

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-000136**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 16-May-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0130**Type of problem:****Welding****Concrete****Other****Welding****Curing****Procedural****Bridge No:** 34-0006**Joint fit-up****Coating****Other****Component:** FB012-011/FB011-006/FB016-006/FB016-008/FB016-**Procedural****Procedural****Descriptor:** OBG Floorbeams**Reference Description:** Did not correct welds with questionable test results**Description of Non-Conformance:**

The Contractor did not correct welds whose surface profiles produced questionable test results. The Contractor's QC ignored Class A indications found during the performance of UT. The Contractor's QC stated that the indications were disregarded because they believe the indications to be from the toe of the weld. The Contractor did not grind the weld smooth and did not blend the weld with adjacent material prior to performing UT. This occurred on weld joint #s FB012-011-023, FB011-006-021, FB016-006-021, FB016-008-021, and FB016-013-021.

**Applicable reference:**

Special Provisions, Section 8-3.01 Welding: "Groove weld surface profiles that interfere with the performance of the NDT procedure or produce questionable test results shall be ground smooth and blended with the adjacent material.... Questionable test results are defined as test results containing relevant or non-relevant indications or results from a situation where a defect may have been masked by the weld profile. Finger dampening the ultra-sonic (UT) signal shall not be considered resolution of questionable test results."

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Who discovered the problem: QA Inspector Erik Prue
Name of individual from Contractor notified: ABFJV QC Inspector Kevin Dye
Time and method of notification: 16 May 2008, 2030
Name of Caltrans Engineer notified: Stanley Ku
Time and method of notification: 22 May 2008, 12:15 verbal
QC Inspector's Name: ZPMC QC CWI Hue Wei Qing
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 Patrick Lowry, 916-227-5719, who represents the Office of Structural Materials for your project.

Inspected By:	Lowry,Patrick	SMR
Reviewed By:	Lowry,Patrick	SMR



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: 30-May-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: 05.03.06-000111

Subject: NCR No. ZPMC-0130

Reference Description: Did not correct welds with questionable test results

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:**

Remarks:

The Contractor did not correct welds whose surface profiles produced questionable test results. The Contractor's QC ignored Class A indications found during the performance of UT. The Contractor's QC stated that the indications were disregarded because they believe the indications to be from the toe of the weld. The Contractor did not grind the weld smooth and did not blend the weld with adjacent material prior to performing UT. This occurred on weld joint #s FB012-011-023, FB011-006-021, FB016-006-021, FB016-008-021, and FB016-013-021.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance to prevent future occurrences.

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0130

cc: Rick Morrow, Gary Pursell, Brian Boal, 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: 05.03.06-000111

Subject: NCR No. ZPMC-0130

Dated: 10-Sep-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000129 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC UT operators have been instructed that finger dampening cannot be used as a means of acceptance and if exceeding the reference level of inspection must be marked for repair.

ZPMC UT operators have been instructed that finger dampening cannot be used as a means of acceptance and if exceeding the reference level of inspection must be marked for repair. Repair is to be performed as necessary until acceptable results are achieved.

Submitted by:

Attachment(s): ABF-NPR-000129R00

Caltrans' comments:

Status: CLO

Date: 15-Sep-2008

The Contractor's response is acceptable. The Department concurs that Non-Conformance ZPMC-0130 is closed.

Submitted by: Wright, Doug

Date: 15-Sep-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-000211**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 16-Feb-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0130**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: 16-May-2008**Description of Non-Conformance:**

The Contractor did not correct welds whose surface profiles produced questionable test results. The Contractor's QC ignored Class A indications found during the performance of UT. The Contractor's QC stated that the indications were disregarded because they believe the indications to be from the toe of the weld. The Contractor did not grind the weld smooth and did not blend the weld with adjacent material prior to performing UT. This occurred on weld joint #s FB012-011-023, FB011-006-021, FB016-006-021, FB016-008-021, and FB016-013-021.

Contractor's proposal to correct the problem:

ZPMC UT operators have been instructed that finger dampening cannot be used as a means of acceptance and if exceeding the reference level of inspection must be marked for repair. Repair is to be performed as necessary until acceptable results are achieved.

Corrective action taken:

ZPMC performed weld repair on joints FB012-011-023, FB011-006-021, FB016-006-021, FB016-008-021, and FB016-013-021. NDT results indicated that the welds are acceptable. This corrective action is acceptable.

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: Tsang, Eric

Quality Assurance Inspector

Reviewed By: Wahbeh, Mazen

QA Reviewer