



P.O. BOX 23223 Oakland, CA 94623
 Phone (510) 419-0120 / Fax (510) 839-0666

LETTER OF SUBMITTAL
KFM Skyway Project # 04-012024

RunDate 19-Jan-05
 Time 9:51 AM

Dated: 19-Jan-2005
 To: Doug Coe
 Caltrans-Skyway Project
 345 Burma Road
 Oakland CA 94607
 Phone: Fax:

SUBMITTAL No: KFMSUB-003682 Rev: 00
 Co/Job # 3643726
 Contract # 04012024
 Sub/Supplier: USI
 Sub/Supplier No:

Subject: **USI** - Documents Clearing **USI** KFM NCR #50 (METS 36)

Special Provis. (SP) REF: 083.01
 Standard Spec. (SS) REF:

RESUBMITTAL/SUPPLEMENTAL REF:

We are sending the following attached items: Attached

Via Fax

- | | | |
|---------------------------------------|---|---|
| <input type="checkbox"/> Drawing | <input checked="" type="checkbox"/> Plans | <input type="checkbox"/> Prog. Pmt |
| <input type="checkbox"/> Samples | <input type="checkbox"/> Certificates of Compliance | <input type="checkbox"/> Calculations |
| <input type="checkbox"/> Payroll | <input type="checkbox"/> Specs | <input type="checkbox"/> copy of Letter |
| <input type="checkbox"/> Change Order | <input type="checkbox"/> Schedule | <input type="checkbox"/> Invoice |

Item	Date	Copies	Description	Drawing No	Rev	Status	Pages
01	19-Jan-05	1	Letter of Transmittal #239		0	Pending	1
02	19-Jan-05	1	USI - Documents Clearing USI W M NCR #50 (METS 36)		0	Pending	4

These are transmitted as checked below:

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> For Approval | <input type="checkbox"/> For Review/comment | <input type="checkbox"/> Return For Correction |
| <input type="checkbox"/> For Your Use | <input type="checkbox"/> As Requested | <input type="checkbox"/> For Information |

Remarks:

CC:

Please review / approve by : 26-Jan-2005

Submitted By: Rich Bienek
 (KFM Staff Member - Originator of Transmittal)

Checked & Sent By: 
 Contract Admin/DCS staff

Universal Structural, Inc.

a subsidiary of

HARDER MECHANICAL CONTRACTORS, INC.

604 S.E. Victory Avenue, Vancouver, WA. 98661

P.O. Box 1030, Vancouver, WA. 98666

Phone: Vancouver (360) 695-1261 - Portland (503) 227-2419

Fax: (360) 696-3590

LETTER OF TRANSMITTAL

NO: 239

DATE: January 17, 2005

PROJECT: SFOBB Skyway Structure

JOB NO.: 23932

ATTENTION: Paul Hegarty / Rich Bienek

TO: KFM

220 Burma Road
Oakland, CA 94607

WE ARE SENDING YOU

- Shop Drawings
 ATTACHED
 Prints
 Prints
 NCR Responses - Re-Submit
 Samples

COPIES	ITEM	DESCRIPTION/ REMARKS
1 Original	NCR Response	Caltrans State Letter # 5.03.01-004703 USI Letter # 40.01 1705 KFM NCR # 40
1 Original	NCR Response	Caltrans State Letter # 5.03.01-004976 USI Letter # 50.081304 KFM NCR # 50

SKYWAY-BAY BRIDGE PROJECT
KIEWIT / FCI / MANSON, A JV

DATE: 1-19-05 CO. JOB: 164-3726

ROUTED BY: NO. 04-112024

TO: RICH BIENEK SPECIAL NOTES:

INTERNAL KFM COPIES TO:

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EXTERNAL COPIES TO:

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SCANNED: Y N FILED TO:

THESE ARE TRANSMITTED AS CHECKED BELOW

- For Approval
 For your use
 As Requested
 FOR BIDS DUE

REMARKS: Mr. Hegarty & Mr. Bienek,
Universal Structural, Inc. (USI) is in receipt of the above mentioned Caltrans State Letter's and the following attachments; with individual cover letters is USI's record of subsequent action taken.

Copy To:

Signed:

Brad Murphy
Brad Murphy/cc:SC

If enclosures are not as noted, kindly notify us at once.

UNIVERSAL STRUCTURAL, INC.



August 13, 2005

Kiewit/ FCI/ Manson, JV (KFM)
220 Burma Road
Oakland, CA 94607
Phone: (510) 419-0120
Fax: (510) 839-0666

Attention: Paul Hegarty / Rich Bienek

Reference: SFOBB Skyway Project
USI #23932 (NCR LTR# 50.081304)

Subject: Response to Caltrans State Letter# 5.03.1-004976, DTD 07/09/2004

Mr. Hegarty & Mr. Bienek,

Universal Structural, Inc. received Caltrans State Letter # 5.03.1-004976, dated July 9, 2004, Caltrans stated that:

*"The State QA inspector **performed** random ultrasonic testing (UT) of production closed rib partial joint penetration groove welds on soffit plate, pa18. The **UT** identified multiple areas with planar type discontinuities. USI personnel **excavated** one area selected by QA on 7/7/04. The crack was confirmed through the use of magnetic particle testing (MT). The crack appears to be similar to the cracks observed in previous production monitoring tests."*

Please see the attached letter in response to this NCR. Please notify Caltrans and request a letter to close this NCR.

If you have any questions or need further clarification, please contact me at your earliest possible convenience.

Sincerely,
Universal **Structural**, Inc.

A handwritten signature in black ink that reads "Brad Murphy". The signature is fluid and cursive, written over the printed name and title.

Brad Murphy
Sales Manager

cc: Brad Young - USI
me



Category III

HARDER MECHANICAL CONTRACTORS



METS NCR #36

BL PH
7/19/04

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION

SFOBB - Skyway Project
345 Burma Road
Oakland, CA 94607
Facsimile Number: (510) 622-5165



Flu Your Power
Be Energy Efficient!

July 09, 2004

KFM, a JV
220 Burma Road
Oakland, CA 94607



Contract: 04-012024
04-SF, Ala-80-13.9/14.3, 0.0/1.6
SFOBB Skyway Project
State Letter # 5.03.1-004976

Subject: USINCR No. 36: 100 mm Crack in Closed Rib PJP Groove Weld on Soffit Plate pa18

Dear Mr. Skoro,
Attention: Paul Hegarty,

This Non-Conformance Report (NCR) is issued by the **State** to KFM as a result of your supplier, USI, **for** the following **reason**:

The **State** QA inspector **performed random** ultrasonic testing (UT) of production closed rib partial joint penetration groove welds on soffit plate, pa18. The UT identified multiple areas with planar type discontinuities. USI personnel excavated one area **selected by QA** on 7/1/04. The excavation uncovered **a crack** approximately 100 mm in length. **The crack** was confirmed **through the** use of magnetic particle testing (MT). **The crack appears** to be similar to the cracks observed in previous production monitoring **tests**.

This NCR will be tracked as USI NCR No. 36. USI **was** verbally notified of **this NCR** by Caltrans' **METS** on **07/02/04**. Please review **and** address how you plan to resolve **this NCR** **and** bring your **work** back into compliance **with** our contract.

Should you have **any** questions, please contact David Wu at (510) 622-5104.

Sincerely,

David Wu
Senior Bridge Engineer

For: Mr. Douglas Coe
Resident Engineer

cc: D. Coe, I. Khinsann, V. Iyer, D. Wu, S. Abbas, B. Chew, H. El-Natur, P. Lowry, I. Kwong

file: 5.03.1, 9.07.8

July 9, 2004

KFM
220 Burma Road
Oakland, California 94623



Attn: Mr. Paul Hegarty

Re: Rib Welding Process

Dear Mr. Hegarty:

As you are well aware, recent testing performed by KFM and Caltrains has revealed cracks in the production welds on the above subject project for welding the closed ribs to the soffit and wing plates on girder 2A. USI has performed UT inspection, but only for depth of penetration. Through the monitoring test, cracks had been encountered, but the vast majority was located in the start of the test leading USI to believe they were limited to the starts only. The start areas were marked with the intention to test only these areas to make sure any cracks that were present would be repaired.

Since cracks have now been found in other areas, it is obvious that more extensive testing must be performed to assure all cracks are located and repaired. Discussions have already been conducted with Caltrains and FCI in regard to utilizing a prod procedure to locate sub surface linear indications. Jim Merriel and Pat Lowery, of Caltrains have expressed positive opinions that this process would be acceptable. USI is currently using the prod method and have had excellent results in finding the same indications that were found in previous UT examinations. This process will include periodic examination with a Magnetometer to check for excessive magnetism that would require demag to avert possible arc blow. Please find attached the procedure that was requested for this testing process. Consider this letter our request for approval of this testing method for conducting 100% MT on the Girder 1A and 2A closed rib welds.

At this time USI has suspended all welding of closed ribs. Tests are currently being conducted using 1/8" wire in place of 3/32". This has provided positive results in reducing the depth to width ratio to a favorable, nearly one to one ratio. Perimeters have been adjusted to acquire an acceptable profile with 80% plus penetration. The penetration has been achieved but profile has been more difficult to achieve. Voltage has been reduced to achieve profile placing the parameters outside the current WPS. A new PQR is currently being performed to develop the appropriate WPS for the new welding procedure.

During the final trial welding and subsequent 10 meter test, no cracking was encountered. In fact during the first week of production, no cracking was encountered. Once cracking was found in the 500 millimeter monitoring test it

seemed to be located in the start of one head of the welding machine. Because the cracking was very inconsistent, it was difficult to find the problem. Since the joint design, weld parameters and equipment had been maintained identical to the weld trial testing, we concluded that there must be an equipment malfunction. Lincoln technicians were called in on many occasions, but were unable to identify any definitive mechanical problems. A power source was discovered to be outputting inconsistent amperage that has been removed and sent to a Lincoln repair company to analyze the defect. As yet, no determination has been submitted.

Sincerely,,



Ralph Seeley
Plant Manager



DEPARTMENT OF TRANSPORTATION

SFOBB – Skyway Project
345 Burma Road
Oakland, CA 94607
Facsimile Number: (510) 622-5165



*Flex Your Power
Be Energy Efficient!*

February 14, 2005

KFM, a JV
220 Burma Road
Oakland, CA 94607

Contract: 04-012024
04-SF, Ala-80-13.9/14.3, 0.0/1.6
SFOBB Skyway Project
State Letter # 5.03.1-006880

Subject: Response to KFM-SUB-003682R00: USI Documents Clearing USI KFM NCR #50 (METS #36)

Dear Mr. Skoro,
Attention: Mr. Rich Bienek,

The Engineer has reviewed KFM-SUB-003682R00: USI Documents Clearing USI KFM NCR #50 (METS #36). The State understands the information in the submittal is no longer current. However, the State is satisfied the Contractor is satisfactorily addressing the issue of cracks in closed rib panels. USI NCR No. 36 is resolved.

Should you have any questions, please contact David Wu at (510) 622-5104 or Patrick Lowry at (858) 344-2712.

Sincerely,

<<< ORIGINAL SIGNED >>>

David Wu
Senior Bridge Engineer

For: Mr. Douglas Coe
Resident Engineer

cc: D. Coe, I. Khinsann, V. Iyer, D. Wu, S. Abbas, B. Chew, H. El-Natur, P. Lowry, I. Kwong
file: 5.03.1, 9.07.8