

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 #: 1x.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Job Site**Report No:** NCR-000720**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 27-Apr-2010**Submitting Contractor:** American Bridge/Fluor Enterprises, a JV**NCR #:** ABF-0008**Type of problem:**

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

Reference Description: Improper Backing Bar Placement**Description of Non-Conformance:**

QA Inspectors observed several areas where the gap between the backing bar and the underside of the top deck plate exceeded the tolerance (2mm) of the D1.5 Code.

FS 2W/3W:

A1-y=2015mm-2125mm, gap at steel backing 7mm-3mm (length 110mm) 2W side of groove

A1-y=1970mm-2130mm, gap at steel backing 9mm-3mm (length 160mm) 3W side of groove

FS 1W/2W:

A2-y=2475mm-3735mm, gap at steel backing 3-3.5mm (length 1260mm)

A2/A3-y=A2-5250mm-A3-600mm, gap at steel backing 3mm-3.5mm (length 750mm)

A4-y=1080mm-1690mm, gap at steel backing 3mm (length 610mm)

A4-y=4350mm-5350, gap at steel backing 3-5mm (approximately 1000mm)

FS 3E/4E:

PLA-located at the plate transition north of the number 1 U-Rib, 6mm gap

FS 3E/4E:

PLA-located at the junction of plate "A" and "B", 4mm gap

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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Applicable reference:

AWS D1.5-02, Chapter 3, Section 3.13.5

"Steel backing shall be placed and held in intimate contact with the base metal. The maximum gap between steel backing and the base metal at the weld root shall be 2 mm [U16 in.]"

Who discovered the problem: QA Inspectors

Name of individual from Contractor notified: WQCM-Jim Bowers

Time and method of notification: Various

Name of Caltrans Engineer notified:

Time and method of notification:

QC Inspector's Name: Jim Bowers

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

The Contractor proposes that the gap be welded with the SMAW process prior to the subsequent welding of the full length tack welds on either side of the backing bar to the base material and any production SAW welding. The affected area is to be clearly marked and documented by the QC Department on the material for future reference for UT examination purposes.

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 Mohammad Fatemi, 916-813-3677, who represents the Office of Structural Materials for your project.

Inspected By: Bozorgnia,Behrouz

QA Inspector

Reviewed By: Lowry,Patrick

SMR



DEPARTMENT OF TRANSPORTATION

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: 28-Apr-2010
Contract No: 04-0120F4
04-SF-80-13.2 / 13.9
Dear: Mr. Charles Kanapicki
Job Name: SAS Superstructure
Attention: Mr. James Bowers
Document No: 05.03.06-000678
Subject: NCR No. ABF-0008

Reference Description: Improper Backing Bar Placement

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.

Remarks:

Material Location: OBG Field Splice Locations Lift: 1W/2W, 2W/3W, 3E/4E

QA Inspectors observed several areas where the gap between the backing bar and the underside of the top deck plate exceeded the tolerance (2mm) of the D1.5 Code.

FS 2W/3W:
A1-y=2015mm-2125mm, gap at steel backing 7mm-3mm (length 110mm) 2W side of groove
A1-y=1970mm-2130mm, gap at steel backing 9mm-3mm (length 160mm) 3W side of groove
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A2/A3-y=A2-5250mm-A3-600mm, gap at steel backing 3mm-3.5mm (length 750mm)
A4-y=1080mm-1690mm, gap at steel backing 3mm (length 610mm)
A4-y=4350mm-5350, gap at steel backing 3-5mm (approximately 1000mm)
FS 3E/4E:
PLA-located at the plate transition north of the number 1 U-Rib, 6mm gap
FS 3E/4E:
PLA-located at the junction of plate "A" and "B", 4mm gap

Per AWS D1.5-02, Chapter 3, Section 3.13.5
"Steel backing shall be placed and held in intimate contact with the base metal. The maximum gap between steel backing and the base metal at the weld root shall be 2 mm [U16 in.]"

Action Required and/or Action Taken:

The Contractor proposes that the gap be welded with the SMAW process prior to the subsequent welding of the full length tack welds on either side of the backing bar to the base material and any production SAW welding. The affected area is to be clearly marked and documented by the QC Department on the material for future reference for UT examination purposes.

Department takes no exception to the Contractor's proposal.

Transmitted By: Tai-Lin Liu Transportation Engineer

Attachments: ABF-0008

cc: Gary Pursell, Peter Siegenthaler, Stanley Ku, Jason Tom, Bill Casey

File: 05.03.06, 09.001.0015

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Job Site**Report No:** NCS-000798**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:****Submitting Contractor:** American Bridge/Fluor Enterprises, a JV**NCR #:** ABF-0008**Type of problem:**

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

Date the Non-Conformance Report was written: 27-Apr-2010**Description of Non-Conformance:**

QA Inspectors observed several areas where the gap between the backing bar and the underside of the top deck plate exceeded the tolerance (2mm) of the D1.5 Code.

FS 2W/3W:

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FS 3E/4E:

PLA-located at the plate transition north of the number 1 U-Rib, 6mm gap

FS 3E/4E:

PLA-located at the junction of plate "A" and "B", 4mm gap

Contractor's proposal to correct the problem:

The Contractor proposes that the gap be welded with the SMAW process prior to the subsequent welding of the full length tack welds on either side of the backing bar to the base material and any production SAW welding.

The affected area is to be clearly marked and documented by the QC Department on the material for future reference for UT examination purposes.

Corrective action taken:

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

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Please refer to Department letter 05.03.01-008592 dated December 2nd, 2010.

Did corrective action require Engineer's approval? **Yes** **No**

If so, name of Engineer providing approval: William S Casey

Date: 02-Dec-2010

Is Engineer's approval attached? **Yes** **No** Reference State Letter 05.03.01-008592.

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

Inspected By: Mahjoub,Nina

Quality Assurance Inspector

Reviewed By: Lowry,Patrick

QA Reviewer