

**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, China

**Report No:** NCR-000993

**Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Date:** 20-Mar-2011

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

**NCR #:** ZPMC-0951

### 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> APBB1 Bearing Blocks, OBG 14E/14W
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Reference Description:** Damaged Bearing Blocks (VT) were discovered installed on Lift 14 East Anchorage prior to repairs being performed

### Description of Non-Conformance:

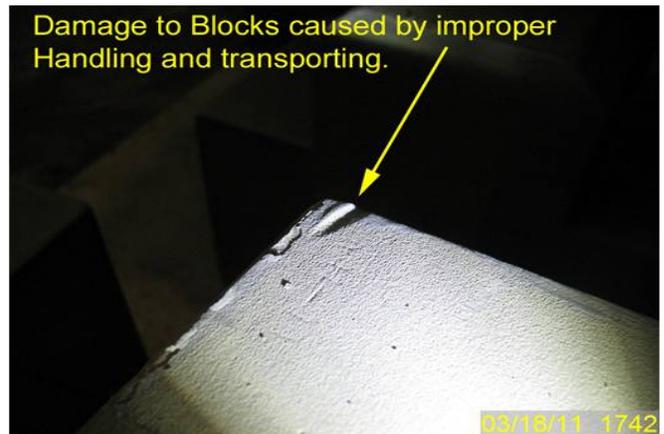
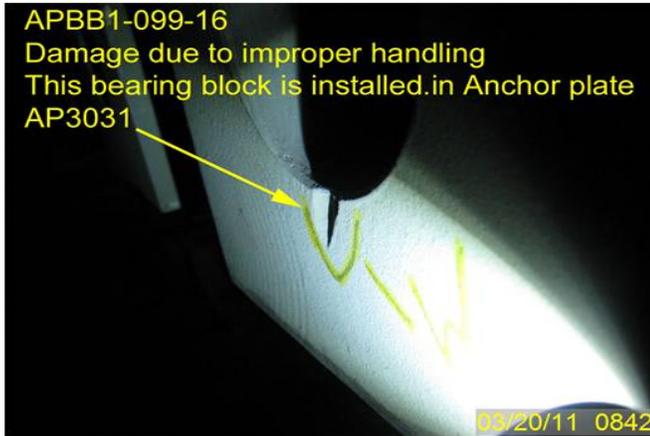
During the Quality Assurance Visual Testing (VT) follow up of APBB1 Bearing Block's located in Bay 14, this Quality Assurance Inspector (QA) discovered the following issues:

- 1) - This QA visually observed multiple bearing blocks with damage to the edge of the blocks due to poor handling. See pictures below.
- 2) - This QA visually observed Bearing Block 057-1 placed into position on Anchor Plate Assembly AP3031A before all the weld repairs have been completed.
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# QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 3 )



## Applicable reference:

Caltrans Standard Specifications 1999

1)- In Section 55-1.04; In handling and shipping of the steel work, every care shall be taken to avoid bending, scraping or overstressing the pieces. All pieces bent or otherwise injured will be rejected.

2)- In Contract Change Order CCO77

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

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 3 of 3 )

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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."

3)- In Contract Change Order CCO77

Section 3.4. "A red Outstanding Repair tag shall be affixed near the yellow tag when any HSR, CWR, NCR is written to indicate an item that requires corrective action and / or closure prior to acceptance of the item."

**Who discovered the problem:** Manuel Teall

**Name of individual from Contractor notified:** Peter Ferguson

**Time and method of notification:** Email, 03/21/11, 08:00 hours

**Name of Caltrans Engineer notified:** Sean Eagen

**Time and method of notification:** 13:30\_3/21/11\_Email

**QC Inspector's Name:** Wang Lu

**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.

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<b>Inspected By:</b>	Devey,Jim	SMR
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<b>Reviewed By:</b>	Wahbeh,Mazen	SMR
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**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:** 21-Mar-2011

**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:** 05.03.06-000950

**Subject:** NCR No. ZPMC-0951

**Reference Description:** Damaged Bearing Blocks (VT) were discovered installed on Lift 14 East Anchorage prior to repairs being performed

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:** Casting **Lift:** 14

### Remarks:

During the Quality Assurance Visual Testing (VT) follow up of APBB1 Bearing Block's located in Bay 14, this Quality Assurance Inspector (QA) discovered the following issues:

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See attached NCR No. ZPMC-0951 for details.

### 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:** Ching Chao

**Attachments:** ZPMC-0951

**cc:** Peter Siegenthaler, Stanley Ku, 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:** 05.03.06-000950

**Subject:** NCR No. ZPMC-0951

**Dated:** 19-Apr-2011

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000946 Rev: 00

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**Contractor's Proposed Resolution:**

**Reference Resolution:**

Please see ZPMC's response.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000946R00;

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**Caltrans' comments:**

**Status:** CLO

**Date:** 19-Apr-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0951 is closed.

**Submitted by:** Eagen, Sean

**Attachment(s):**

**Date:** 19-Apr-2011



TRANSMITTAL LETTER

PROJECT: S.F.O.B.B.

DATE:2011-04-15

TO: ROSEMARY/ABF JV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: OBG NCR

SUBMITTED FOR YOUR APPROVAL AND SUBMITTAL TO CALTRANS

ENCLOSED WITH THIS TRANSMITTAL IS ONE COPY OF

(01) LR: No. B-989

(02) NCR-000993(ZPMC-0951)

B787-MT-38841

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT

PLAN HOLDER:

Tealdy

COMPANY:

ABFJV

PLAN NUMBER:N/A  
#R787-QCP-102

DATE:

8:23 . 4.16.2011

PHONE NO.

\_\_\_\_\_



No. B-989

## LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2011-04-15

REGARDING: NCR-000993(ZPMC-0951)

ZPMC acknowledged this problem and has issued an internal NCR. ZPMC QA personnel have talked with the floor CWI to address this issue. These damaged locations have been repaired and been inspected to be acceptable. ZPMC is providing the NDT report to show these areas have been accepted by department's inspector. Based on this, please consider closure of this NCR.

**ATTACHMENT:**

NCR-000993(ZPMC-0951)

B787-MT-38841

*Zhang Wei*

*4/15/11*

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

**Location:** Changxing Island, Shanghai, China

**Report No:** NCR-000993

**Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Date:** 20-Mar-2011

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

**NCR #:** ZPMC-0951

**Type of problem:**

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

**Bridge No:** 34-0006

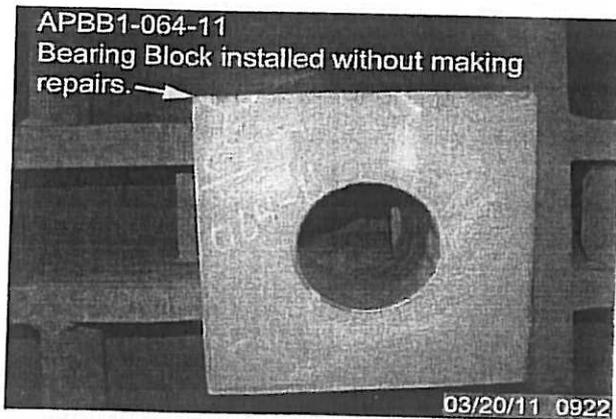
**Component:** APBB1 Bearing Blocks, OBG 14E/14W

**Reference Description:** Damaged Bearing Blocks (VT) were discovered installed on Lift 14 East Anchorage prior to repairs being performed

**Description of Non-Conformance:**

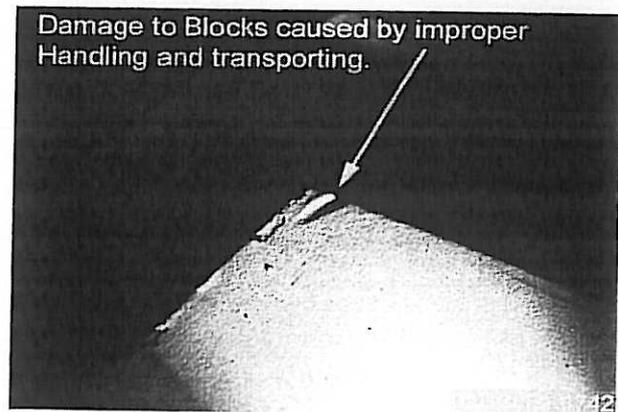
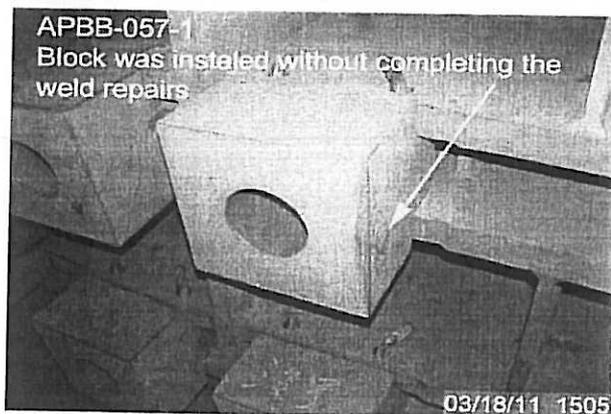
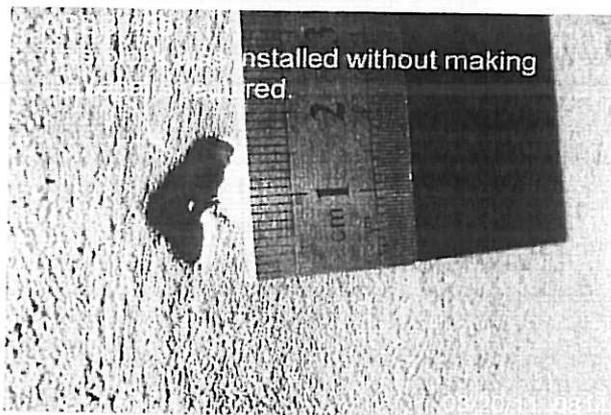
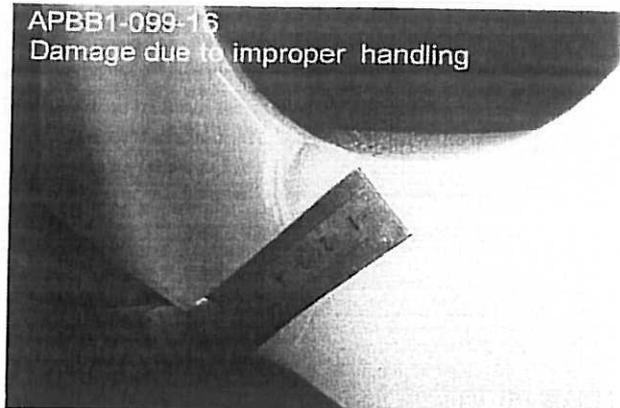
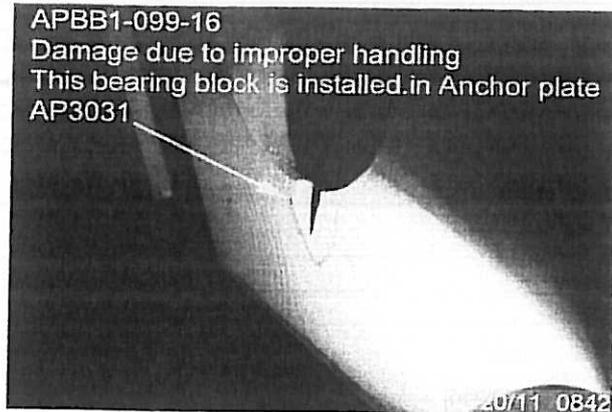
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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 3 )



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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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( Continued Page 3 of 3 )

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Time and method of notification: Email, 03/21/11, 08:00 hours

Name of Caltrans Engineer notified: Sean Eagen

Time and method of notification: 13:30\_3/21/11\_Email

QC Inspector's Name: Wang Lu

Was QC Inspector aware of the problem:  Yes  No

Contractor's proposal to correct the problem:

NA

**Comments:**

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Inspected By: Devey,Jim

SMR

Reviewed By: Wahbeh,Mazen

SMR

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# REPORT OF MAGNETIC PARTICLE EXAMINATION

## 磁粉检测报告

REPORT NO. 报告编号 B787-MT-38841      DATE日期 2011.04.14      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: APBB1 bearing plate		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> , 2011
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 DA-400S	SERIAL NO. 连续编号 17372
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	ASTM-A148 250mm
WELDING PROCESS 焊接方法	FCAW	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			
082-10				ACC.		100%MT
083-2				ACC.		100%MT
057-1				ACC.		100%MT
082-2				ACC.		100%MT
082-1				ACC.		100%MT
121-3				ACC.		100%MT
064-11				ACC.		100%MT
099-16				ACC.		100%MT
051-1				ACC.		100%MT

Base metal per B-WR20307

BLANK


EXAMINED BY 主探 Wang Wei <i>Wang Wei</i> LEVEL - II SIGN 签名 / DATE日期 4/14/11 质量经理 / QCM <i>Li Li Ming</i>	REVIEWED BY 审核 <i>Li Li Ming</i> LEVEL-II SIGN / DATE日期 4/14/11 用户 CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

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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-000962**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 20-Apr-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0951**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>Description:</b>	

**Date the Non-Conformance Report was written:** 20-Mar-2011**Description of Non-Conformance:**

During the Quality Assurance Visual Testing (VT) follow up of APBB1 Bearing Block's located in Bay 14, this Quality Assurance Inspector (QA) discovered the following issues:

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

Contractor will repair the damaged location, and provide the NDT report. Contractor will issue an internal NCR to the QA personnel regarding this issue.

**Corrective action taken:**

Contractor repaired the damaged location. NDT report is provided and acceptable. Contractor also issued the NCR to the QA personnel.

**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:**

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## QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

( Continued Page 2 of 2 )

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**Inspected By:** Ng,Michael

Quality Assurance Inspector

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**Reviewed By:** Wahbeh,Mazen

QA Reviewer