

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:** Changxin Island, Shanghai, P. R. China**Report No:** NCR-000475**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 08-Oct-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0448**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: OBG Segment 6AW Lifting Lugs
Procedural	Procedural	Description:	

Reference Description: The contractor did not use H4 Low-Hydrogen electrodes as per the approved WPS**Description of Non-Conformance:**

During a random visual inspection of OBG Lifting Lugs (SSD12-PP40-220, 221, 223, 225, 235, 250) located outside of Bay 14, the Caltrans Quality Assurance (QA) Inspector observed that ZPMC personnel was performing welding not in accordance with the qualified welding procedure specifications (WPS) WPS-345-SMAW-3G(3F)-FCM-Repair-1 and WPS-345-SMAW-2G(2F)-FCM-Repair-1. These WPS specify using welding electrodes with H4 low-hydrogen classification. The welding consumables being utilized were TL-508 without the H4 designator.

**Applicable reference:**

Approved WPS's: WPS-345-SMAW-3G(3F)-FCM-Repair-1 and WPS-345-SMAW-2G(2F)-FCM-Repair-1.

AWS D1.5, 2002: Section 4.5.1; Electrodes for SMAW shall conform to the requirements of the latest edition of AWS A5.1. All electrodes for SMAW shall be of the low-hydrogen classification.

Who discovered the problem: Chandra Kumar Sudalaimuthu

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Name of individual from Contractor notified: Steve Lawton

Time and method of notification: 1045 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: 1200 hours, Email

QC Inspector's Name: Chen Fu You

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: Carreon,Albert

Lead Reviewer/Task Leader

Reviewed By: Wahbeh,Mazen

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: 17-Nov-2009

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: 05.03.06-000438

Subject: NCR No. ZPMC-0448

Reference Description: The contractor did not use H4 Low-Hydrogen electrodes as per the approved WPS

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 a random visual inspection of OBG Lifting Lugs (SSD12-PP40-220, 221, 223, 225, 235, 250) located outside of Bay 14, the Caltrans Quality Assurance (QA) Inspector observed that ZPMC personnel was performing welding not in accordance with the qualified welding procedure specifications (WPS) WPS-345-SMAW-3G(3F)-FCM-Repair-1 and WPS-345-SMAW-2G(2F)-FCM-Repair-1. These WPS specify using welding electrodes with H4 low-hydrogen classification. The welding consumables being utilized were TL-508 without the H4 designator.

Action Required and/or Action Taken:

Re weld the lifting lugs using the correct consumables.

Transmitted by: Bill Howe

Attachments: ZPMC-0448

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, 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: 05.03.06-000438
Subject: NCR No. ZPMC-0448

Dated: 11-Jan-2010
Contract No.: 04-0120F4
04-SF-80-13.2 / 13.9
Job Name: SAS Superstructure
Document No.: ABF-NPR-000470 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC, when notified of this non-conformance, removed the weld layers, finished the weld with the proper H4 weld filler material and performed the NDT.

ZPMC, when notified of this non-conformance, removed the weld layers, finished the weld with the proper H4 weld filler material and performed the NDT. ABF subsequently performed a 100% NDT verification of these welds. Attached are the ABF NDT reports. ZPMC QA has notified ABF that the welder was punished. APMC/ABF request closure of this NCR.

Submitted by: Lawton, Steve
Attachment(s): ABF-NPR-000470R00;

Caltrans' comments:

Status: CLO
Date: 11-Jan-2010

The documentation received is sufficient to close this NCR.

Submitted by: Howe, Bill
Attachment(s):

Date: 11-Jan-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:** Changxin Island, Shanghai, P. R. China**Report No:** NCS-000450**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 20-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0448**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: 08-Oct-2009**Description of Non-Conformance:**

During a random visual inspection of OBG Lifting Lugs (SSD12-PP40-220, 221, 223, 225, 235, 250) located outside of Bay 14, the Caltrans Quality Assurance (QA) Inspector observed that ZPMC personnel was performing welding not in accordance with the qualified welding procedure specifications (WPS) WPS-345-SMAW-3G(3F)-FCM-Repair-1 and WPS-345-SMAW-2G(2F)-FCM-Repair-1. These WPS specify using welding electrodes with H4 low-hydrogen classification. The welding consumables being utilized were TL-508 without the H4 designator.

Contractor's proposal to correct the problem:

Remove existing weld, replace it using the appropriate electrode, then perform the required NDT.

Corrective action taken:

Contractor replaced the weld using the appropriate electrode and submitted NDT documentation verifying the weld is in conformance with Contract requirements.

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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Inspected By: Simonis, Jim

Quality Assurance Inspector

Reviewed By: Wahbeh, Mazen

QA Reviewer