

**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-000775

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

**Date:** 26-Jun-2010

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

**NCR #:** ZPMC-0737

### 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> OBG Lift 13E Deck Panel
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Reference Description:** Weld Removal on SPCM Material without Engineer's Approval

### Description of Non-Conformance:

During the Quality Assurance (QA) random in process observations of the fabrication of Orthotropic Box Girder (OBG) Deck Panel (DP) DP3072A, QA discovered the following issue:

- ZPMC removed Seismic Performance Critical Member (SPCM) welds without the Engineer's approval.
- The weld joints are identified as DP3072-001-075 and 076.
- The welds are fillet weld T-joints, joining the Rib stiffener to the SPCM areas of Deck Panel DP3072A.
- SPCM Deck plate is identified as X3168A.
- The stiffener is identified as RS3112C.
- OBG DP3072A is located in Bay #6.



### Applicable reference:

AWS D1.5 2002 Section 3.7.5; The Engineer shall be notified before improperly fitted and welded members are cut apart.

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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AWS D1.5 Section 12.17.3 Critical Weld Repairs; Except as provided in 12.17.2, all welded repairs shall be considered critical. They include, but not limited to the following:

- (5) Corrections requiring weld removal and rewelding except as provided in 12.17.2 (4).
- (6) All welding to correct errors in fabrication such as improper cutting, punching, drilling, machining, assembly, etc...

AWS D1.5 Section;12.17.4; All critical repairs to base metal and welds shall be approved by the Engineer prior to beginning the repair and shall be documented giving details of the type of discontinuity and extent of repair.

**Who discovered the problem:** Surendra Prabhu

**Name of individual from Contractor notified:** Liu Hua Jie

**Time and method of notification:** 1500 hours, 06/26/10, Verbal

**Name of Caltrans Engineer notified:** Stanley Ku

**Time and method of notification:** 1700 hours, 06/26/10, Email

**QC Inspector's Name:** Lay Tao / Huang Min

**Was QC Inspector aware of the problem:** Yes No

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

### 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:** 28-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:** 05.03.06-000733

**Subject:** NCR No. ZPMC-0737

**Reference Description:** Weld Removal on SPCM Material without Engineer's Approval

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:** 13

### Remarks:

During the Quality Assurance (QA) random in process observations of the fabrication of Orthotropic Box Girder (OBG) Deck Panel(DP) DP3072A, QA discovered the following issue:

- ZPMC removed Seismic Performance Critical Member (SPCM) welds without the Engineer's approval.
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- SPCM Deck plate is identified as X3168A.
- The stiffener is identified as RS3112C.
- OBG DP3072A is located in Bay #6.

### 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:** Sean Eagen Transportation Engineer

**Attachments:** ZPMC-0737

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

**File:** 05.03.06

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000733

**Subject:** NCR No. ZPMC-0737

**Dated:** 21-Jul-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000728 Rev: 00

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### Contractor's Proposed Resolution:

**Reference Resolution:** The CWR report number is B-CWR1675. ZPMC has attached the relative MT report accepting the weld. ZPMC requests closure of this NCR.

ZPMC has written an internal NCR to address the requirement of issuing a CWR prior to start of welding repair on SPCM material. The CWR report number is B-CWR1675. ZPMC has attached the relative MT report accepting the weld. ZPMC requests closure of this NCR.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000728R00;

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### Caltrans' comments:

**Status:** CLO

**Date:** 22-Jul-2010

The proposed resolution is acceptable. NCR No. ZPMC-0737 is considered closed.

**Submitted by:** Woo, Laraine

**Date:** 22-Jul-2010

**Attachment(s):**



No. B-827

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2010-7-21**

**REGARDING: NCR-000775(ZPMC-0737)**

ZPMC has written an internal NCR to address the requirement of CWR prior to start the welding repair. The CWR report number is B-CWR1675. ZPMC is providing the NDT record to show the plate in question has been removed and is acceptable now. Based on this, ZPMC is requesting closure of this NCR.

**ATTACHMENT:**

NCR-000775(ZPMC-0737)

B787-MT-24424

*Zhangwei*  
*7/21/10*



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge  
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**File:** 05.03.06

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

**Report No:** NCR-000775

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

**Date:** 26-Jun-2010

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

**NCR #:** ZPMC-0737

### Type of problem:

**Welding**  **Concrete**  **Other**

**Welding**  **Curing**  **Procedural**

**Joint fit-up**  **Coating**  **Other**

**Procedural**  **Procedural**  **Description:**

**Bridge No:** 34-0006

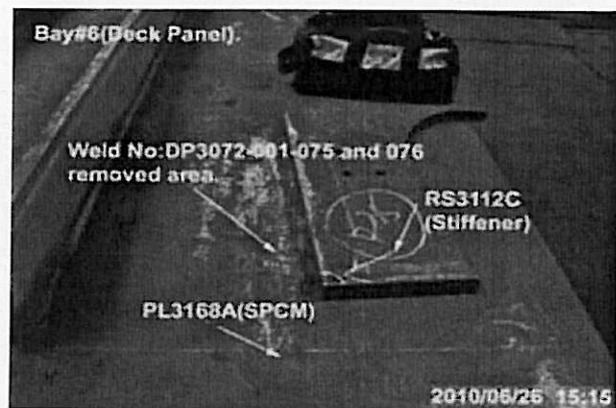
**Component:** OBG Lift 13E Deck Panel

**Reference Description:** Weld Removal on SPCM Material without Engineer's Approval

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### Applicable reference:

AWS D1.5 2002 Section 3.7.5; The Engineer shall be notified before improperly fitted and welded members are cut apart.

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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**Name of Caltrans Engineer notified:** Stanley Ku

**Time and method of notification:** 1700 hours, 06/26/10, Email

**QC Inspector's Name:** Lay Tao / Huang Min

**Was QC Inspector aware of the problem:**  Yes  No

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

**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
<b>Reviewed By:</b>	Wahbeh,Mazen	SMR

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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-000694**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 22-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0737**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:** 26-Jun-2010**Description of Non-Conformance:**

During the Quality Assurance (QA) random in process observations of the fabrication of Orthotropic Box Girder (OBG) Deck Panel (DP) DP3072A, QA discovered the following issue:

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- SPCM Deck plate is identified as X3168A.
- The stiffener is identified as RS3112C.
- OBG DP3072A is located in Bay #6.

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

Submit CWR for weld repair and perform NDT required to verify weld quality.

**Corrective action taken:**

Contractor submitted CWR 1675, and provided post repair NDT data verifying weld conforms with Contract weld quality requirements.

**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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**Inspected By:** Simonis, Jim

Quality Assurance Inspector

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# QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

( Continued Page 2 of 2 )

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**Reviewed By:** Wahbeh,Mazen

QA Reviewer