

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-000160**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 16-Jul-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0150**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: 89m Mock-up
Procedural	Procedural	Descriptor: 89m Fit Lug Partial Mock-up (35mm PJP)	

Reference Description: 04-0120F4 Special Provisions**Description of Non-Conformance:**

Caltrans Quality Assurance inspector observed that ZPMC did not follow the approved partial mock-up fabrication procedure for the 35mm partial joint penetration weld. After completing Steps 1 and 2 of the procedure ZPMC began preparing to execute Step 9 of the procedure which was the welding the fit lug to stiffener. The restraining devices were in place and the area to be welded was preheated to 180°C. The inspector also noted that ZPMC did not attach weld run off tabs for the PJP welds while they were preparing the location.

Ultimately, ZPMC did not begin welding because there was not enough time to complete the welding and post welding cooling during the day shift.

Applicable reference:

Special Provisions, Section 10-1.59, "Steel Structures", subsection "Fabrication" page 313: "For each mock-up, the Contractor shall prepare a written fabrication and welding sequence. The fabrication and welding sequence shall be submitted for review by the Engineer, and approval shall be given before the mock-up is fabricated."; ABF-SUB101R2 dated June 3, 2008.

Who discovered the problem: Ken Riley, Quality Assurance Inspector**Name of individual from Contractor notified:** Steve Lawton, Quality Control Manager**Time and method of notification:** 7/16/08;1845;Verbal**Name of Caltrans Engineer notified:** Scott Kennedy**Time and method of notification:** 7/16/08;1845;Verbal**QC Inspector's Name:** Li Xiuyang, Quality Control Inspector**Was QC Inspector aware of the problem:** Yes No**Contractor's proposal to correct the problem:**

None at this time.

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

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

concerning repairs or remedial efforts please contact Joshua Ishibashi (011-86-137-471-0411), who represents the Office of Structural Materials for your project.

Inspected By: Ishibashi,Josh SMR

Reviewed By: Ishibashi,Josh SMR



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge

333 Burma Road
Oakland CA 94607
Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

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

Date: 18-Jul-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: 05.03.06-000133

Subject: NCR No. ZPMC-0150

Reference Description: Failure to follow Approved Procedure / Sequence / 89m Mock-up

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:**

Remarks:

Caltrans Quality Assurance inspector observed that ZPMC did not follow the approved partial mock-up fabrication procedure for the 35mm partial joint penetration weld. After completing Steps 1 and 2 of the procedure ZPMC began preparing to execute Step 9 of the procedure which was the welding the fit lug to stiffener. The restraining devices were in place and the area to be welded was preheated to 180°C. The inspector also noted was ZPMC did not attach weld run off tabs for the PJP welds while they were preparing the location. Ultimately, ZPMC did not begin welding because there was not enough time to complete the welding and post welding cooling during the day shift.

Action Required and/or Action Taken:

Propose a resolution that ensures that this systematic non-conformance with regard to the failure to follow the approved procedures will not continue to occur and what steps will be taken by the welding Quality Control Manager to prevent future failures to follow the submitted and approved procedures. The previous failures by ZPMC Production and Quality Control to follow the approved procedures for the 89m Mock-up resulted in the issuance of NCR ZPMC-0089,ZPMC-0097,ZPMC-0146 and ZPMC-0147.

Transmitted by: Scott Kennedy Sr. Bridge Engineer

Attachments: ZPMC-0150

cc: Rick Morrow, Gary Pursell, Mark Woods, Doug Coe

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000133

Subject: NCR No. ZPMC-0150

Dated: 25-Aug-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000101 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has been notified that the fabrication procedure shall be followed or the procedure shall be revised prior to use

ZPMC has been notified that the fabrication procedure shall be followed or the procedure shall be revised prior to use.

Submitted by: Mackey, Kim

Attachment(s): ABF-NPR-000101R00

Caltrans' comments:

Status: CLO

Date: 01-Jan-2009

Per State Letter 05.03.01-003087 dated December 8, 2008, the 77m and 89m Tower Section Mock-ups were successfully completed. The Department concurs that Non-Conformance ZPMC-0150 is closed.

As noted in ABF-CAL-LTR-000758, the Department understands that the appropriate fabrication plans will be modified in accordance with Special Provision Section 10-1.59, "Steel Structures," subsection "Working Drawings" through the FCN process.

Submitted by: Wright, Doug

Attachment(s):

Date: 02-Jan-2009

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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, PRC**Report No:** NCS-000135**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Dec-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0150**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: 16-Jul-2008**Description of Non-Conformance:**

Caltrans Quality Assurance inspector observed that ZPMC did not follow the approved partial mock-up fabrication procedure for the 35mm partial joint penetration weld. After completing Steps 1 and 2 of the procedure ZPMC began preparing to execute Step 9 of the procedure which was the welding the fit lug to stiffener. The restraining devices were in place and the area to be welded was preheated to 180°C. The inspector also noted that ZPMC did not attach weld run off tabs for the PJP welds while they were preparing the location.

Contractor's proposal to correct the problem:

ZPMC has been notified that the fabrication procedure shall be followed or the procedure shall be revised prior to use.

Corrective action taken:

Fabrication procedure has been modified and partial mock-ups have been fabricated successfully. Letter No. 05.03.01-003087 concluded the successful completion of 77m and 89m mock-ups.

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

Inspected By: Sinevod, Serge

Quality Assurance Inspector

Reviewed By: Sinevod, Serge

QA Reviewer