

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-000366

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 03-Jul-2009

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

NCR #: ZPMC-0340

Type of problem:

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: BK2A
Procedural	Procedural	Description:	

Reference Description: Heat Straightening of BK2A

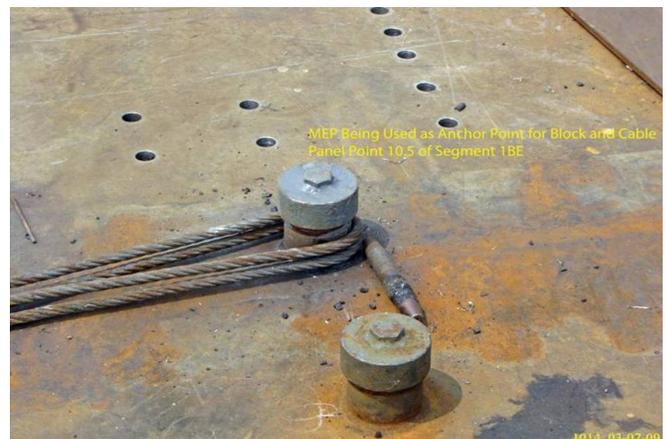
Description of Non-Conformance:

Quality Assurance Representative observed heat straightening operations being performed on the Bike Path Cantilever Brackett located at Panel Point 11 of Segment 1BE. ZPMC production personnel performing the work presented, when requested, ZPMC's internal Heat Straightening Record 1(B) 7055, which described a procedure that varied from the operations observed. The variations included the locations for the application of heat, the use of jacks and the use of a block and chain/cable to apply active pressure after heating. In addition, the anchor point of the block and chain/cable was observed to be the Mechanical Electrical Penetration (MEP) at Panel Point 10.5. The MEP was observed to be leaning toward the direction of the load while the cable was tensioned and after the load was released the MEP was measured to be 2mm out of plumb. The deck area immediately adjacent to the MEP and opposite the direction of load was observed to be slightly upset. This upset is visible but within tolerance of the specifications.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

ZPMC's internal Heat Straightening Record 1(B) 7055. The procedure illustrated the locations for the application of heat and specified the need to complete the task by only flame straightening.

Caltrans Standard Specifications, Section 55-1.04 Shipping, Handling and Storing Materials. In handling and shipping of steel work, every care shall be taken to avoid bending, scraping or overstressing the pieces.

Who discovered the problem: John Kinsey

Name of individual from Contractor notified: Kevin Chen

Time and method of notification: 1015, Verbal

Name of Caltrans Engineer notified: Scott Kennedy

Time and method of notification: 1045, Verbal

QC Inspector's Name: Wang Lu

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

Comments:

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

Inspected By: Simonis,Jim

QA Inspector

Reviewed By: Wahbeh,Mazen

SMR



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
666 Feng Bin Road Room 708, Changxing Island
Shanghai 201913 PR China
Tel: 021-56856666 ext 207061 Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 04-Aug-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: 05.03.06-000319

Subject: NCR No. ZPMC-0340

Reference Description: Heat Straightening of BK2A

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: Bike Path **Lift:** 01

Remarks:

Quality Assurance Representative observed heat straightening operations being performed on the Bike Path Cantilever Brackett located at Panel Point 11 of Segment 1BE. ZPMC production personnel performing the work presented, when requested, ZPMC's internal Heat Straightening Record 1(B) 7055, which described a procedure that varied from the operations observed. The variations included the locations for the application of heat, the use of jacks and the use of a block and chain/cable to apply active pressure after heating. In addition, the anchor point of the block and chain/cable was observed to be the Mechanical Electrical Penetration (MEP) at Panel Point 10.5. The MEP was observed to be leaning toward the direction of the load while the cable was tensioned and after the load was released the MEP was measured to be 2mm out of plumb. The deck area immediately adjacent to the MEP and opposite the direction of load was observed to be slightly upset. This upset is visible but within tolerance of the specifications.

See attached NCR No. ZPMC-0340 for details.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences.,A response for the resolution of this issue is expected within 14 days.

Transmitted by: Ching Chao

Attachments: ZPMC-0340

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

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000319

Subject: NCR No. ZPMC-0340

Dated: 24-Aug-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000336 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC violated several requirements regarding this NCR. The bike path bracket has since been reworked in compliance with the WQCP using the proper procedures. The MEP was replaced.

ZPMC violated several requirements regarding this NCR. The bike path bracket has since been reworked in compliance with the WQCP using the proper procedures. The MEP was replaced. ZPMC will submit the required documents at a later date for closure of this NCR.

Submitted by:

Attachment(s): ABF-NPR-000336R00

Caltrans' comments:

Status: AAP

Date: 10-Sep-2009

The response is acceptable, but the Non-Conformance is not closed.

Please provide documentation of the heat straightening that was performed and inspection documents on all affected welds. The Department will review the Contractor's proposal to close Non-Conformance ZPMC-0340 at that time.

Submitted by: Wright, Doug

Date: 10-Sep-2009

Attachment(s):

NCR PROPOSED RESOLUTION

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

Dated: 03-Nov-2009

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

Attention: Pursell, Gary
Resident Engineer

Job Name: SAS Superstructure

Document No.: ABF-NPR-000336 Rev: 01

Ref: 05.03.06-000319

Subject: NCR No. ZPMC-0340

Contractor's Proposed Resolution:

Reference Resolution: ZPMC is submitting the required documentation. ZPMC requests closure of this NCR.
ZPMC is submitting the required documentation. ZPMC requests closure of this NCR.

Submitted by:

Attachment(s): ABF-NPR-000336R01;

Caltrans' comments:

Status: CLO

Date: 11-Nov-2009

The submitted NDT reports appeared to be sufficient.

Submitted by: Chao, Ching

Date: 11-Nov-2009

Attachment(s):



No. B-486

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2009-11-03

REGARDING: NCR-000366 (ZPMC-0340)

With this letter of response, ZPMC requests closure for Caltrans NCR-000366 (ZPMC-0340). Per requirement of the NPR, we are providing the documentation of the heat straightening that was performed and inspection documents on all affected weld.

so base on the above explanation, ZPMC applies to close the caltrans's report NCR-000366 (ZPMC-0340).

Please reference attached document for acceptance and closure the NCR-000366 (ZPMC-0340).

ATTACHMENT:

NCR-000366 (ZPMC-0340)

ZPMC internal NCR

The heat straightening record

The impact weld accepted VT/MT/UT reports

The RFI with new drawing for the B/P bracket

The MEP final VT/MT reports

Zhou Shuangbao

2009. 11. 3.



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-232 (ZPMC-340)
Item: Heat Straightening of BK2A 名称描述: 悬臂梁 BK2A 校火	Item Number: 件号: BK2A	Drawing: BK2A 图号:
Location: 位置: 1BE, BK2A		Date: 日期: 2009-8-18

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

Quality Assurance Representative observed heat straightening operations being performed on the Bike Path Cantilever Bracket located at Panel Point 11 of Segment 1BE. ZPMC production personnel performing the work presented, when requested, ZPMC's internal Heat Straightening Record 1(B) 7055, which described a procedure that varied from the operations observed. The variations included the locations for the application of heat, the use of jacks and the use of a block and chain/cable to apply active pressure after heating. In addition, the anchor point of the block and chain/cable was observed to be the Mechanical Electrical Penetration (MEP) at Panel Point 10.5. The MEP was observed to be leaning toward the direction of the load while the cable was tensioned and after the load was released the MEP was measured to be 2mm out of plumb. The deck area immediately adjacent to the MEP and opposite the direction of load was observed to be slightly upset. This upset is visible but within tolerance of the specifications.

ZPMC 在对 1BE 箱体 PP11 位置的悬臂梁 BK2A 做校火时, 加洲检验员发现 ZPMC 没有按照批准的校火记录 7055 操作。现场操作与校火记录中的不同之处在于, 校火位置不同, 现场实际校火加热后使用了千斤顶和动滑轮来施加外力。此外, 动滑轮的定位点在 PP10.5 的管线穿越孔的套管上, 动滑轮的链条拉紧时, 导致此套管向拉力方向倾斜。在链条松掉后, 对此套管垂直度进行测量, 发现其垂直度偏差 2 毫米。套管边上, 与链条拉力反方向的顶板区域发现些微的变形, 此变形可以明显的目视发现, 但是变形量在标准允许范围内。

Work By: 施工方: Xi q fa Ling <input type="checkbox"/> Drawing Error 图纸错误	Prepared by: Shen Xuejun 准备: 2009.8.18 <input type="checkbox"/> Material Defect 材料缺陷	Reviewed by QCE: Zhao Shuanghao 质量工程师批准: 2009.8.18 <input type="checkbox"/> Fabrication Error 制作错误	<input type="checkbox"/> Other 其他原因
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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
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1. 现对 BK2 悬臂梁作校火处理。拟在 NDT 报告及设计报告 HSR108-6609 中
2. 套管垂直度偏差在允许范围内

CUI. Jiarong Jian 07/2007
1) change BK2. and perform NDT and HSR108-6609 07.P.4.
2) the vertical was within tolerance of the specification.

Recommendation:

建议:

Prepared by: _____

准备

Approved by QCA: _____

质量经理批准

Reason for Nonconformance:

不符合原因:

由于IBE箱体PPH位置的悬臂梁BK2A做校火时,没有按照
 批准的校火工艺要求操作.
 During heat straightening IBE box PPH cantilever BK2A, didn't
 follow HSR CB 7055 requirement.

Prevention of Re-occurrence:

预防措施:

加强对现场监控或检查.
 Enhance supervision and inspection.

Technical Justification for Use-As-Is/Repair:

Approved by/批准: Guo Jun 09.08.22

回用或返修的技术依据:

Attachment

Non-attachment

附件

无附件

现已将变形的盖板割除, 换板重新调整水平.
 Now the distorted face plate has been cut away and a new plate is replaced.
 Adjust the components to right position.

Reviewed/批准: Ma Jia 09.24.09

Verification:

确认:

Acceptable
可接受

Unacceptable
不可接受

Jin Yong Jian 07120671

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 Bin Road Room 708, Changxing Island
Shanghai 201913 PR China
Tel: 021-56856666 ext 207061 Fax:

Ching Chao

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 04-Aug-2009

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

Dear: Mr. Charles Kanapicki
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Subject: NCR No ZPMC-0340

Job Name: SAS Superstructure
Document No: 05.03.06-000319

Reference Description: Heat Straightening of BK2A

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- Quality Control (QC) not performed in conformance with contract documents.
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- Non-Conformance Resolved.

Material Location: Bike Path

Lift: 01

Remarks:

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See attached NCR No. ZPMC-0340 for details.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 14 days.

Transmitted by: Ching Chao

Attachments: ZPMC-0340

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

DEPARTMENT OF TRANSPORTATION
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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, PRC

Report No: NCR-000366

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 03-Jul-2009

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

NCR #: ZPMC-0340

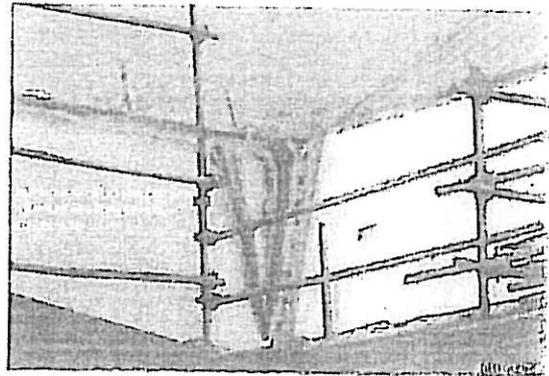
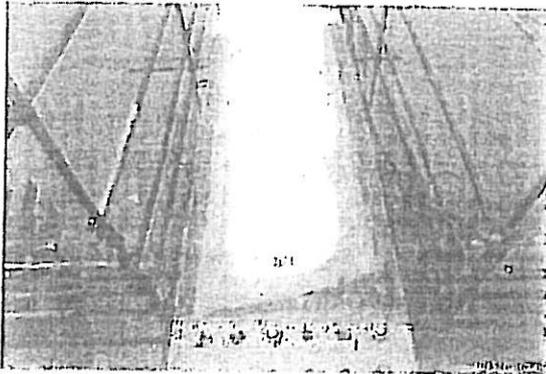
Type of problem:

Welding Concrete Other
Welding Curing Procedural Bridge No: 34-0006
Joint fit-up Coating Other Component: BK2A
Procedural Procedural Description:

Reference Description: Heat Straightening of BK2A

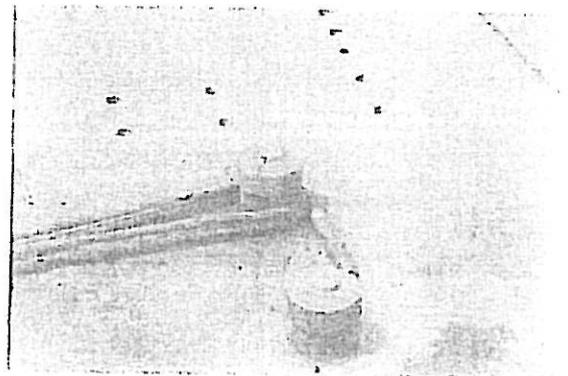
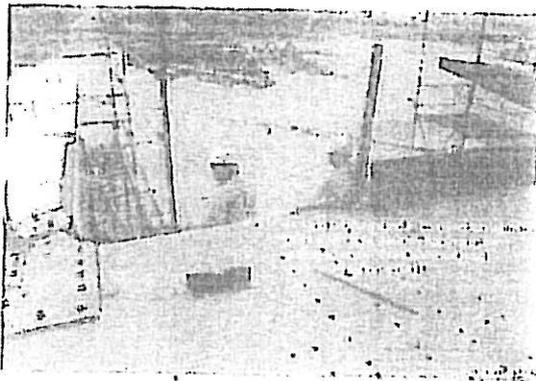
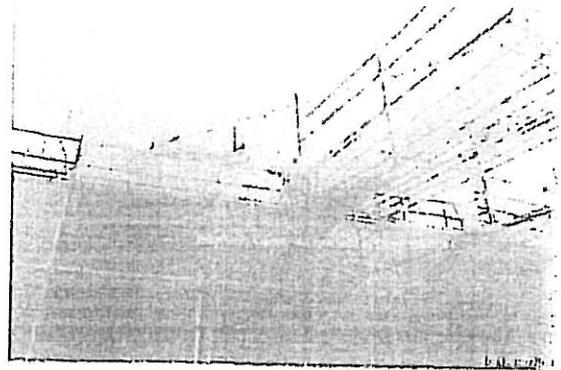
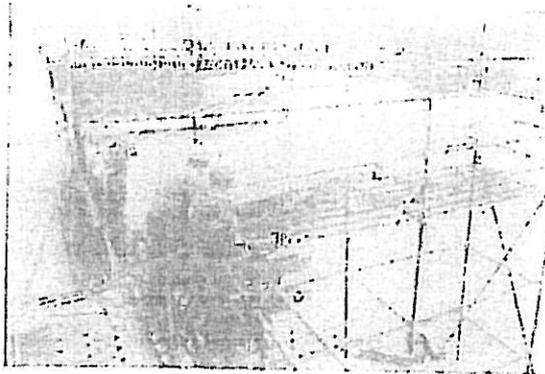
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

ZPMC's internal Heat Straightening Record I(B) 7055. The procedure illustrated the locations for the application of heat and specified the need to complete the task by only flame straightening.
Caltrans Standard Specifications, Section 55-1.04 Shipping, Handling and Storing Materials. In handling and shipping of steel work, every care shall be taken to avoid bending, scraping or overstressing the pieces.

Who discovered the problem: John Kinsey

Name of individual from Contractor notified: Kevin Chen

Time and method of notification: 1015, Verbal

Name of Caltrans Engineer notified: Scott Kennedy

Time and method of notification: 1045, Verbal

QC Inspector's Name: Wang Lu

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

Comments:

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

VF 37606, UF 8622, MF 13965
 37907, UF 8621, MF 13966



火工校正记录

Heat Straightening Record (HSR1)

报告号 Record #

HSR1(B)-6669

版本号 Revision #

0

日期 Date

2009.08.16

美国海湾大桥 San Francisco Oakland Bay Bridge

CALTRANS #04-0120F4

工程编号 JOB#: ZP06-787

装配 Assembly:

质检代表/Quality Control Representative

部装 Sub-Assembly:

Xu Jun 8-16-09

梁段 Gird:

See Sketch

质检经理/Quality Assurance Manager-Approval

塔段 Tower:

N/A

焊缝号 Weld No:

See Sketch

焊缝地图号 Weld Map No:

See Sketch

情况描述 Description of Condition

Cause 原因

Welding distortion 焊接变形

Type of Defect 缺陷类型

Welding distortion 焊接变形

Inspection Method 检查方法

Visual 目检

处置方法 Disposition

缺陷去除方法 (Defect Removal Method):

Flame Straightening by oxygen acetylene 运用氧乙炔进行校火

后续 NDE (Post-Removal NDE):

After finishing heat straightening, the weld of the heat area shall perform NDT according to the approved shop drawing 校火后, 根据图纸要求对热影响区域进行 NDT 检测。

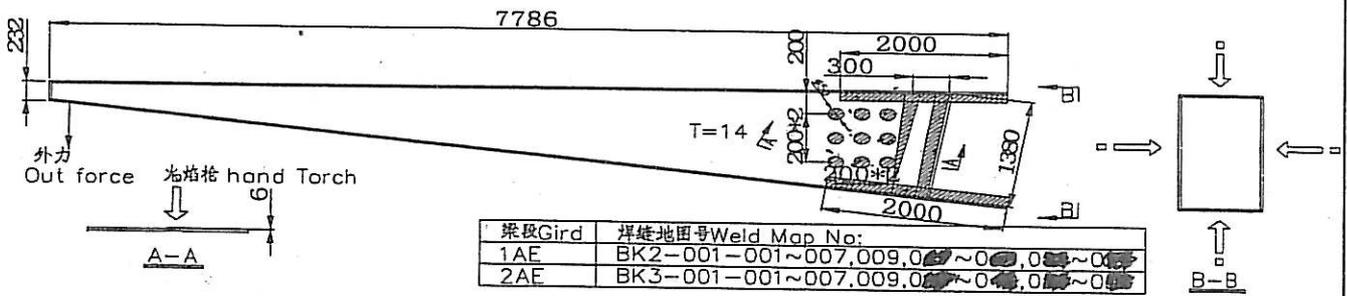
纠正措施 (Corrective Action(s)):

Control current, voltage and weld speed according to relevant WPS. If necessary anti-deformation or hold down device can be added. 依据相应的 WPS 的要求控制电流, 电压和焊接速度。如有必要, 可使用反变形设施进行校正。

实施次数 (Number of application): 1~3

最高温度 (Maximum temperature): <650°C

简图 Sketch



注: 最大变形量约 6mm, 校火宽度 50~100mm.

NOTE: the max deformation is about 6mm, heat straightening the width is 50~100mm.

校火于 8.24
H.S.D

To be signed when Closing HSR-Verify compliance and all necessary reports are ready to attach

检验员 Inspector:

Jurong Jian

签字 Signature:

[Signature]

CWI #

07120671

II 级探伤 NDE Certification:

Level II

Closing Date:

2009.9.21

质检经理 QC Manager

[Signature]

审核日期 Review Date:

08-16-09

Note: All repair work shall be performed in accordance with applicable CALTRANS approved procedures, contract specifications and AWS D1.5 2002.

#R787-QCP-1101

Approved by Lujankua 8/16/09



Visual Weld Inspection Report
 焊缝目视检查报告

B-VT 37907

周数	94
日期	2009.08.24

Caltrans Contract No. 加州合同编号
 04-0120F4

Girder/梁: Tower/塔: OBG PlatePanelSplice

Project No.: 项目
 San Francisco Oakland Bay Bridge 美
 Project No.: 名称 项目
 国海湾大桥

Quality Control Representative:
 质检代表:
 C W I:
 检验员:
 Quality Assurance Manager ~ Approval
 质量控制经理:

Jin Yong Jian 20120671

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	Reject after repair 修后接受或拒
BK2-001-001	220067	4G	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
BK2-001-002	220067	4G	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
BK2-001-003	220067	4G	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
BK2-001-004	220067	2G	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
BK2-001-005	220077	2G	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
BK2-001-006	220077	3G	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
BK2-001-007	220077	1G	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
BK2-001-009	220077	3G	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA
		1G	supercore71H(Φ1.4)	√	√	√	√	√	√	√	ACC	NA	NA

After root weld
 After CWR or WRR No.:

After cover pass
 After HSR No.: HSR1(B)-6669

Others

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



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-8834 DATE 2009.09.20 PAGE 1 OF 2 Revision No: 0

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

ITEMS NAME: CANTILEVER BOX BRACKET DRAWING NO.: BK2 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 CORNER-JOINT Dec. 28ST, 2009

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-345 22/25mm

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
BK2-001-001		70				32									ACC.	100%
BK2-001-002		70				32									ACC.	100%
BK2-001-003		70				32									ACC.	100%
BK2-001-004		70				32									ACC.	100%
BK2-001-005		70				32									ACC.	100%
BK2-001-006		70				32									ACC.	100%
BK2-001-007		70				32									ACC.	100%
BK2-001-009		70				32									ACC.	100%
BK2-001-068		70				32									ACC.	100%

EXAMINED BY 主探 Sun yin 09.09.20 REVIEWED BY 审核 Xue Hai Rong 09.09.20

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



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-8834 DATE 2009.09.20 PAGE 2 OF 2 Revision No: 0

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			
BK2-001-069		70				32								ACC.	100%	
BK2-001-053		70				32								ACC.	100%	
BK2-001-054		70				32								ACC.	100%	
BK2-001-055		70				32								ACC.	100%	
BK2-001-056		70				32								ACC.	100%	
BK2-001-048		70				32								ACC.	100%	
BK2-001-049		70				32								ACC.	100%	

AFTER B-WR6198

BLANK

EXAMINED BY 主操/17
Sun yin *Sun yin* 09.09.20

LEVEL - II SIGN / DATE

质量经理 / QCM

签字 SIGN / 日期 DATE

REVIEWED BY 审核
due hai peng 09.09.20

LEVEL - II SIGN / DATE

用户CUSTOMER

签字 SIGN / 日期 DATE



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-13968 DATE日期 2009.09.21 PAGE OF页码 1/1 Revision No: 0

PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS	
DRAWING NO. 图号: BK2 OBG PLATE PANEL SPLICE		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 , 2009
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 22/25 mm
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			
BK2-001-001				ACC.		100%MT
BK2-001-002				ACC.		100%MT
BK2-001-003				ACC.		100%MT
BK2-001-004				ACC.		100%MT
BK2-001-005				ACC.		100%MT
BK2-001-006				ACC.		100%MT
BK2-001-007				ACC.		100%MT
BK2-001-009				ACC.		100%MT
BK2-001-053				ACC.		100%MT
BK2-001-054				ACC.		100%MT
BK2-001-055				ACC.		100%MT
BK2-001-056				ACC.		100%MT
BK2-001-048				ACC.		100%MT
BK2-001-049				ACC.		100%MT

AFTER B - WR 6198

EXAMINED BY主探 Su Wei <i>Su Wei 09.09.21</i>	REVIEWED BY 审核 <i>Lu Hai 09.09.21</i>
LEVEL - II 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



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-13966 DATE日期 2009.09.21 PAGE OF页码 1/1 Revision No: 0

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

DRAWING NO. 图号: BK2 CALTRANS CONTRACT NO.: 04-0120F4
 OBG PLATE PANEL SPLICE 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. 28ST, 2009

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: WELDING 焊接件 Material & thickness 母材, 厚度: A709M-345
 CASTING 铸件 22/25 mm
 FORGING 锻造

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			
BK2-001-001				ACC.		100%MT
BK2-001-002				ACC.		100%MT
BK2-001-003				ACC.		100%MT
BK2-001-004				ACC.		100%MT
BK2-001-005				ACC.		100%MT
BK2-001-006				ACC.		100%MT
BK2-001-007				ACC.		100%MT
BK2-001-009				ACC.		100%MT

AFTER HSR1 (B) - 6669

BLANK

EXAMINED BY主探: Su Wei *Su Wei* 09.09.21 REVIEWED BY 审核: *MM Hai* 09.09.21

LEVEL - II 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

REQUEST FOR INFORMATION (RFI)

RFI No.: ABF-RFI-001814R00 Submitted By: Levine, Sabrina Pages: 6
 RFI Date: 20-July-2009 Contact Name: Rosamilia, Gene Pages Attached: 5
 Phone No. 510-808-4600

Subject: Fabrication Issue: Propose to Introduce CJP Splices in Bikepath Cantilever Beam Deck & Web	
References:	
Sub/Sup: ZPM	Sub RFI #: RFI-ZPM-000694R01
Response Required by: 27-July-2009	Response affects critical path activity? Yes

Description:

After the fabrication of bikepath cantilever beam, ZPMC finds that the flatness of deck & web will be difficult to adjust. Therefore, ZPMC proposes to introduce CJP splices in bikepath cantilever beam deck & web. See attached drawings for the proposed locations.
 For the welding sequence see the sketches below. The marked up top and web plates at BK2 & BK3 will be replaced. For the welding detail see the WD below. 100%UT and 100%MT will be performed on these welds.

Contractor Disposition:

This RFI is being submitted for:
 The Cost and Time Impact from this RFI is: Not selected

Response: **Agreed Ext. Due Date:**
Pages: 1
Pages Attached: 0

It is understood that no backing bar is used for any transverse welds. Backing bars are only acceptable to remain for the longitudinal welds.

The recommended repair method for the discontinuous longitudinal backing bar is to feather the ends of the bars to form a smooth transition. This transition shall be achieved by transitioning the backing bar termination with 50mm long concave fillet welds. The clear distance between the backing bar complete removal transition should be at least 150mm.

It is not acceptable to add new copes to the bikepath cantilever beam

The Contractor's proposed inspection of the repair is acceptable.

Administrative Action:

This response resolves this RFI.

Date: 31-July-2009	Respondent: Altamirano, Victor	Phone No.:
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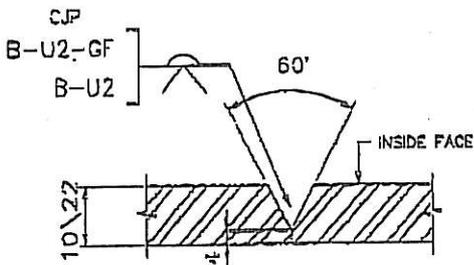
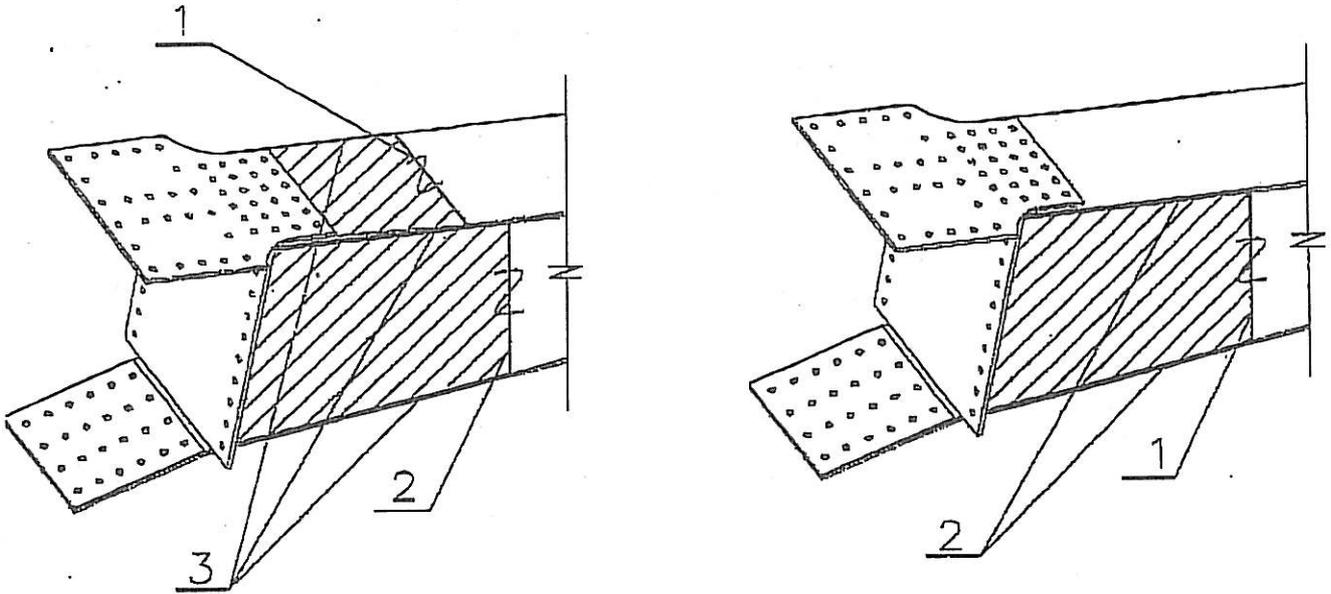
REQUEST FOR INFORMATION (RFI) ? ABF&SUB.

RFI No.: RFI-ZPM-000694R01 Submitted by: Lu Jun Page(s): 1
 RFI Date: 2009-7-18 Contact Name: Sun Weidong Phone No. +86-21-51907428

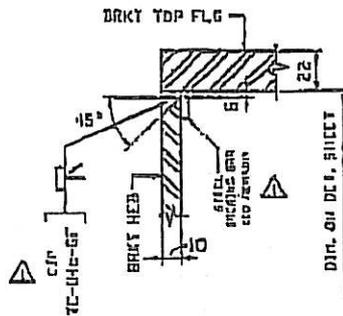
Subject: Fabrication Issue: Propose to Introduce CJP Splices in Bikepath Cantilever Beam Deck & Web	
References:	
Response required by: <u>2009-7-24</u> (date)	Response affects critical path activity? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

Description:

After the fabrication of bikepath cantilever beam, ZPMC finds that the flatness of deck & web will be difficult to adjust.
 Therefore, ZPMC proposes to introduce CJP splices in bikepath cantilever beam deck & web.
 See attached drawings for the proposed locations.
 For the welding sequence see the sketches below. The marked up top and web plates at BK2 & BK3 will be replaced.
 For the welding detail see the WD below. 100%UT and 100%MT will be performed on these welds.



WD



BKWDIS

Please review and respond.

This RFI is being submitted for:

- Material Procurement
- Contractor Convenience
- Clarification of the Contract Documents
- Engineering Review Request (ERR) for missing design information/coordination.

The Cost and Time Impact from this RFI is:

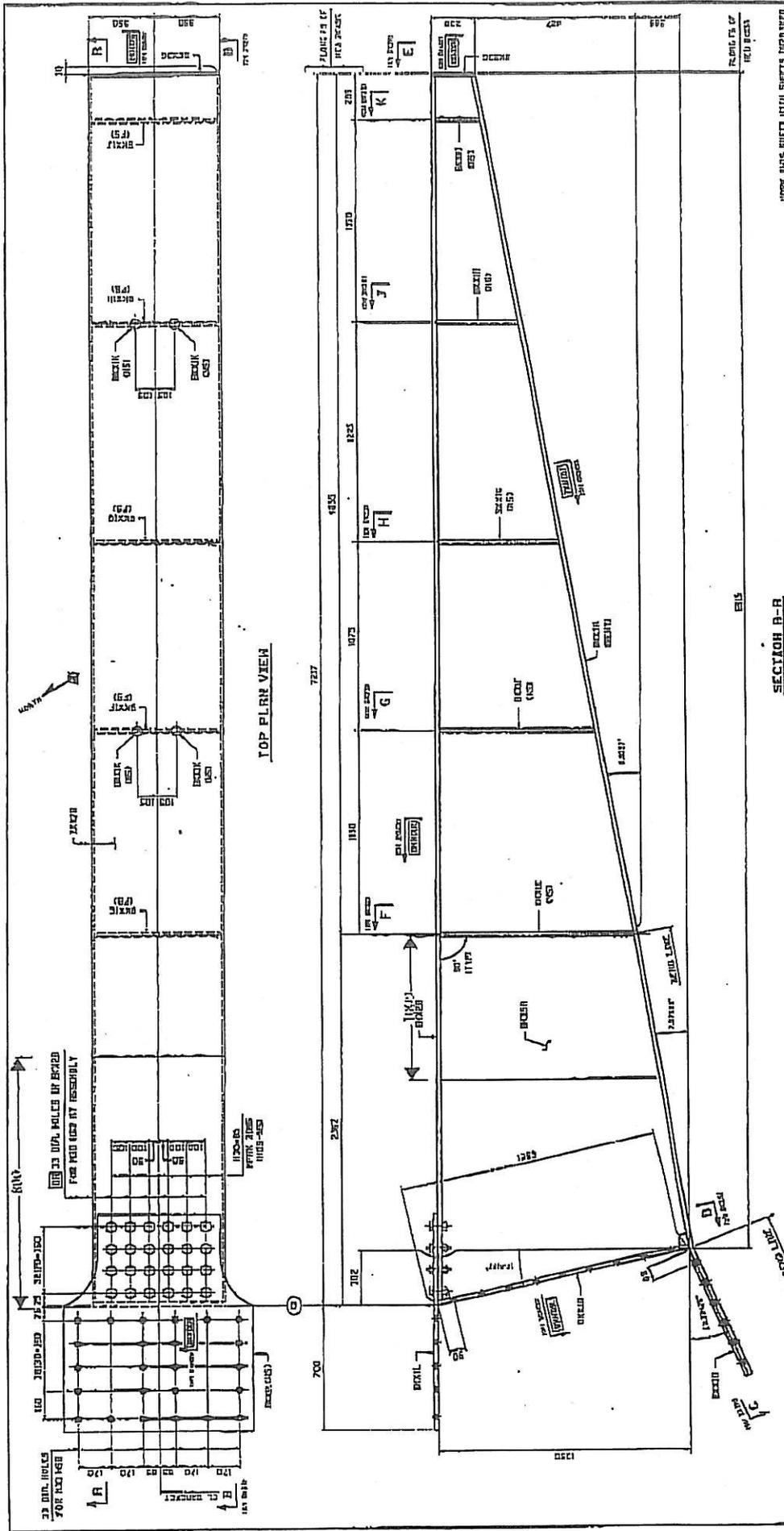
- No cost or time impacts in the performance of our Work.
- Cost and/or time impacts in the performance of our Work will result.
- We are unable to determine at this point whether there will be cost and/or time impacts.

Response:

Date:	Respondent:	Phone No.:
-------	-------------	------------

RFI Status: (sign and date)

Closed:	Revision Pending:
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ZPMC

SHANGHAI ZHONGTONG PORT & CRANE EQUIPMENT CO., LTD.
 1000000 SHANGHAI CHINA
 TEL: 86-21-51500000 FAX: 86-21-51500001
 WWW.ZPMC.COM

UNITED STATES OF AMERICA
 1000000 SHANGHAI CHINA
 TEL: 86-21-51500000 FAX: 86-21-51500001
 WWW.ZPMC.COM

SECTION B-R
 OF THE PLAN
 CRANE LEVER BOX BRACKET ASSEMBLY
 8 WITH BRIDGE IRON

NO.	DATE	REVISION	BY	CHKD BY
1	04/08			
2	04/08			
3	04/08			
4	04/08			

- NOTES
1. FOR SCHEMATIC VIEW SEE SHEETS AND DRAWING.
 2. FOR WELDING DETAILS SEE SHEET BRK1.
 3. FOR STRUCTION DETAILS SEE SHEET BRK2 & BRK3.
 4. ALL DIMENSIONS SHALL BE FULLY TOLERANCED.

APPROVED AS SHOWN

DESIGNED FOR CONNECTION

3000000 SHANGHAI CHINA
 TEL: 86-21-51500000 FAX: 86-21-51500001
 WWW.ZPMC.COM

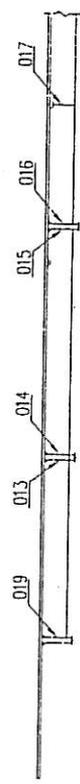
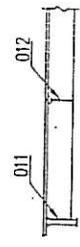
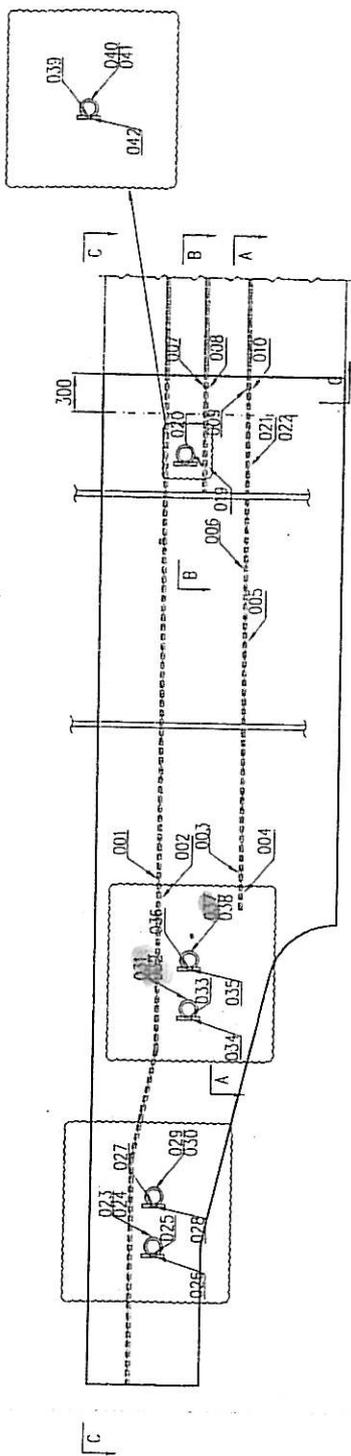
DATE: 04/08

BY: [Signature]

CHKD BY: [Signature]

2009-1-20 8:50:05 M.E.M.L.N

EAST



注意：
如有遗漏或重复标注的情况，请QC人员通知工艺进行补标或删标。

焊接编号规则：DF000 000 XXX
 件机序号
 零件生产流水号
 零件表面图纸号

ZPMC
 SHANGHAI ZHENHUA PORT MACHINERY CO., LTD.
 WELDING MAP
 SHEET NO. DP737
 DRAWN BY
 CHECKED BY
 1/1

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-000405**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 25-Dec-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0340**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: 03-Jul-2009**Description of Non-Conformance:**

Quality Assurance Representative observed heat straightening operations being performed on the Bike Path Cantilever Bracket located at Panel Point 11 of Segment 1BE. ZPMC production personnel performing the work presented, when requested, ZPMC's internal Heat Straightening Record 1(B) 7055, which described a procedure that varied from the operations observed. The variations included the locations for the application of heat, the use of jacks and the use of a block and chain/cable to apply active pressure after heating. In addition, the anchor point of the block and chain/cable was observed to be the Mechanical Electrical Penetration (MEP) at Panel Point 10.5. The MEP was observed to be leaning toward the direction of the load while the cable was tensioned and after the load was released the MEP was measured to be 2mm out of plumb. The deck area immediately adjacent to the MEP and opposite the direction of load was observed to be slightly upset. This upset is visible but within tolerance of the specifications.

Contractor's proposal to correct the problem:

The contractor will repair according to HSR1(B)-6669 and perform NDT verification.

Corrective action taken:

The contractor has verified the affected welds with NDT. Acceptable NDT documentation result is provided.

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 Mazen Wahbeh, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

Inspected By: Tsang, Eric

Quality Assurance Inspector

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Reviewed By: Wahbeh,Mazen

QA Reviewer