Time and method of notification: Time Varies, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 0700 hours, Verbal

QC Inspector's Name: Chen Xi

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: 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: 27-Oct-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: 05.03.06-000420

Subject: NCR No. ZPMC-0430

Reference Description: Cold bending of SPCM Member: Crossbeam 14 Intermediate Web Plate CB202E

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: Xbeam **Lift:** 14

Remarks:

On Sept. 18, 2009, this Quality Assurance Inspector (QA) observed that the contractor performed “cold bending” of the Seismic Performance Critical Material (SPCM) and a Fracture Critical Weld (FCW). This QA observed two (2) three (3) ton weights had been placed on the material, one on each side of the FCW. The weights appeared to be for the purpose of bending the material. The SPCM is identified as FB202A. The FCW joint is identified as CB202E-014-002. See attached photos for details.

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Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval and discontinue any further cold bending on similar members.

Transmitted by: Bill Howe

Attachments: ZPMC-0430

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, 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: 05.03.06-000420

Subject: NCR No. ZPMC-0430

Dated: 10-Nov-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000419 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has included NDT documentation of the weld to show that it is sound. Based on this ZPMC requests closure of this NCR.

ZPMC had an approved heat straightening request but it was not on site at the time of the heat straightening. ZPMC has educated the production team to ensure that they have the paperwork on site before they begin work. ZPMC has included NDT documentation of the weld to show that it is sound. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000419R00;

Caltrans' comments:

Status: CLO

Date: 13-Dec-2009

The documentation submitted has been reviewed by the Engineer and is found to be acceptable.

Submitted by: Chao, Ching

Attachment(s):

Date: 13-Dec-2009



No. B-510

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2009-12-01

REGARDING: NCR-000457(ZPMC-0430)

With this letter of response, ZPMC requests closure for Caltrans NCR-000457 (ZPMC-0430). It mentioned that QA observed cold bending of SPCM member..

ZPMC need explain this issue here that this panel was going to perform heat straightening and ZPMC had an approved HSR(B)-318. And, UT has been performed to warrant the affected welds quality after heat straightening. To avoid such misunderstanding happen again, ZPMC has emphatically educated site people to prepare any paper work needed before start such working.

So ZPMC hope Caltrans could take a review and consider close this NCR. Related documentation please see attachments.

ATTACHMENT:

NCR-B-~~200~~(ZPMC-0430)

NCR-000457(ZPMC-0430)

HSR(B)-318

B-VT-40194

B787-UT-8784

A handwritten signature in black ink, appearing to be "Jay Wu", is written above the date.
12/01/09



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- 290 ²⁹⁰ (ZPMC- 0430 ⁰⁴³⁰)	
Item: Cold bending of SPCM 名称描述: 对 SPCM 板冷弯		Item Number: 件号: N/A	Drawing: CB14 图号:
Location: Bay 2 位置: 2 车间		Date: 日期: 2009-11-05	

Description of Nonconformance:

不符合项状态描述:

On Sept.18, 2009, this Quality Assurance Inspector (QA) observed that the contractor performed "cold bending" of the Seismic Performance Critical Material (SPCM) and a Fracture Critical Weld (FCW). This QA observed two (2) three (3) ton weights had been placed on the material, one on each side of the FCW. The weights appeared to be for the purpose of bending the material. The SPCM is identified as FB202A. The FCW joint is identified as CB202E-014-002. See attached photos for details.

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在 2009 年 9 月 18 号, 加州检验员发现施工队在进行对 SPCM 板和一 FCW 焊缝冷弯。该检验员发现两个 3 吨的配重块放在了板上, 在 FCW 焊缝上一边一个。放配重块以达到折弯板材的目的。该 SPCM 板为 FB202A。FCW 焊缝是 CB202E-014-002。详见附属照片。

在 2009 年 9 月 20 号, 加州检验员发现施工队在进行对 SPCM 板和一 FCW 焊缝冷弯。该检验员发现一 3 吨重的配重块放置于板上靠近 FCW 焊缝。这个配重块放置的目的是为了校正母材上由于烧焊过多而导致的变形。该 SPCM 板为 FB202A, FCW 焊缝是 CB202E-014-002。

在 2009 年 9 月 24 号, 加州检验员发现施工队在进行 SPCM 板和 FCW 焊缝冷弯。该检验员发现两个 8 吨重的配重块被放置于板材靠近 FCW 焊缝处。该配重块放置的目的是为了校正母材上由于烧焊过多而导致的变形。该 SPCM 板为 FB202A, FCW 焊缝是 CB202E-014-002。

Work By: 施工方:	Prepared by: Zhangwei 准备: 09.11.05.	Reviewed by QCE: 质量工程师批准: <i>Lu Jianhua</i>
<input type="checkbox"/> Drawing Error <input type="checkbox"/> Material Defect <input checked="" type="checkbox"/> Fabrication Error <input type="checkbox"/> Other 图纸错误 材料缺陷 制作错误 其他原因		

Disposition: 处理措施:	<input type="checkbox"/> Use as is 回用	<input type="checkbox"/> Repair 返修	<input type="checkbox"/> Reject 拒收
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Recommendation:

建议:

Prepared by: _____
准备

Approved by QCA: _____
质量经理批准

Reason for Nonconformance:

不符合原因:

華校前已开校报告, 得到加州批准后才施工.

报告上也注明了要用附件(有缺损)进行校正

Issue HSR, and approved by Caltrans, and mark ton weight on

Prevention of Re-occurrence:

预防措施:

HSR.

Approved by/批准: Hu Yuzhang

Technical Justification for Use-As-Is/Repair:

回用或返修的技术依据:

Attachment
附件

Non-attachment
无附件

Reviewed /批准: _____

Verification:

确认:

Acceptable
可接受

Unacceptable
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
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 Quality Assurance and Source Inspection

Bay Area Branch
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 Vallejo, CA 94592-1133
 (707) 649-5453
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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-000457

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 24-Sep-2009

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

NCR #: ZPMC-0430

Type of problem:

Welding Concrete Other

Welding Curing Procedural

Joint fit-up Coating Other

Procedural Procedural Description:

Bridge No: 34-0006

Component: Crossbeam 14 Intermediate Web Plate CB202E

Reference Description: Cold bending of SPCM Member: Crossbeam 14 Intermediate Web Plate CB202E

Description of Non-Conformance:

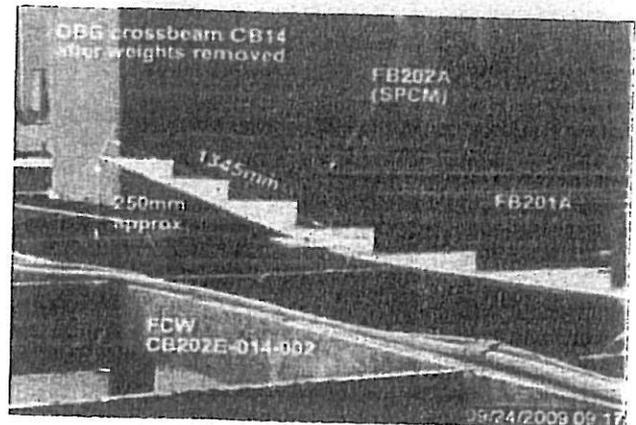
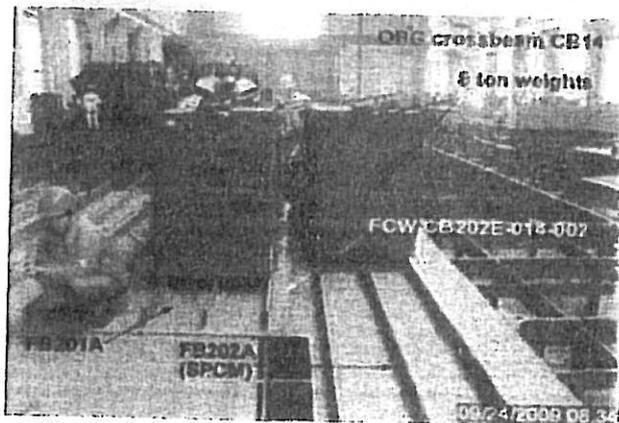
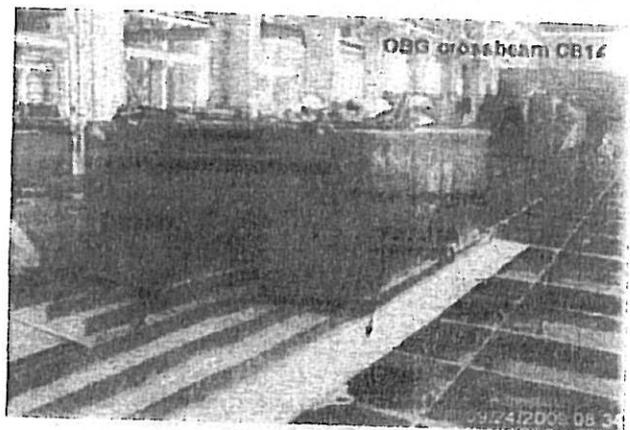
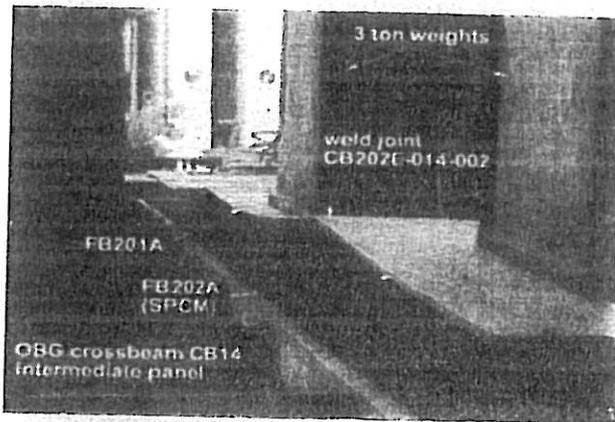
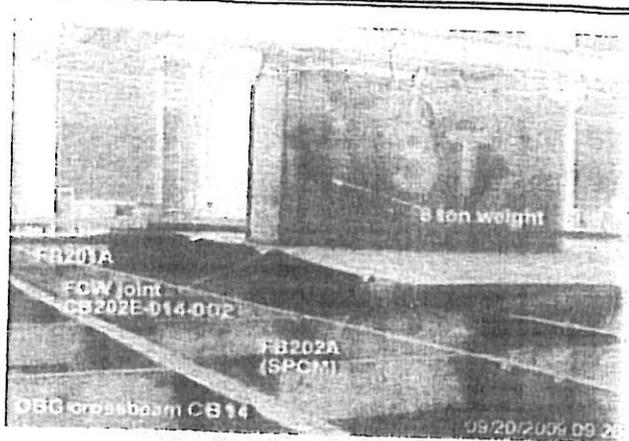
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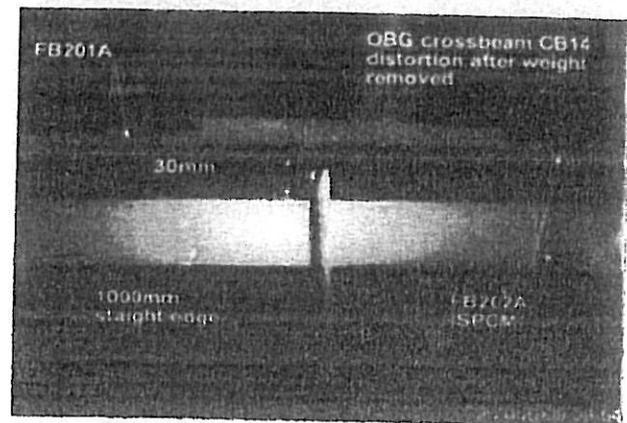
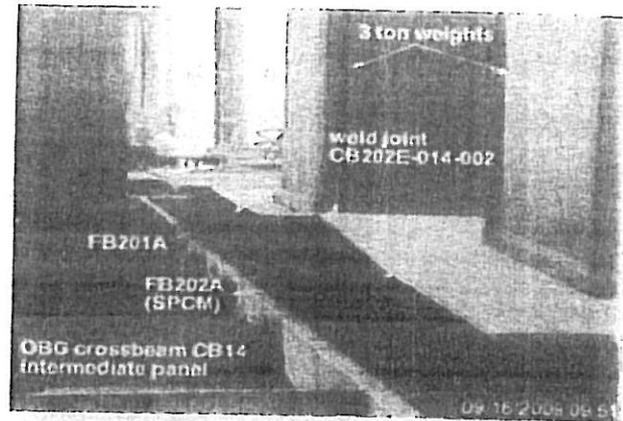
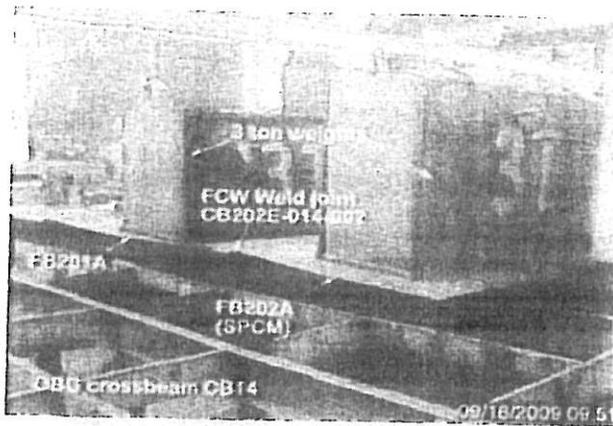
QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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Who discovered the problem: Steve Hall

Name of individual from Contractor notified: Wang Wen Bin

Time and method of notification: Time Varies, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 0700 hours, Verbal

QC Inspector's Name: Chen Xi

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

Comments:

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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: 27-Oct-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: 05.03.06-000420

Subject: NCR No. ZPMC-0430

Reference Description: Cold bending of SPCM Member: Crossbeam 14 Intermediate Web Plate CB202E

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: Xbeam

Lift: 14

Remarks:

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Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval and discontinue any further cold bending on similar members.

Transmitted by: Bill Howe

Attachments: ZPMC-0430

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, Contract Files, Ching Chao
File: 05.03.06



火工校正报告

Heat Straightening Report(HSR)

报告号 Report#

HSR(B)-318

版本号 Revision #

0

日期 Date

2009.08.30

美国海湾大桥 San Francisco Oakland Bay Bridge

CALTRANS #04-0120F4

工程编号 JOB#: ZP06-787

装配 Assembly:

部装 Sub-Assembly:

质检代表/Quality Control Representative

梁段 Gird: CB14 CB202E

质检经理/Quality Assurance Manager-Approval

塔段 Tower: N/A

焊缝号 Weld No: 001

焊缝地图号 Weld Map No: CB202E-014

情况描述 Description of Condition

Cause原因 Welding distortion 焊接变形

Type of Defect缺陷类型 Welding distortion 焊接变形

Inspection Method检查方法 Visual 目检

处置方法 Disposition

缺陷去除方法(Defect Removal Method): Flame Straightening by oxygen acetylene 运用氧乙炔进行校火

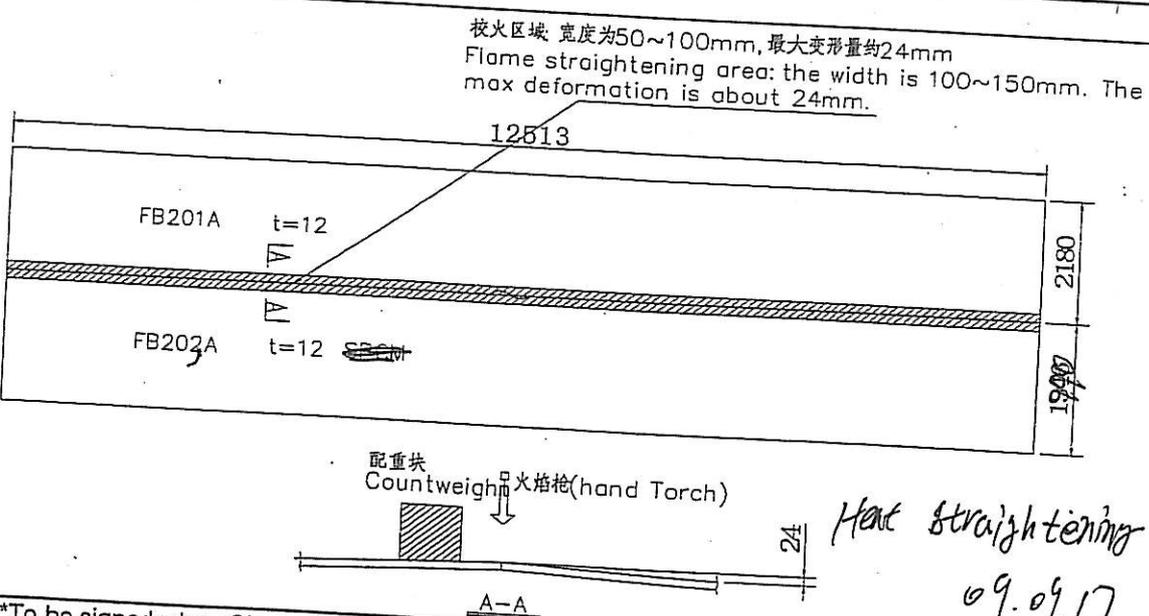
后续NDE(Post-Removal NDE): After finishing heat straightening, the weld of the heat area shall perform NDT according to the approved shop drawing 校火后, 根据图纸要求对热影响区域进行NDT检测.
Control current, voltage and weld speed according to relevant WPS. If necessary anti-deformation or hold down device can be added. 依据相应的WPS的要求控制电流, 电压和焊接速度. 如有必要, 可使用反变形设施进行校正.

纠正措施(Corrective Action(s)):

实施次数(Number of application): 1~3

最高温度(Maximum temperature): <600°C

简图 Sketch

Heat straightening Date
09.09.17

To be signed when Closing HSR~Verify compliance and all necessary reports are ready to attach

检验员 Inspector:	chen xi	签字 Signature:	chen xi
CWI #	07072021	Closing Date:	09.10.17
II 级探伤 NDE Certification:	Level II		

质检经理 QC Manager:	Li Jianjun	日期 Review Date:	09.10.19
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Note: All repair work shall be performed in accordance with applicable Code, approved procedures, contract specifications and AWS D1.5 2002.

APPROVED

RETURNED FOR CORRECTION

Pursuant to Section 5-1.02 of the Standard Specifications State of California

DEPARTMENT OF TRANSPORTATION
Division of Engineering Services
Office of Structure Construction

SJE for RM 9/2/2009
Structure Representative Date

#R787-QCP-1100

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
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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-000443**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 13-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0430**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: 24-Sep-2009**Description of Non-Conformance:**

On Sept. 18, 2009, this Quality Assurance Inspector (QA) observed that the contractor performed "cold bending" of the Seismic Performance Critical Material (SPCM) and a Fracture Critical Weld (FCW). This QA observed two (2) three (3) ton weights had been placed on the material, one on each side of the FCW. The weights appeared to be for the purpose of bending the material. The SPCM is identified as FB202A. The FCW joint is identified as CB202E-014-002. See attached photos for details.

On Sept. 20, 2009, this Quality Assurance Inspector (QA) observed that the contractor performed "cold bending" Seismic Performance Critical Material (SPCM) and a Fracture Critical Weld (FCW). The QA inspector observed one (1) three (3) ton weight had been placed on the material near the FCW. The weight appeared to be for the purpose of correcting excessive weld distortion of the base metal material. The SPCM material is identified as FB202A and the FCW weld joint is identified as CB202E-014-002.

On Sept. 24, 2009, this Quality Assurance Inspector (QA) observed that the contractor performed "cold bending" Seismic Performance Critical Material (SPCM) and a Fracture Critical Weld (FCW). This QA observed two eight (8) ton weights had been placed on the material near the FCW. The weights appeared to be for the purpose of correcting excessive weld distortion of the material. The SPCM is identified as FB202A and the FCW joint is identified as CB202E-014-002.

Contractor's proposal to correct the problem:

Perform NDT and submit HSR for approval.

Corrective action taken:

Contractor submitted Heat Straightening Report as well as NDT reports verifying the welds are in conformance with Contract specifications.

Did corrective action require Engineer's approval?

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

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