

**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**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, PRC**Report No:** NCR-000179**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 25-Aug-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0162**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> SP748A and SP510A
<b>Procedural</b>	<b>Procedural</b>	<b>Descriptor:</b>	OBG Side Panels

**Reference Description:** Members cut apart without Engineer Notification**Description of Non-Conformance:**

The Contractor cut apart improperly fitted and welded members without notifying the Engineer. This occurred on the complete joint penetration groove weld that joins members SP748A and SP510A on Segment 5BW.

**Applicable reference:**

AWS D1.5, Sec. 3.7.5: "The Engineer shall be notified before improperly fitted and welded members are cut apart."

**Who discovered the problem:** Caltrans Quality Assurance Timothy McClendon**Name of individual from Contractor notified:** ABFJV QC Inspector Art Peterson**Time and method of notification:** 800 Verbal notification.**Name of Caltrans Engineer notified:** Kannu Balan**Time and method of notification:** Verbal notification at 10:00**QC Inspector's Name:** Mr. Wang Lu**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 Abifhram Velasco, who represents the Office of Structural Materials for your project.

**Inspected By:** Velasco, Abifhram

SMR

**Reviewed By:** Velasco, Abifhram

SMR



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge  
333 Burma Road  
Oakland CA 94607  
Tel: 510-622-5151 Fax:

## NON-CONFORMANCE REPORT TRANSMITTAL

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

**Date:** 25-Aug-2008

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

**Dear:** Mr. Charles Kanapicki

**Job Name:** SAS Superstructure

**Attention:** Mr. Charles Kanapicki Quality Control Manager

**Document No:** 05.03.06-000150

**Subject:** NCR No. ZPMC-0162

**Reference Description:** Members cut apart without Engineer Notification

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 Contractor cut apart improperly fitted and welded members without notifying the Engineer. This occurred on the complete joint penetration groove weld that joins members SP748A and SP510A on Segment 5BW.

### Action Required and/or Action Taken:

Propose a resolution for the identified no-conformance and the steps taken by the Quality Control Manager to prevent future failures to follow the AWS D1.5, SEC 3.7.5.

**Transmitted by:** Kannu Balan Sr. Engineer

**Attachments:** ZPMC-0162

**cc:** Rick Morrow, Gary Pursell, Jason Tom, 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:** 05.03.06-000150

**Subject:** NCR No. ZPMC-0162

**Dated:** 11-Sep-2008

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000150 Rev: 00

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**Contractor's Proposed Resolution:**

**Reference Resolution:** ABF has reviewed AWS D1.5 paragraph 3.7.5 with ZPMC to prevent future occurrences.

ZPMC cut apart fitted and welded members without notifying the Engineer. ABF has reviewed AWS D1.5 paragraph 3.7.5 with ZPMC to prevent future occurrences.

**Submitted by:**

**Attachment(s):** ABF-NPR-000150R00

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**Caltrans' comments:**

**Status:** AAP

**Date:** 01-Oct-2008

The response is acceptable, but the Non-Conformance is not closed.

Please provide documentation of the weld repairs that were performed and that the repairs were acceptable. The Department will review the Contractor's proposal to close Non-Conformance ZPMC-0162 at that time.

**Submitted by:** Wright, Doug

**Date:** 01-Oct-2008

**Attachment(s):**

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000150

**Subject:** NCR No. ZPMC-0162

**Dated:** 11-Mar-2009

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000150 Rev: 01

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### Contractor's Proposed Resolution:

**Reference Resolution:** ABFJV has conducted documented training with ZPMC CWI and MT inspectors relative to this code requirement. With the attached documentation, ZPMC requests closure of this NCR.

ABFJV has conducted documented training with ZPMC CWI and MT inspectors relative to this code requirement. With the attached documentation, ZPMC requests closure of this NCR.

### Submitted by:

**Attachment(s):** ABF-NPR-000150R01;

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### Caltrans' comments:

**Status:** CLO

**Date:** 19-Mar-2009

The proposed resolution is acceptable. Training has been provided to the welding inspectors, and there has not been a recurrence of this issue. The Department concurs that Non-Conformance ZPMC-0162 is closed.

**Submitted by:** Wright, Doug

**Date:** 19-Mar-2009

**Attachment(s):**

# Tool Box Training

Subject:

CWI and MT inspector training, CT NCR's ZPMC-0123,  
ZPMC-0162, ZPMC -0145, ZPMC-0204, ZPMC-0205,  
ZPMC-0206, ZPMC-0207

Date:

Mar. 10th. 2009

Conducted By:

Steve Lawton

Name	Title
Xu Xiangping	CWI
Zhang Zhong	}
Wang Nan	
Gousses	
Wan Zhaoqiang	
(Fotter)	
李 振 宇	
Li Zhijiang	
Wan Wenzhong	
Zhao Chen Sun	
Zhang Zhixun	
Lu Jianhua	↓

# Tool Box Training Agenda

**Subject:** CWI responsibilities

**Reason for Training:** Several NCR's relating to CWI responsibility, where it appears the CWI is not completely aware of all duties expected of a CWI

**Reference:** NCR's, ZPMC-0123, ZPMC-0145, ZPMC-0162, ZPMC-0202, ZPMC-0204, ZPMC-0205

1. **AWS D1.5-2002 Section 6 Responsibilities of QC Inspector**
  - a. 6.2 Inspection of Materials
  - b. 6.3 Inspection of WPS Qualification and Equipment
  - c. 6.4 Inspection of Welder, Welding Operator and Tack Welder Qualifications
  - d. 6.5 Inspection of Work and Records
2. **Time of Inspection**
  - a. Fit-up
  - b. inprocess
  - c. Final
3. **AWS D1.5-02 Section 3**
  - a. 3.2 Preparation of Base Material
  - b. 3.3 Assembly
  - c. 3.4 Control of Distortion and Shrinkage
  - d. 3.6 Weld Profiles
  - e. 3.7 Repairs



# Tool Box Training Agenda

**Subject:** MT of welds

**Reason for Training:** Several CT NCR's relating to welds accepted by MT by ZPMC then later found to be unacceptable by CT QA inspection.

**Reference:** CT NCR's ZPMC-0203, ZPMC-0204, ZPMC-0034, ZPMC-0035, ZPMC-0077, ZPMC-0191, ZPMC-0192, ZPMC-0194,

1. **MT Techniques**
  - a. Equipment
  - b. Pie Gage
  - c. Powder
  
2. **Inspection Techniques**
  - a. Lighting
  - b. Position of body (distance of eyes to the weld surface)
  - c. Speed
  - d. Amount of Powder
  
3. **Inspection Criteria**
  - a. ZPMC Inspection procedures
  - b. Relevant Versus Non Relevant indications

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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, PRC**Report No:** NCS-000221**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 21-May-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0162**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:** 25-Aug-2008**Description of Non-Conformance:**

The Contractor cut apart improperly fitted and welded members without notifying the Engineer. This occurred on the complete joint penetration groove weld that joins members SP748A and SP510A on Segment 5BW.

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

ABFJV has conducted documented training with ZPMC CWI and MT inspectors relative to this code requirement.

**Corrective action taken:**

ABFJV has conducted documented training with ZPMC CWI and MT inspectors relative to this code requirement and have provided the corresponding documentation to CT. This is acceptable to close the issue.

**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 Eric Tsang, +(86) 1500.042.2372, who represents the Office of Structural Materials for your project.

**Inspected By:** Guest, Skyler **Quality Assurance Inspector****Reviewed By:** Wahbeh, Mazen **QA Reviewer**