

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:** Shanghai, China**Report No:** NCR-000036**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 20-Jan-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0035**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: OBG Side Plate SP-30
Procedural	Procedural	Description:	

Reference Description: The Contractor missed transverse cracks in the start/stop areas during VT inspection of welds on side plate SP-0030.

Description of Non-Conformance:

The Contractor missed cracks in welds during visual inspection. The Contractor did not identify transverse cracks at the start and stop areas of welds on side plate SP-0030.

Applicable reference:

AWS D1.5 (2002) Section 6, subsection 6.26.1.1: "The weld shall have no cracks."

Who discovered the problem: Larry Viars**Name of individual from Contractor notified:****Time and method of notification:****Name of Caltrans Engineer notified:** Jason Tom**Time and method of notification:** 1/23/08, verbal**QC Inspector's Name:** Shen Xue Jun**Was QC Inspector aware of the problem:** Yes No**Contractor's proposal to correct the problem:**

Unknown at this time

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 Patrick Lowry, 916-227-5719, who represents the Office of Structural Materials for your project.

Inspected By: Lowry, Patrick

SMR

Reviewed By: Lowry, Patrick

SMR



DEPARTMENT OF TRANSPORTATION
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 Enterprises, a JV
375 Burma Road
Oakland CA 94607

Date: 08-Feb-2008

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

Attention: Dave Williams Consultant

Job Name: SAS Superstructure

Document No: 05.03.06-000021

Subject: NCR No. ZPMC-0035

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Non-Conformance with quality control procedures. Please take appropriate corrective action. Recurrence may require further administrative action.
- Non-Conformance with quality control. Records indicate that this is a recurring issue and constitutes a systematic problem in quality control. Within fourteen (14) days, please submit a plan to correct the deficiency.
- Material or workmanship is not in compliance with contract requirements.

Enclosed please find the following items:

NCR No: ZPMC-0035

Remarks:

Please see Non-Conformance Report for details.

Transmitted by: Stanley Ku Sr. Bridge Engineer

cc: Rick Morrow, Gary Pursell, Stanley Ku, Brian Boal, Jason Tom, Dave Williams

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000021

Subject: NCR No. ZPMC-0035

Dated: 23-Apr-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000020 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC will improve welders skills and QC will inspect more strictly

Please see the attached response from ZPMC. ABF JV has reviewed and concurs with this response and considers this issue resolved. ABF JV believes, based on our understanding of the NCT process that this NCR was issued closed as the top (first) box on the NCT was checked. Please confirm.

Submitted by: Kanapicki, Charles

Attachment(s): ABF-NPR-000020R00;

Caltrans' comments:

Status: CLO

Date: 24-Jul-2008

The weld defects were repaired, and the weld was accepted by MT. Also, ZPMC has agreed to improve welder skills and inspect more closely. The Department concurs that Non-Conformance ZPMC-0035 is closed.

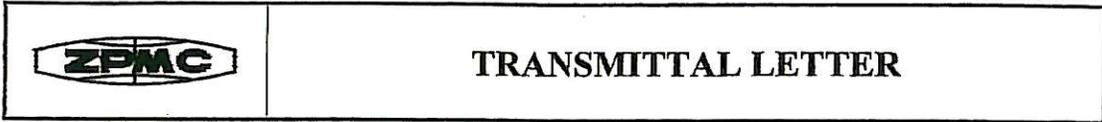
Submitted by: Wright, Doug

Attachment(s):

Date: 24-Jul-2008

NCR 281

TL-000969



PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE

DATE: 03/28/2008

TO: RUBY/ ABFJV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: NCR(NCR-000036) FOR CLOSURE / ZPMC 35 ^{CASH} 4/22/08

SUBMITTED FOR YOUR APPROVAL AND SUBMITTAL TO CALTRANS.

ENCLOSED WITH THIS TRANSMITTAL IS ONE

- (1) COPY OF LETTER OF RESPONSE WITH NO.B-074 FOR CLOSURE.
- (2) COPY OF NCR WITH NUMBER NCR-000036 / ZPMC 35 ^{CASH} 4/22/08
- (3) COPY OF WR WITH NUMBER B-CWR018
- (4) COPY OF VT REPORT WITH NUMBER B-VT478
- (5) COPY OF MT REPORTS WITH NUMBER B787-MT-081, B787-MT-081R1

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:

Ruby Li

3/28/08 1106

PLAN HOLDER

DATE

ABFJV

COMPANY

PHONE NO.

PLAN NUMBER: N/A

#R787-QCP-102



No. B-074

LETTER OF RESPONSE

DATE: 2008.03.28

To: AB/F Steve Lawton

From: ZPMC Xu Xianping

Subject: Response to CT NCR-000036 / ZPMC 35 ^{CSL} 4/22/08

Mr. Lawton,

ZPMC has generated internal NCR-B-014 in response to CT NCR-000036, regarding that ZPMC missed cracks in welds during visual inspection and didn't identify transverse cracks at the start and stop area of welds on side plate SP-0030. The joint of repairing welds wasn't welded well, which resulted in cracks. We performed MT on January 18th and found cracks on those welds, as you can see on B787-MT-081. Then those welds were repaired according to the attached B-CWR018 and accepted by MT which was shown by B787-MT-081R1. In the future, we will improve welders' welding skills and inspect more strictly.

/ ZPMC 35 ^{CSL} 4/22/08

Hereby we apply for the closure of this NCR.

For further information, please contact me. Thank you.

ATTACHMENTS:

- 1) ZPMC internal NCR-B-014 and CT NCR-000036 / ZPMC 35 ^{CSL} 4/22/08
- 2) B787-MT-081
- 3) B-CWR018
- 4) VT-478
- 5) B787-MT-081R1

Sincerely,
Xu Xianping

Xu Xianping

2008-3-28

REVIEWED
ABF QCM
J. Hunter
31 MARCH 08



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-014 (NCR-000036) / ZPMC 35	
Item: Crack in welds 名称描述: 焊缝中存在裂纹	Item Number: 件号:	Drawing Number: 图号: SP030	
Location: OBG Bottom Plate 位置: 钢箱梁底板单元		Date: 日期: 2008-2-24	
Description of Nonconformance: 不符合项状态描述: The Contractor missed cracks in welds during visual inspection. The Contractor did not identify transverse cracks at the start and stop areas of welds on side plate SP-0030. 合同方没有在目检时发现焊缝上的裂纹。合同方没有在边侧底板 SP-0030 的开始和结束区域发现横向的裂纹。 Work By: <u>Liu Hai Dong</u> Prepared by: <u>Du Wenling</u> Reviewed by QCE: <u>Fu...</u> 施工方: 2008.02.24 准备: 2008.02.24 质量工程师批准: 2008.02.24 <input type="checkbox"/> Drawing Error <input type="checkbox"/> Material Defect <input type="checkbox"/> Fabrication Error <input checked="" type="checkbox"/> Other 图纸错误 材料缺陷 制作错误 其他原因			
Disposition: <input type="checkbox"/> Use as is <input checked="" type="checkbox"/> Repair <input type="checkbox"/> Reject 处理措施: 回用 返修 拒收			
Recommendation: 建议 加强检查力度 Improve the strength of inspection. Prepared by: <u>Xu Xianping 2008.02.25</u> Approved by QCA: <u>HuGang 2008.2.25</u> 准备 质量经理批准			
Reason for Nonconformance: 不符合原因: 补焊处接头没焊好导致裂纹 The joint of repair welding didn't weld well, which resulted in cracks. Prevention of Re-occurrence: 预防措施: 加强焊接技术及检查力度 Improve welding technology and inspection strength. Approved by/批准: <u>Xu Xianping 2008.02.25</u>			
Technical Justification for Use-As-Is/Repair: <input checked="" type="checkbox"/> Attachment <input type="checkbox"/> Non-attachment 回用或返修的技术依据: 附件 无附件 具体返修请参考 B-CWR018 The detail repair please reference B-CWR018. Reviewed /批准: <u>Tang Hong bo</u>			
Verification: <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable 确认: 可接受 不可接受			
Verified by QCI/质检确认: <u>Xu Xianping 07/2007</u> Reviewed by QCA/质检主任审核: <u>HuGang</u>			



DEPARTMENT OF TRANSPORTATION
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 Enterprises, a JV
375 Burma Road
Oakland CA 94607

Date: 08-Feb-2008

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

Attention: Dave Williams Consultant

Job Name: SAS Superstructure

Document No: 05.03.06-000021

Subject: NCR No. ZPMC-0035

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

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- Material or workmanship is not in compliance with contract requirements.

Enclosed please find the following items:

NCR No: ZPMC-0035

Remarks:

Please see Non-Conformance Report for details.

Transmitted by: Stanley Ku Sr. Bridge Engineer

cc: Rick Morrow, Gary Pursell, Stanley Ku, Brian Boal, Jason Tom, Dave Williams

File: 05.03.06

DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES
 Office of Structural Materials
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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: Shanghai, China

Report No: NCR-000036

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 20-Jan-2008

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

NCR #: ZPMC-0035

Type of problem:

Welding Concrete Other
 Welding Curing Procedural Bridge No: 34-0006
 Joint fit-up Coating Other Component: OBG Side Plate SP-30
 Procedural Procedural Descriptor:

Description of Non-Conformance:

The Contractor missed cracks in welds during visual inspection. The Contractor did not identify transverse cracks at the start and stop areas of welds on side plate SP-0030.

Applicable reference:

AWS D1.5 (2002) Section 6, subsection 6.26.1.1: "The weld shall have no cracks."

Who discovered the problem: Larry Viars**Name of individual from Contractor notified:****Time and method of notification:****Name of Caltrans Engineer notified:** Jason Tom**Time and method of notification:** 1/23/08, verbal**QC Inspector's Name:** Shen Xue Jun**Was QC Inspector aware of the problem:** Yes No**Contractor's proposal to correct the problem:**

Unknown at this time

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 Patrick Lowry, 916-227-5719, who represents the Office of Structural Materials for your project.

Inspected By: Lowry, Patrick

Quality Assurance Inspector

Reviewed By: Lowry, Patrick

QA Reviewer



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-081		DATE 日期 2008.01.18	PAGE 页码 1/2	Revision No: 0
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS		
DRAWING NO. 图号: SP30 EAST BOX		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 Jan. 1 ST , 2009	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5360 5362	
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-345T2-X 10/22mm	
WELDING PROCESS 焊接方法	FCAW	TYPE OF JOINT 焊缝类型	CORNER 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			
SP030-01-014	1	CRACK	4mm		REJ.	
SP030-01-013	1	CRACK	3mm		REJ.	
	2	CRACK	3mm		REJ.	
	3	CRACK	6mm		REJ.	
	4	CRACK	5mm		REJ.	
SP030-01-016	1	CRACK	6mm		REJ.	
	2	CRACK	3mm		REJ.	
	3	CRACK	4mm		REJ.	
	4	CRACK	5mm		REJ.	
SP030-01-015	1	CRACK	7mm		REJ.	
SP030-01-018	1	CRACK	6mm		REJ.	
	2	CRACK	6mm		REJ.	
SP030-01-017	1	CRACK	6mm		REJ.	
	2	CRACK	3mm		REJ.	
	3	CRACK	4mm		REJ.	
	4	CRACK	4mm		REJ.	

EXAMINED BY 主操 <i>Cai Xinjin</i> LEVEL-II SIGN 签名 / DATE 日期 2008.01.18	REVIEWED BY 审核 <i>Zhou Dongjun</i> LEVEL-II SIGN / DATE 日期 2008.01.18
质量经理 / QCM _____ 签字 SIGN / 日期 DATE	用户 CUSTOMER _____ 签字 SIGN / 日期 DATE

This document is APPROVED
 State of California
 DEPARTMENT OF TRANSPORTATION
 Pursuant Section 16.102 of the
 Standard Specifications
 Initial: *SNZ* Date: 2/12/2008



REPORT OF MAGNETIC PARTICLE EXAMINATION
磁粉检测报告

REPORT NO. 报告编号 B787-MT-081		DATE日期 2008.01.18	PAGE OF页码 2/2	Revision No: 0
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS		
DRAWING NO. 图号: SP30 EAST BOX		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 Jan. 1 ST , 2009	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5360 5362	
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-345T2-X 10/22mm	
WELDING PROCESS 焊接方法	FCAW	TYPE OF JOINT 焊缝类型	CORNER 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			
SP030-01-020	1	CRACK	5mm		REJ.	
SP030-01-019	1	CRACK	4mm		REJ.	
	2	CRACK	5mm		REJ.	
SP030-01-022	1	CRACK	6mm		REJ.	
SP030-01-021				ACC.		
SP030-01-024				ACC.		
SP030-01-023				ACC.		

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This document is: APPROVED
State of California
DEPARTMENT OF TRANSPORTATION
Pursuant Section 5-1.02 of the
Standard Specifications
Initial SJE Date: 2/4/2008

EXAMINED BY 主探 <u>Cai Xinxin</u> LEVEL-II SIGN 签名 / DATE日期 2008.01.18	REVIEWED BY 审核 <u>Zhou Dongyun</u> LEVEL-II SIGN 签名 / DATE日期 2008.01.18
质量经理 / QCM _____ 签字 SIGN / 日期 DATE	用户 CUSTOMER _____ 签字 SIGN / 日期 DATE



关键焊缝返修报告

版本 Rev. No.

Critical Welding Repair Report(CWR)

0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No	SP30	报告编号 Report No.	B-CWR018
合同号 Contract No.:	04-0120F4	部件名称 Items Name	EAST BOX 3B-C5	NDT报告编号 Report No.of NDT	B787-MT-081
项目编号 Project No.:	ZP06-787				

焊缝缺陷描述:

Description of welding discontinuity:

We found several cracks by MT.

(MT探伤发现多处裂纹。)

Welder No.(焊工编号): 048801,053742,048810

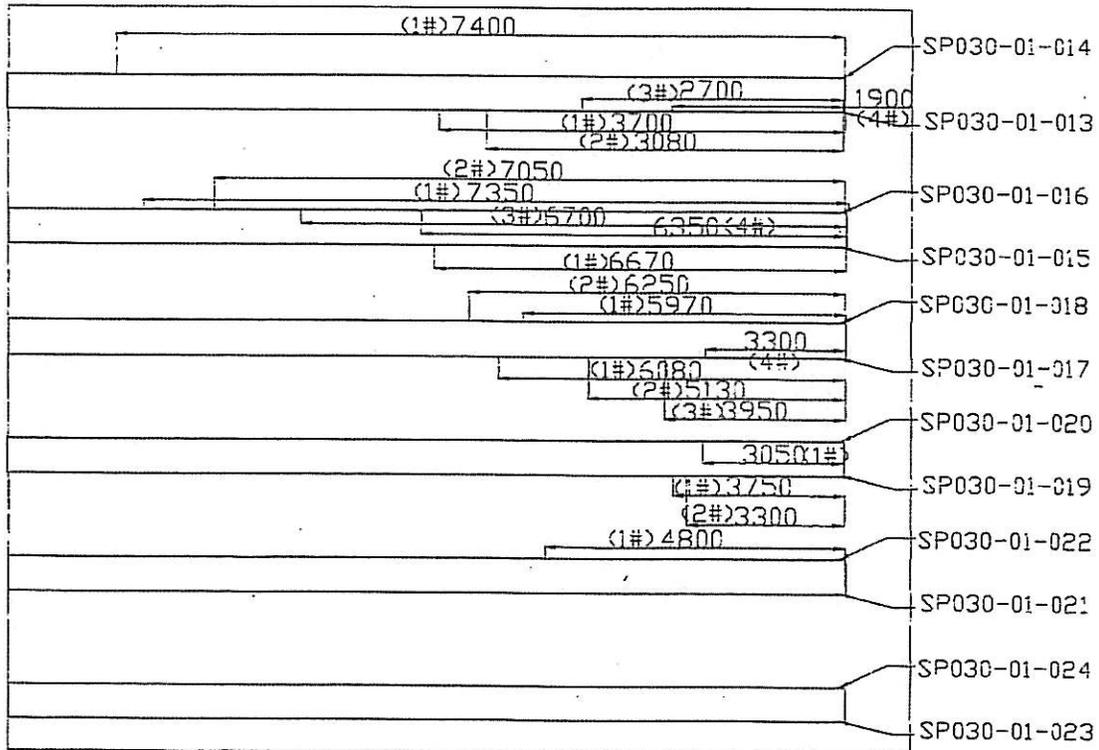
Location(位置):2F

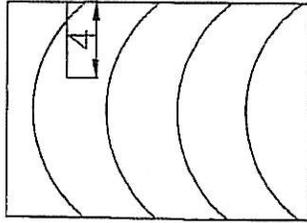
This document is: APPROVED
State of California
DEPARTMENT OF TRANSPORTATION
Pursuant Section 5-1.02 of the
Standard Specifications
Initial *SJE* Date: *2/4/2008*

检验员 (Inspector): Cai Xinxin 日期(Date): 2008.01.18

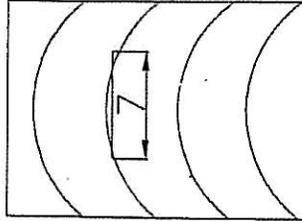
焊缝返修位置示意图:

Draft of welding discontinuity:

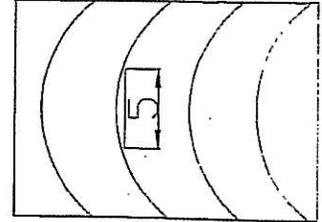




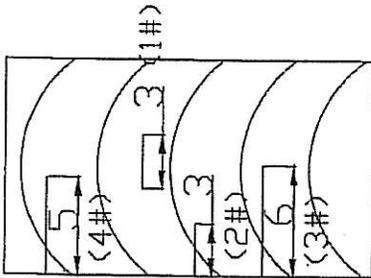
SP030-01-014



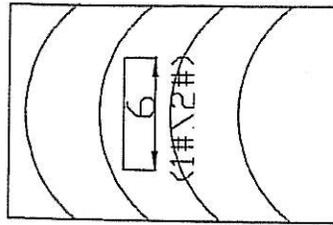
SP030-01-015



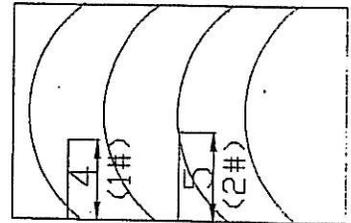
SP030-01-020



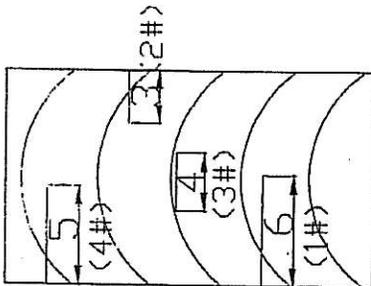
SP030-01-013



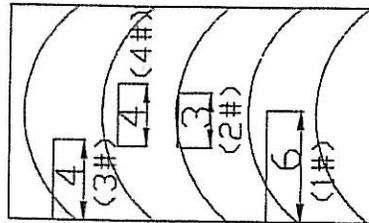
SP030-01-018



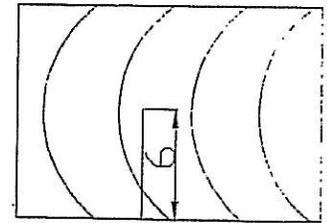
SP030-01-019



SP030-01-016



SP030-01-017



SP030-01-022

This document is: APPROVED
 State of California
 DEPARTMENT OF TRANSPORTATION
 Pursuant Section 5-1.02 of the
 Standard Specifications
 Initial *SJE* Date: *2/4/2008*

产生原因:

Caused:

因为天气变冷, 冷却速度太快, ZPMC QA/QC已经核实了其它的潜在的可变的因素, 例如: 焊工的技术, WPS的参照参数, 填充金属和焊缝填充的控制, 发现这些变量都服从控制程序和WPS要求。最后, ZPMC使用同样的控制和人员焊接了许多类似的焊缝, 没有发现类似裂纹这样的现象发生, 只到现在天气突然不合季节的变冷。

Since the weather is colder, cooling is faster, ZPMC QA/QC has verified other potential variables such as welder performance, WPS parameters are complied with, weld filler material and weld filler control and found these variables are within compliance of control procedures and WPS requirements.

To date, ZPMC has welded several similar welds using the same controls and personnel, without observing cracking problems similar to these, until recently when the weather has become unseasonably cold.

车间负责人(Foreman): *Yang Xuehai* 日期(Date): 2008.01.22

处理意见

Disposition:

1. 用打磨或碳刨的方式去除裂纹, 碳刨前预热温度不低于65°C;
2. 焊接前按照焊接返修工艺规程(WPS)准备焊接接头。
3. 作100%MT检查, 确保缺陷完全去除;
4. 按照批准的焊缝返修工艺规程(WPS)进行预热和焊接;
5. 打磨焊缝区域使其与母材或邻近焊缝平齐;
6. 根据图纸要求对修补区域进行检测;

1. Excavate linear indications by means of grinding or gouging. Preheat prior to gouging to a minimum temperature of 65°C.
2. Prepare excavation in accordance with an approved repair WPS prior to welding.
3. Perform MT 100% of the excavation to insure removal of defects. - *Inform CT to verify defects removed prior to performing repair.*
4. Preheat and weld according to the relevant WPS.
5. Following welding grind the weld flush with base metal or contiguous weld.
6. Check the repaired area according to the approved working drawings.

Notify CT of start of repairs - excavate

AAN: Re-examine repaired area in accordance with Special Provisions, page 333, Item 3.

<input type="checkbox"/>	APPROVED
<input checked="" type="checkbox"/>	APPROVED AS NOTED
<input type="checkbox"/>	NOT APPROVED
Pursuant to Section 5-1.02 of the Standard Specifications State of California DEPARTMENT OF TRANSPORTATION	
Signed	<u><i>SJE for RM</i></u> Structure Representative
Date	<u><i>2/4/2008</i></u>

工艺: *Ling shihua* 审核: _____
Technical engineer: _____ Approved by _____

日期 *08.1.26*
Date: _____



关键焊缝返修报告

版本 Rev. No.

Critical Welding Repair Report(CWR)

0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No.	SP30	报告编号 Report No.	B-CWR018
合同号 Contract No.:	04-0120F4	部件名称 Items Name	EAST BOX 3B-C5	NDT报告编号 Report No.of NDT	B787-MT-081
项目编号 Project No.:	ZP06-787				

纠正措施:

Correction action to prevent re occurrence;

按照相应的WPS, 在返修工作中, 加强道间预热温度的控制, 从板的另一面测量预热和道间温度, 以核实整块板的加热是一致的。

预热和道间温度应该覆盖更大的面积以降低冷却的速度, 热量的覆盖在冷却控制中是必须的, 当使用电加热时, 将逐步的降低保温的温度, 不是焊完后立即关掉电加热, 返修使用关键焊缝返修中的返修工艺, 将不会降低材料的性能。

Strengthen preheat interpass temperature and control according to WPS during repairing and work. Measure the pre-heat and interpass temperatures from other plate surfaces to verify heating is uniform throughout the plate thickness.

Pre-heat and interpass temperatures shall cover a larger area to the extent that slower cooling will take place. Thermal blankets shall be used as necessary to control cooling. When electric heat is used, it will be turned down gradually and not turned off immediately after welding.

Repairing using the repair procedure in the CWR will not degrade the material.

车间负责人(Foreman):

日期(Date):2008.01.22

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	Lingshikuo
返修(碳刨)前预热温度 Preheat temperature before gouging	80	返修的缺陷 Description of discontinuity	crack
焊前处理检查 Inspection before welding	MT	焊前预热温度 Preheat temperature before welding	175
最大碳刨深度 Max. depth of gouging	5mm	碳刨总长 Total length of gouging	1900mm
焊工 welder	Han Xiaofeng	焊接类型 welding type	SMAW
焊接电流 Current	220	焊接电压 Voltage	27
返修后检查 Inspection After repairing:		焊接位置 position	2F
外观检查 VT result	Acc	检验员 Inspector	Xu... 0707071
NDT复检 NDT result	MJ Acc	探伤员 NDT person	日期 Date
见证: Witness/Review:		Signed	SSE... Structure Representative
备注: Remark:		Date	2/4/2008

new preheat, interpass temperature, and cooling procedures in any revisions to this CWR.

B-V[4]8



		周数 日期		17# 2008.02.27									
Visual Weld Inspection Report 焊缝目视检查报告													
Caltrans Contract No. 加州合同编号		04-0120F4		Girder/梁: Tower/塔: Representative: 质检代表:									
Project No.: 项目名称		San Francisco Oakland Bay Bridge 海湾大桥		NA Lee Jianhua									
Project No.: 项目编号		ZP06-787		XU Xian ping 0707-071 Huogang									
Quality Assurance Manager ~Approval 质量控制经理:													
Weld No. 焊缝编号	Welder I.D.# 焊工识别号	Location 位置	Welding consumables 焊接材料	Undercut 咬边	Porosity 气孔	Over lap 焊瘤	Crater 弧坑	Arc strike 电弧擦伤	Spatters 飞溅	Crack 裂纹	Accept or Reject 接受或拒收	Repair 返修	Accept or Reject after repair 返修后接受 或拒收
SP030-001-013	048801	2F	Supercord 71H(Φ1.4)	NA	NA	NA	NA	NA	NA	√	NA	Acc	NA
SP030-001-014	048801	2F	Supercord 71H(Φ1.4)	NA	NA	NA	NA	NA	NA	√	NA	Acc	NA
SP030-001-015	048801	2F	Supercord 71H(Φ1.4)	NA	NA	NA	NA	NA	NA	√	NA	Acc	NA
SP030-001-016	048801	2F	Supercord 71H(Φ1.4)	NA	NA	NA	NA	NA	NA	√	NA	Acc	NA
SP030-001-017	053742	2F	Supercord 71H(Φ1.4)	NA	NA	NA	NA	NA	NA	√	NA	Acc	NA
SP030-001-018	053742	2F	Supercord 71H(Φ1.4)	NA	NA	NA	NA	NA	NA	√	NA	Acc	NA
SP030-001-019	053742	2F	Supercord 71H(Φ1.4)	NA	NA	NA	NA	NA	NA	√	NA	Acc	NA
SP030-001-020	053742	2F	Supercord 71H(Φ1.4)	NA	NA	NA	NA	NA	NA	√	NA	Acc	NA
SP030-001-022	048810	2F	Supercord 71H(Φ1.4)	NA	NA	NA	NA	NA	NA	√	NA	Acc	NA
<input type="checkbox"/> After root weld <input checked="" type="checkbox"/> After CWR or WRR No.: B-CWR018 <input type="checkbox"/> After cover pass <input type="checkbox"/> After HSR No.: <input checked="" type="checkbox"/> Others													

HR787-QCP-603

"√" is no defects. "X" is defects. "NA" is not applicable.



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-081R1		DATE日期 2008.03.03	PAGE OF页码 1/2	Revision No: 0		
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS				
DRAWING NO. 图号: SP30 EAST BOX		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 Jan. 1 ST , 2009			
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5360 5362			
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-345T2-X 10/22mm			
WELDING PROCESS 焊接方法	FCAW	TYPE OF JOINT 焊缝类型	CORNER 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			
SP030-01-014	1R1			ACC.		
SP030-01-013	1R1			ACC.		
	2R1			ACC.		
	3R1			ACC.		
	4R1			ACC.		
SP030-01-016	1R1			ACC.		
	2R1			ACC.		
	3R1			ACC.		
	4R1			ACC.		
SP030-01-015	1R1			ACC.		
SP030-01-018	1R1			ACC.		
	2R1			ACC.		
SP030-01-017	1R1			ACC.		
	2R1			ACC.		
	3R1			ACC.		
	4R1			ACC.		
EXAMINED BY 主操 <i>Zhou Dongyan</i>			REVIEWED BY 审核 <i>Cai Xinxin</i>			
LEVEL-II SIGN 签名 / DATE日期 2008-03-03			LEVEL-II SIGN / DATE日期 2008-03-03			
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:** Shanghai, China**Report No:** NCS-000020**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 08-Feb-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0035**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: 20-Jan-2008**Description of Non-Conformance:**

The Contractor missed cracks in welds during visual inspection. The Contractor did not identify transverse cracks at the start and stop areas of welds on side plate SP-0030.

Contractor's proposal to correct the problem:

METS-OSM will track this issue as a Quality Management Issue and does not request a response from the Contractor at this time. If this issue becomes systemic, METS will elevate this issue to second-tier and request a response from the Contractor.

Corrective action taken:

N/A

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 Patrick Lowry, (858) 344-2712, who represents the Office of Structural Materials for your project.

Inspected By: Liu, Chengwen

Quality Assurance Inspector

Reviewed By: Lowry, Patrick

QA Reviewer