

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-000963**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 05-Jan-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0922**Type of problem:**

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

Reference Description: QA Inspector observed handling paint damages on the OBG steel barriers after they were loaded on the ship.

Description of Non-Conformance:

During random in-process visual inspection of OBG Steel Barriers, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

-Paint damages were observed on the following steel barriers: W2-SB9-041 for Panel Point (PP) 78-78.5, W5-SB2-006 for PP55-55.5, W5-SB1-042 for PP50-50.5 and W5-SB2-007 for 53-53.5.

-These barriers were loaded onto ZPMC Ship 18.

-Prior to transporting these steel barriers away from the paint shop onto the ship, the paint quality on these steel barriers were inspected and accepted.

-The observed paint damages are handling damages.

-Additional paint damages were found on some other steel barriers on this ship (which are not mentioned above). This is due to the limited access to the steel barriers.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

-Special Provisions Section 10-1.69- Clean and Paint Structural Steel, Handling, Storage, and Erection: Due care shall be exercised in handling the steel in the shop, during shipping, during erection, and during subsequent construction of the bridge. The steel shall be insulated from the binding chains by softeners approved by the Engineer. Hooks and slings used to hoist steel shall be padded. Diaphragms and similar pieces shall be spaced in such a way that no rubbing that may damage the coatings will occur during shipment. The steel shall be placed on pallets at the jobsite or by other means approved by the Engineer, so that it does not rest on the dirt, so that water pockets are not formed, and so that components do not fall or rest on each other.

-Standard Specifications Section 55-1.04- In handling and shipping of the steel work, every care shall be taken to avoid bending, scraping or overstressing the pieces. All pieces bent or otherwise injured will be rejected.

-Standard Specifications Section 5-1.08- The Engineer shall, at all times, have safe access to the work during its construction, and shall be furnished with every reasonable facility for ascertaining that the materials and the workmanship are in accordance with the requirements and intentions of these specifications, the special provisions and the plans. All work done and all materials furnished shall be subject to the Engineer's inspection.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

Who discovered the problem: James Lumley
Name of individual from Contractor notified: Don Walton
Time and method of notification: 1030 hours, 01/05/11, Verbal
Name of Caltrans Engineer notified: Aaron Prehlik
Time and method of notification: 1100 hours, 01/05/11, Verbal
QC Inspector's Name: Quin & Zhang Wei
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.

Inspected By:	Tsang, Eric	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: 06-Jan-2011

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-0922

Job Name: SAS Superstructure
Document No: 05.03.06-000920

Reference Description: QA Inspector observed handling paint damages on the OBG steel barriers after they were loaded on the ship.

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 random in-process visual inspection of OBG Steel Barriers, Caltrans Quality Assurance (QA) Inspector discovered the following issues:
 - Paint damages were observed on the following steel barriers: W2-SB9-041 for Panel Point (PP) 78-78.5, W5-SB2-006 for PP55-55.5, W5-SB1-042 for PP50-50.5 and W5-SB2-007 for 53-53.5.
 - These barriers were loaded onto ZPMC Ship 18.
 - Prior to transporting these steel barriers away from the paint shop onto the ship, the paint quality on these steel barriers were inspected and accepted.
 - The observed paint damages are handling damages.
 - Additional paint damages were found on some other steel barriers on this ship (which are not mentioned above). This is due to the limited access to the steel barriers.

Action Required and/or Action Taken:

Propose resolutions for the identified non-conformance items and document that the various deficiencies have been brought in compliance with contract requirements. Also propose a resolution that addresses the apparent failure of Quality Control to identify the non-conformance. 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.

Transmitted by: Sean Eagen Transportation Engineer
Attachments: ZPMC-0922

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: 05.03.06-000920

Subject: NCR No. ZPMC-0922

Dated: 20-Jan-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000915 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has repaired the damaged painted areas accessible at this time, acceptance of the damaged coating for W5-SB1-042 PP50-50.5 and W5-SB2-007 PP53-53.5 is documented.

ZPMC has repaired the damaged painted areas accessible at this time, acceptance of the damaged coating for W5-SB1-042 PP50-50.5 and W5-SB2-007 PP53-53.5 is documented in the attached notice of inspection. The remaining two barriers will be repaired when they are unpacked in the US. Based on this ZPMC requests that this NCR be approved, with action pending.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000915R00;

Caltrans' comments:

Status: AAP

Date: 20-Jan-2011

This proposed resolution is accepted with action pending. This NCR will be considered closed pending paint repairs on the inaccessible steel barriers including, but not limited to W5-SB2-006, and W2-SB9-041.

Submitted by: Eagen, Sean

Attachment(s):

Date: 20-Jan-2011

Shanghai Zhenhua Heavy Industries
Co., Ltd.

San Francisco-Oakland Bay Bridge

Notice of Inspection



Document No. PR 008 Rev 03

Page 1 of 1

Request Number: 5812

The attendance of ABF & CalTrans inspection personnel are requested to carry out inspection of surface preparation and or coating application.

Time: 10:00

Date: 18/01/2011

Location: The ship NO.18

Items offered for inspection

No.	Item description	Code	Total Nos.
1	Crash barrier external surface damaged areas	see the comments	2
2			
3			
4			

Operations to be Inspected	Item Number
Degreasing/Cleaning	
Surface Preparation	
Primer Coat Application	
Finish Coat Application	
DFT Check	1
Adhesion Test	
Residual Chlorides Test	
Others:	1

Comments:

Part of CT's issued NCR they are:

W5-SB1-042 P.P50-50.5

W5-SB2-007 P.P53-53.5

W5-SB2-006 P.P55-55.5

W2-SB9-041 P.P78-78.5

zpmc will conduct repair in USA.

zpmc will conduct repair in USA.

Others means final acceptance inspection after repaired the damaged coating .

Accepted x2 crash barriers as confirmed by CT
Perf Inspector ^{Wu} - 2 others to be repaired in USA.

Note

For part closure of CT's NCR/IR *(signature)*

Inspection requested by: ZPMC

(signature) 2011.1.18

Received by: *(signature)*

ABF:

Date: 18th Jan 2011

Time: 09:40

CalTrans:

(signature)

Date: Jan 18, 2011

Time: 16:25

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000920

Subject: NCR No. ZPMC-0922

Dated: 27-Jan-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000915 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has repaired two the four barriers and is providing documentation to show that the repairs were acceptable
ZPMC has repaired two the four barriers and is providing documentation to show that the repairs were acceptable. The other two barriers will be recoated in the US. Based on this ZPMC request that this NCR be approved, with action pending.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000915R01;

Caltrans' comments:

Status: CLO

Date: 27-Jan-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0922 is closed. For the remaining two barriers to be repaired in the US, the repair work will be tracked by the punchlist for Voyage 7 under item O-117.

Submitted by: Eagen, Sean

Attachment(s):

Date: 27-Jan-2011



No. B-968

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2011-01-21

REGARDING: NCR-000963(ZPMC-0922)

Two of the steel barriers which the painting surfaces were found to be damaged during handling have been stacked on boat. Due to there is no access to perform repairing, so any work related to closing this NCR will be performed at the jobsite in the USA. Based on this and with the attached painting inspection report, ZPMC is requesting closure of this NCR.

ATTACHMENT:

NCR-000963(ZPMC-0922)

PAINTING INSPECTION REPORT

Zhang Wei
1/21/2011



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: 06-Jan-2011

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: 05.03.06-000920

Subject: NCR No. ZPMC-0922

Reference Description: QA Inspector observed handling paint damages on the OBG steel barriers after they were loaded on the ship.

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- 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 random in-process visual inspection of OBG Steel Barriers, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

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Action Required and/or Action Taken:

Propose resolutions for the identified non-conformance items and document that the various deficiencies have been brought in compliance with contract requirements. Also propose a resolution that addresses the apparent failure of Quality Control to identify the non-conformance. 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.

Transmitted by: Sean Eagen Transportation Engineer

Attachments: ZPMC-0922

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

File: 05.03.06

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 DIVISION OF ENGINEERING SERVICES
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Bay Area Branch
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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, P.R. China

Report No: NCR-000963

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 05-Jan-2011

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

NCR #: ZPMC-0922

Type of problem:

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

Reference Description: QA Inspector observed handling paint damages on the OBG steel barriers after they were loaded on the ship.

Description of Non-Conformance:

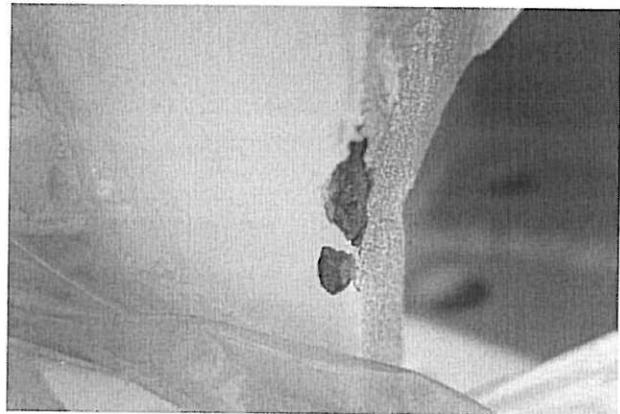
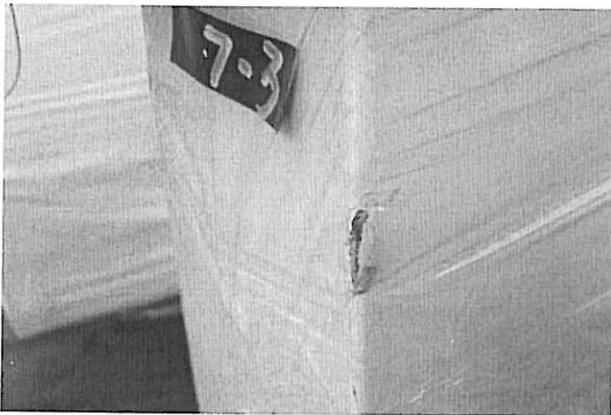
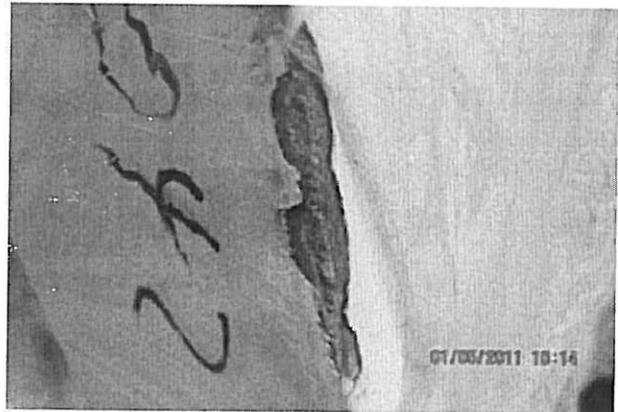
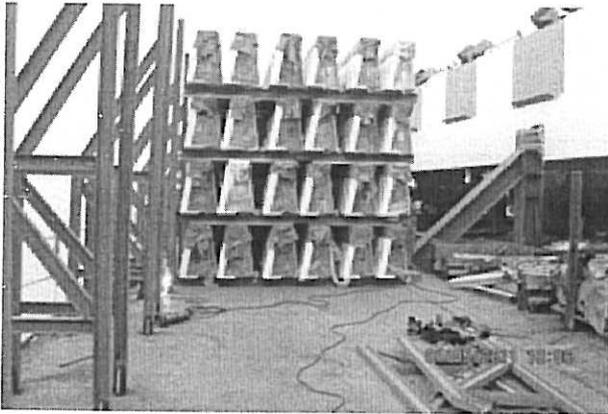
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

-Special Provisions Section 10-1.69- Clean and Paint Structural Steel, Handling, Storage, and Erection: Due care shall be exercised in handling the steel in the shop, during shipping, during erection, and during subsequent construction of the bridge. The steel shall be insulated from the binding chains by softeners approved by the Engineer. Hooks and slings used to hoist steel shall be padded. Diaphragms and similar pieces shall be spaced in such a way that no rubbing that may damage the coatings will occur during shipment. The steel shall be placed on pallets at the jobsite or by other means approved by the Engineer, so that it does not rest on the dirt, so that water pockets are not formed, and so that components do not fall or rest on each other.

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

Who discovered the problem: James Lumley
Name of individual from Contractor notified: Don Walton
Time and method of notification: 1030 hours, 01/05/11, Verbal
Name of Caltrans Engineer notified: Aaron Prchlik
Time and method of notification: 1100 hours, 01/05/11, Verbal
QC Inspector's Name: Quin & Zhang Wei
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.

Inspected By:	Tsang, Eric	SMR
Reviewed By:	Wahbeh, Mazen	SMR

Shanghai Zhenhua Heavy Industries
Co., Ltd.
San Francisco-Oakland Bay Bridge



Document No. PR 008 Rev 03
Page 1 of 1
Request Number: 5812

Notice of Inspection

The attendance of ABF & CalTrans inspection personnel are requested to carry out inspection of surface preparation and or coating application.

Time: 10:00 Date: 18/01/2011

Location: The ship NO.18

Items offered for inspection

No.	Item description	Code	Total Nos.
1	Crash barrier external surface damaged areas	see the comments	2
2			
3			
4			

Operations to be Inspected	Item Number
Degreasing/Cleaning	
Surface Preparation	
Primer Coat Application	
Finish Coat Application	
DFT Check	1
Adhesion Test	
Residual Chlorides Test	
Others:	1

Comments:

Part of CT's issued NCR they are:
W5-SB1-042 P.P50-50.5
W5-SB2-007 P.P53-53.5
W5-SB2-006 P.P55-55.5 zpmc will conduct repair in USA.
W2-SB9-041 P.P78-78.5 zpmc will conduct repair in USA.

Others means final acceptance inspection after repaired the damaged coating .

Accepted x2 crash barriers as confirmed by CT
Paint Inspector ^{works} - 2 others to be repaired in USA.

Note: For part closure of CT's NCR/IR *fill*

Inspection requested by: ZPMC *fill* 2011.1.18

Received by: *fill*

ABF: Date: 18th Jan 2011

Time: 09:40 .

CalTrans: *fill* Date: Jan 18, 2011

Time: 16:25

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, P.R. China**Report No:** NCS-000928**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 27-Jan-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0922**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: 05-Jan-2011**Description of Non-Conformance:**

During random in-process visual inspection of OBG Steel Barriers, Caltrans Quality Assurance (QA) Inspector discovered the following issues:

-Paint damages were observed on the following steel barriers: W2-SB9-041 for Panel Point (PP) 78-78.5, W5-SB2-006 for PP55-55.5, W5-SB1-042 for PP50-50.5 and W5-SB2-007 for 53-53.5.

-These barriers were loaded onto ZPMC Ship 18.

-Prior to transporting these steel barriers away from the paint shop onto the ship, the paint quality on these steel barriers were inspected and accepted.

-The observed paint damages are handling damages.

-Additional paint damages were found on some other steel barriers on this ship (which are not mentioned above). This is due to the limited access to the steel barriers.

Contractor's proposal to correct the problem:

Contractor proposes to repair the paint damaged Steel Barriers which are accessible on the ship. For those Steel Barriers not accessible for repair, Contractor will perform the paint repair in Oakland. The repair work will be tracked by the punchlist for Voyage 7 under item O-117.

Corrective action taken:

Contractor performed the paint repair of two of the four identified Steel Barriers which were accessible and submitted documentation showing the repair was acceptable. For the two inaccessible, Contractor will perform the work in Oakland, and tracked by the punchlist of Voyage 7 under item O-117.

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:**

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QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

of Structural Materials for your project.

Inspected By: Ng,Michael

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer
