

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-000458

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 24-Sep-2009

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

NCR #: ZPMC-0431

Type of problem:

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

Bridge No: 34-0006

Component: OBG Segment 5BW Floor Beam

Reference Description: Removal of a Floorbeam section and introducing additional weld splice at Floorbeam FB5A at PP33

Description of Non-Conformance:

The Caltrans Quality Assurance (QA) Inspector observed that ZPMC personnel have removed a small section of plate from the lower Floor Beam and replaced this section with an unknown steel plate. During this process the contractor has removed the double-sided fillet welds and added a new un-approved complete joint penetration (CJP) weld without the Engineer's approval. Subsequently, the double-sided fillet weld joint between the new plate and the bottom panel was welded. This un-approved repair was performed at OBG Segment 5BW lower Floor Beam (FB5A) to Bottom Panel at panel point 33 between the 4th and 5th WT stiffeners from the Bikepath side.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

AWS D1.5-2002 Section 1.2.1; The contract documents shall designate the specification and classification of base metals to be used.

AWS D1.5-2002 Section 1.2.2; Unless otherwise specified, base metals to be welded under this code shall meet the requirements of the latest edition of AASHTO M270M (M270) (ASTM A 709M {A709}) for the grade of steel shown on the plans or described in this specification.

AWS D1.5-2002 Section 3.7.4; Prior approval of the Engineer shall be obtained for repairs to base metal or for revised design to compensate for deficiencies.

AWS D1.5-2002 Section 6.5.1; "The Inspector shall make certain that the size, length, and location of all welds conform to the requirements of this code and to the detail drawings and that no unspecified welds have been added without approval".

Special Provisions 8-3; Inspection and approval of all joint preparations, assembly practices, joint fit-ups, welding techniques, and the performance of each welder, welding operator, and tack welder shall be documented by the QC Inspector on a daily basis for each day the welding is performed. For each inspection, the QC Inspector shall confirm and document compliance with the requirements of the AWS code criteria and the requirements of these Special Provisions on all welds joints before welding, during welding and after the completion of welding.

Who discovered the problem: Larry Viars

Name of individual from Contractor notified: Mike Williams

Time and method of notification: 0630 hours, verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 0730 hours, Verbal

QC Inspector's Name: Wang Lu

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

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

Office of Structural Materials for your project.

Inspected By:	Tsang, Eric	SMR
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Reviewed By:	Wahbeh, Mazen	SMR
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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
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Subject: NCR No. ZPMC-0431

Job Name: SAS Superstructure
Document No: 05.03.06-000421

Reference Description: Removal of a Floorbeam section and introducing additional weld splice at Floorbeam FB5A at PP33

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:** 05

Remarks:

The Caltrans Quality Assurance (QA) Inspector observed that ZPMC personnel have removed a small section of plate from the lower Floor Beam and replaced this section with an unknown steel plate. During this process the contractor has removed the double-sided fillet welds and added a new un-approved complete joint penetration (CJP) weld without the Engineer's approval. Subsequently, the double-sided fillet weld joint between the new plate and the bottom panel was welded. This un-approved repair was performed at OBG Segment 5BW lower Floor Beam (FB5A) to Bottom Panel at panel point 33 between the 4th and 5th WT stiffeners from the Bikepath side.

Action Required and/or Action Taken:

Submit repair procedure to the engineer for approval that includes repair using contract steel in place of the unknown steel.

Transmitted by: Bill Howe

Attachments: ZPMC-0431

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: 05.03.06-000421

Subject: NCR No. ZPMC-0431

Dated: 11-Jan-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000472 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC did not have approval to perform this repair, ZPMC will submit a CWR that documents this repair as well as all associated welding and inspection records at a later date for closure of this NCR.

ZPMC did not have approval to perform this repair, ZPMC will submit a CWR that documents this repair as well as all associated welding and inspection records at a later date for closure of this NCR.

Submitted by: Lawton, Steve

Attachment(s): ABF-NPR-000472R00

Caltrans' comments:

Status: REJ

Date: 11-Jan-2010

This NCR is rejected because none of the requested information was submitted.

Submitted by: Howe, Bill

Attachment(s):

Date: 11-Jan-2010

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000421

Subject: NCR No. ZPMC-0431

Dated: 09-Mar-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000472 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: Attached is the material traceability report from ZPMC showing that the material meets project specifications acceptable, as well as NDT of the welds to show the added welds are acceptable.

Per ABF-RFI-002018, the floorbeam section referenced in the NCR has been replaced. Attached is the material traceability report from ZPMC showing that the material meets project specifications acceptable, as well as NDT of the welds to show the added welds are acceptable. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000472R01;

Caltrans' comments:

Status: CLO

Date: 17-Mar-2010

The documentation is sufficient to close this NCR.

Submitted by: Howe, Bill

Date: 17-Mar-2010

Attachment(s):



No. B-644

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-3-5

REGARDING: NCR-000458 (ZPMC-0431)

With this letter of response, ZPMC requests closure of CT NCR-000458 (ZPMC-0431) what mentioned about the removal of a Floor Beam section.

- The floor beam section was replaced according to ABF-RFI-002018.
- Attached documentations show the material of the new floor beam section and the NDT report for the new added welds.
- Punch list item 203 what mentioned this NCR has been confirmed and closed by CT inspector.

Based on response above and attached documentations, ZPMC requests closure of this NCR.

ATTACHMENT:

NCR-000458 (ZPMC-0431)

Material Traceability Inspection Report

B787-UT-11533

B787-MT-19921

A handwritten signature in black ink, appearing to be 'Jing W', is written over the attachment list.

3/8/10



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

Job Name: S/S Superstructure

Document No: 05.03.06-000421

Dear: Mr. Charles Kanapicki
 Attention: Mr. Thomas Nilsson Project/Fabrication Manager
 Subject: NCR No. ZPMC-0431

Reference Description: Removal of a Floorbeam section and introducing additional weld splice at Floorbeam FB5A at PP33

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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: 05

Remarks:

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Transmitted by: Bill Howe

Attachments: ZPMC-0431

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

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

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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

Report No: NCR-000458

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 24-Sep-2009

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

NCR #: ZPMC-0431

Type of problem:

Welding Concrete Other

Welding Curing Procedural

Joint fit-up Coating Other

Procedural Procedural Description:

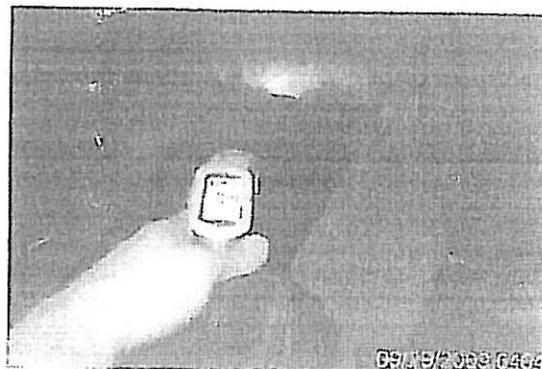
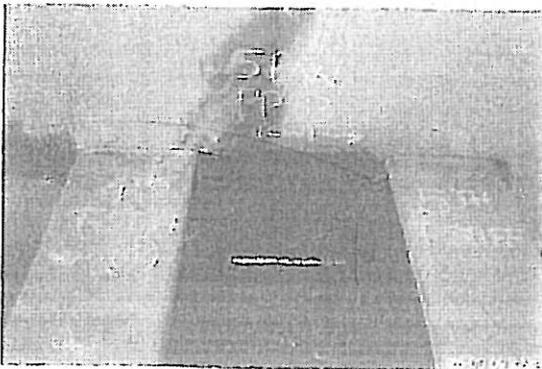
Bridge No: 34-0006

Component: OBG Segment 5BW Floor Beam

Reference Description: Removal of a Floorbeam section and introducing additional weld splice at Floorbeam FB5A at PP33

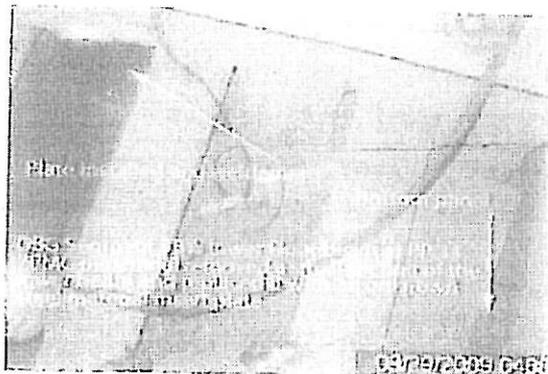
Description of Non-Conformance:

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



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AWS D1.5-2002 Section 6.5.1; "The Inspector shall make certain that the size, length, and location of all welds conform to the requirements of this code and to the detail drawings and that no unspecified welds have been added without approval".

Special Provisions 8-3; Inspection and approval of all joint preparations, assembly practices, joint fit-ups, welding techniques, and the performance of each welder, welding operator, and tack welder shall be documented by the QC Inspector on a daily basis for each day the welding is performed. For each inspection, the QC Inspector shall confirm and document compliance with the requirements of the AWS code criteria and the requirements of these Special Provisions on all welds joints before welding, during welding and after the completion of welding.

Who discovered the problem: Larry Viars

Name of individual from Contractor notified: Mike Williams

Time and method of notification: 0630 hours, verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 0730 hours, Verbal

QC Inspector's Name: Wang Lu

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

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

Office of Structural Materials for your project

Inspected By: Tsang, Eric

SMR

Reviewed By: Wahbeh, Mazen

SMR

NCR-B-287



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-19921 DATE日期 2010.03.07 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: OBW5 5BW FLOOR BEAM PP35		CALTRANS CONTRACT NO.: 加州工程编号: 04-0120F4	
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 , 2010
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
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-345 12/20mm
WELDING PROCESS 焊接方法	SMAW	TYPE OF JOINT 焊缝类型	CORNER 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			
SSD11A-PP33-078				ACC.		100%MT
SSD11A-PP33-079				ACC.		100%MT
SSD11A-PP33-080				ACC.		100%MT
SSD11A-PP33-081				ACC.		100%MT
SSD11A-PP33-264				ACC.		100%MT
SSD11A-PP33-265				ACC.		100%MT
BLANK						

EXAMINED BY 主探 <i>Danny A cheng</i> 2010.03.07	REVIEWED BY 审核 <i>SU Wei</i> 2010.03.07
LEVEL - I SIGN 签名 / DATE 日期	LEVEL - II SIGN / DATE 日期
质量经理 / QCM	用户 CUSTOMER
签字 SIGN / 日期 DATE	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-000574**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 29-Mar-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0431**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: 24-Sep-2009**Description of Non-Conformance:**

The Caltrans Quality Assurance (QA) Inspector observed that ZPMC personnel have removed a small section of plate from the lower Floor Beam and replaced this section with an unknown steel plate. During this process the contractor has removed the double-sided fillet welds and added a new un-approved complete joint penetration (CJP) weld without the Engineer's approval. Subsequently, the double-sided fillet weld joint between the new plate and the bottom panel was welded. This un-approved repair was performed at OBG Segment 5BW lower Floor Beam (FB5A) to Bottom Panel at panel point 33 between the 4th and 5th WT stiffeners from the Bikepath side.

Contractor's proposal to correct the problem:

Provide Material Traceability report for replacement plate.

Corrective action taken:

Contractor submitted Material Traceability report for said plate. The plate has been tested and is in conformance with Contract specifications.

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 152. 1675.3703, who represents the Office of Structural Materials for your project.

Inspected By: Simonis, Jim

Quality Assurance Inspector

Reviewed By: Wahbeh, Mazen

QA Reviewer