

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-000119**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 17-Apr-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0115**Type of problem:**

| | | | |
|---------------------|-------------------|--------------------|------------------------------|
| Welding | Concrete | Other | |
| Welding | Curing | Procedural | Bridge No: 34-0006 |
| Joint fit-up | Coating | Other | Component: DP-324-002 |
| Procedural | Procedural | Descriptor: | OBG Deck Panels |

Reference Description:**Description of Non-Conformance:**

The Contractor missed cracks found in welds and performed base metal repair without receiving prior Engineer approval. METS QA personnel discovered cracks in tack welds of closed rib to box shell plate weld that the Contractor's QC personnel did not identify. The Contractor's grinding of the cracked tacks extended into the base metal, and the Contractor proceeded to perform repairs without the Engineer's approval. This occurred in tack weld #11 of weld number DP-324-002-007 and in tack weld #'s 11 and 13 of weld number DP-324-002-008.

Applicable reference:

AWS D1.5, Section 3.7.4: "Prior approval of the Engineer shall be obtained for repairs to base metal...."

Who discovered the problem: Quality Assurance (QA) Alfredo Acuna**Name of individual from Contractor notified:** ABFJV QC Inspector Art Peterson**Time and method of notification:** 1030 hours, verbal notification**Name of Caltrans Engineer notified:** Stanley Ku**Time and method of notification:** 04-17-2008, 1000 hours, verbal notification**QC Inspector's Name:** ZPMC QC Inspectors Sun Wei and Lay Tao**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 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



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 Enterprises, a JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 22-Apr-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: 05.03.06-000096

Subject: NCR No. ZPMC-0115

Reference Description: The Contractor performed base metal repair without receiving prior Engineer approval.

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 - No Response Required.

Material Location: OBG **Lift:**

Remarks:

The Contractor's grinding of the cracked tacks extended into the base metal, and the Contractor proceeded to perform repairs without the Engineer's approval. This occurred in tack weld #11 of weld number DP-324-002-007 and in tack weld #'s 11 and 13 of weld number

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences.

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0115

cc: Rick Morrow, Gary Pursell, Brian Boal, Jason Tom, 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: 05.03.06-000096

Subject: NCR No. ZPMC-0115

Dated: 10-Sep-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000120 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC QA/QC have instructed their CWI's and NDT personnel of missed cracks and will strengthen and monitor the welding process

ZPMC QA/QC have reviewed this NCR to instruct their CWI's and NDT personnel of missed cracks and will strengthen and monitor the welding process as well as the inspection process to prevent the recurrence of cracks and their detection. As for the crack extending into the base metal, it is unclear that this is a base metal repair since it is caused by the welding process and the weld does penetrate into the base metal as shown in WMT macro-etches.

Submitted by:

Attachment(s): ABF-NPR-000120R00

Caltrans' comments:

Status: AAP

Date: 28-Sep-2008

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

Please provide documentation of the weld repairs that were performed and that the repairs were acceptable. The Department will review the Contractor's proposal to close Non-Conformance ZPMC-0115 at that time.

Submitted by: Wright, Doug

Date: 28-Sep-2008

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000096

Subject: NCR No. ZPMC-0115

Dated: 14-Jan-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000120 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC requests closure of this NCR as per the attached documentation
Please see attached.

Submitted by:

Attachment(s): Documents to close NCR; ABF-NPR-000120R01

Caltrans' comments:

Status: CLO

Date: 18-Jan-2009

The proposed resolution is acceptable. The welding report for the repair is included, and the welds in question have been accepted by VT and MT as shown in the attached documents. The Department concurs that Non-Conformance ZPMC-0115 is closed.

Submitted by: Wright, Doug

Date: 19-Jan-2009

Attachment(s):



PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE

DATE: 01/06/2009

TO: RUBY/ ABFJV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: CALTRANS NCR FOR CLOSURE

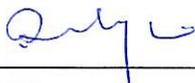
SUBMITTED FOR YOUR APPROVAL.

ENCLOSED WITH THIS TRANSMITTAL IS ONE

- (1) COPY OF LETTER OF RESPONSE WITH NO.B-330 FOR CLOSURE.
- (2) COPY OF NCR WITH NUMBER NCR-119 (ZPMC-0115)
- (3) COPY OF VT AND MT REPORTS (AFTER REPAIR AND FINAL)
- (4) COPY OF ZPMC INTERNAL NCR
- (5) COPY OF THE WELD REPAIR REPORT

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:



PLAN HOLDER

RECEIVED 03 JAN 2009
o/b

DATE



COMPANY

PHONE NO.

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



No. B-330

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2009-1-6

REGARDING: NCR-000119(ZPMC-0115)

With this letter of response, ZPMC requests closure for Caltrans NCR-000119(ZPMC-0115). According the comments from the caltrans that "please provide the documentation of the weld repair performed and the repairs were acceptable", we provide the corresponding weld repair reports and VT/MT inspection report to prove the good quality of the repair areas. Therefore we think the department can review the proposal again.

So ZPMC considers NCR-000119(ZPMC-0115) can be closed.

Please check the attached documentation for acceptance and close the NCR-000119(ZPMC-0115).

ATTACHMENT:

NCR-000119(ZPMC-0115)

The VT and MT reports(after repair and final)

ZPMC internal NCR

The weld repair report

Zhao Shuangbao

2009.1.6.

ABF QCM
14 JAN. 09



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-B-052 NCR 编号: NCR-B-052 | |
| Item: missed cracks found and repair base metal without engineer approval 名称描述: 裂纹漏检且母材擅自返修 | | Item Number: DP324-002 件号: DP324-002 | Drawing Number: DP324-002 图号: DP324-002 |
| Location: bay one 位置: U 肋生产车间 | | Date: 2008-4-17 日期: 2008-4-17 | |

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

The contractor missed cracks found in welds and performed base metal repair without receiving prior engineer approval. METS QA personnel discovered cracks in tack welds of closed rib to box shell plate weld that the contractor's QC personnel did not identify. The contractor's grinding of the cracked tacks extended into the base metal, and the contractor proceeded to perform repairs without the engineer's approval. This occurred in tack weld #11 of weld number DP-324-002-007 and in tack weld #11 and 13 of weld number.

ZPMC 在焊缝检查过程中漏检了裂纹并且在没有工程师批准的情况下对母材进行了返修。监造在顶板 U 肋的点焊检查过程中发现了裂纹,但我们的检验员并没有发现。之后对裂纹的打磨中裂纹延伸到了母材,施工队没有经过监造的批准就对该母材私自进行了焊接返修。

Work By: Sumlei Prepared by: Huikang Reviewed by QCE: Zhao Shuangbao
 施工方: 08.7.5 准备: 2008.07 质量工程师批准: 5.27

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: 加强对点焊裂纹的控制,生产中确保不产生点焊裂纹。
Enhance controlling of tack weld cracks to avoid tack welds crack.

Prepared by: Sumlei 08.7.5 Approved by QCA: Huikang
 准备 质量经理批准

Reason for Nonconformance:
不符合原因: 由于顶板单元压反变形产生的延迟裂纹,使检验员检查时未发现点焊裂纹存在。
The Anti-distortion caused delay crack, so we didn't find cracks.

预防措施: 加强点焊裂纹检查力度,确保不产生裂纹。
Enhance inspection of tack welds cracks to ensure no cracks.

Approved by/批准: Sumlei 08.7.5

Technical Justification for Use-As-Is/Repair: Attachment Non-attachment
 回用或返修的技术依据: 附件 无附件

Reviewed /批准: _____

Verification: Acceptable Unacceptable
 确认: 可接受 不可接受

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



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
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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 95607

Date: 22-Apr-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: 05.03.06-000096

Subject: NCR No. ZPMC-0115

Reference Description: The Contractor performed base metal repair without receiving prior Engineer approval.

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Material Location: OBG

Lift:

Remarks:

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Action Required and/or Action Taken:

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Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0115

cc: Rick Morrow, Gary Pursell, Brian Boal, Jason Tom, Ching Chao

File: 05.03.06

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, PRC

Report No: NCR-000119

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 17-Apr-2008

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

NCR #: ZPMC-0115

Type of problem:

Welding Concrete Other
Welding Curing Procedural Bridge No: 34-0006
Joint fit-up Coating Other Component: DP-324-002
Procedural Procedural Descriptor: OBG Deck Panels

Reference Description:

Description of Non-Conformance:

The Contractor missed cracks found in welds and performed base metal repair without receiving prior Engineer approval. METS QA personnel discovered cracks in tack welds of closed rib to box shell plate weld that the Contractor's QC personnel did not identify. The Contractor's grinding of the cracked tacks extended into the base metal, and the Contractor proceeded to perform repairs without the Engineer's approval. This occurred in tack weld #11 of weld number DP-324-002-007 and in tack weld #'s 11 and 13 of weld number DP-324-002-008.

Applicable reference:

AWS D1.5, Section 3.7.4: "Prior approval of the Engineer shall be obtained for repairs to base metal..."

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

Name of individual from Contractor notified: ABFJV QC Inspector Art Peterson

Time and method of notification: 1030 hours, verbal notification

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 04-17-2008, 1000 hours, verbal notification

QC Inspector's Name: ZPMC QC Inspectors Sun Wei and Lay Tao

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 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



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 | DP324 | 报告编号 Report No. | B-WR224 |
| 合同号 Contract No.: | 04-0120F4 | 部件名称 Items Name | Deck plate sub-assembly | NDT报告编号 Report No.of NDT | |
| 项目编号 Project No.: | ZP06-787 | | | | |

焊缝缺陷描述:

Description of welding discontinuity:

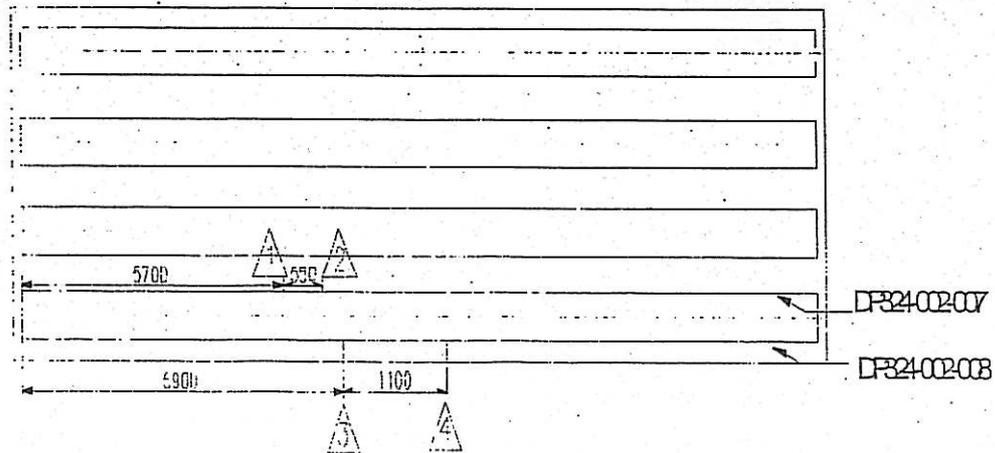
3A-5A-E 图号DP324/PL371B 的U肋顶板在点焊装配后经目检发现多处点焊裂纹。打磨清除干净后,其中4处顶板母材损伤(长度为90mm,最深处为5mm)。具体位置见下图。

There were many cracks in the tack welding after assembling, the base material (DP324/PL371B) was gouged after grinding, the length is 90mm, the depth is 5mm, the following shows the detail position.

检验员 (Inspector): Li Yanhua 日期(Date): 2008.04.17

焊缝返修位置示意图:

Draft of welding discontinuity:



产生原因:

Caused:

- 1.板单元装配前未清理干净导致定位焊出现裂纹,压制反变形受外力影响定位焊裂纹延伸至母材
1.It didn't clear completely before assembly, which leded the cracks in the tack welding, when it pressed the anti-deformation, the crack extended into the base material.

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

2008-4-18
日期(Date):2008-4-18

处理意见

Disposition :

1. 焊接前按照焊接返修工艺规程(WPS)准备焊缝接头型式;
 2. 作100%MT检查, 确保缺陷完全去除;
 3. 按照批准的焊缝返修工艺规程(WPS)进行预热和焊接;
 4. 打磨焊缝区域使其与母材平齐;
 5. 对修补区域作100%MT及检测;
 6. 按照图纸要求重新进行定位焊接。
-
1. Prepare excavation in accordance with an approved repair WPS prior to welding.
 2. Perform MT 100% of the excavation to insure removal of defects.
 3. Preheat and weld according to the relevant repair WPS.
 4. Following welding grind the weld flush with base metal.
 5. Perform MT 100% of repaired area.
 6. Tack weld according to the working drawings.

工艺: Niu Hefang
Technical engineer:

审核: Hu Gang
Approved by

日期: 08.4.18
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 | DR324 | 报告编号 Report No. | B-WR224 |
| 合同号 Contract No.: | 04-0120F4 | 部件名称 Items Name | Deck plate sub -assembly | NDT报告编号 Report No.of NDT | |
| 项目编号 Project No.: | ZP06-787 | | | | |

纠正措施:

Correction action to prevent re occurrence;

1.板单元装配前清理干净并加强焊接质量监控

1. Clear the panel before assembly and improve monitoring welding quality.

车间负责人(Foreman): Li Dong Liang

日期(Date): 2008-4-18

| | | | |
|--|--|---|-----------------|
| 参照的WPS编号 Repair WPS No. | WPS-345-SMAW-1 G(1F)-Repair WPS-345-FCAW-1 G(1F)-Repair-1 | 工艺员 technologist | Nim Baifeng |
| 返修(碳刨)前预热温度 Preheat temperature before gouging | N/A | 返修的缺陷 Description of discontinuity | 母材缺陷 |
| 焊前处理检查 Inspection before welding | Acc | 焊前预热温度 Preheat temperature before welding | 70°C |
| 最大碳刨深度 Max. depth of gouging | N/A | 碳刨总长 Total length of gouging | N/A |
| 焊工 welder | 059371 Fengchuanheng | 焊接类型 welding type | FCAW |
| 焊接电流 Current | 278 A | 焊接电压 Voltage | 29.8 V |
| | | 焊接位置 position | 1G |
| | | 焊接速度 Speed | 50.3 mm/min |
| 返修后检查 Inspection After repairing: | | | |
| 外观检查 VT result | Acc | 检验员 Inspector | Sunwei 07051331 |
| | | 日期 Date | 2008.6.18 |
| NDT复检 NDT result | ALL | 探伤员 NDT person | Bothuini |
| | | 日期 Date | 2008.4.18 |
| 见证: Witness/Review: | | | |
| 备注: Remark: | | | |



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

| REPORT NO. 报告编号 B787-MT-726 | | DATE日期 2008.04.17 | | 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: DP324 TOP PLATE U-RIB | | | 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 5362 5395 5360 | |
| 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 12/14mm | |
| WELDING PROCESS 焊接方法 | | FCAW | | TYPE OF JOINT 焊缝类型 | | T-JOINT | |
| WELD I.D. 焊缝编号 | DISCONTINUITY不连续性 | | | ACCEPT 接受 | REJECT 拒收 | REMARKS 备注 | |
| | INDICATION 指示 | TYPE 类型 | LENGTH IN mm 长度 | | | | |
| DP324-002-007 | | | | ACC. | | | |
| DP324-002-008 | | | | ACC. | | | |
| BLANK | | | | | | | |
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| EXAMINED BY 主探 <u>Bu Tian</u> | | | | REVIEWED BY 审核 <u>Zhou Dongyan</u> | | | |
| LEVEL - II SIGN 签名 / DATE日期 <u>2008.4.17</u> | | | | LEVEL-II SIGN / DATE日期 <u>2008.4.17</u> | | | |
| 质量经理 / QCM <u>Hu Gang 2008.4.23</u> | | | | 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-4246 DATE日期 2008.10.30 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: DP324 OBG U-RIB 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. 28ST, 2008

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 CASTING 铸件 FORGING 锻造 Material & thickness 母材,厚度: A709M-345T2-X-S 12/14mm

WELDING PROCESS 焊接方法: GMAW+SAW 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 | | | |
| DP324-002-001 | | | | ACC. | | 10%MT |
| DP324-002-002 | | | | ACC. | | 10%MT |
| DP324-002-003 | | | | ACC. | | 10%MT |
| DP324-002-004 | | | | ACC. | | 10%MT |
| DP324-002-005 | | | | ACC. | | 10%MT |
| DP324-002-006 | | | | ACC. | | 10%MT |
| DP324-002-007 | | | | ACC. | | 10%MT |
| DP324-002-008 | | | | ACC. | | 10%MT |

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EXAMINED BY主探: Sunji REVIEWED BY审核: Wang Mei

LEVEL - II SIGN 签名 / DATE日期: 08.10.30 LEVEL-II SIGN / DATE日期: 08.10.30

质量经理 / QCM: Hu Gang 用户CUSTOMER: _____

签字 SIGN / 日期 DATE: 2008-11-4 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-000184**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 14-Feb-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0115**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: 17-Apr-2008**Description of Non-Conformance:**

The Contractor missed cracks found in welds and performed base metal repair without receiving prior Engineer approval. METS QA personnel discovered cracks in tack welds of closed rib to box shell plate weld that the Contractor's QC personnel did not identify. The Contractor's grinding of the cracked tacks extended into the base metal, and the Contractor proceeded to perform repairs without the Engineer's approval. This occurred in tack weld #11 of weld number DP-324-002-007 and in tack weld #'s 11 and 13 of weld number DP-324-002-008.

Contractor's proposal to correct the problem:

ZPMC performed weld repairs. ZPMC also performed MT and VT inspection to ensure the weld repair is acceptable.

Corrective action taken:

ZPMC performed weld repairs. ZPMC also performed MT and VT inspection to ensure the weld repair is acceptable.

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