

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



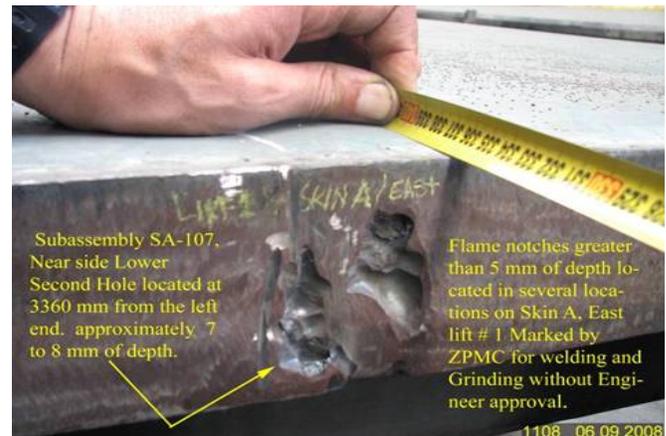
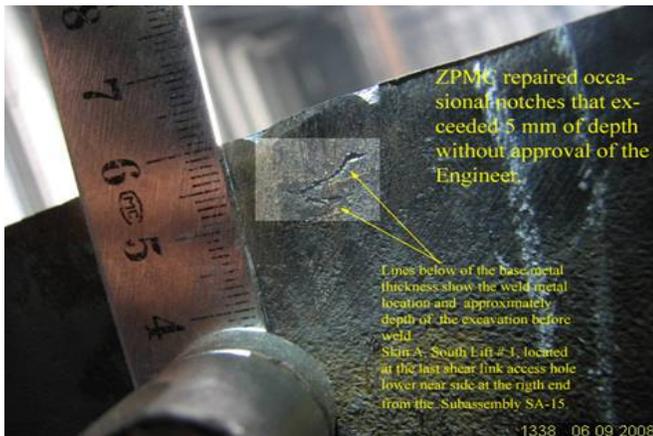
Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-000142**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 09-Jun-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0135**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Tower, South Shaft, Skin A, Lift 1
Procedural	Procedural	Descriptor: Penetrations for the shear link connections	

Reference Description: AWS D1.5 (2002)**Description of Non-Conformance:**

ZPMC utilized thermal cutting equipment that was not adjusted or manipulated in a manner to avoid torch notches along the edge of the skin plate. ZPMC has performed the repair of base metal notches without Engineer approval on plate edges of tension and reversal-of-stress members without performing ultrasonic testing and magnetic particle testing as required by contract documents. These notches occur at the shear link connection access holes on the South Shaft, Skin A, Lift 1.

**Applicable reference:**

AWS D1.5 (2002) Section 3.2.2.1 Steel, occasional notches....resulting from improper operation of the cutting process, may, with the approval of the Engineer, be repaired by welding.....Repair of members subject to tension or reversal of stress shall be inspected as described in 3.2.2.3.

Section 3.2.2.3: Welded repairs to the surfaces and edges of tension and reversal-of-stress members shall be subject to UT and MT. Weld quality shall conform to the requirements of 6.26.

Who discovered the problem: Alfredo Acuna, Quality Assurance Inspector

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Name of individual from Contractor notified: John Hamer, Quality Control

Time and method of notification: 6/6/08, 1400, Verbal notification

Name of Caltrans Engineer notified: Scott Kennedy, Structure Construction

Time and method of notification: 6/6/08, 1200, Present during discovery of incident

QC Inspector's Name: Zhang Jiadi Ken

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Wahbeh,Mazen

SMR

Reviewed By: Wahbeh,Mazen

SMR



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: 16-Jun-2008

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

Dear: Mr. Charles Kanapicki

Job Name: SAS Superstructure

Attention: Mr. Dave Williams Consultant

Document No: 05.03.06-000117

Subject: NCR No. ZPMC-0135

Reference Description: AWS D1.5 (2002) / Skin Plate Penetrations

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: Tower **Lift:** 01

Remarks:

ZPMC utilized thermal cutting equipment that was not adjusted or manipulated in a manner to avoid torch notches along the edge of the skin plate. ZPMC has performed the repair of base metal notches without Engineer approval on plate edges of tension and reversal-of-stress members without performing ultrasonic testing and magnetic particle testing as required by contract documents. These notches occur at the shear link connection access holes on the South Shaft, Skin A, Lift 1.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance that addresses both the procedures to minimize the repairs of the base metal and the corrective actions to be taken to ensure that the repairs to date are in compliance with the contract documents. In addition to the material/workmanship non-conformance, propose a resolution that addresses the failure of Quality Control to prevent the repair of the base metal without the approval of the Engineer and the steps taken by the welding Quality Control Manager to prevent future occurrences.

Transmitted by: Scott Kennedy Sr. Bridge Engineer

Attachments: ZPMC-0135

cc: Rick Morrow, Gary Pursell, Mark Woods, Doug Coe

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000117

Subject: NCR No. ZPMC-0135

Dated: 10-Sep-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000132 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC QA has notified the CWI's and production personnel of this issue.

ZPMC WQCP Section 9 allows for the repair of thermal cut edges of non-SPCM parts without engineers approval, however, all inspection required by the contract are required to be performed. ZPMC QA has notified the CWI's and production personnel of this issue.

Submitted by:

Attachment(s): ABF-NPR-000132R00

Caltrans' comments:

Status: CLO

Date: 02-Nov-2008

The proposed resolution is acceptable. The Department concurs that Non-Conformance ZPMC-0135 is closed.

Submitted by: Wright, Doug

Date: 02-Nov-2008

Attachment(s):

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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-000144**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 22-Dec-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0135**Type of problem:**

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

Date the Non-Conformance Report was written: 09-Jun-2008**Description of Non-Conformance:**

ZPMC utilized thermal cutting equipment that was not adjusted or manipulated in a manner to avoid torch notches along the edge of the skin plate. ZPMC has performed the repair of base metal notches without Engineer approval on plate edges of tension and reversal-of-stress members without performing ultrasonic testing and magnetic particle testing as required by contract documents. These notches occur at the shear link connection access holes on the South Shaft, Skin A, Lift 1.

Contractor's proposal to correct the problem:

ZPMC WQCP Section 9 allows for the repair of thermal cut edges of non-SPCM parts without engineers approval, however, all inspection required by the contract are required to be performed. ZPMC QA has notified the CWIs and production personnel of this issue.

Corrective action taken:

ZPMC QA has notified the CWIs and production personnel that ultrasonic and magnetic particle testing is required for repairs performed on thermal cut edges.

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 Serge Sinevod, who represents the Office of Structural Materials for your project.

Inspected By: Sinevod, Serge

Quality Assurance Inspector

Reviewed By: Sinevod, Serge

QA Reviewer