

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-000442
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 24-Sep-2009
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0416

Type of problem:

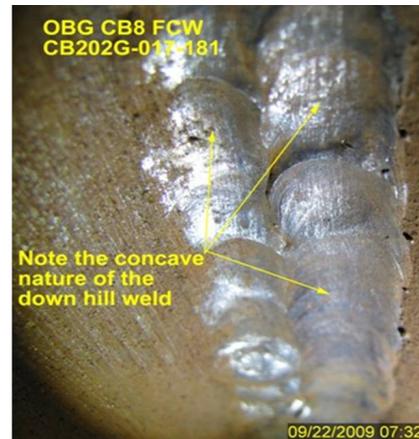
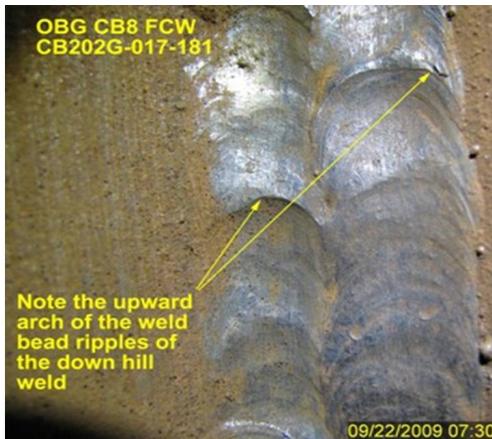
Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: CB 8 and 12 Intermediate Diaphragm to Side Panel
Procedural	Procedural	Description:	

Reference Description: Vertical Weld in a Downward Progression in Crossbeam 8 and 12

Description of Non-Conformance:

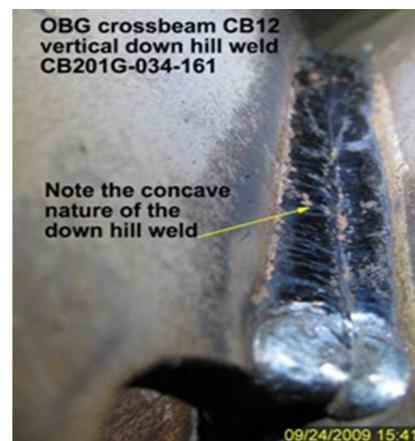
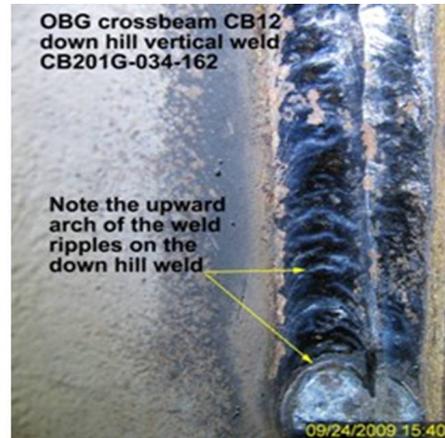
During random in process Visual Inspection (VT) of Fracture Critical Weld (FCW) at Crossbeam CB8, the Quality Assurance (QA) Inspector observed that ZPMC welding personnel have performed a vertical weld in a downward progression. The weld exhibits typical visual characteristics of a weld performed in a downward progression. This weld is identified as a FCW weld on the approved drawings. This weld ID is CB202G-017-181.

During random in process Visual Testing (VT) of Crossbeam CB 12. The Quality Assurance Inspector (QA) observed that the contractors welding personnel appears to have performed seven (7) vertical weld repairs in a downward progression. These repair welds appeared to exhibit typical visual characteristics of a weld performed in a downward progression. The affected welds are identified as CB201G-034-161, CB201G-035-143, 161, 145 and CB201G-036-163.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

AWS D1.5 2002 section 4.6.8 "The progression for all passes in the vertical position shall be upward, unless a downward progression is qualified by tests approved by the Engineer".

Special Provisions 8-3 Welding; "The QC inspector shall inspect and approve each joint preparation, assembly practice, welding technique, joint fit-up and the performance of each welder, welding operator and tack welder to make certain that the applicable requirements of the code and the approved WPS are met. The QC inspector shall examine the work to make certain that it meets the requirements of section 3 and 6.26.

Who discovered the problem: Steve Hall

Name of individual from Contractor notified: Chang Bao Qian, Kelvin Cheung

Time and method of notification: 1730 hours, Verbal

Name of Caltrans Engineer notified: Bill Howe, Ching Chao

Time and method of notification: 0700 hours, Verbal

QC Inspector's Name: Zhang Wei, Liu Fa Wen

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

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

concerning repairs or remedial efforts please contact Mazen Wahbeh, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

Inspected By:	Tsang, Eric	SMR
----------------------	-------------	-----

Reviewed By:	Wahbeh, Mazen	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: 12-Oct-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: 05.03.06-000406

Subject: NCR No. ZPMC-0416

Reference Description: Vertical Weld in a Downward Progression in Crossbeam 8 and 12

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: Xbeam **Lift:** N/A

Remarks:

During random in process Visual Inspection (VT) of Fracture Critical Weld (FCW) at Crossbeam CB8, the Quality Assurance (QA) Inspector observed that ZPMC welding personnel have performed a vertical weld in a downward progression. The weld exhibits typical visual characteristics of a weld performed in a downward progression. This weld is identified as a FCW weld on the approved drawings. This weld ID is CB202G-017-181.

During random in process Visual Testing (VT) of Crossbeam CB 12. The Quality Assurance Inspector (QA) observed that the contractors welding personnel appears to have performed seven (7) vertical weld repairs in a downward progression. These repair welds appeared to exhibit typical visual characteristics of a weld performed in a downward progression. The affected welds are identified as CB201G-034-161, CB201G-035-143, 161, 145 and CB201G-036-163.

Please see attached NCR No. ZPMC 416 for details.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to remedy the workmanship issue and prevent future occurrences.

Transmitted by: Ching Chao

Attachments: ZPMC-0416

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, Contract Files, Ching Chao, Bill Howe
File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000406

Subject: NCR No. ZPMC-0416

Dated: 23-Oct-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000411 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC QC has generated a CWR to remove the down hand welds and replace the weld in conformance with the applicable WPS.

ZPMC QC confirmed that down hand welding was performed in locations identified in the NCR. ZPMC QC has generated a CWR to remove the down hand welds and replace the weld in conformance with the applicable WPS. A CWR for the weld in CB8 has been approved by Caltrans, and CWR for the weld in CB12 is currently being processed. ZPMC requests closure of this NCR.

Submitted by:

Attachment(s): ABF-NPR-000411R00

Caltrans' comments:

Status: CLO

Date: 11-Nov-2009

CT METS inspector has verified that the weld in question has been removed.

Submitted by: Chao, Ching

Date: 11-Nov-2009

Attachment(s):

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 #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCS-000367**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 30-Nov-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0416**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: 24-Sep-2009**Description of Non-Conformance:**

During random in process Visual Inspection (VT) of Fracture Critical Weld (FCW) at Crossbeam CB8, the Quality Assurance (QA) Inspector observed that ZPMC welding personnel have performed a vertical weld in a downward progression. The weld exhibits typical visual characteristics of a weld performed in a downward progression. This weld is identified as a FCW weld on the approved drawings. This weld ID is CB202G-017-181.

During random in process Visual Testing (VT) of Crossbeam CB 12. The Quality Assurance Inspector (QA) observed that the contractors welding personnel appears to have performed seven (7) vertical weld repairs in a downward progression. These repair welds appeared to exhibit typical visual characteristics of a weld performed in a downward progression. The affected welds are identified as CB201G-034-161, CB201G-035-143, 161, 145 and CB201G-036-163.

Contractor's proposal to correct the problem:

Remove welds and perform new weld in conformance with the approved WPS.

Corrective action taken:

ZPMC removed the welds in question and performed the new welds in conformance with the approved WPS.

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.

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Inspected By: Simonis,Jim

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer