

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, P.R. China**Report No:** NCR-000999**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 24-Apr-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0957**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Cable Brackets SA6529
Procedural	Procedural	Description:	

Reference Description: A joint in Cable Bracket SA6529 was being welded without conforming to the approved WPS root gap opening tolerance

Description of Non-Conformance:

During random in-process visual inspection of OBG Cable Brackets, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

- The fit-up of 3 Partial Joint Penetration (PJP) welds had excessive root openings as described below.
- ZPMC personnel proceeded with welding one of these PJP welds without conforming to the root opening tolerance as stated in the approved WPS.

***Cable Bracket SA6529**

- The PJP weld is identified as SA6529-001-046 (Welded the joint with excessive root opening).
- The Root gap was measured approximately 5.5mm for length of 530mm.
- Web plate (X6549A) connects to Side connection plate (X6545A).

***Cable Bracket SA6031 (Currently at fit-up stage)**

- The PJP weld is identified as SA6031-001-044.
- The Root gap was measured approximately 5.0 mm for length of 600mm.
- Web plate (X6043A) connects to Bottom flange plate (X6038C).

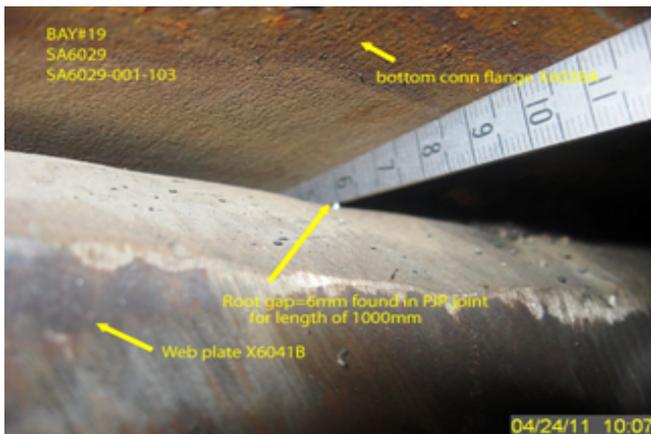
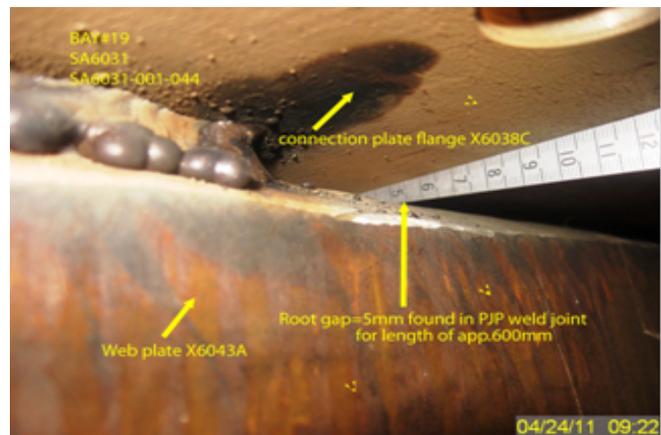
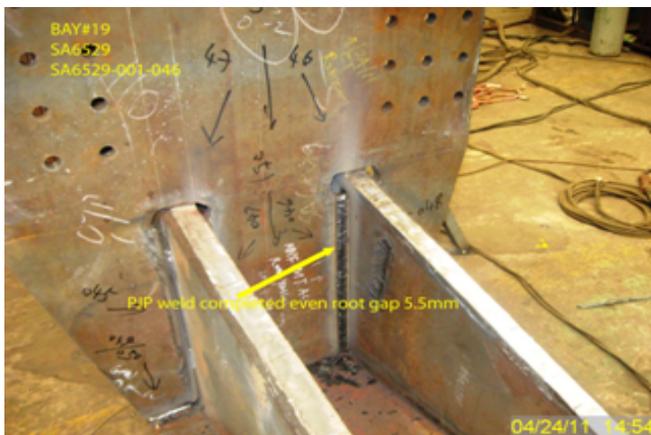
***Cable Bracket SA6029 (Currently at fit-up stage)**

- The PJP weld is identified as SA6029-001-103.
- The Root gap was measured approximately 6.0mm for length of 1000mm.
- Web plate (X6041B) connects to Bottom flange plate (X6038A)

The OBG Cable brackets are located inside of fabrication Bay#19.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

Approved WPS: WPS-B-T-2233-ESAB / WPS-B-T-2232-ESAB indicated that the Root Gap fit-up shall be 0mm with a tolerance of (+3mm, -2mm)

AWSD1.5-2002, Sec.3.3.2: The root opening between parts to be joined by PJP groove welds parallel to the member length (bearing joints expected) shall be zero, or as small as practicable.

Who discovered the problem: Chandra Sudalaimuthu

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

Name of individual from Contractor notified: Kevin Cheung

Time and method of notification: 0930 hours, 04/24/11, Verbal

Name of Caltrans Engineer notified: Sean Eagen

Time and method of notification: 0830 hours 04/25/11, email

QC Inspector's Name: Li Yan Hua

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 Mazen Wahbeh, (818) 292-0659, 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: 25-Apr-2011

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: 05.03.06-000956

Subject: NCR No. ZPMC-0957

Reference Description: A joint in Cable Bracket SA6529 was being welded without conforming to the approved WPS root gap opening tolerance

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:** 12

Remarks:

During random in-process visual inspection of OBG Cable Brackets, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

- The fit-up of 3 Partial Joint Penetration (PJP) welds had excessive root openings as described below.
- ZPMC personnel proceeded with welding one of these PJP welds without conforming to the root opening tolerance as stated in the approved WPS.

*Cable Bracket SA6529

- The PJP weld is identified as SA6529-001-046 (Welded the joint with excessive root opening).
- The Root gap was measured approximately 5.5mm for length of 530mm.
- Web plate (X6549A) connects to Side connection plate (X6545A).

*Cable Bracket SA6031 (Currently at fit-up stage)

- The PJP weld is identified as SA6031-001-044.
- The Root gap was measured approximately 5.0 mm for length of 600mm.
- Web plate (X6043A) connects to Bottom flange plate (X6038C).

*Cable Bracket SA6029 (Currently at fit-up stage)

- The PJP weld is identified as SA6029-001-103.
- The Root gap was measured approximately 6.0mm for length of 1000mm.
- Web plate (X6041B) connects to Bottom flange plate (X6038A)

The OBG Cable brackets are located inside of fabrication Bay#19.

Action Required and/or Action Taken:

NCT

(Continued Page 2 of 2)

Propose resolutions for the identified non-conformance items and document that the various deficiencies have been brought in compliance with contract requirements. Also propose a resolution that addresses the apparent failure of Quality Control to identify the non-conformance with the appropriate Welding Procedure Specification (WPS). Provide documentation of the steps taken by the Quality Control Manager to prevent future occurrences.

The response for the resolution of this issue is requested within 7 days.

Transmitted by: Sean Eagen Transportation Engineer

Attachments: ZPMC-0957

cc: Rick Morrow, Peter Siegenthaler, Stanley Ku, Brian Boal, Contract Files, Ching Chao, Bill Casey

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000956

Subject: NCR No. ZPMC-0957

Dated: 09-May-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000951 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution:

Based on TC-RFI-0411 Rev 0 acceptable response to leave this condition as is, ABFJV hereby requests closure of this NCR.

Submitted by: Lawton, Steve

Attachment(s): ABF-NPR-000951R00

Caltrans' comments:

Status: CLO

Date: 10-May-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0957 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 10-May-2011

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-000966**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 11-May-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0957**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-Apr-2011**Description of Non-Conformance:**

During random in-process visual inspection of OBG Cable Brackets, Caltrans Quality Assurance (QA)

Inspector discovered the following issues:

- The fit-up of 3 Partial Joint Penetration (PJP) welds had excessive root openings as described below.
- ZPMC personnel proceeded with welding one of these PJP welds without conforming to the root opening tolerance as stated in the approved WPS.

***Cable Bracket SA6529**

- The PJP weld is identified as SA6529-001-046 (Welded the joint with excessive root opening).
- The Root gap was measured approximately 5.5mm for length of 530mm.
- Web plate (X6549A) connects to Side connection plate (X6545A).

***Cable Bracket SA6031 (Currently at fit-up stage)**

- The PJP weld is identified as SA6031-001-044.
- The Root gap was measured approximately 5.0 mm for length of 600mm.
- Web plate (X6043A) connects to Bottom flange plate (X6038C).

***Cable Bracket SA6029 (Currently at fit-up stage)**

- The PJP weld is identified as SA6029-001-103.
- The Root gap was measured approximately 6.0mm for length of 1000mm.
- Web plate (X6041B) connects to Bottom flange plate (X6038A)

The OBG Cable brackets are located inside of fabrication Bay#19.

Contractor's proposal to correct the problem:

Contractor issued TC-RFI -0411R0 proposing remedial actions for cable bracket SA6029 but leaving SA6529 and SA6031 sa-is. proposes remedial actions for cable bracket SA6029 as well as leaving SA6529 and SA6031 as-is. Remedial action for SA6029 includes - root pass with SMAW as stated in AWS D1.5, clause 3.3.2.1, MT

