

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, P.R. China**Report No:** NCR-000845**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 21-Sep-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0807**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: East Tower Shaft Lift-5
Procedural	Procedural	Description: Missed MT transverse crack by QC	

Reference Description: QA found a missed MT transverse crack after ZPMC had tested and accepted the weld in East Tower Lift 5

Description of Non-Conformance:

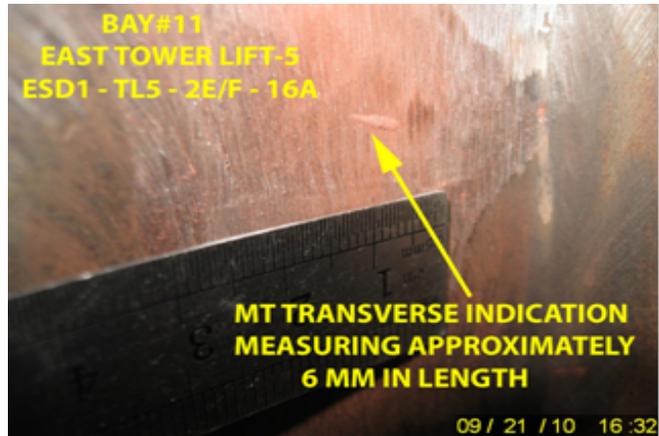
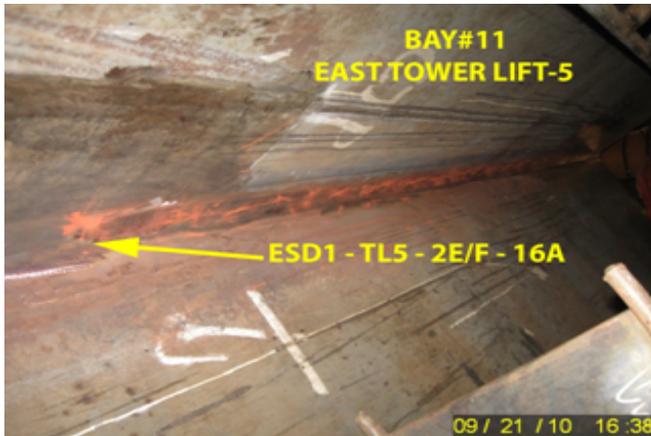
During Magnetic Particle Testing (MT) review of welds on grillage assembly of East Tower Lift-5, this Quality Assurance Inspector (QA) discovered the following issues:

- Transverse linear crack measuring approximately 6 mm in length.
- The member is identified as Grillage Plate.
- The weld is identified as ESD1-TL5-2E/F #16A.
- The weld is a Complete Joint Penetration (CJP) T-joint joining the Longitudinal grillage stiffener to Transverse grillage stiffener.
- The member is Non-Seismic Performance critical Member (SPCM).
- The member is located in Tower fabrication Bay # 11.

The Notice of Witness Inspection Number (NWIT) is 06730. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform 100% MT inspection of these welds.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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Applicable reference:

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.”

AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.

Who discovered the problem: Robin Sharma

Name of individual from Contractor notified: Wang Jiang Hua

Time and method of notification: 1700Hrs / 09/21/10 / Verbal

Name of Caltrans Engineer notified: Sean Eagen

Time and method of notification: 1400Hrs / 9/22/10/ Verbal

QC Inspector's Name: Xu Jie

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

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: Ng,Michael

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: 22-Sep-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: 05.03.06-000802

Subject: NCR No. ZPMC-0807

Reference Description: QA found a missed MT transverse crack after ZPMC had tested and accepted the weld in East Tower Lift 5

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: Tower **Lift:** 05

Remarks:

During Magnetic Particle Testing (MT) review of welds on grillage assembly of East Tower Lift-5, this Quality Assurance Inspector (QA) discovered the following issues:

- Transverse linear crack measuring approximately 6 mm in length.
- The member is identified as Grillage Plate.
- The weld is identified as ESD1-TL5-2E/F #16A.
- The weld is a Complete Joint Penetration (CJP) T-joint joining the Longitudinal grillage stiffener to Transverse grillage stiffener.
- The member is Non-Seismic Performance critical Member (SPCM).
- The member is located in Tower fabrication Bay # 11.

The Notice of Witness Inspection Number (NWT) is 06730. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform 100% MT inspection of these welds.

Action Required and/or Action Taken:

Propose a resolution for this non-conformance and provide documentation that the deficiency has been brought into compliance with the contract requirements. Propose a resolution that addresses the apparent failure of Quality Control to identify the indication. Additionally, provide documentation of the steps taken by the Quality Control Manager to prevent future occurrences.

The response for the resolution of this issue is requested within 7 days.

NCT

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Transmitted by: Sean Eagen Transportation Engineer

Attachments: ZPMC-0807

cc: Rick Morrow, Peter Siegenthaler, Brian Boal, Mark Woods, Contract Files, Ching Chao, Bill Casey

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000802

Subject: NCR No. ZPMC-0807

Dated: 23-Sep-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000789 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC repaired this indication immediately after it was found by grinding.

ZPMC repaired this indication immediately after it was found by grinding. The weld was then tested at the same time using MT and found to be free of defect by both ZPMC and the Department. Based on this immediate action and acceptable NDT results after, ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000789R00

Caltrans' comments:

Status: CLO

Date: 26-Sep-2010

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0807 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 26-Sep-2010

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCS-000792**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Sep-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0807**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: 21-Sep-2010**Description of Non-Conformance:**

During Magnetic Particle Testing (MT) review of welds on Grillage Assembly of East Tower Lift-5, this Quality Assurance Inspector (QA) discovered the following issues:

- Transverse linear crack measuring approximately 6 mm in length.
- The member is identified as Grillage Plate.
- The weld is identified as ESD1-TL5-2E/F #16A.
- The weld is a Complete Joint Penetration (CJP) T-joint joining the Longitudinal grillage stiffener to Transverse grillage stiffener.
- The member is Non-Seismic Performance critical Member (SPCM).
- The member is located in Tower fabrication Bay # 11.

The Notice of Witness Inspection Number (NWIT) is 06730. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform 100% MT inspection of these welds.

Contractor's proposal to correct the problem:

Contractor proposes to repair the indication by grinding, and provide the NDT documentation to confirm the weld is acceptable.

Corrective action taken:

Contractor repaired the indication by grinding immediately after CT tested, and provided the NDT documentation to prove the indication have been removed satisfactorily.

Did corrective action require Engineer's approval? Yes No**If so, name of Engineer providing approval:****Date:****Is Engineer's approval attached?**

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

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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 , who represents the Office of Structural Materials for your project.

Inspected By: Ng,Michael

Quality Assurance Inspector

Reviewed By: Devey,Jim

QA Reviewer