

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-000501**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 04-Nov-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0474**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: 6AE Floor Beams and Side Panels at CB13
Procedural	Procedural	Description:	

Reference Description: Fracture Critical Tack Welds did not comply with the minimum length requirement in CB13 and 6AE

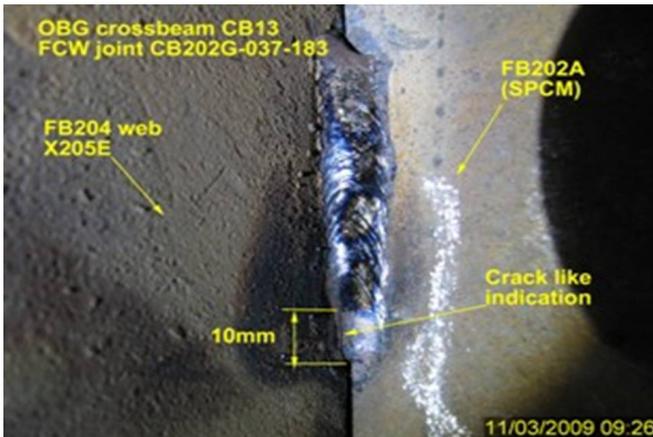
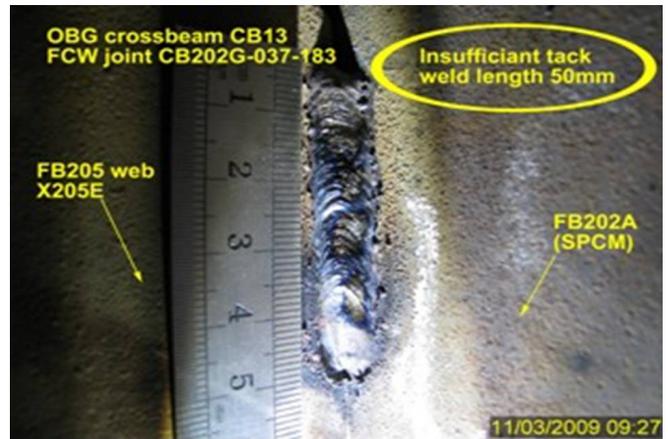
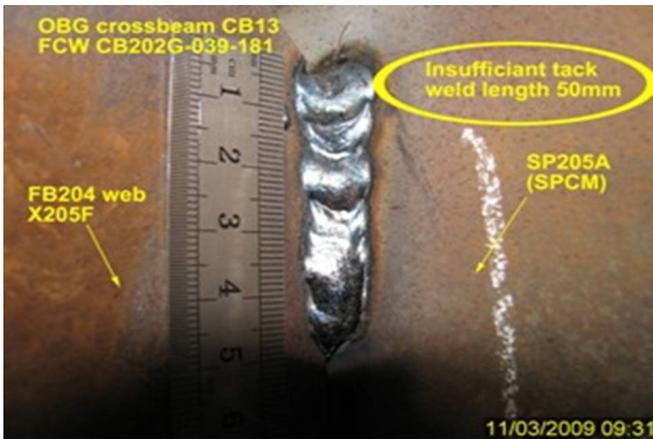
Description of Non-Conformance:

During random in process visual inspection of above mentioned crossbeam, this Quality Assurance Inspector (QA) observed numerous Fracture Critical Weld (FCW) tack welds that do not appear to comply with the contract documents. The tack welds in question are joining the floor beam diaphragms to the SPCM area of the intermediate panel and the east and west side panels. The length of the tack welds measure approximately 50mm. The insufficient tack weld length exists at all four floor beam locations. The members affected are identified as floor beams FB204, FB205, FB202A (SPCM) and side panels SP202A (SPCM) and SP205A (SPCM) in CB13. Weld joints are identified as CB202G-037/038/039/040-181, CB202G-037/038/039/040-183 and CB202G-037/038/039/040-185. The following FCW tack welds appeared to exhibit crack like indications in the crater areas: CB202G-037-183 and CB202G-038-181.

During a random in process visual inspection, this Quality Assurance (QA) Inspector observed several Fracture Critical Weld (FCW) tack welds that do not appear to comply with the contract documents. The tack welds in question are joining one (1) of the FB Diaphragms to the SPCM area of the Side Panel and FB Diaphragm to Bottom Plate. The members are identified as FB20A to X27B weld joint and X104E to Bottom Plate between PP38 and PP39 in 6AE. The length of these tack welds measure 35mm to 55mm in length and there were six (6) tack welds in each weld joint listed above. The minimum length of FCW tack welds per AWS D1.5 section 12 shall be 75mm or as specified by table 12.2.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

AWS D1.5 2002 section 12, table 12.2 requires FCW tack welds not covered by Submerged Arc Welding (SAW) to be a minimum of 75mm in length.

AWS D1.5 2002 section 3.3.7.1 "Tack welds shall be subject to the same quality requirements as the final welds..."

AWS D1.5 2002 section 6.26.1.1 "The weld shall have no cracks."

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

Special Provisions Section 8-3; "Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.

Who discovered the problem: Steve Hall

Name of individual from Contractor notified: Zou Hu

Time and method of notification: 1000 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao and Bill Howe

Time and method of notification: 1100 hours, Verbal

QC Inspector's Name: Zhang Wei

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 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: Carreon,Albert

Lead Reviewer/Task Leader

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:	11-Dec-2009
Dear:	Mr. Charles Kanapicki	Contract No:	04-0120F4 04-SF-80-13.2 / 13.9
Attention:	Mr. Thomas Nilsson Project/Fabrication Manager	Job Name:	SAS Superstructure
Subject:	NCR No. ZPMC-0474	Document No:	05.03.06-000464

Reference Description: Fracture Critical Tack Welds did not comply with the minimum length requirement in CB13 and 6AE

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:** 06

Remarks:

During random in process visual inspection of above mentioned crossbeam, this Quality Assurance Inspector (QA) observed numerous Fracture Critical Weld (FCW) tack welds that do not appear to comply with the contract documents. The tack welds in question are joining the floor beam diaphragms to the SPCM area of the intermediate panel and the east and west side panels. The length of the tack welds measure approximately 50mm. The insufficient tack weld length exists at all four floor beam locations. The members affected are identified as floor beams FB204, FB205, FB202A (SPCM) and side panels SP202A (SPCM) and SP205A (SPCM) in CB13. Weld joints are identified as CB202G-037/038/039/040-181, CB202G-037/038/039/040-183 and CB202G-037/038/039/040-185. The following FCW tack welds appeared to exhibit crack like indications in the crater areas: CB202G-037-183 and CB202G-038-181.

During a random in process visual inspection, this Quality Assurance (QA) Inspector observed several Fracture Critical Weld (FCW) tack welds that do not appear to comply with the contract documents. The tack welds in question are joining one (1) of the FB Diaphragms to the SPCM area of the Side Panel and FB Diaphragm to Bottom Plate. The members are identified as FB20A to X27B weld joint and X104E to Bottom Plate between PP38 and PP39 in 6AE. The length of these tack welds measure 35mm to 55mm in length and there were six (6) tack welds in each weld joint listed above. The minimum length of FCW tack welds per AWS D1.5 section 12 shall be 75mm or as specified by table 12.2.

Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval that includes the correct size tack welds.

Transmitted by: Bill Howe

Attachments: ZPMC-0474

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, 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: 05.03.06-000464

Subject: NCR No. ZPMC-0474

Dated: 25-Jan-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000542 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC will provide explanation of measures that they took to correct the issue. In addition, NDT documentation will be provided to show the welds in question are acceptable.

ZPMC will provide explanation of measures that they took to correct the issue documented in the NCR. In addition, NDT documentation will be provided to show the welds in question are acceptable. Based on this ZPMC requests that this course of action be approved with action pending. When documents become available ZPMC will request closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000542R00

Caltrans' comments:

Status: AAP

Date: 26-Jan-2010

The proposed resolution provided by the contractor is accepted. The NCR will be closed once the required preventative measures are taken and repair documentation are submitted for the Engineer's review and acceptance.

Submitted by: Chao, Ching

Attachment(s):

Date: 26-Jan-2010

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000464

Subject: NCR No. ZPMC-0474

Dated: 23-Mar-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000542 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has issued an internal NCR to inform the relevant departments of the deficiencies noted in the NCR. ZPMC is providing NDT to show that the completed welds are acceptable and free of defect.

ZPMC has issued an internal NCR to inform the relevant departments of the deficiencies noted in the NCR. ZPMC is providing NDT to show that the completed welds are acceptable and free of defect. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000542R01;

Caltrans' comments:

Status: CLO

Date: 05-Apr-2010

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0474 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 05-Apr-2010



No. B-701

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-3-21

REGARDING: NCR-000501(ZPMC-0474)

ZPMC acknowledged this problem and has issued internal NCR. ZPMC QA has instructed this site QC/CWI to notice such problem and enhance to monitor on site. ZPMC is providing the NDT records show the soundness of these affected welds. This issue has been confirmed and removed from punchlist by CT's representative. Based on this, ZPMC is requesting this NCR to be closed.

ATTACHMENT:

NCR-000501(ZPMC-0474)

NCR-B-323(ZPMC-0474)

B787-MT-19931

B787-MT-19868

L. J. Lewis

3/21/10



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: 11-Dec-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: 05.03.06-000464

Subject: NCR No. ZPMC-0474

Reference Description: Fracture Critical Tack Welds did not comply with the minimum length requirement in CB13 and 6AE

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: 06

Remarks:

During random in process visual inspection of above mentioned crossbeam, this Quality Assurance Inspector (QA) observed numerous Fracture Critical Weld (FCW) tack welds that do not appear to comply with the contract documents. The tack welds in question are joining the floor beam diaphragms to the SPCM area of the intermediate panel and the east and west side panels. The length of the tack welds measure approximately 50mm. The insufficient tack weld length exists at all four floor beam locations. The members affected are identified as floor beams FB204, FB205, FB202A (SPCM) and side panels SP202A (SPCM) and SP205A (SPCM) in CB13. Weld joints are identified as CB202G-037/038/039/040-181, CB202G-037/038/039/040-183 and CB202G-037/038/039/040-185. The following FCW tack welds appeared to exhibit crack like indications in the crater areas: CB202G-037-183 and CB202G-038-181.

During a random in process visual inspection, this Quality Assurance (QA) Inspector observed several Fracture Critical Weld (FCW) tack welds that do not appear to comply with the contract documents. The tack welds in question are joining one (1) of the FB Diaphragms to the SPCM area of the Side Panel and FB Diaphragm to Bottom Plate. The members are identified as FB20A to X27B weld joint and X104E to Bottom Plate between PP38 and PP39 in 6AE. The length of these tack welds measure 35mm to 55mm in length and there were six (6) tack welds in each weld joint listed above. The minimum length of FCW tack welds per AWS D1.5 section 12 shall be 75mm or as specified by table 12.2.

Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval that includes the correct size tack welds.

Transmitted by: Bill Howe

Attachments: ZPMC-0474

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

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-000501

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 04-Nov-2009

Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

NCR #: ZPMC-0474

Type of problem:

Welding Concrete Other

Welding Curing Procedural Bridge No: 34-0006

Joint fit-up Coating Other Component: 6AE Floor Beams and Side Panels at CB13

Procedural Procedural Description:

Reference Description: Fracture Critical Tack Welds did not comply with the minimum length requirement in CB13 and 6AE

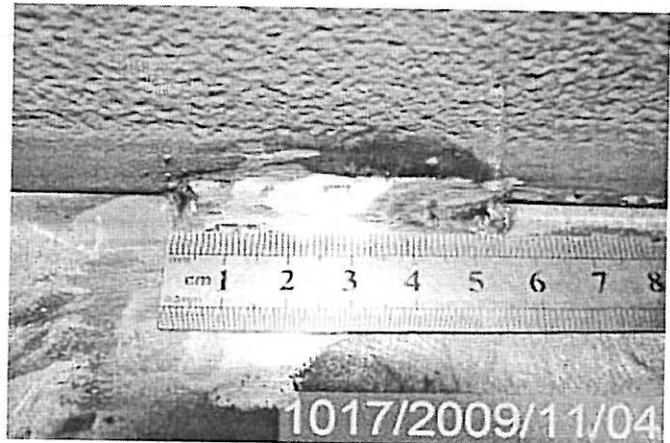
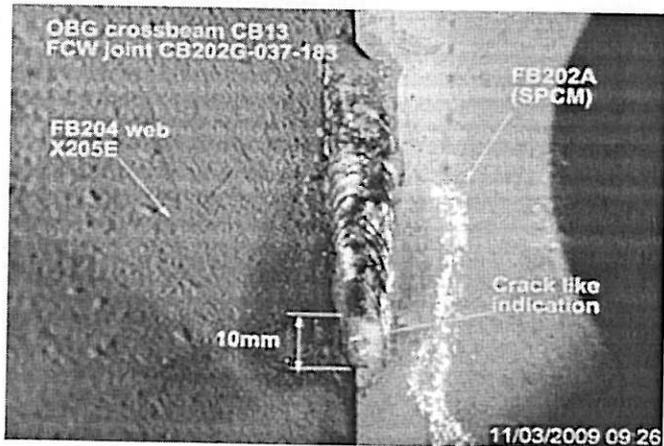
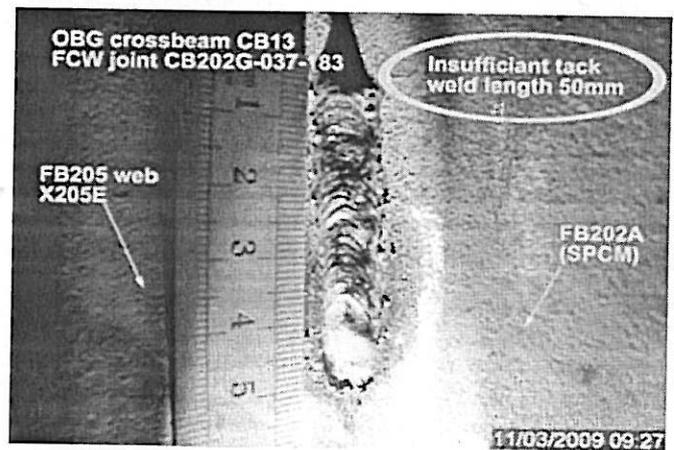
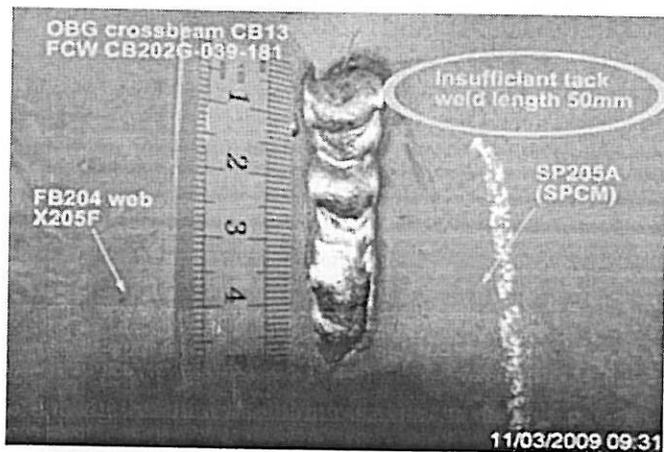
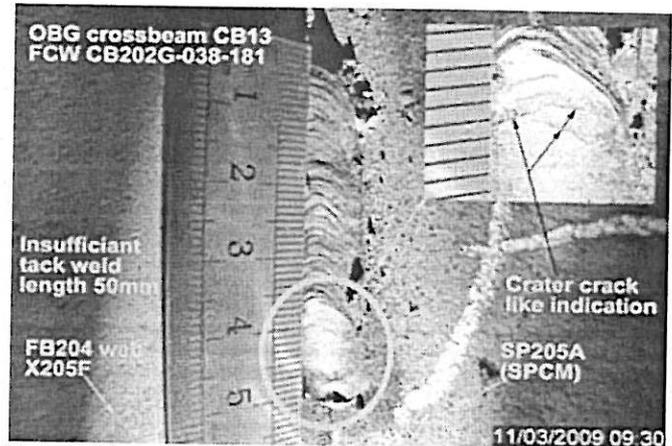
Description of Non-Conformance:

During random in process visual inspection of above mentioned crossbeam, this Quality Assurance Inspector (QA) observed numerous Fracture Critical Weld (FCW) tack welds that do not appear to comply with the contract documents. The tack welds in question are joining the floor beam diaphragms to the SPCM area of the intermediate panel and the east and west side panels. The length of the tack welds measure approximately 50mm. The insufficient tack weld length exists at all four floor beam locations. The members affected are identified as floor beams FB204, FB205, FB202A (SPCM) and side panels SP202A (SPCM) and SP205A (SPCM) in CB13. Weld joints are identified as CB202G-037/038/039/040-181, CB202G-037/038/039/040-183 and CB202G-037/038/039/040-185. The following FCW tack welds appeared to exhibit crack like indications in the crater areas: CB202G-037-183 and CB202G-038-181.

During a random in process visual inspection, this Quality Assurance (QA) Inspector observed several Fracture Critical Weld (FCW) tack welds that do not appear to comply with the contract documents. The tack welds in question are joining one (1) of the FB Diaphragms to the SPCM area of the Side Panel and FB Diaphragm to Bottom Plate. The members are identified as FB20A to X27B weld joint and X104E to Bottom Plate between PP38 and PP39 in 6AE. The length of these tack welds measure 35mm to 55mm in length and there were six (6) tack welds in each weld joint listed above. The minimum length of FCW tack welds per AWS D1.5 section 12 shall be 75mm or as specified by table 12.2.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

AWS D1.5 2002 section 12, table 12.2 requires FCW tack welds not covered by Submerged Arc Welding (SAW) to be a minimum of 75mm in length.

AWS D1.5 2002 section 3.3.7.1 "Tack welds shall be subject to the same quality requirements as the final welds..."

AWS D1.5 2002 section 6.26.1.1 "The weld shall have no cracks."

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

Special Provisions Section 8-3; "Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.

Who discovered the problem: Steve Hall

Name of individual from Contractor notified: Zou Hu

Time and method of notification: 1000 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao and Bill Howe

Time and method of notification: 1100 hours, Verbal

QC Inspector's Name: Zhang Wei

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

Comments:

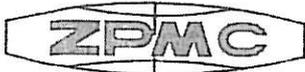
This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

Inspected By: Carreon, Albert

Lead Reviewer/Task Leader

Reviewed By: Wahbeh, Mazen

SMR



Nonconformance Report

不符合项报告

Project Name: S.F.O.B.B 项目名称: 美国加州海湾大桥		NCR Number: NCR 编号: NCR-B-323(ZPMC-0474)	
Item: too short for the tack welds length 名称描述: 点焊长度不够		Item Number: 件号: CB13、6AE	Drawing: 图号: N/A
Location: outside yard 位置: 外场		Date: 日期: 2009-12-22	

Description of Nonconformance:
不符合项状态描述:

During random in process visual inspection of above mentioned crossbeam, this Quality Assurance Inspector (QA) observed numerous Fracture Critical Weld (FCW) tack welds that do not appear to comply with the contract documents. The tack welds in question are joining the floor beam diaphragms to the SPCM area of the intermediate panel and the east and west side panels. The length of the tack welds measure approximately 50mm. The insufficient tack weld length exists at all four floor beam locations. The members affected are identified as floor beams FB204, FB205, FB202A(SPCM) and side panels SP202A(SPCM) and SP205A(SPCM) in CB13. Weld joints are identified as CB202G-037/038/039/040-181.

During a random in process visual inspection, this Quality Assurance (QA) Inspector observed several Fracture Critical Weld (FCW) tack welds that do not appear to comply with the contract documents. The tack welds in question are joining one (1) of the FB Diaphragms to the SPCM area of the Side Panel and FB Diaphragm to Bottom Plate. The members are identified as FB20A to X27B weld joint and X104E to Bottom Plate between PP38 and PP39 in 6AE. The length of these tack welds measure 35mm to 55mm in length and there were six (6) tack welds in each weld joint listed above. The minimum length of FCW tack welds per AWS D1.5 section 12 shall be 75mm or as specified by table 12.2.

在随机目检横梁的过程中, 加州检验员发现许多 FCW 焊缝的点焊没有按照合同要求进行。这些点焊位于连接隔板横隔板与 SPCM 板中间板区域以及东西两侧的板。这些点焊被测得将近 50mm 长。这些长度不够的点焊出现在四块隔板上。这些板在 CB13 上, 板号是 FB204, FB205, FB202A(SPCM) 和 SP202A(SPCM) 和 SP205A(SPCM)。焊缝是 CB202G-037/038/039/040-181。

在随机目检过程中, 加州检验员发现一些 FCW 点焊没有按照合同要求进行。这些点焊位于连接隔板横隔板与 SPCM 区域以及隔板横隔板到底板区域。这些地方是在 6AE 上 FB20A 到 X27B 焊缝和 X104E 到底板 PP38 至 PP39 的区域。这些点焊长度被测得 35mm 至 55mm 长并且有 6 个点焊在这些焊缝上。按照 AWS D1.5 12 章中的 12.2 要求点焊的最小长度是 75mm。

Work By: 施工方: Zhou Jian Feng 12.25	Prepared by: Zhang Wei 准备: 2009.12.22	Reviewed by QCE: [Signature] 质量工程师批准: 12.22
<input type="checkbox"/> Drawing Error 图纸错误	<input type="checkbox"/> Material Defect 材料缺陷	<input checked="" type="checkbox"/> Fabrication Error 制作错误
<input type="checkbox"/> Other 其他原因		

Disposition: 处理措施:	<input type="checkbox"/> Use as is 回用	<input type="checkbox"/> Repair 返修	<input type="checkbox"/> Reject 拒收
-----------------------	--	---------------------------------------	---------------------------------------

Recommendation:
建议:

Prepared by: _____ Approved by QCA: _____
准备 质量经理批准

Reason for Nonconformance:
不符合原因:
由于FCW焊缝的焊接没有按要求进行。
Didn't perform according to requirement during FCW tack weld.

Prevention of Re-occurrence:
预防措施:
加强现场监控或检查。
Enhance supervision and inspection.

Approved by/批准: Gao Jun 12.25

Technical Justification for Use-As-Is/Repair: Attachment Non-attachment
回用或返修的技术依据: 附件 无附件
想对焊缝做NDT检测, 若合格回用, 否则返修, 加强现场
监控,
Check the weld with NDT, perform use-as-is if result turn out acceptable
or repair it. Enhance supervision on site.

Reviewed/批准: Manli 12.20/09

Verification: Acceptable Unacceptable
确认: 可接受 不可接受

Ju rong Jiam 07120671 2010.3.12

Verified by QCI/质检确认: _____ Reviewed by QCA/质检主任审核: _____



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-19931		DATE日期 2010.03.08	PAGE OF页码 1/3	Revision No: 0
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS		
DRAWING NO. 图号: OBE6 6AE STRUT PLATE FLOOR BEAM		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4		
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 ST , 2010	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345 12/14mm	
WELDING PROCESS 焊接方法	FCAW	TYPE OF JOINT 焊缝类型	T- JOINT	

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SSD27-PP039-001				ACC.		100%MT
SSD27-PP039-002				ACC.		100%MT
SSD27-PP039-005				ACC.		100%MT
SSD27-PP039-006				ACC.		100%MT
SSD27-PP039-009				ACC.		100%MT
SSD27-PP039-010				ACC.		100%MT
SSD27-PP039-013				ACC.		100%MT
SSD27-PP039-014				ACC.		100%MT
SSD27-PP039-017				ACC.		100%MT
SSD27-PP039-018				ACC.		100%MT
SSD27-PP039-021				ACC.		100%MT
SSD27-PP039-022				ACC.		100%MT
SSD27-PP039-025				ACC.		100%MT
SSD27-PP039-026				ACC.		100%MT

EXAMINED BY 主操 <i>Chang Fanyie</i> 2010.03.08	REVIEWED BY 审核 <i>SU Wei</i> 2010.03.08
LEVEL - I SIGN 签名 / DATE日期	LEVEL - II SIGN / DATE日期
质量经理 / QCM	用户 CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

NCR-323



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-19931 DATE日期 2010.03.08 PAGE OF 页码 3/3 Revision No: 0

PROJECT NO. ZP06-787 CONTRACTOR: CALTRANS
 工程编号: 用户:

DRAWING NO. OBE6 CALTRANS CONTRACT NO.: 04-0120F4
 图号: 6AE STRUT PLATE FLOOR BEAM 加州工程编号

REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 ST , 2010
---	--	-------------------------------------	---

EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
-------------------------	----------------------------	-------------------------	-----------------------------------

MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
----------------------------	------------------------------------	---------------	----

PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
-----------------------	--------------------------	----------------------	----------

MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度 12/14mm	A709M-345
---------------------------------	---	---	-----------

WELDING PROCESS 焊接方法	FCAW	TYPE OF JOINT 焊缝类型	T- JOINT
-------------------------	------	-----------------------	----------

WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SSD27-PP039-059				ACC.		100%MT
SSD27-PP039-060				ACC.		100%MT
SSD27-PP039-063				ACC.		100%MT
SSD27-PP039-064				ACC.		100%MT
SSD27-PP039-067				ACC.		100%MT
SSD27-PP039-068				ACC.		100%MT
SSD27-PP039-105				ACC.		100%MT
SSD27-PP039-106				ACC.		100%MT

BLANK

EXAMINED BY 主探
 Chang Fanyjie 2010.03.08
 LEVEL - II SIGN 签名 / DATE 日期

REVIEWED BY 审核
 SU Wen 2010.03.08
 LEVEL-II SIGN / DATE 日期

质量经理 / QCM
 签字 SIGN / 日期 DATE

用户 CUSTOMER
 签字 SIGN / 日期 DATE

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-000655**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 05-Apr-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0474**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: 04-Nov-2009**Description of Non-Conformance:**

During random in process visual inspection of above mentioned crossbeam, this Quality Assurance Inspector (QA) observed numerous Fracture Critical Weld (FCW) tack welds that do not appear to comply with the contract documents. The tack welds in question are joining the floor beam diaphragms to the SPCM area of the intermediate panel and the east and west side panels. The length of the tack welds measure approximately 50mm. The insufficient tack weld length exists at all four floor beam locations. The members affected are identified as floor beams FB204, FB205, FB202A (SPCM) and side panels SP202A (SPCM) and SP205A (SPCM) in CB13. Weld joints are identified as CB202G-037/038/039/040-181, CB202G-037/038/039/040-183 and CB202G-037/038/039/040-185. The following FCW tack welds appeared to exhibit crack like indications in the crater areas: CB202G-037-183 and CB202G-038-181.

During a random in process visual inspection, this Quality Assurance (QA) Inspector observed several Fracture Critical Weld (FCW) tack welds that do not appear to comply with the contract documents. The tack welds in question are joining one (1) of the FB Diaphragms to the SPCM area of the Side Panel and FB Diaphragm to Bottom Plate. The members are identified as FB20A to X27B weld joint and X104E to Bottom Plate between PP38 and PP39 in 6AE. The length of these tack welds measure 35mm to 55mm in length and there were six (6) tack welds in each weld joint listed above. The minimum length of FCW tack welds per AWS D1.5 section 12 shall be 75mm or as specified by table 12.2.

Contractor's proposal to correct the problem:

Inform QC/CWI of reoccurring problem and perform NDT required to verify weld quality.

Corrective action taken:

Contractor issued an internal NCR regarding said issue and provided NDT documentation verifying weld meets Contract weld quality requirements.

Did corrective action require Engineer's approval?

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

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.

Inspected By: Simonis,Jim

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer