

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, China**Report No:** NCR-000785**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 03-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0747**Type of problem:****Welding****Concrete****Other****Welding****Curing****Procedural****Bridge No:** 34-0006**Joint fit-up****Coating****Other****Component:** Traveler Rail Welds 20TR2-004-011, -016-004**Procedural****Procedural****Description:****Reference Description:** Missed MT Indications by QC**Description of Non-Conformance:**

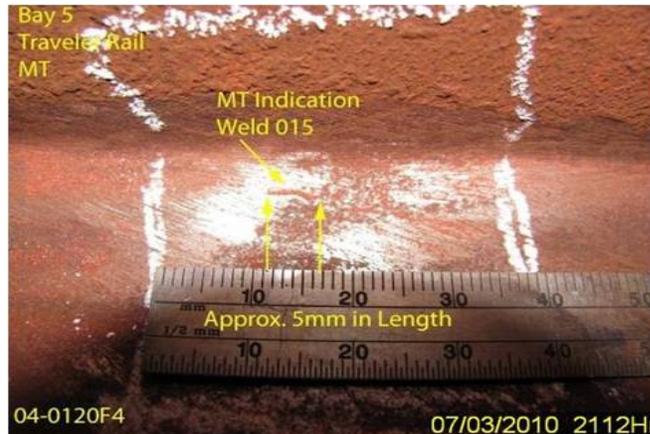
-During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder(OBG) Traveler Rails, QA discovered the following issues:

- Weld identified as: 20TR2-004-011.
- One Longitudinal Linear crack indication was missed by ZPMC measuring approximately 5mm.
- The "Y" location is approximately 220mm directly across from the end of weld 015.
- Weld identified as: 20TR2-016-004.
- One Linear crack indication was missed by ZPMC measuring approximately 20mm.
- The "Y" location is approximately 520mm from the end of weld 015.
- The welds are fillet welds joining flange to web.
- The fillet weld size measured to be 6 mm.
- Traveler Rails are located in the OBG Sub assembly Bay#5.

The Notice of Witness Inspection Number (NWIT) is 06113. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

AWS D1.5 2002 Section 6 figure 6.8 – specifies for fillet weld sizes up to 6mm the maximum discontinuity length is approximately 1.6mm.

AWS D1.5 2002 section 6.26.2 – “Welds that are subject to RT or Magnetic particle Testing (MT) in addition to visual inspection shall have no cracks...”

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

Who discovered the problem: Ken Riley

Name of individual from Contractor notified: Mr. Zhang Xiao Bin

Time and method of notification: 0030hrs, 07-03-10, Verbal

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: 7:30, 7/5/10, Email

QC Inspector's Name: Zhang Wei

Was QC Inspector aware of the problem:

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

Yes No

Contractor's proposal to correct the problem:

NA

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.

| | | |
|----------------------|--------------|-----|
| Inspected By: | Devey,Jim | SMR |
| 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: | 05-Jul-2010 |
| Dear: | Mr. Charles Kanapicki | Contract No: | 04-0120F4 04-SF-80-13.2 / 13.9 |
| Attention: | Mr. Thomas Nilsson Project/Fabrication Manager | Job Name: | SAS Superstructure |
| Subject: | NCR No. ZPMC-0747 | Document No: | 05.03.06-000742 |
| Reference Description: | Missed MT Indications by QC | | |

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:

- During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder(OBG) Traveler Rails, QA discovered the following issues:
- Weld identified as: 20TR2-004-011.
- One Longitudinal Linear crack indication was missed by ZPMC measuring approximately 5mm.
- The “Y” location is approximately 220mm directly across from the end of weld 015.
- Weld identified as: 20TR2-016-004.
- See attached NCR No. ZPMC-0747 for details.
- One Linear crack indication was missed by ZPMC measuring approximately 20mm.
- The “Y” location is approximately 520mm from the end of weld 015.
- The welds are fillet welds joining flange to web.
- The fillet weld size measured to be 6 mm.
- Traveler Rails are located in the OBG Sub assembly Bay#5.

The Notice of Witness Inspection Number (NWIT) is 06113. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.

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 7 days.

NCT

(Continued Page 2 of 2)

Transmitted by: Ching Chao

Attachments: ZPMC-0747

cc: Gary Pursell, Peter Siegenthaler, Stanley Ku, Contract Files, Ching Chao, Bill Casey

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000742

Subject: NCR No. ZPMC-0747

Dated: 22-Jul-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000729 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has issued an internal NCR and has discussed preventative measures with the ABF QCM. ZPMC has attached the acceptable MT report after repair. ZPMC requests closure of this NCR.

ZPMC has issued an internal NCR and has discussed preventative measures with the ABF QCM. ZPMC has attached the acceptable MT report after repair. ZPMC requests closure of this NCR.

Submitted by: Lawton, Steve

Attachment(s): ABF-NPR-000729R00;

Caltrans' comments:

Status: AAP

Date: 29-Jul-2010

The proposed resolution is acceptable with action pending. Please provide MT record for weld joint 20TR2-004-015.

Submitted by: Woo, Laraine

Attachment(s):

Date: 29-Jul-2010



No. B-831

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-7-21

REGARDING: NCR-000785(ZPMC-0747)

ZPMC has issued an internal NCR to address this issue and ZPMC QA personnel have talked with the head of the NDT department. Please be noticed the weld IDs in NCR were incorrect, ZPMC has written CWRs with correct information to repair these welds. The missed indications have been repaired and were tested to be acceptable. ZPMC is providing the NDT records and is requesting closure of this NCR.

ATTACHMENT:

NCR-000785(ZPMC-0747)

B787-MT-24640 R1

By [Signature]
7/21/10



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: 05-Jul-2010

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: 05.03.06-000742

Subject: NCR No. ZPMC-0747

Reference Description: Missed MT Indications by QC

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:

-During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder(OBG) Traveler Rails, QA discovered the following issues:

- Weld identified as: 20TR2-004-011.
- One Longitudinal Linear crack indication was missed by ZPMC measuring approximately 5mm.
- The "Y" location is approximately 220mm directly across from the end of weld 015.

- Weld identified as: 20TR2-016-004.

See attached NCR No. ZPMC-0747 for details.

- One Linear crack indication was missed by ZPMC measuring approximately 20mm.
- The "Y" location is approximately 520mm from the end of weld 015.
- The welds are fillet welds joining flange to web.
- The fillet weld size measured to be 6 mm.
- Traveler Rails are located in the OBG Sub assembly Bay#5.

The Notice of Witness Inspection Number (NWIT) is 06113. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.

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 7 days.

NCT

(Continued Page 2 of 2)

Transmitted by: Ching Chao

Attachments: ZPMC-0747

cc: Gary Pursell, Peter Siegenthaler, Stanley Ku, Contract Files, Ching Chao, Bill Casey

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, China**Report No:** NCR-000785**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 03-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0747**Type of problem:**Welding Concrete Other Welding Curing Procedural Bridge No: 34-0006Joint fit-up Coating Other Component: Traveler Rail Welds 20TR2-004-011, -016-004Procedural Procedural Description:**Reference Description:** Missed MT Indications by QC**Description of Non-Conformance:**

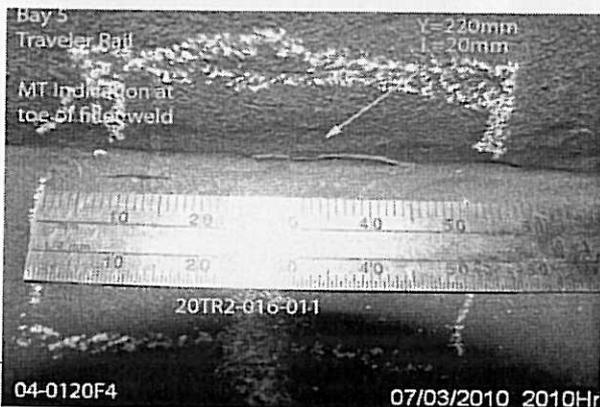
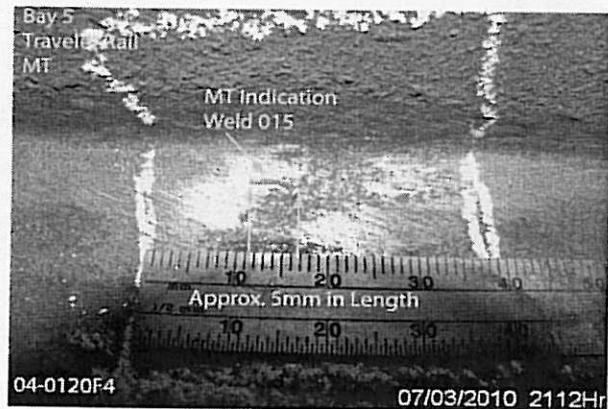
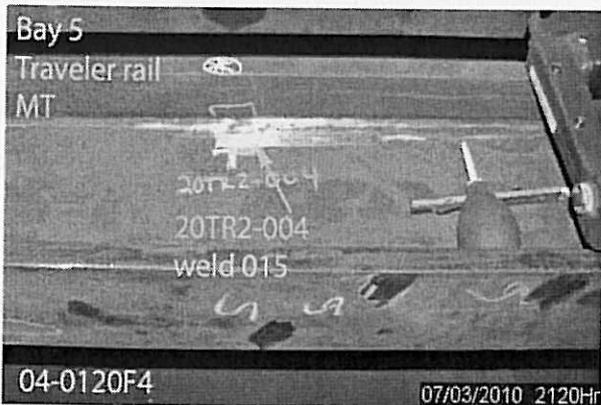
-During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder(OBG) Traveler Rails, QA discovered the following issues:

- Weld identified as: 20TR2-004-011.
- One Longitudinal Linear crack indication was missed by ZPMC measuring approximately 5mm.
- The "Y" location is approximately 220mm directly across from the end of weld 015.
- Weld identified as: 20TR2-016-004.
- One Linear crack indication was missed by ZPMC measuring approximately 20mm.
- The "Y" location is approximately 520mm from the end of weld 015.
- The welds are fillet welds joining flange to web.
- The fillet weld size measured to be 6 mm.
- Traveler Rails are located in the OBG Sub assembly Bay#5.

The Notice of Witness Inspection Number (NWIT) is 06113. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

AWS D1.5 2002 Section 6 figure 6.8 – specifies for fillet weld sizes up to 6mm the maximum discontinuity length is approximately 1.6mm.

AWS D1.5 2002 section 6.26.2 – “Welds that are subject to RT or Magnetic particle Testing (MT) in addition to visual inspection shall have no cracks...”

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

Who discovered the problem: Ken Riley

Name of individual from Contractor notified: Mr. Zhang Xiao Bin

Time and method of notification: 0030hrs, 07-03-10, Verbal

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: 7:30, 7/5/10, Email

QC Inspector's Name: Zhang Wei

Was QC Inspector aware of the problem:

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

Yes No

Contractor's proposal to correct the problem:

NA

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.

Inspected By: Devey,Jim

SMR

Reviewed By: Wahbeh,Mazen

SMR

0747

编号有证



REPORT OF MAGNETIC PARTICLE EXAMINATION
磁粉检测报告

REPORT NO. 报告编号 B787-MT-24640R1 DATE日期 2010.07.11 PAGE OF页码 1/1 Revision No: 0

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

DRAWING NO. 20TR2 CALTRANS CONTRACT NO.:
图号: TRAVELER RAIL 加州工程编号 04-0120F4

REFERENCING CODE ACCEPTANCE STANDARD PROCEDURE NO. CALIBRATION DUE DATE
参考规范编码 接受标准 程序编号 仪器校正有效期
AWS D1.5-2002 AWS D1.5-2002 ZPQC-MT-01 Dec. 28ST, 2010

EQUIPMENT 设备 MANUFACTURER 制造商 MODEL NO. 样式编号 SERIAL NO. 连续编号
MT YOKE PARKER B310S 5395 5617 5620

MAGNETIZING METHOD Continuous magnetic yoke CURRENT AC
磁化方法 磁轭式连续法 电流

PARTICLE TYPE Dry magnet powder YOKE SPACING 70~150mm
磁粉类型 干磁粉 磁轭间距

MATERIAL TO BE √ WELDING 焊接件 Material & thickness A709M-345T2-X
EXAMINED □ CASTING 铸件 母材,厚度 20mm
检测材料 □ FORGING 锻造

WELDING PROCESS SMAW TYPE OF JOINT T-JOINT
焊接方法 焊缝类型

| 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 | | | |
| 20TR2-004-013 | 1R1 | | | ACC. | | 100%MT |
| 20TR2-016-011 | 1R1 | | | ACC. | | 100%MT |

AFTER B-CWR1706 REV0/ CWR1707 REV0

BLANK

| | | | | | | |
|--|--|--|--|--|--|--|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

EXAMINED BY主探 Tan chao wei 20/0.07.11 REVIEWED BY 审核 SUN Guang chang 20/0.07.11
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

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000742

Subject: NCR No. ZPMC-0747

Dated: 25-Aug-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000729 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC submitted NDT records after repair to show that the welds with the indications have been successfully repaired.

Weld ID 20TR2-004-015 did not have any indications it was being used by the inspector to reference the location of the indications found in 20TR2-004-013 and 20TR2-016-011. ZPMC submitted NDT records after repair to show that the welds with the indications have been successfully repaired. The weld IDs referenced in the NCR have been corrected to reflect the actual weld ID. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000729R01;

Caltrans' comments:

Status: CLO
Date: 31-Aug-2010

The submitted documentation is sufficient to close the NCR.

Submitted by: Woo, Laraine

Attachment(s):

Date: 31-Aug-2010



No. B-831

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-7-21

REGARDING: NCR-000785(ZPMC-0747)

ZPMC has issued an internal NCR to address this issue and ZPMC QA personnel have talked with the head of the NDT department. Please be noticed the weld IDs in NCR were incorrect, ZPMC has written CWRs with correct information to repair these welds. The missed indications have been repaired and were tested to be acceptable. ZPMC is providing the NDT records and is requesting closure of this NCR.

ATTACHMENT:

NCR-000785(ZPMC-0747)

B787-MT-24640 R1

By [Signature]
7/21/10



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: 05-Jul-2010

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: 05.03.06-000742

Subject: NCR No. ZPMC-0747

Reference Description: Missed MT Indications by QC

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:

-During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder(OBG) Traveler Rails, QA discovered the following issues:

- Weld identified as: 20TR2-004-011.
- One Longitudinal Linear crack indication was missed by ZPMC measuring approximately 5mm.
- The "Y" location is approximately 220mm directly across from the end of weld 015.

- Weld identified as: 20TR2-016-004.

See attached NCR No. ZPMC-0747 for details.

- One Linear crack indication was missed by ZPMC measuring approximately 20mm.
- The "Y" location is approximately 520mm from the end of weld 015.
- The welds are fillet welds joining flange to web.
- The fillet weld size measured to be 6 mm.
- Traveler Rails are located in the OBG Sub assembly Bay#5.

The Notice of Witness Inspection Number (NWIT) is 06113. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.

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 7 days.

NCT

(Continued Page 2 of 2)

Transmitted by: Ching Chao

Attachments: ZPMC-0747

cc: Gary Pursell, Peter Siegenthaler, Stanley Ku, Contract Files, Ching Chao, Bill Casey

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 #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, China**Report No:** NCR-000785**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 03-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0747**Type of problem:**Welding Concrete Other Welding Curing Procedural **Bridge No:** 34-0006Joint fit-up Coating Other **Component:** Traveler Rail Welds 20TR2-004-011, -016-004Procedural Procedural **Description:****Reference Description:** Missed MT Indications by QC**Description of Non-Conformance:**

-During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder(OBG) Traveler Rails, QA discovered the following issues:

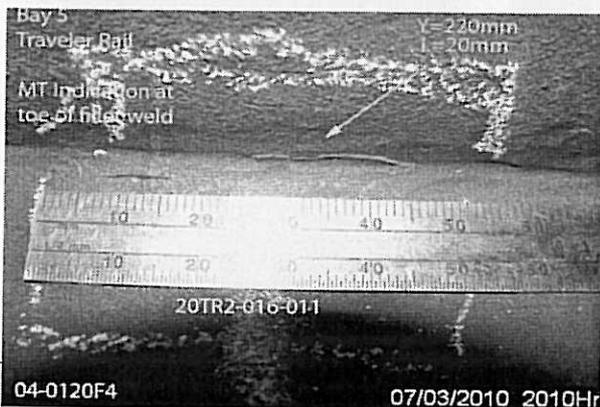
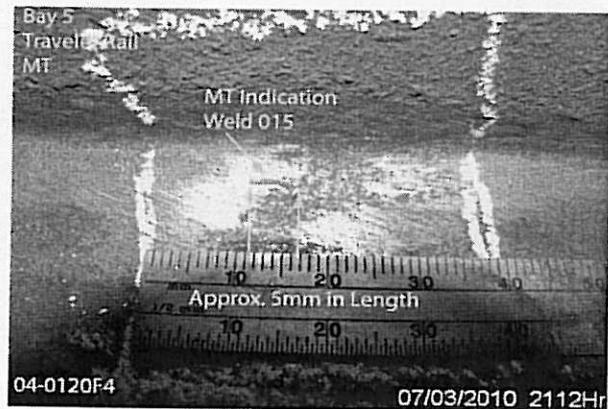
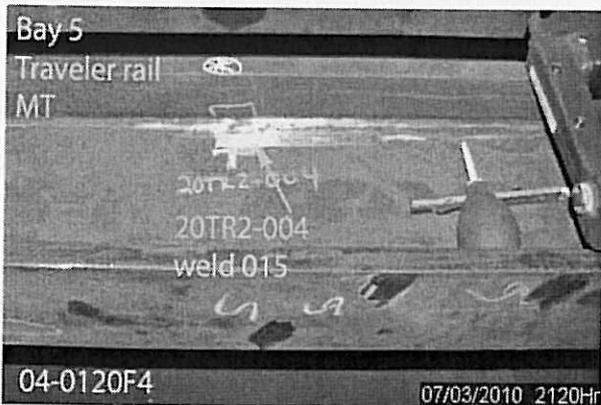
- Weld identified as: 20TR2-004-011.
- One Longitudinal Linear crack indication was missed by ZPMC measuring approximately 5mm.
- The "Y" location is approximately 220mm directly across from the end of weld 015.

- Weld identified as: 20TR2-016-004.
- One Linear crack indication was missed by ZPMC measuring approximately 20mm.
- The "Y" location is approximately 520mm from the end of weld 015.
- The welds are fillet welds joining flange to web.
- The fillet weld size measured to be 6 mm.
- Traveler Rails are located in the OBG Sub assembly Bay#5.

The Notice of Witness Inspection Number (NWIT) is 06113. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

AWS D1.5 2002 Section 6 figure 6.8 – specifies for fillet weld sizes up to 6mm the maximum discontinuity length is approximately 1.6mm.

AWS D1.5 2002 section 6.26.2 – “Welds that are subject to RT or Magnetic particle Testing (MT) in addition to visual inspection shall have no cracks...”

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

Who discovered the problem: Ken Riley

Name of individual from Contractor notified: Mr. Zhang Xiao Bin

Time and method of notification: 0030hrs, 07-03-10, Verbal

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: 7:30, 7/5/10, Email

QC Inspector's Name: Zhang Wei

Was QC Inspector aware of the problem:

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

Yes No

Contractor's proposal to correct the problem:

NA

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.

| | | |
|----------------------|-----------|-----|
| Inspected By: | Devey,Jim | SMR |
|----------------------|-----------|-----|

| | | |
|---------------------|--------------|-----|
| Reviewed By: | Wahbeh,Mazen | SMR |
|---------------------|--------------|-----|

0747

编号有证



REPORT OF MAGNETIC PARTICLE EXAMINATION
磁粉检测报告

REPORT NO. 报告编号 B787-MT-24640R1 DATE日期 2010.07.11 PAGE OF页码 1/1 Revision No: 0

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

DRAWING NO. 20TR2 CALTRANS CONTRACT NO.: 04-0120F4
图号: TRAVELER RAIL 加州工程编号

REFERENCING CODE ACCEPTANCE STANDARD PROCEDURE NO. CALIBRATION DUE DATE
参考规范编码 接受标准 程序编号 仪器校正有效期
AWS D1.5-2002 AWS D1.5-2002 ZPQC-MT-01 Dec. 28ST, 2010

EQUIPMENT 设备 MANUFACTURER 制造商 MODEL NO. 样式编号 SERIAL NO. 连续编号
MT YOKE PARKER B310S 5395 5617 5620

MAGNETIZING METHOD Continuous magnetic yoke CURRENT AC
磁化方法 磁轭式连续法 电流

PARTICLE TYPE Dry magnet powder YOKE SPACING 70~150mm
磁粉类型 干磁粉 磁轭间距

MATERIAL TO BE √ WELDING 焊接件 Material & thickness A709M-345T2-X
EXAMINED □ CASTING 铸件 母材,厚度 20mm
检测材料 □ FORGING 锻造

WELDING PROCESS SMAW TYPE OF JOINT T-JOINT
焊接方法 焊缝类型

| 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 | | | |
| 20TR2-004-013 | 1R1 | | | ACC. | | 100%MT |
| 20TR2-016-011 | 1R1 | | | ACC. | | 100%MT |

AFTER B-CWR1706 REV0/ CWR1707 REV0

BLANK

| | | | | | | |
|--|--|--|--|--|--|--|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

EXAMINED BY主探 Tan chao wei 20/0.07.11 REVIEWED BY 审核 SUN Guang chang 20/0.07.11
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

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, China**Report No:** NCS-000743**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 01-Sep-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0747**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-2010**Description of Non-Conformance:**

-During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder(OBG) Traveler Rails, QA discovered the following issues:

- Weld identified as: 20TR2-004-011.
- One Longitudinal Linear crack indication was missed by ZPMC measuring approximately 5mm.
- The "Y" location is approximately 220mm directly across from the end of weld 015.

- Weld identified as: 20TR2-016-004.
- One Linear crack indication was missed by ZPMC measuring approximately 20mm.
- The "Y" location is approximately 520mm from the end of weld 015.
- The welds are fillet welds joining flange to web.
- The fillet weld size measured to be 6 mm.
- Traveler Rails are located in the OBG Sub assembly Bay#5.

The Notice of Witness Inspection Number (NWIT) is 06113. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel.

Contractor's proposal to correct the problem:

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

Corrective action taken:

Contractor supplied post repair NDT documentation verifying weld is in conformance with Contract weld quality requirements. Contractor has also issued an internal NCR in regards to this issues in order to avoid similar issues in the future.

Did corrective action require Engineer's approval?

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Yes No

If so, name of Engineer providing approval:

Date:

Is Engineer's approval attached? Yes No

Comments:

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Jim Simonis, who represents the Office of Structural Materials for your project.

Inspected By: Simonis,Jim

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer