

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-000522
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 28-Nov-2009
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0495

Type of problem:

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Crossbeam CB 11 Weld # FB204-032-069
Procedural	Procedural	Description: Missed UT indication	

Reference Description: Non-conforming UT indication was discovered after the contractor's NDT acceptance for CB11

Description of Non-Conformance:

During random verification of Ultrasonic Testing (UT) on Complete Joint Penetration (CJP) butt joint on Crossbeam identified as CB11, this Quality Assurance Inspector (QA) discovered the following:

- One (1) Class "A" non conforming longitudinal indication measuring approximately 20 mm in length.
- The weld designation is identified as FB204-032-069.
- The CJP weld is joining floor beam diaphragm flanges identified as X206B to X203A.
- The member is located in Bay 5.
- The indication is in an area previously tested and accepted by ZPMC QC UT technicians.
- The Notice of Witness Inspection Number (NWIT) is 4753.
- Material thickness is 16mm.
- The discontinuity rating is +9, Class "A" reject
- Depth of the discontinuity from face A is approximately 9mm.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

AWS D1.5-2002, Section 6, Table 6.3. specifies for material thicknesses 8mm through 20mm, a decibel (dB) indication rating of 10 dB or less shall be categorized as a Class A (large flaws) and any indication in this category shall be rejected (regardless of length).

Who discovered the problem: Sandeep Kumar Naddi

Name of individual from Contractor notified: Wan Wen Bin

Time and method of notification: 1730 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao and Bill Howe

Time and method of notification: 1830 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: 23-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: 05.03.06-000483

Subject: NCR No. ZPMC-0495

Reference Description: Non-conforming UT indication was discovered after the contractor's NDT acceptance for CB11

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:** 11

Remarks:

- During random verification of Ultrasonic Testing (UT) on Complete Joint Penetration (CJP) butt joint on Crossbeam identified as CB11, this Quality Assurance Inspector (QA) discovered the following:
- One (1) Class "A" non conforming longitudinal indication measuring approximately 20 mm in length.
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 - The CJP weld is joining floor beam diaphragm flanges identified as X206B to X203A.
 - The member is located in Bay 5.
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 - The Notice of Witness Inspection Number (NWIT) is 4753.
 - Material thickness is 16mm.
 - The discontinuity rating is +9, Class "A" reject
 - Depth of the discontinuity from face A is approximately 9mm.

Action Required and/or Action Taken:

Submit a repair plan to the engineer for approval.

Transmitted by: Bill Howe

Attachments: ZPMC-0495

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, 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: 05.03.06-000483

Subject: NCR No. ZPMC-0495

Dated: 18-Jan-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000514 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: As a means of preventing future occurrences, the ABF QCM has performed refresher UT training. See attached UT training agenda and attendance roster.

As it is necessary to respond to the NCR with a proposed plan of action, ABF is doing so without all of the repair documentation at this time. As a means of preventing future occurrences, the ABF QCM has performed refresher UT training. See attached UT training agenda and attendance roster. The ABF QCM has been discussing missed UT indications with the ZPMC QCM and related NDT supervisory personnel. The ZPMC level III is in the process of assessing personnel, techniques and equipment. ABF has purchased GE Technology transducers to distribute to both ZPMC and ABF UT personnel in a cooperative effort to match the equipment of CT. These transducers will arrive to the job site approximately the end of January 10 at which time they will be put into immediate use. ZPMC requests this NCR be placed in the Approved Action Pending status category until such time that all the repair documents have been assembled and submitted.

Submitted by: Lawton, Steve

Attachment(s): ABF-NPR-000514R00;

Caltrans' comments:

Status: AAP

Date: 25-Jan-2010

The preventative measures taken by the QCM and the proposed resolution for closing NCR submitted by the contractor are acceptable. The NCR will be closed upon completion of the repair and review of the repair documents by the Engineer when submitted by the contractor.

Submitted by: Chao, Ching

Attachment(s):

Date: 25-Jan-2010

UT Refresher Training Agenda

Subject: UT Techniques

Reason for Training: Several CT NCR's for missed UT indications

1. Safety

- a. Safety Glasses
- b. Gloves (if required)
- c. Knee Pads
- d. Electrical Shock

2. Tools

- a. Calibrated UT Machine condition of machine
- b. Coaxial cable condition of cable
- c. Transducer condition of transducer
- d. IIW Block
- e. Scraper
- f. UT couplant

3. Inspection Techniques

- a. Surface preparation
- b. Location of weld UT from beveled plate
- c. Scanning patterns
- d. Correct choice of Angles
- e. Calibration per ZPMC procedure at regular intervals
- f. Scanning speed
- g. Know where your sound is at.... First leg, second leg etc...

4. Inspection Criteria

- a. Table 6.3 or Table 6.4
- b. Are surface inspections complete VT and or MT should always occur before UT
- c. Scanning Levels
- d. Criteria dictated by the thinner of the two members
- e. Planar flaws



教育培训纪录

培训编号:

培训内容:	UT复习培训教程 UT Techniques
培训对象:	ZPMC UT GUYS
授课人员:	STEVE LAWTON
培训类型:	UT Refresher Training Agenda
培训时间:	2009. 12. 24. 16:30
计划培训地点:	ZPMC NDT OFFICE

人员签到:

姓名	部门	姓名	部门
戴斌 Dai Goud Shen	江江 Jiang Jiang		
薛宇 Xuellamang	黄廷 Huang Ting		
马志长 Majzhang	黄廷 Huang Ting		
谭善 Tanxingshan	李黎明 Li Liming		
马强 Ma Jiana	李黎明 Li Liming		
王福 Wangfu	徐坤 Xu Kun		
沈健 Sheng Jian	李黎明 Li Liming		
黄宇 Huang Jiaoy			
金峰 Jin Feng			
吴文 Wu Chen			
解坤 Jie Kun			
周海周 Zhou Hai Zhou			
徐坤 Xu Kun			

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000483

Subject: NCR No. ZPMC-0495

Dated: 24-Feb-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000514 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC is providing the weld repair report and subsequent NDT to show that the missed indication was removed and the weld is successful. Based on this ZPMC requests closure of this NCR.

ZPMC is providing the weld repair report and subsequent NDT to show that the missed indication was removed and the weld is successful. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000514R01

Caltrans' comments:

Status: REJ

Date: 24-Feb-2010

No information was attached to this NPR.

Submitted by: Howe, Bill

Date: 24-Feb-2010

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000483

Subject: NCR No. ZPMC-0495

Dated: 12-Apr-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000514 Rev: 02

Contractor's Proposed Resolution:

Reference Resolution: ZPMC is providing documents to show that the non conformance documented has been rectified. Based on this ZPMC requests closure of this NCR.

ZPMC is providing documents to show that the non conformance documented has been rectified. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000514R02;

Caltrans' comments:

Status: CLO

Date: 20-Apr-2010

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0495 is closed

Submitted by: Ku, Stanley

Attachment(s):

Date: 20-Apr-2010



No. B-614

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-2-22

REGARDING: NCR-000522(ZPMC-0495)

With this letter of response, ZPMC requests closure of CT NCR-000522(ZPMC-0495) what mentioned that CT inspector observed missed UT indication by ZPMC QC.

- WWR was issued reflecting to the confirmed UT indication in FB204-032-069. See attached B-WR9842.
- UT was performed to warrant the weld's quality after repair.
- To improve the UT technique, refresh training was performed to ZPMC's UT personnel by ABF QCM.

Base on the taken actions and attached documentations, ZPMC requests closure of this NCR.

ATTACHMENT:

NCR-000522(ZPMC-0495)

B-WR9842

B787-UT-10680

B787-UT-10680R1

[Handwritten signature]
2/22/10



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: 23-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: 05.03.06-000483

Subject: NCR No. ZPMC-0495

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- Non-Conformance Resolved.

Material Location: Xbeam

Lift: 1

Remarks:

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Action Required and/or Action Taken:

Submit a repair plan to the engineer for approval.

Transmitted by: Bill Howe

Attachments: ZPMC-0495

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

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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-000522
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 28-Nov-2009
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0495

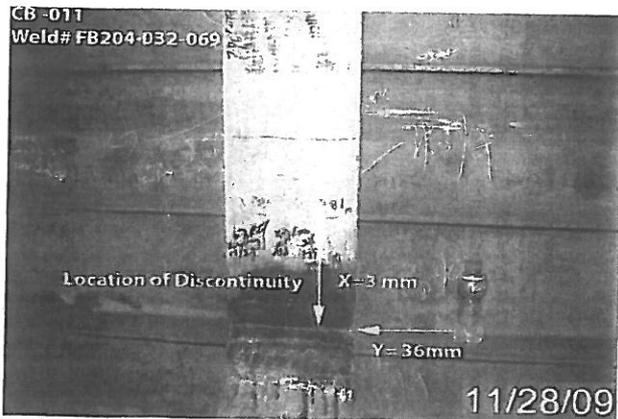
Type of problem:

- Welding Concrete Other
 Welding Curing Procedural **Bridge No:** 34-0006
 Joint fit-up Coating Other **Component:** Crossbeam CB 11 Weld # FB204-032-069
 Procedural Procedural **Description:** Missed UT indication

Reference Description: Non-conforming UT indication was discovered after the contractor's NDT acceptance for CB11

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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Who discovered the problem: Sandeep Kumar Naddi

Name of individual from Contractor notified: Wan Wen Bin

Time and method of notification: 1730 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao and Bill Howe

Time and method of notification: 1830 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



焊缝返修报告

版本 Rev. No.

Welding Repair Report

0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No	CB11	报告编号 Report No.	B-WR9842
合同号 Contract No.:	04-0120F4	部件名称 Items Name	FLOOR BEAM	NDT报告编号 Report No.of NDT	B787-UT-10680
项目编号 Project No.:	ZP06-787				

焊缝缺陷描述:

Description of welding discontinuity:

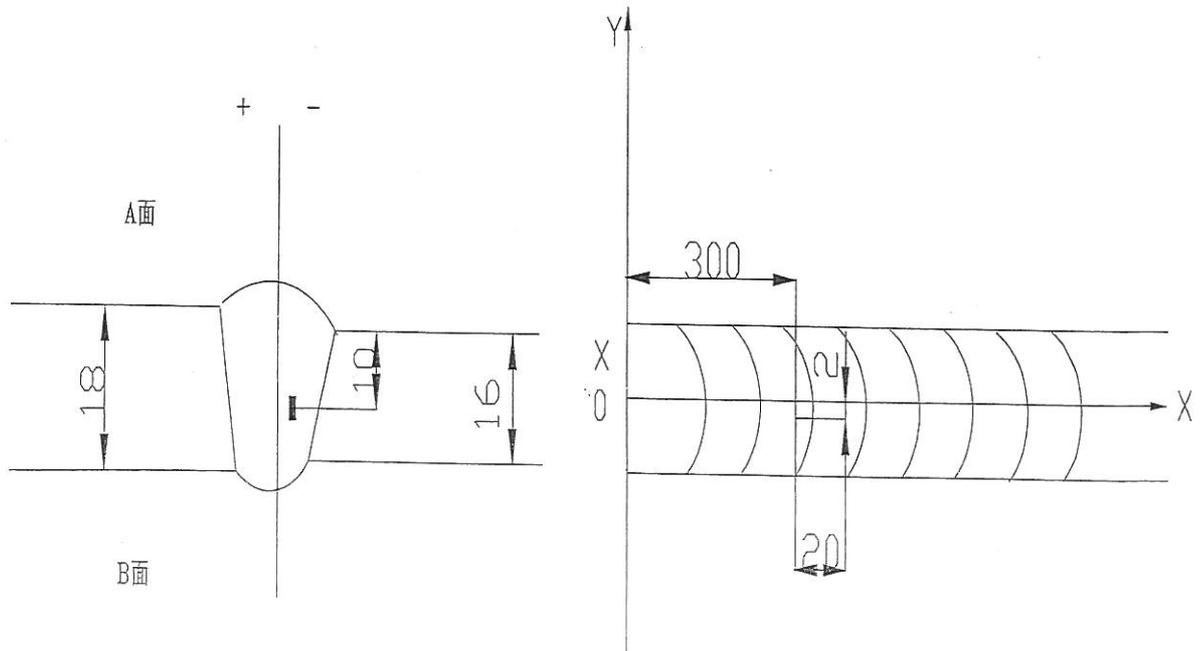
Rejected indication found by ultrasonic inspection is less than the maximum allowance aggregate length.

(UT探伤发现的缺陷总长度小于最大允许长度。) FB204-032-069

检验员 (Inspector) Han Feng 日期(Date): 2010.01.09

焊缝返修位置示意图:

Draft of welding discontinuity:



WELD NUMBER: FB204-032-069

产生原因:

Caused:

1、焊道未及时处理干净。

1. Did not clear the weld pass completely in time.

车间负责人(Foreman): *Zhang Guiming* 日期(Date): 1.12

处理意见

Disposition :

1. 从缺陷距离端面较近一侧 ($D \leq 0.65T$, D为缺陷深度, T为板厚) 采用碳刨或打磨的方法去除焊缝缺陷;

2. 参照返修焊接工艺规程 (WPS) 准备正确的接头型式, 预热和焊接;

3. 焊前对修补区域进行VT检测保证缺陷完全被清除;

4. 将修补区域打磨到与母材或邻近焊缝平齐;

5. 对焊缝进行UT检测, 检测范围为返修区域以及其两端各延长50mm。

1. Gouge or grind from nearer side from metal edge ($D \leq 0.65T$, "D" is depth of defects, "T" is thickness of metal) to remove all defects;

2. Follow repair WPS for joint preparation, preheat, and weld deposit;

3. Verify with VT no defects remain in the weld joint prior to welding;

4. Grind the repaired area flush with base metal or the adjacent weld;

5. Perform UT inspection to the weld along with 50mm on each end of the repair area;

工艺: *hexiaolin*
Technical engineer

审核:
Approved by

日期
Date

10-1-12



焊缝返修报告

Welding Repair Report

版本 Rev. No.

0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No	CB11	报告编号 Report No.	B-WR9842
合同号 Contract No.:	04-0120F4	部件名称 Items Name	FLOOR BEAM	NDT报告编号 Report No. of NDT	B787-UT-10680
项目编号 Project No.:	ZP06-787				

纠正措施:

Correction action to prevent re occurrence:

1. 加强焊接监控和道间清理。

1. Improve monitoring of welding and interpass cleaning.

车间负责人(Foreman): Zhang Guiming 日期(Date): 1.12

参照的WPS编号 Repair WPS No.	WPS-345-SMAW-2 G(2F)-Repair WPS-345-FCAW-2 G(2F)-Repair-1	工艺员 technologist	HexiaoLin 10.1.12
返修(碳刨)前预热温度 Preheat temperature before gouging	75°C	返修的缺陷 Description of discontinuity	夹渣 slag
焊前处理检查 Inspection before welding	ACC	焊前预热温度 Preheat temperature before welding	83°C
最大碳刨深度 Max. depth of gouging	8mm	碳刨总长 Total length of gouging	80mm
焊工 welder 215248	焊接类型 welding type SMAW	焊接位置 position 2G	
焊接电流 Current 165A	焊接电压 Voltage 25.5V	焊接速度 Speed 150mm/min	
返修后检查 Inspection After repairing:			
外观检查 VT result ACC	检验员 Inspector F.W. Lin. 08/26/11	日期 Date 2010.01.12	
NDT复检 NDT result Acc	探伤员 NDT person Lan Jun	日期 Date 2010.12.15	
见证: Witness/Review:			
备注: Remark:			

#R787-QCP-900



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-10680 DATE 2010.01.09 PAGE 1 OF 1 Revision No: 0

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

ITEMS NAME: FLOOR BEAM DRAWING NO.: CB11 CROSS BEAM CALTRANS CONTRACT NO.: 04-0120F4
 部件名称 图号 加州工程编号

REFERENCING CODE 参考规范 ACCEPTANCE STANDARD 接受标准 PROCEDURE NO. 程序编号
 AWS D1.5-2002 AWS D1.5-2002(Table 6.3) ZPQC-UT-01

WELDING PROCESS 焊接方法 JOINT TYPE 焊缝类型 CALIBRATION DUE DATE 仪器校正有效期
 FCAW BUTT Dec. 28ST, 2010

EQUIPMENT 设备 MANUFACTURER 制造商 MODEL NO. 样式编号 SERIAL NO. 序列编号
 UT SCOPE PANAMETRICS EPOCH-4B 071565311, 061488510,
 061495811, 070152011,

CALIBRATION BLOCK 试块 COUPLANT 耦合剂 MATERIAL/THICKNESS 材料厚度
 AWS IIV BLOCK TYPE II C.M.C A709M-345T2-X 16/18mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70°	2.5MHz	18×18mm				
Changchao	0°	2.5MHz	20mm	Reference Level 参考灵敏度		20dB	

Base metal inspected per AWS D1.5-2002 Section 6.19.5 0° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
					a	b	c	d	Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From X 距X	From Y 距Y		
FB204-032-069	1	70	A	1	40	32	1	+7	20	38	10	-2	300	REJ.	100%
BLANK															

EXAMINED BY 主探 <i>Nan Peng</i> 2010.01.09 LEVEL - II SIGN / DATE	REVIEWED BY 审核 <i>Jue Ma</i> 2010.01.09 LEVEL - II SIGN / DATE
------------------------------------------------------------------------	----------------------------------------------------------------------

质量经理 / QCM 签字 SIGN / 日期 DATE	用户 CUSTOMER 签字 SIGN / 日期 DATE
-------------------------------------	--------------------------------------



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-10680R1 DATE 2010.01.15 PAGE 1 OF 1 Revision No: 0

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

ITEMS NAME: FLOOR BEAM DRAWING NO.: CB11 CROSS BEAM CALTRANS CONTRACT NO.: 04-0120F4
 部件名称 图号 加州工程编号

REFERENCING CODE 参考规范 ACCEPTANCE STANDARD 接受标准 PROCEDURE NO. 程序编号
 AWS D1.5-2002 AWS D1.5-2002(Table 6.3) ZPQC-UT-01

WELDING PROCESS 焊接方法 JOINT TYPE 焊缝类型 CALIBRATION DUE DATE 仪器校正有效期
 SMAW BUTT Dec. 28ST, 2010

EQUIPMENT 设备 MANUFACTURER 制造商 MODEL NO. 样式编号 SERIAL NO. 序列编号
 UT SCOPE PANAMETRICS EPOCH-4B 071565311, 061488510, 061495811, 070152011,

CALIBRATION BLOCK 试块 COUPLANT 耦合剂 MATERIAL/THICKNESS 材料厚度
 AWS IIV BLOCK TYPE II C.M.C A709M-345T2-X 16/18mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70°	2.5MHz	18×18mm				
Changchao	0°	2.5MHz	20mm	Reference Level 参考灵敏度		20dB	

Base metal inspected per AWS D1.5-2002 Section 6.19.5 0° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)						
									a	b	c	d	Length 长度		
FB204-032-069	1R1	70				32								ACC.	100%

AFTER B-WR9842

BLANK

EXAMINED BY 主探 han Perry 2010.01.15 REVIEWED BY 审核 Xue Han 2010.01.15
 LEVEL - II SIGN / DATE LEVEL - II SIGN / DATE

质量经理 / QCM 用户CUSTOMER
 签字 SIGN / 日期 DATE 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-000588**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 16-Apr-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0495**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: 28-Nov-2009**Description of Non-Conformance:**

During random verification of Ultrasonic Testing (UT) on Complete Joint Penetration (CJP) butt joint on Crossbeam identified as CB11, this Quality Assurance Inspector (QA) discovered the following:

- One (1) Class "A" non conforming longitudinal indication measuring approximately 20 mm in length.
- The weld designation is identified as FB204-032-069.
- The CJP weld is joining floor beam diaphragm flanges identified as X206B to X203A.
- The member is located in Bay 5.
- The indication is in an area previously tested and accepted by ZPMC QC UT technicians.
- The Notice of Witness Inspection Number (NWIT) is 4753.
- Material thickness is 16mm.
- The discontinuity rating is +9, Class "A" reject
- Depth of the discontinuity from face A is approximately 9mm.

Contractor's proposal to correct the problem:

Repair said indication and perform NDT required to verify weld quality.

Corrective action taken:

Contractor supplied WRR used during repair work along with subsequent NDT documentation verifying the weld now meets Contract weld quality requirements. Supplemental training was provided to NDT technicians by the Contractor's QCM as a means of enhancing technique to prevent future occurrences.

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 152.1675.3703, 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