

**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-000568

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

**Date:** 28-Dec-2009

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

**NCR #:** ZPMC-0541

### Type of problem:

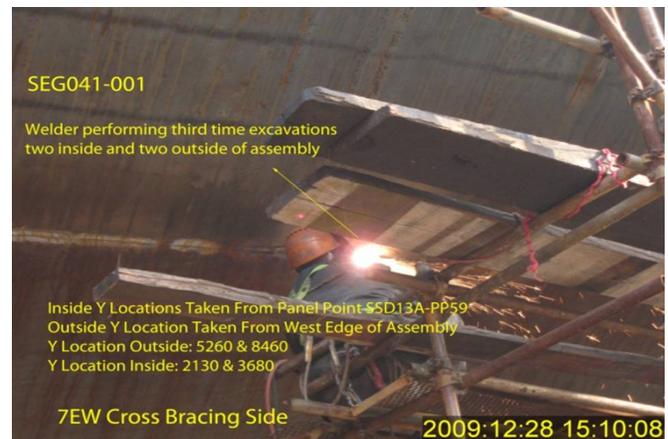
<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b> OBG Segment 7EW Side Plate
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Reference Description:** ZPMC performed third time weld repair excavations to a SPCM weld without the Engineer's approval or an Critical Weld Report

### Description of Non-Conformance:

This QA observed ZPMC welding personnel performing third (3rd) time weld repair excavations to Seismic Performance Critical Material (SPCM) weld without the Engineer's approval or an Critical Weld Report (CWR) in the following four (4) locations:

- "Y" = 5260mm and 8460mm on the outside surface pulling from the west end of the segment.
- "Y" = 2130mm and 3680mm on the inside surface pulling from Panel Point 059.
- The Orthotropic Box Girder (OBG) segment is identified as 7EW.
- The weld is identified as SEG041A-001.
- The weld is designated as SPCM on the approved drawings.
- The weld is a Complete Joint Penetration (CJP) butt joint joining Side Panel identified as SP433A (SPCM) to SP101A.



### Applicable reference:

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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Caltrans Special Provisions section 8-3.01 specifies In addition to the provisions in AWS D1.5, section 3.7.4 and section 12.17, third time repairs of welds, or base metal, regardless of NDT method,...require prior approval of the Engineer.”

**Who discovered the problem:** Tim Murphy

**Name of individual from Contractor notified:** Wang Li Yang

**Time and method of notification:** 1600 hours, 12-28-09, Verbal

**Name of Caltrans Engineer notified:** Bill Howe

**Time and method of notification:** 0930 hours, 12-29-09, 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 Office of Structural Materials for your project.

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**Inspected By:** Carreon,Albert

Lead Reviewer/Task Leader

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**Reviewed By:** Wahbeh,Mazen

SMR



**DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge**

333 Burma Road  
Oakland CA 94607  
Tel: Fax:

**NON-CONFORMANCE REPORT TRANSMITTAL**

<b>To:</b>	AMERICAN BRIDGE/FLUOR, A JV 375 BURMA ROAD OAKLAND CA 95607	<b>Date:</b>	29-Dec-2009
<b>Dear:</b>	Mr. Charles Kanapicki	<b>Contract No:</b>	04-0120F4 04-SF-80-13.2 / 13.9
<b>Attention:</b>	Mr. Thomas Nilsson Project/Fabrication Manager	<b>Job Name:</b>	SAS Superstructure
<b>Subject:</b>	NCR No. ZPMC-0541	<b>Document No:</b>	05.03.06-000531

**Reference Description:** ZPMC performed third time weld repair excavations to a SPCM weld without the Engineer’s approval or an Critical Weld Report

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:** 07

**Remarks:**

- This QA observed ZPMC welding personnel performing third (3rd) time weld repair excavations to Seismic Performance Critical Material (SPCM) weld without the Engineer’s approval or an Critical Weld Report (CWR) in the following four (4) locations:
- “Y” = 5260mm and 8460mm on the outside surface pulling from the west end of the segment.
  - “Y” = 2130mm and 3680mm on the inside surface pulling from Panel Point 059.
  - The Orthotropic Box Girder (OBG) segment is identified as 7EW.
  - The weld is identified as SEG041A-001.
  - The weld is designated as SPCM on the approved drawings.
  - The weld is a Complete Joint Penetration (CJP) butt joint joining Side Panel identified as SP433A (SPCM) to SP101A.

**Action Required and/or Action Taken:**

Do not perform 3 time SPCM repair without notification and approval of a CWR. Submit UT test data to verify weld soundness.

**Transmitted by:** Bill Howe

**Attachments:** ZPMC-0541

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, 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:** 05.03.06-000531

**Subject:** NCR No. ZPMC-0541

**Dated:** 16-Feb-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000598 Rev: 00

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### Contractor's Proposed Resolution:

**Reference Resolution:** ZPMC will submit the weld repair report used in this instance as well as NDT documentation showing that the repaired weld is sound when available.

ZPMC will submit the weld repair report used in this instance as well as NDT documentation showing that the repaired weld is sound when available. Please note that the weld ID referenced in the report is incorrect and future documentation to be submitted will have the correct weld ID rather than the weld ID incorrectly referenced. When the documents mentioned become available ZPMC will submit for closure of this NCR, until then we request this NCR be approved with action pending.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000598R00

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### Caltrans' comments:

**Status:** AAP

**Date:** 17-Feb-2010

AAP approved.

**Submitted by:** Howe, Bill

**Date:** 17-Feb-2010

**Attachment(s):**

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000531

**Subject:** NCR No. ZPMC-0541

**Dated:** 21-Apr-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000598 Rev: 01

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### Contractor's Proposed Resolution:

**Reference Resolution:** The excavation allows ZPMC to determine if they have removed the previously discovered indications before beginning welding. This has been agreed upon before with the Department as being acceptable

The excavations documented in this NCR are acceptable without having an approved WRR/CWR present as long as welding is not being done. The excavation allows ZPMC to determine if they have removed the previously discovered indications before beginning welding. This has been agreed upon before with the Department as being acceptable as long as ZPMC does not proceed with welding. Based on this ZPMC requests that this NCR be closed.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000598R01;

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### Caltrans' comments:

**Status:** REJ

**Date:** 25-Apr-2010

The referenced agreement is for surface indications found by MT. In this case, the NCR was written for a 3rd time repair found by UT. Please show that approval for this repair was received and provide NDT reports verifying the weld is in conformance with Contract weld quality requirements.

**Submitted by:** Eagen, Sean

**Attachment(s):**

**Date:** 25-Apr-2010



No. B-734

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2010-4-21**

**REGARDING: NCR-000568(ZPMC-0541)**

As discussed and agreed with ABF and CT's representative ZPMC is allowed to excavate the indication without the approval of WRR/CWR. For this case, ZPMC is just excavating the weld's deflection. No welding was applied at that moment. A misunderstanding about the requirement to prepare an approved CWR on site occurred to this inspector. Based on this, ZPMC is requesting withdrawal of this NCR.

**ATTACHMENT:**

NCR-000568(ZPMC-0541)

A handwritten signature in black ink, appearing to be 'J. W.' or similar, written in a cursive style.

4/21/10



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:** 29-Dec-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:** 05.03.06-000531

**Subject:** NCR No. ZPMC-0541

**Reference Description:** ZPMC performed third time weld repair excavations to a SPCM weld without the Engineer's approval or an Critical Weld Rep

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:** 07

### Remarks:

This QA observed ZPMC welding personnel performing third (3rd) time weld repair excavations to Seismic Performance Critical Material (SPCM) weld without the Engineer's approval or an Critical Weld Report (CWR) in the following four (4) locations:

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- The weld is designated as SPCM on the approved drawings.

- The weld is a Complete Joint Penetration (CJP) butt joint joining Side Panel identified as SP433A (SPCM) to SP101A.

### Action Required and/or Action Taken:

Do not perform 3 time SPCM repair without notification and approval of a CWR. Submit UT test data to verify weld soundness.

**Transmitted by:** Bill Howe

**Attachments:** ZPMC-0541

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

**File:** 05.03.06

**DEPARTMENT OF TRANSPORTATION**

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(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-000568**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 28-Dec-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0541**Type of problem:**Welding  Concrete  Other Welding  Curing  Procedural  **Bridge No:** 34-0006Joint fit-up  Coating  Other  **Component:** OBG Segment 7EW Side PlateProcedural  Procedural  **Description:****Reference Description:** ZPMC performed third time weld repair excavations to a SPCM weld without the Engineer's approval or an Critical Weld Report**Description of Non-Conformance:**

This QA observed ZPMC welding personnel performing third (3rd) time weld repair excavations to Seismic Performance Critical Material (SPCM) weld without the Engineer's approval or an Critical Weld Report (CWR) in the following four (4) locations:

-“Y” = 5260mm and 8460mm on the outside surface pulling from the west end of the segment.

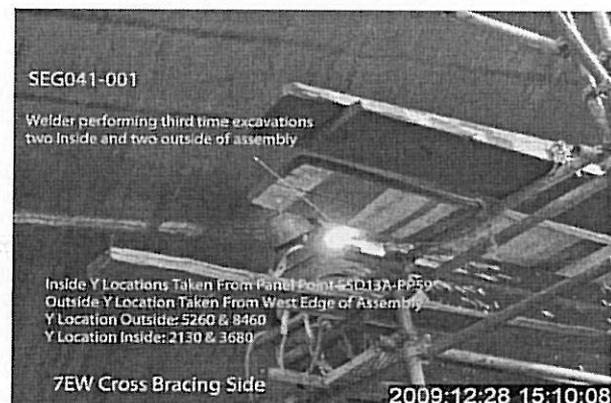
-“Y” = 2130mm and 3680mm on the inside surface pulling from Panel Point 059.

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-The weld is identified as SEG041A-001.

-The weld is designated as SPCM on the approved drawings.

-The weld is a Complete Joint Penetration (CJP) butt joint joining Side Panel identified as SP433A (SPCM) to SP101A.

**Applicable reference:**

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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Caltrans Special Provisions section 8-3.01 specifies In addition to the provisions in AWS D1.5, section 3.7.4 and section 12.17, third time repairs of welds, or base metal, regardless of NDT method,...require prior approval of the Engineer.”

**Who discovered the problem:** Tim Murphy

**Name of individual from Contractor notified:** Wang Li Yang

**Time and method of notification:** 1600 hours, 12-28-09, Verbal

**Name of Caltrans Engineer notified:** Bill Howe

**Time and method of notification:** 0930 hours, 12-29-09, 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 Office of Structural Materials for your project.

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**Inspected By:** Carreon,Albert

Lead Reviewer/Task Leader

**Reviewed By:** Wahbeh,Mazen

SMR

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## NCR PROPOSED RESOLUTION

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

**Dated:** 21-May-2010

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

**Attention:** Pursell, Gary  
Resident Engineer

**Job Name:** SAS Superstructure

**Ref:** 05.03.06-000531

**Document No.:** ABF-NPR-000598 Rev: 02

**Subject:** NCR No. ZPMC-0541

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### Contractor's Proposed Resolution:

**Reference Resolution:** Excavation by ZPMC is allowed without a CWR/WRR in order to determine the extent of the underlying indication and to determine if the indication has been fully removed before weld repair begins.

The incident documented by the inspector for this NCR is excavation. Excavation by ZPMC is allowed without a CWR/WRR in order to determine the extent of the underlying indication and to determine if the indication has been fully removed before weld repair begins. In this case, only the excavation was performed. As previously agreed to by the Department this activity alone does not constitute a non conformance. Based on this, ZPMC requests that this NCR be closed.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000598R02

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### Caltrans' comments:

**Status:** CLO

**Date:** 25-May-2010

This proposed resolution is acceptable. The Department concurs that Non-Conformance ZPMC-0541 is closed.

**Submitted by:** Eagen, Sean

**Date:** 25-May-2010

**Attachment(s):** NPR CT Comments

**DEPARTMENT OF TRANSPORTATION**

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Bay Area Branch  
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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-000642**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 25-May-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0541**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:** 28-Dec-2009**Description of Non-Conformance:**

This QA observed ZPMC welding personnel performing third (3rd) time weld repair excavations to Seismic Performance Critical Material (SPCM) weld without the Engineer's approval or an Critical Weld Report (CWR) in the following four (4) locations:

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

No welding was performed in this instance; excavation was to determine the extent of the repair to be performed. This item is a non issue.

**Corrective action taken:**

N/A

**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, 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