

**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, PRC**Report No:** NCR-000159**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 03-Jun-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0149**Type of problem:**

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b> OBG Segment 3BE
<b>Procedural</b>	<b>Procedural</b>	<b>Descriptor:</b> Skew joint Side plate C5 to Bottom plate D6	

**Reference Description:** ZPMC overlooked Class A UT indication**Description of Non-Conformance:**

The Contractor missed rejectable indication while performing ultrasonic test. The Contractor did not identify Class A rejectable indication of the CJP weld splicing side plate C5 and bottom plate D6. This "Class A" indication measures 15 mm long and the Y location is 1820 mm on the CJP weld joint # SEG-016-008.

**Applicable reference:**

AWS D1.5 (2002) Table 6.3 UT Acceptance-Rejection Criteria-Tensile Stress

**Who discovered the problem:** Quality Assurance(QA) Inspector, Alfredo Acuna**Name of individual from Contractor notified:** ABF representative, Peter Shaw**Time and method of notification:** 1015 on Jun, 03-2008, verbal notification.**Name of Caltrans Engineer notified:** Stanley Ku**Time and method of notification:** 06-05-2008, 0905 hours in person**QC Inspector's Name:** ZPMC representative Fu Yu Hong, verbal notification**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 Abifhram Velasco, +86-183-1694-2685, who represents the Office of Structural Materials for your project.

**Inspected By:** Velasco, Abifhram

SMR

**Reviewed By:** Velasco, Abifhram

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:** 14-Aug-2008

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

**Dear:** Mr. Charles Kanapicki

**Job Name:** SAS Superstructure

**Attention:** Mr. Dave Williams Consultant

**Document No:** 05.03.06-000159

**Subject:** NCR No. ZPMC-0149

**Reference Description:** ZPMC overlooked Class A UT indication

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:** N/A

### Remarks:

The Contractor missed rejectable indication while performing ultrasonic test. The Contractor did not identify Class A rejectable indication of the CJP weld splicing side plate C5 and bottom plate D6. This "Class A" indication measures 15 mm long and the Y location is 1820 mm on the CJP weld joint # SEG-016-008. See attached NCR #ZPMC-0149 for details.

### Action Required and/or Action Taken:

No Action Required., This issue is considered to be closed for the following reason(s):  
According to METS records, the contractor was notified at the time of incident and the indication was repaired according to the approved procedure.

**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0149

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, 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:** 05.03.06-000159  
**Subject:** NCR No. ZPMC-0149

**Dated:** 11-Sep-2008  
**Contract No.:** 04-0120F4  
04-SF-80-13.2 / 13.9  
**Job Name:** SAS Superstructure  
**Document No.:** ABF-NPR-000140 Rev: 00

---

**Contractor's Proposed Resolution:**

**Reference Resolution:** ZPMC has re-inspected the weld in question and has determined that this weld is a class A.

ZPMC has re-inspected the weld in question and has determined that this weld is a class A. ABF concurs with CT findings. ZPMC did locate the defect, however, ZPMC UT technician did not identify as Class A and subsequently accepted the indication. ABF compared our equipment with ZPMC and determined the Transducers being used by ZPMC required replacement. ZPMC has since replaced worn out transducers.

**Submitted by:**

**Attachment(s):** ABF-NPR-000140R00

---

**Caltrans' comments:**

**Status:** CLO

**Date:** 14-Sep-2008

The worn piece of equipment was replaced, and the UT indication was identified and repaired. The Department concurs that Non-Conformance ZPMC-0149 is closed.

**Submitted by:** Wright, Doug

**Date:** 14-Sep-2008

**Attachment(s):**

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000159

**Subject:** NCR No. ZPMC-0149

**Dated:** 01-Oct-2008

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000165 Rev: 00

---

**Contractor's Proposed Resolution:**

**Reference Resolution:** ZPMC agrees with the nonconformance and has provided training to the NDE operators.

Please find attached.

**Submitted by:**

**Attachment(s):** ABF-NPR-000165R00;

---

**Caltrans' comments:**

**Status:** CLO

**Date:** 02-Oct-2008

The Department concurs that Non-Conformance ZPMC-0149 is closed. This NCR was previously addressed and closed in NPR-0140.

**Submitted by:** Wright, Doug

**Date:** 02-Oct-2008

**Attachment(s):** NPR CT Comments

DEPARTMENT OF TRANSPORTATION  
 CHINA FABRICATION TEAM  
 506 Shangcheng Rd, Pudong New District  
 Shanghai 200120, PRC



**REVIEW OF CONTRACTOR'S TRANSMITTAL**

To: Dave Williams, American Bridge – Fluor, a Joint Venture  
Gary Pursell, Resident Engineer

Review Date: 09-24-2008

From: Ady Velasco, Structural Materials Representative

Contract No.: 04-0120F4

Date/Time Submittal Received: 09-24-2008/ 12:48

China Standard Time  
 (GMT+08:00)

Contractor's Transmittal #: AFC-CAL- Rev. # 0  
TRN-001373

<input checked="" type="checkbox"/>	substantially <b>complies</b> with contract requirements and is approved		
<input type="checkbox"/>	substantially <b>complies</b> with contract requirements and is approved as noted.		
<input type="checkbox"/>	Lacks sufficient information and/or contains unacceptable items that must be corrected or prior to resubmittal		
Verbal Notification		<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes
		Date:	Time:
Name of individual from Contractor Notified:			
This submittal is a:	<input type="checkbox"/> Welding Report	<input type="checkbox"/> Critical Weld Repair	
	<input type="checkbox"/> Request for Information	<input type="checkbox"/> Heat Straightening Request	
	<input type="checkbox"/> Fabrication Procedures	<input checked="" type="checkbox"/> Other: <u>NCR Close Out Documents</u>	

Submitting Contractor: ABF

ITEMS REVIEWED	COMPLIES		COMMENTS
1. For Closure, CT NCR No. ZPMC-0149	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	This NCR is resolved.
2.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
3.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
4.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

Remarks:

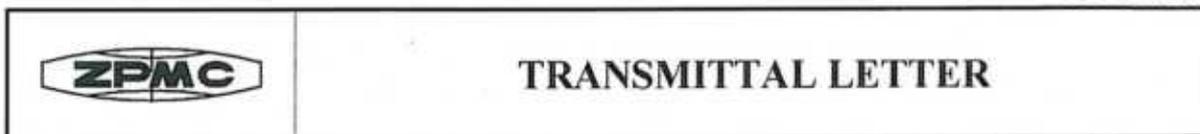
Reviewer: Ady Velasco AV

Date: 09-24-2008

Construction Concurrence: AV Initial 9/24/08 Date

Received by (ABFJV): Qi Date: 9-24-08 Time: 1425





PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE

DATE: 09/24/2008

TO: RUBY/ ABFJV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: NCR-000159(ZPMC-0149)FOR CLOSURE

SUBMITTED FOR YOUR APPROVAL.

ENCLOSED WITH THIS TRANSMITTAL IS ONE

- (1) COPY OF LETTER OF RESPONSE WITH NO.B-300.
- (2) COPY OF INTERNAL NCR WITH NUMBER NCR-B-109
- (3) COPY OF NCR WITH NUMBER NCR-000159(ZPMC-0149)
- (4) COPY OF RT REPORT: B787-RT-003
- (5) COPY OF THE REJECTIVE UT REPORT AND WRR
- (6) COPY OF THE ACCEPTABLE VT AND UT REPORT.

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:

*Ruby C*  
 \_\_\_\_\_  
 PLAN HOLDER

\_\_\_\_\_  
 COMPANY

PLAN NUMBER: N/A  
 #R787-QCP-102

RECEIVED 24 SEP 2008

1049

DATE

APPROVED  
 APPROVED AS NOTED  
 RETURNED FOR CORRECTION  
 Pursuant to Section 5-1.02  
 of the Standard Specifications  
 State of California  
 DEPARTMENT OF TRANSPORTATION  
 Division of Engineering Service  
 Office of Structure Construction

PHONE NO \_\_\_\_\_

Structure Representative \_\_\_\_\_ Date *9/24/08*



No. B-300

# LETTER OF RESPONSE

**TO: American Bridge/Flour JV**

**DATE: 2008-9-24**

**REGARDING: NCR-000159 (ZPMC-0149)**

With this letter of response, ZPMC requests closure for Caltrans NCR-000159 (ZPMC-0149) . We agree that it's ZPMC NDE operators didn't identify the class A rejective indication, And then we educated the QC that will be more careful to perform the NDT test in the future.

Besides that we have repaired the defect follow the corresponding WRR, and then performed the final visual and NDT test to confirm the good quality in according with the acceptable specification.

So ZPMC considers NCR-000159 can be closed and submits the application .

Please reference attached documentation for acceptance and closure the NCR-000159.

**ATTACHMENT:**

**NCR-000159 (ZPMC-0149)**

**The rejective UT report and WRR**

**The acceptable VT and UT report**

*Zhao Shuangbao*

*2008.9.24.*

*Reviewed*  
*Handwritten*  
*ABS QCM*  
*24 Sept 08*

APPROVAL	
<input checked="" type="checkbox"/>	APPROVED AS NOTED
<input type="checkbox"/>	RETURNED FOR CORRECTION
Pursuant to Section 5-1.02	
the Standard Specifications	
State of California	
DEPARTMENT OF TRANSPORTATION	
Division of Engineering Service	
Office of Structure Construction	
Structure Representative	Date <i>9/24/08</i>



# 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-109 (NCR-000159)	
Item: ZPMC overlooked Class A UT indication 名称描述: ZPMC 漏检 A 类 UT 缺陷	Item Number: 件号: OBG Segment 3BE, Skew joint Side plate C5 to Bottom plate D6	Drawing Number: 图号: SEG-016-008	
Location: OBG Assembly Shop 位置: 桥面拼装车间	Date: 日期: 2008-09-17		

### Description of Nonconformance:

#### 不符合项状态描述:

The Contractor missed rejected indication while performing ultrasonic test. The contractor did not identify Class A rejectable indication of the CJP weld splicing side plate C5 and bottom plate D6. This "Class A" indication measures 15 mm long and the Y location is 1820 mm on the CJP weld joint # SEG-016-008.

Applicable reference: AWS D1.5, (2002) Table 6.3 UT Acceptance-Rejection Criteria-Tensile Stress.

ZPMC 在做 UT 的时候发生缺陷漏检的情况。ZPMC 在对斜底板 C5 和底板 D6 之间的 CJP 焊缝做 UT 时没有标示出一个 A 级缺陷。这个 A 级缺陷长 15 毫米, Y 向坐标是 1820 毫米, 此 CJP 焊缝编号是 SEG016-008。

参考标准: AWS D1.5 (2002) 表 6.3 "UT 合格-拒收判据-拉应力焊缝"。

Work By: Lizhany Prepared by: Shen Xuejun Reviewed by QCE: Zhao Shuangbo

施工方: 2008.09.18 准备: 2008.9.17 质量工程师批准:

- Drawing Error     Material Defect     Fabrication Error     Other  
 图纸错误                      材料缺陷                      制作错误                      其他原因

Disposition:     Use as is                       Repair                       Reject  
 处理措施:                      回用                      返修                      拒收

### Recommendation:

建议 返修 Repair

Prepared by: Lizhany Approved by QCA: Tu Guang  
 准备 2008.09.18                      质量经理批准 2008.9.18

### Reason for Nonconformance:

不符合原因: A 级缺陷漏检 Didn't identify class A rejectable indication

#### 预防措施

加强检验 Enhance inspection.

Approved by/批准: Lizhany 2008.9.18

Technical Justification for Use-As-Is/Repair:  
回用或返修的技术依据:

Attachment     APPROVED Non-attachment  
 附件                      批准  
 APPROVED AS IS  
 RETURNED FOR CORRECTION  
 Pursuant to Section 5-1.02  
 of the Standard Specifications  
 State of California  
 DEPARTMENT OF TRANSPORTATION

Verification:     Acceptable                       Unacceptable  
 确认:                      可接受                      不可接受

Reviewed/批准: u  
 Division of Engineering Service  
 Office of Structure Construction  
 Structure Representative    9/24/08  
 Date

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



**DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge**  
 666 Feng Bln 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:** 14-Aug-2008  
  
**Contract No:** 04-0120F4  
 04-SF-80-13.2 / 13.9

**Dear:** Mr. Charles Kanapicki  
**Attention:** Mr. Dave Williams Consultant  
**Subject:** NCR No. ZPMC-0149

**Job Name:** SAS Superstructure  
**Document No:** 05.03.06-000159

**Reference Description:** ZPMC overlooked Class A UT indication

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:** N/A

**Remarks:**

The Contractor missed rejectable indication while performing ultrasonic test. The Contractor did not identify Class A rejectable indication of the CJP weld splicing side plate C5 and bottom plate D6. This "Class A" indication measures 15 mm long and the Y location is 1820 mm on the CJP weld joint # SEG-016-008. See attached NCR #ZPMC-0149 for details.

**Action Required and/or Action Taken:**

No Action Required., This issue is considered to be closed for the following reason(s):  
 According to METS records, the contractor was notified at the time of incident and the indication was repaired according to the approved procedure.

**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0149

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

**File:** 05.03.06

<input checked="" type="checkbox"/>	APPROVED
<input type="checkbox"/>	APPROVED AS NOTED
<input type="checkbox"/>	RETURNED FOR CORRECTION
Pursuant to Section 5-1.02 of the Standard Specifications State of California	
DEPARTMENT OF TRANSPORTATION	
Division of Engineering Service	
Office of Structure Construction	
Structure Representative	Date 8/24/08

**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, PRC

**Report No:** NCR-000159

**Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Date:** 03-Jun-2008

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

**NCR #:** ZPMC-0149

**Type of problem:**

Welding  Concrete  Other   
 Welding  Curing  Procedural  Bridge No: 34-0006  
 Joint fit-up  Coating  Other  Component: OBG Segment 3BE  
 Procedural  Procedural  Description: Skew joint Side plate C5 to Bottom plate D6

**Reference Description:** ZPMC overlooked Class A UT indication

**Description of Non-Conformance:**

The Contractor missed rejectable indication while performing ultrasonic test. The Contractor did not identify Class A rejectable indication of the CJP weld splicing side plate C5 and bottom plate D6. This "Class A" indication measures 15 mm long and the Y location is 1820 mm on the CJP weld joint # SEG-016-008.

**Applicable reference:**

AWS D1.5 (2002) Table 6.3 UT Acceptance-Rejection Criteria-Tensile Stress

**Who discovered the problem:** Quality Assurance(QA) Inspector, Alfredo Acuna

**Name of individual from Contractor notified:** ABF representative, Peter Shaw

**Time and method of notification:** 1015 on Jun, 03-2008, verbal notification.

**Name of Caltrans Engineer notified:** Stanley Ku

**Time and method of notification:** 06-05-2008, 0905 hours in person

**QC Inspector's Name:** ZPMC representative Fu Yu Hong, verbal notification

**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 Abifhram Velasco, +86-183-1694-2685, who represents the Office of Structural Materials for your project.

**Inspected By:** Velasco, Abifhram

**Reviewed By:** Velasco, Abifhram

SMR

<input checked="" type="checkbox"/>	APISMR
<input type="checkbox"/>	APPROVED AS NOTED
<input type="checkbox"/>	RETURNED FOR CORRECTION
Pursuant to Section 5-1.02	
of the Standard Specifications	
State of California	
DEPARTMENT OF TRANSPORTATION	
Division of Engineering Service	
Office of Structure Construction	
Structure Representative	Date





# REPORT OF ULTRASONIC EXAMINATION

## UT探伤报告

REPORT NO. 报告编号 B787-UT-1021

DATE 2008.06.04

PAGE 1 OF 1

Revision No: 0

PROJECT NO.: 工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: OBG PLATE PANEL  
部件名称 SPLICE

DRAWING NO.: SEG16A  
图号

CALTRANS CONTRACT NO.: 04-0120F4  
加州工程编号

REFERENCING CODE 参考规范  
AWS D1.5-2002

ACCEPTANCE STANDARD 接受标准  
AWS D1.5-2002 (Table 6.3)

PROCEDURE NO. 程序编号  
ZPQC-UT-01

WELDING PROCESS 焊接方法  
FCAW/SAW

JOINT TYPE 焊缝类型  
BUTT

CALIBRATION DUE DATE 仪器校正有效期  
Dec. 28, 2008

EQUIPMENT 设备  
UT SCOPE

MANUFACTURER 制造商  
PANAMETRICS

MODEL NO. 样式编号  
EPOCH-4B

SERIAL NO. 序列编号  
071565311, 061488510,  
061495811, 070152011,

CALIBRATION BLOCK 试块  
AWS IIV BLOCK TYPE II

COUPLANT 耦合剂  
C.M.C

MATERIAL/THICKNESS 材料厚度  
A709M-345T2-X 1/20/22/mm

### 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 °	2.5 MHz	18x18 mm				
Changchao	0 °	2.5 MHz	20 mm	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							
SEG016A-008	1	68.9	B	1	48	36	4	+8	10	74	20	0	1810	REJ.	

BLANK

EXAMINED BY 主探

*Xu Mahong* 2008.06.04  
LEVEL - II SIGN / DATE

REVIEWED BY 审核:

*Xu Ronggang*  
LEVEL - II SIGN / DATE

NOTED FOR CORRECTION of the Standard Specifications of the State of California  
DEPARTMENT OF TRANSPORTATION  
Division of Engineering Service  
Office of Structure Construction  
Structure Representative  
9/24/08 Date

质量经理 / QCM

签字 SIGN / 日期 DATE

用户 CUSTOMER

签字 SIGN / 日期 DATE



# 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	SEG16A	报告编号 Report No.	B-WR414
合同号 Contract No.:	04-0120F4	部件名称 Items Name	OBG PLATE PANEL SPLICE	NDT报告编号 Report No.of NDT	B787-UT-1021
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。)SEG016A-008

检验员 (Inspector): Xue Hairong 日期(Date): 08.06.04

焊缝返修位置示意图:

Draft of welding discontinuity:



WELD NUMBER: SEG016A-008

<input checked="" type="checkbox"/>	ACCEPTED
<input type="checkbox"/>	REJECTED FOR CORRECTION
Refer to Section 5-1.02 of the Standard Specifications State of California	
DEPARTMENT OF TRANSPORTATION	
Division of Engineering Service	
Office of Structure Construction	
Structure Representative	Date
	9/24/08

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.

*Li Dong Liang*  
 车间负责人(Foreman): Li Dong Liang

*2008-05*  
 日期(Date):2008-6-5

处理意见

Disposition :

- 1. 从A面采用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/MT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. 根据批准的车间图纸检查焊缝.
- 
- 1. Grind from face A to remove all defects;
  - 2. Follow repair WPS for joint preparation, preheat, and weld deposit;
  - 3. Verify with VT/MT no defects remain in the weld joint prior to welding;
  - 4. Grind the repaired area flush with base metal or the adjacent weld;
  - 5. Check the welds according to the working drawings.



工艺: *Nimble*  
 Technical engineer.

审核: *Huifang*  
 Approved by

日期 *08-06-05*  
 Date



# 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.	SEG16A	报告编号 Report No.	B-WR414
合同号 Contract No.:	04-0120F4	部件名称 Items Name	OBG PLATE PANEL SPLICE	NDT报告编号 Report No.of NDT	B787-UT-1021
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.

Li Dong Liang  
车间负责人(Foreman): Li Dong Liang

2008-6-5  
日期(Date):2008-6-5

参照的WPS编号 Repair WPS No.	WPS-345-SMAW-4 G(4F)-Repair WPS-345-FCAW-4 G(4F)-Repair-1	工艺员 technologist	Niu Kefeng
返修(碳刨)前预热温度 Preheat temperature before gouging	NA	返修的缺陷 Description of discontinuity	内部缺陷 Internal defects
焊前处理检查 Inspection before welding	All	焊前预热温度 Preheat temperature before welding	58°C
最大碳刨深度 Max. depth of gouging	NA	碳刨总长 Total length of gouging	NA
焊工 welder	054016	焊接类型 welding type	SMAW
焊接电流 Current	155 A	焊接电压 Voltage	26 V
		焊接位置 position	CG
		焊接速度 Speed	25 mm/min
返修后检查 Inspection After repairing:			
外观检查 VT result	All	检验员 Inspector	C.M. Chen 03110711
NDT复检 NDT result	All	探伤员 NDT person	Xuehairong
见证: Witness/Review:			
备注: Remark:			

日期  
 Date 2008-6-7  
 FOR CORRECTION  
 Section 5-1.02  
 of the Standard Specifications  
 State of California  
 DEPARTMENT OF TRANSPORTATION  
 Division of Engineering Service  
 Office of Structure Construction  
 Structure Representative  
 Date 9/24/08





# REPORT OF ULTRASONIC EXAMINATION

## UT探伤报告

REPORT NO.报告编号 B787-UT-1021R1

DATE 2008.06.07

PAGE 1 OF 1

Revision No: 0

PROJECT NO.:工程编号 ZP06-787

CONTRACTOR: CALTRANS

ITEMS NAME: OBG PLATE PANEL

DRAWING NO.:SEG16A

CALTRANS CONTRACT NO.: 04-0120F4

部件名称 SPLICE

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. 28, 2008

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 /20/22/mm

### 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 °	2.5 MHz	18x18 mm				
Changchao	0 °	2.5 MHz	20 mm	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								
SEG016A-008	1R1	68.7				35									ACC.	

BLANK



EXAMINED BY 主探

REVIEWED BY 审核:

*Xue Hong* 2008.06.07  
LEVEL - II SIGN / DATE

*Xu Ronggang* 2008.06.07  
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, PRC**Report No:** NCS-000160**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 03-Jan-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0149**Type of problem:**

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b>
<b>Procedural</b>	<b>Procedural</b>	<b>Descriptor:</b>	

**Date the Non-Conformance Report was written:** 03-Jun-2008**Description of Non-Conformance:**

The Contractor missed rejectable indication while performing ultrasonic test. The Contractor did not identify Class A rejectable indication of the CJP weld splicing side plate C5 and bottom plate D6. This "Class A" indication measures 15 mm long and the Y location is 1820 mm on the CJP weld joint # SEG-016-008.

**Contractor's proposal to correct the problem:**

ZPMC has re-inspected the weld in question and has determined that this weld is a class A. ABF concurs with CT findings. ZPMC did locate the defect, however, ZPMC UT technician did not identify as Class A and subsequently accepted the indication. ABF compared our equipment with ZPMC and determined the Transducers being used by ZPMC required replacement. ZPMC has since replaced worn out transducers. Reference: NCR-000159 (ZPMC 0149) for weld repair NDT record.

**Corrective action taken:**

Repaired weld is accepted per NDT test results. ZPMC UT equipment defect has been addressed.

**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 Eric Tsang, +(86) 150.0042.2372, who represents the Office of Structural Materials for your project.

**Inspected By:** Tsang, Eric

Quality Assurance Inspector

**Reviewed By:** Wahbeh, Mazen

QA Reviewer