

**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


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**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT**


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**Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCR-000656**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 27-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0627**Type of problem:**

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b> Segment 6CE PP47 FB flange
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Reference Description:** Fabrication not according to the approved shop drawings in Segment 6CE vertical floorbeam flange

**Description of Non-Conformance:**

During the Quality Assurance (QA) random in-process visual inspection of the OBG segments in the Trial Assembly area, this QA inspector discovered the following issues:

- Cope Hole R=30mm has been welded (on X7J)
- The R=50mm portion at the transition end of the X7J flange has been trimmed

**Additional Information:**

- At panel point 47, Segment 6CE, Floor Beam FB16A
- The PJP weld joint connecting the vertical floorbeam flange (stiffener) X7J to the Longitudinal Diaphragm LD15A flange plate X42A
- Weld number SEG032D-011

**Applicable reference:**

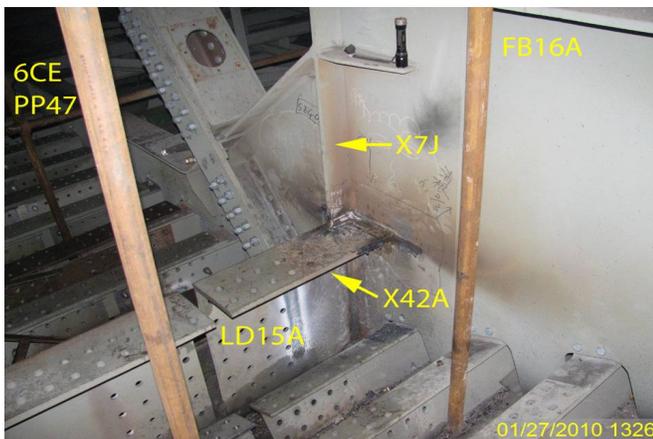
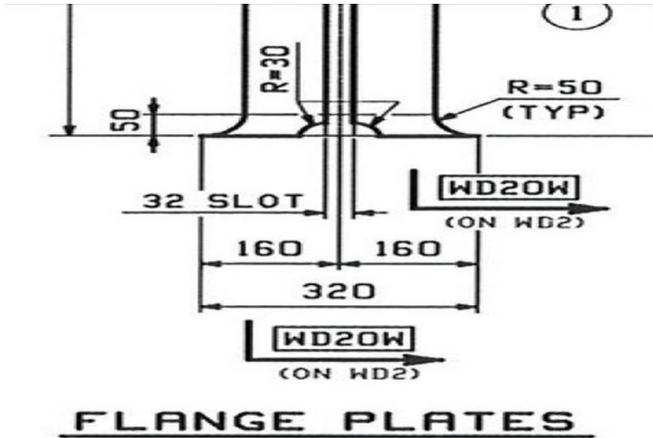
AWS D1.5 2002 Section 3.2.5: Radii of beam copes and weld access holes shall provide a smooth transition, free of notches or cutting past the points of tangency between adjacent surfaces.

AWS D1.5 2002 Section 3.2.5: Reentrant corners of base-metal cut edges shall be formed to provide a smooth transition with a radius of not less than 25 mm [1 in.] that meets the adjacent edges without offset or cutting past the point of tangency. The reentrant corners may be formed by thermal cutting, followed by grinding to meet the surface requirements of 3.2.2.

Approved Shop Drawings X7: Approved OBG Standards Floor Beam Details

# QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )



**Who discovered the problem:** Dan Hernandez  
**Name of individual from Contractor notified:** He Yong  
**Time and method of notification:** 1330 hours, 01-27-10, Verbal  
**Name of Caltrans Engineer notified:** Bill Howe and Ching Chao  
**Time and method of notification:** 0800 hours, 01-28-10, Verbal  
**QC Inspector's Name:** Wang Li Yang  
**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**  
666 Feng Bin Road Room 708, Changxing Island  
Shanghai 201913 PR China  
Tel: 021-56856666 ext 207061 Fax:

## NON-CONFORMANCE REPORT TRANSMITTAL

**To:** AMERICAN BRIDGE/FLUOR, A JV  
375 BURMA ROAD  
OAKLAND CA 95607

**Date:** 29-Jan-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:** 05.03.06-000622

**Subject:** NCR No. ZPMC-0627

**Reference Description:** Fabrication not according to the approved shop drawings in Segment 6CE vertical floorbeam flange

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:** 06

### Remarks:

During the Quality Assurance (QA) random in-process visual inspection of the OBG segments in the Trial Assembly area, this QA inspector discovered the following issues:

- Cope Hole R=30mm has been welded (on X7J)
- The R=50mm portion at the transition end of the X7J flange has been trimmed

### Additional Information:

- At panel point 47, Segment 6CE, Floor Beam FB16A
- The PJP weld joint connecting the vertical floorbeam flange (stiffener) X7J to the Longitudinal Diaphragm LD15A flange plate X42A
- Weld number SEG032D-011

Please see attached NCR ZPMC-627 for details.

### Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences and provide documentation to show that the non-conformance has been corrected according to the approved shop drawings. A response for the resolution of this issue is expected within 14 days.

**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0627

**cc:** Rick Morrow, Gary Pursell, Contract Files, Ching Chao, Bill Howe

**File:** 05.03.06

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000622

**Subject:** NCR No. ZPMC-0627

**Dated:** 16-Mar-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000622 Rev: 00

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### Contractor's Proposed Resolution:

**Reference Resolution:** ZPMC has excavated the cope hole so it is now in conformance with AWS D1.5 and the approved shop drawings. Attached is the NDT to show that base metal was not damaged during this repair.

ZPMC has excavated the cope hole so it is now in conformance with AWS D1.5 and the approved shop drawings. Attached is the NDT to show that base metal was not damaged during this repair. Based on this ZPMC requests closure of this NCR.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000622R00;

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### Caltrans' comments:

**Status:** CLO

**Date:** 18-Mar-2010

The documentation received is sufficient to close this NCR.

**Submitted by:** Howe, Bill

**Date:** 18-Mar-2010

**Attachment(s):**



No. B-683

## LETTER OF RESPONSE

**TO:** American Bridge/Flour

**DATE:** 2010-3-16

**REGARDING:** NCR-000656(ZPMC-0627)

The welded cope hole has been excavated and was inspected by CT. ZPMC is providing the NDT records show the affected weld is acceptable. This issue has been removed from punchlist by CT's representative. Based on this, ZPMC requests closure of this NCR.

**ATTACHMENT:**

NCR-000656(ZPMC-0627)

B787-MT-19944

*[Handwritten signature]*

*3/16/10*



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge  
666 Feng Bin Road Room 708, Changxing Island  
Shanghai 201913 PR China  
Tel: 021-56856666 ext 207061 Fax:

## NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV  
375 BURMA ROAD  
OAKLAND CA 95607

Date: 29-Jun-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: 05.03.06-000622

Subject: NCR No. ZPMC-0627

Reference Description: Fabrication not according to the approved shop drawings in Segment 6CE vertical floorbeam flange

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- Non-Conformance Resolved.

Material Location: OBG

Lift: 06

### Remarks:

During the Quality Assurance (QA) random in-process visual inspection of the OBG segments in the Trial Assembly area, this QA inspector discovered the following issues:

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Transmitted by: Ching Chao

Attachments: ZPMC-0627

cc: Rick Morrow, Gary Pursell, Contract Files, Ching Chao, Bill Howe

File: 05.03.06

Approved Shop Drawings X7: Approved OBG Standards Floor Beam Details

AWS D1.5 2002 Section 3.2.5: Reentrant corners of base-metal cut edges shall be formed to provide a smooth transition with a radius of not less than 25 mm [1 in.] that meets the adjacent edges without offset or cutting past the point of tangency. The reentrant corners may be formed by thermal cutting, followed by grinding to meet the surface requirements of 3.2.2.

AWS D1.5 2002 Section 3.2.5: Radii of beam copes and weld access holes shall provide a smooth transition, free of notches or cutting past the points of tangency between adjacent surfaces.

Applicable references:

- Weld number SEG032D-011
- LD15A flange plate X42A
- The PJP weld joint connecting the vertical floorbeam flange (stiffener) X7J to the Longitudinal Diaphragm
- At panel point 47, Segment 6CE, Floor Beam FB16A

Additional Information:

-The R=50mm portion at the transition end of the X7J flange has been trimmed

-Cope Hole R=30mm has been welded (on X7J)

During the Quality Assurance (QA) random in-process visual inspection of the OBG segments in the Trial Assembly area, this QA inspector discovered the following issues:

Description of Non-Conformance:

Reference Description: Fabrication not according to the approved shop drawings in Segment 6CE vertical floorbeam flange

Welding	<input checked="" type="checkbox"/>	Concrete	<input type="checkbox"/>	Other	<input type="checkbox"/>
Welding	<input type="checkbox"/>	Curing	<input type="checkbox"/>	Procedural	<input type="checkbox"/>
Joint fit-up	<input type="checkbox"/>	Coating	<input type="checkbox"/>	Other	<input type="checkbox"/>
Procedural	<input checked="" type="checkbox"/>	Procedural	<input type="checkbox"/>	Description:	

Type of problem:

Location: Changxing Island, Shanghai, P.R. China  
 Prime Contractor: American Bridge/Fluor Enterprises, a JV  
 Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island  
 Report No: NCR-000656  
 Date: 27-Jan-2010  
 NCR #: ZPMC-0627

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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File #: 69.25B

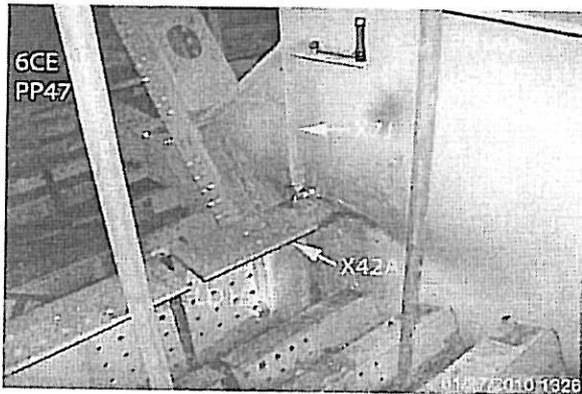
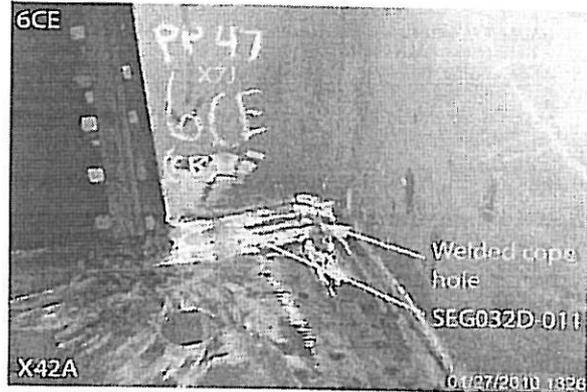
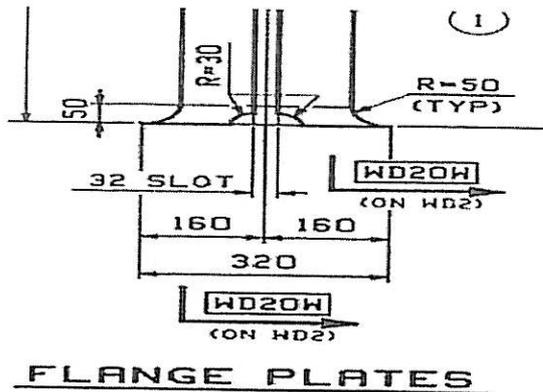


Arnold Schwarzenegger, Governor

STATE OF CALIFORNIA--BUSINESS, TRANSPORTATION AND HOUSING AGENCY

# QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Who discovered the problem: Dan Hernandez  
 Name of individual from Contractor notified: He Yong  
 Time and method of notification: 1330 hours, 01-27-10, Verbal  
 Name of Caltrans Engineer notified: Bill Howe and Ching Chao  
 Time and method of notification: 0800 hours, 01-28-10, Verbal  
 QC Inspector's Name: Wang Li Yang  
 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  
 Reviewed By: Wahbeh, Mazen

Lead Reviewer/Task Leader  
 SMR



# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-19944      DATE日期 2010.03.14      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: FB16A FLOOR BEAM      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<sup>ST</sup>, 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:  WELDING 焊接件      Material & thickness 母材,厚度: A709M-345F2-X 14/100mm  
 CASTING 铸件  
 FORGING 锻造

WELDING PROCESS 焊接方法: NA      TYPE OF JOINT 焊缝类型: NA

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			
X7J				ACC.		base metal

BLANK

EXAMINED BY主探 <i>Dif Achery</i> / 1003.04 LEVEL-II SIGN 签名 / DATE日期 质量经理 / QCM	REVIEWED BY 审核 <i>Smee</i> / 1.12.10 LEVEL-II SIGN / DATE日期 用户CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

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(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-000557**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 18-Mar-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0627**Type of problem:**

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b>
<b>Procedural</b>	<b>Procedural</b>	<b>Descriptor:</b>	

**Date the Non-Conformance Report was written:** 27-Jan-2010**Description of Non-Conformance:**

During the Quality Assurance (QA) random in-process visual inspection of the OBG segments in the Trial Assembly area, this QA inspector discovered the following issues:

- Cope Hole R=30mm has been welded (on X7J)
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**Additional Information:**

- At panel point 47, Segment 6CE, Floor Beam FB16A
- The PJP weld joint connecting the vertical floorbeam flange (stiffener) X7J to the Longitudinal Diaphragm LD15A flange plate X42A
- Weld number SEG032D-011

**Contractor's proposal to correct the problem:**

Replace cope hole and perform NDT required to verify weld quality.

**Corrective action taken:**

Contractor removed weld, installed cope hole in conformance with approved Shop Drawings, and submitted subsequent NDT report verifying the weld and base material in the vicinity of the repair were not affected.

**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.

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# QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

( Continued Page 2 of 2 )

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**Inspected By:** Simonis,Jim

Quality Assurance Inspector

**Reviewed By:** Wahbeh,Mazen

QA Reviewer