

May 3, 2004

Serial Letter: KFM-LET-000785

California Department of Transportation  
SFOBB – Skyway Project  
345 Burma Road  
Oakland, CA 94607

Attention: Douglas Coe, P.E.

Reference: Skyway Bridge Project (Caltrans Contract No. 04-012024)  
KFM Job No. 364/3726  
State Letter # 5.03.1-004342  
State Transmittal # 5.03.2-000501

Subject: NOPC #5 - Vertical Deviation in Segment E12E-9E Rib Tendon Duct (TIA #7)

Dear Doug:

KFM has received State Letter #4342, dated April 28, 2004, regarding NOPC #5. KFM maintains that this matter remains unresolved and has been referred to the DRB.

Your letter asserts that KFM “stated that this issue would not be pursued to the DRB” at our January 21, 2004 meeting with the DRB. Attached is State Transmittal #501, which forwarded the State’s minutes for the January 21st meeting. On page 4, the minutes show that NOPC #5 is “unresolved” and “the board received on January 6<sup>th</sup>”, but that KFM indicated the “issue would probably be absorbed into the bigger issue.” As opposed to withdrawing the DRB referral, KFM was simply pointing out that because the late hinge drawings would be a greater time impact to the project, the additional time associated with NOPC #5 could be absorbed into the hinge drawing delay. Even if the time were included with the hinge delay, the additional labor, equipment, materials, and extended casting yard damages continue to be outstanding.

KFM will provide the State with additional information on the damages in an effort to reach a final settlement on this matter, but we reserve the right to activate a hearing with the DRB if necessary.

Sincerely,  
**KIEWIT/FCI/MANSON, a JV**

A.T. (Tom) Skoro  
Project Director

RECEIVED  
022030 MAY -5 2004

Attachments

cc: file



**DEPARTMENT OF TRANSPORTATION – District 4 Toll Bridge**  
 SFOBB – Skyway Project  
 345 Burma Road  
 Oakland, CA 94607  
 Telephone (510) 622-5100 Facsimile (510) 622-5165

**LETTER OF TRANSMITTAL**

To: KFM, a JV  
 P.O. Box 23223

Date: 22-Apr-2004

Oakland CA 94623

Contract No: 04-012024  
 04-SF, Ala-80-13.9/14.3,0.0/1.6

Attn: A.T. (Tom) Skoro

Job Name: Skyway Project - SFOBB  
 Transmittal No.: 5.03.2-000501

Subject: State Letter 5.23.1-000008 - DRB Meeting Minutes

**Enclosed please find the following items:**

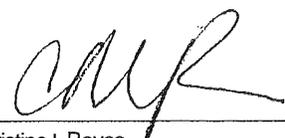
- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Shop Drawings            | <input type="checkbox"/> Change Order            | <input type="checkbox"/> Submittal(s)               |
| <input type="checkbox"/> WSWD Report(s)           | <input type="checkbox"/> Plans                   | <input type="checkbox"/> Other                      |
| <input type="checkbox"/> Daily Extra Work Reports | <input type="checkbox"/> Progress Payment        | <input type="checkbox"/> Certified Payroll          |
| <input type="checkbox"/> RFI                      | <input checked="" type="checkbox"/> State Letter | <input type="checkbox"/> Certificates of Compliance |

Copies	Item	Date	Sheets	Description
1		22-Apr-2004		STL 5.23.1-000008

**These Are Transmitted As Checked Below:**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> For Approval or Action  | <input type="checkbox"/> Approved as submitted    | <input type="checkbox"/> Resubmit ___ Copies for approval   |
| <input checked="" type="checkbox"/> For Your Use | <input type="checkbox"/> Approved as Noted        | <input type="checkbox"/> Submit ___ Copies for distribution |
| <input type="checkbox"/> As Requested            | <input type="checkbox"/> Returned for Corrections | <input type="checkbox"/> Return ___ Corrected prints        |
| <input type="checkbox"/> For Review & Comment    | <input type="checkbox"/> Other                    | <input type="checkbox"/> Sign and Return                    |

**Remarks:**

Signed   
 Christine L Reyes  
 Office Tech

Copy To:  
 File: 5.03.2

<b>SKYWAY-BAY BRIDGE PROJECT</b>	
KIEWIT / FCI / MANSON, A JV	
DATE: 4/23/04	CO/JOB 364-3726
ROUTED BY: cjh	NO 04-012024
TO: Tom Skoro	SPECIAL NOTES: na
INTERNAL KFM COPIES TO:	
ca	
EXTERNAL COPIES TO:	
na	
SCANNED: (Y) N	FILED TO: G-TRANS-501

**DEPARTMENT OF TRANSPORTATION**

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



*Flex Your Power  
Be Energy Efficient!*

**April 22, 2004**

Warren M. Bullock, Construction Consultant  
1122 Ferguson Road  
Sebastopol, CA 95472

Contract: 04-012024  
04-SF, Ala-80-13.9/14.3, 0.0/1.6  
SFOBB Skyway Project  
*State Letter # 5.23.1-000008*

*Subject: DRB Meeting Minutes*

Dear Mr. Bullock,

For your review and comment, please find attached the January 21, 2004 DRB meeting minutes.

Sincerely,

A handwritten signature in black ink, appearing to read "Douglas Coe".

Douglas Coe  
Resident Engineer

cc: Skoro, Graebe, Lewis  
file: 5.23.1

# DRB Meeting Minutes

Date: January 21, 2004  
Location: KFM Office  
220 Burma Road, Oakland

Meeting: 6  
Contract: 04-012024  
SFOBB-Skyway

## In Attendance:

<u>Board Members</u>	<u>Contractor</u>	<u>Caltrans</u>
Warren Bullock	Kent Boden	Pete Siegenthaler
Frederick Graebe	John Hazard	Douglas Coe
Richard Lewis		Bill Tanner

## Purpose of Meeting

The purpose of the meeting was to brief the Board members on the construction activities that took place in the past four months, and what work has been scheduled for the next four months. Major issues facing the project and their planned course for resolution were also discussed.

## Discussion

*NOTE: The following information was generated from hand written notes taken during the meeting. All information presented is paraphrased, and is not a word for word account of the conversations which occurred during the meeting.*

### Meeting Called to Order

**Warren Bullock**

**10:08 am**

Reviewed the meeting minutes from November 5, 2003. Minutes were adopted.

### Status of Work - Contractor

**Kent Boden**

KFM gave a presentation on the construction that had been performed to date. The presentation focused on work done in the following areas:

#### **Project Status**

- ◆ Total working days as of January 21, 2003, are 482 of 1121.
- ◆ Project completion date is under evaluation.

- ◆ Salaried and craft man-hours to date are 1,006,000 of a projected 3,374,000 man-hours for the project, which is approximately 1/3. These hours do not include subcontractor hours.
- ◆ Total employees on site 364.
- ◆ Total employees in Stockton 146.

#### **Footings**

- ◆ 16 of 28 footing boxes have been delivered to date and 15 of 28 footing boxes are installed
- ◆ The barge has left for Corpus Ghristi for footing boxes 14W, 13W, 5W and 6W. They are scheduled for delivery next week.

#### **Pile Fabrication**

- ◆ 84 of 160 piles have been fabricated to date.

#### **Piles**

- ◆ 74 of 160 piles have been driven to date
- ◆ Pile clean out is going well with minor adjustments to teeth and whiskers to enhance performance.

#### **Pile Heads Welded**

- ◆ 44 of 160 pile head connections have been completed to date.

#### **Pile Cages**

- ◆ 20 of the 160 pile cages have been set to-date.

#### **Concrete**

- ◆ 30,000 of the 146,000 CM have been cast to date.

#### **Column Cages**

- ◆ 7 of the 28 column cages have been completed.

#### **Tower Cranes**

- ◆ 7 of the 14 cranes are on the water.

#### **Cofferdams**

- ◆ 2 cofferdams rotated from EB to WB.
- ◆ The pier 8 cofferdam flooded on New Years day when the power CONEX was knocked out and the pumps failed.

#### **Segment Erection**

- ◆ The erection of segments is scheduled to begin the summer of 2004.

#### **Mission Control**

- ◆ 45,000 man hours billed to date.
- ◆ 15,000 completed shop drawings.
- ◆ The staff has been increased by two.

#### **Piers**

- ◆ 16E - Install pier table bottom deck and stem
- ◆ 15E - Install pier table falsework
- ◆ 16W - Dewater cell to top of box and cleanup
- ◆ 15W - Structural Ex & Bedding

- ◆ 14E - Install access casing joint seal
- ◆ 13E - Strip pier lift no. 2 forms
- ◆ 12E - Prep and install access casing interior forms
- ◆ 11E - Place pier lift no. 1 concrete
- ◆ 10E - Place footing top mat restee
- ◆ 09E - Install column restee
- ◆ 08E - Welding pile heads
- ◆ 07E - Cutting slots for pile head connection plates
- ◆ 06E - Cutting slots for pile head connection plates
- ◆ 05E - Initial pile cleanout
- ◆ 04E - Drive/Splice/Drive Group A Piles
- ◆ 03E - Drive/Splice/Drive Group A Piles

### **Precast**

- ◆ 89 of the 452 have been cast
- ◆ Yard storage maximum is 180. Big concern that full storage will be reached before segment erection begins. Water and trailer park restrain additional storage.
- ◆ Yard is currently operating on a 6 day work week to make cycle
- ◆ 1<sup>st</sup> hinge drawings close to complete
- ◆ No curing issues, because concrete strength is being met, resulting in a low creep coefficient and a reduction in the segment age restriction.
- ◆ Barge slip is completed and permitted...A major milestone

### **Contract Drawing Status**

- ◆ Total contract sheets to date 1133
- ◆ 200 sheets added
- ◆ 598 sheets modified
- ◆ 393 sheets ok

### **Time Impact Analysis**

- ◆ TIA #10 - Late pier table drawings - 14 work days
- ◆ TIA #11 - Late pier table drawings - 20 work days
- ◆ TIA #12 - Late segment drawings - 11 work days
- ◆ TIA #13 - Late hinge drawings - 168 work days
- ◆ TIA #14 - Late bearing drawings - 164 work days
- ◆ These delays are concurrent not additive
- ◆ The State and KFM met last week to brainstorm about alternatives to recover the schedule

### **Status of Work - Caltrans**

**Doug Coe**

The Skyway project is 38% complete. 48% of the project time has elapsed. Currently, the project is 168 Working Days beyond the accepted contract completion date.

Items of concern are the working drawing preparation and casting of the segment hinges, the fabrication, testing, and installation of the circular bearings, the fabrication and delivery of the hinge pipe beams, the preparation and approval of the pier table and pier table panel working drawings, erection of the pier tables, and the effects of the above to the storage capacity of the precast segments in the Stockton precast yard.

The State and KFM have met to discuss the 168 day impact of the late drawings and possible mitigation. The problem is that we don't know the full extent of the impacts until the drawings are done. The October schedule showed a negative 36 days, which was due to the late hinge drawings. The November schedule showed a negative 164 days. The reason for the additional slip was that the duration for the Hinge construction was increased from 25 to 40 days, the Polyester overlay was pushed into winter, which meant no work from November to March, and the segment erect at pier 16 is delayed four months, waiting on the construction of the Hinge. The November schedule has not been accepted because of the increase in duration for the Hinge beams that to date have not been built, and as a result, responsibility has not been assigned for the TIA's.

The Contractor is working on "what if" scenarios such as, de-mob and moving the sleds out of sequence, which would free up storage by continuing segment erection at a different location, and deleting the Polyester overlay. If the sled is moved and the overlay calendar is deleted then it is possible that some of the 144 days can be mitigated.

Incomplete plans continue to cause problems that are resolved and progress is being made. Two days a week staff from PB Power review structure, mechanical and electrical plans to anticipate future problems. The key is that both KFM and the State are focused on solving problems.

Despite all the drawing problems, fieldwork is going well.

- ◆ **As** of Tuesday, 85 segments have been poured.
- ◆ The footing boxes for the EB bridge are done and piling will be completed at the end of next week
- ◆ Pier table 14 falsework has begun

#### Review of CCO, PCO, and NOPC's

- ◆ CCO No. 107 for 49 days resolves TIA's 3-6.
- ◆ NOPC No. 1 was ruled in favor of the contractor. KFM wants the quantum to go before the DRB. The goal of the State is to conclude this issue before the hearing. The hearing is scheduled for March 31 and April 1. The quantum is comprised of insurance for the additional 6 months the cantilever is not pinned (7 million). There is form re-work, casting yard bed adjustments, an 8 month shut down to the bed to reduce storage yard needs, and the slow down of bed no. 1. **An** offer of 500k has been made by the State.
- ◆ NOPC No. 2 is resolved
- ◆ NOPC No. 3 continues to evolve. The State wishes to resolve.
- ◆ NOPC No. 4 was ruled in favor of the State. The time clock for requesting clarification from the DRB starts when the official signed copy from the DRB is received by KFM and the State.
- ◆ NOPC No. 5 is unresolved. It deals with a blocked duct. The board received on January 6<sup>th</sup> Kent B. indicated that this issue would probably be absorbed into the bigger issue.
- ◆ NOPC No. 6 Doug met with Jeff Ellis and Lee Zinc to resolve. The State has taken responsibility for minor interference. It is cheaper to fix in the field under CCO No. 73.

**Date for the Next Meeting**

- ◆ May 17<sup>th</sup> - 10 am - Pier 7
- ◆ August 17 - 10 am - Pier 7

**Meeting Adjourned**

**12:28pm**

- ◆ Meeting adjourned by Warren Bullock. Lunch was served.

**Jobsite Tour**

- ◆ The Board Members, including Kent Boden from KFM and Doug Coe from Caltrans toured the job site.

# DRB Project Update



January 21, 2004

## San Francisco-Oakland Bay Bridge East Span – Skyway Structures

(Bridge Nos. 34-0006L/R)

Contract 04-012024

### Contract Data:

Contract Award Date	January 17, 2002
Contract Approval Date	January 22, 2002
First Working Day	February 6, 2002
Contract Specified Duration	1000 Working Days
Original Computed Completion Date	February 14, 2006
Contractor Bid Amount	\$1,043,541,000
Current Completion Date	June 5, 2006
Contract Change Order Days (CCO 107)	49 Days (Pending)
Potential Time Impacts (TIA's 10-15)	168 Working Days
Estimated Completion Date (with 14 anticipated weather days):	May 10, 2007

### Progress:

As of the week ending January 20, 2004, 48% of the contract time has elapsed and 38% of the work has been completed. The progress is considered satisfactory. The status of the project via the CPM schedule is that the current job completion date is forecast 168 Working Days beyond the accepted contract completion date. Items of concern are the working drawing preparation and casting of the segment hinges, the fabrication, testing, and installation of the circular bearings, the fabrication and delivery of the hinge pipe beams, the preparation and approval of the pier table and pier table panel working drawings, erection of the pier tables, and the effects of the above to the storage capacity of the precast segments in the Stockton precast yard.

### Concerns:

The project team has initiated meetings to address the above schedule concerns to identify alternative mitigation measures for the schedule activities impacting the critical path. It is essential for this process to continue to minimize impacts to the contract completion date.

The finish dates for the segment hinge working drawing preparation and approval activities have been impacted due to the re-design of the hinges. This is impacting the procurement of the reinforcing steel, duct, and embed material causing the hinges to be cast later than planned

Re-design of the circular bearings is impacting the fabrication of the bearings and their installation in the segment hinges, which is also causing the hinges to be erected later than planned.

KFM has recently received updated hinge pipe beam fabrication information from their supplier and are currently evaluating the data for its impact to the project schedule. This may also impact the erection of the segment hinges.

KFM's construction engineer's, Parsons Transportation Group (PTG) preparation of the composite working drawings for the pier tables and pier table panels to support construction is being impacted due to conflicts with the contract plans. This causes the pier tables to be constructed later than planned, which directly impacts the erection of the precast segments.

Based on the above items, the Precast Yard segment storage capacity is being exceeded due to segments scheduled to be erected later than planned. When stored segments are not removed from the yard for erection, additional segments cannot be cast. This is causing the casting beds to be shut down for up to 5 months.

## **Work Status.**

All footing boxes have been placed on the eastbound bridge. The piles for the last remaining eastbound box, E3E, are currently being driven and should be completed by next week. The first two cofferdams on the eastbound bridge, E16W and E15W, have been relocated to the westbound bridge. The first footing box on the westbound bridge, E16W, has been placed and the cofferdam will be de-watered this week. The next shipment of footing boxes from Texas for piers E14W, E13W, E6W, and E5W have shipped and are scheduled to arrive on-site January 28, 2004.

Some pile driving may occur out-of-sequence on the westbound bridge. Footing boxes at piers E6W and E5W will be placed on their falsework and if the D.B. General becomes available during the westbound foundation work, it will begin pile driving at those locations.

Pier table falsework has begun at piers E16E, and E15E, and the pier table bottom slab and starter wall web forms have been constructed at E16E. The pier table reinforcing steel lay-down bed is complete and is located adjacent to the Oakland Touchdown area.

85 segments have been poured in the Stockton Precast Yard to date utilizing casting beds 1, 2, and 3. Also, 191 lightweight precast panels have now been cast. Construction of bed 4, the hinge production bed, is now complete, although due to hinge redesign efforts, the first hinge segment is not scheduled to be cast until mid-May 2004.

## **NOPC Status:**

### **NOPC #1 Segment Age Restrictions for exterior closures in Frame 3.**

Description: 18 month segment age restriction in plans and specs; KFM claims some ambiguity requiring re-sequencing segment fabrication. The resultant added costs for the exterior span closure of Frame 3 are claimed.

Submitted: June 4, 2002  
Response: June 27, 2002  
Hearing Date: September 10<sup>th</sup>, 2002  
Status: Board ruled in favor of KFM in a split decision (2 to 1).  
The State accepted the Boards decision on Nov. 26<sup>th</sup>, 2002.  
Costs have yet to be verified by CT.

### **NOPC #2 Coating of Hinge Pipe Beams.**

Description: KFM claims that the Hinge Pipe Beam is not "exposed" and therefore does not require painting.

Submitted: August 30, 2002  
Response: September 11, 2002  
Hearing Date: Not scheduled at this time.  
Status: Resolved.

### **NOPC #3 Integrated Shop Drawing Details by Parsons.**

Description: Claims that additional work and time is required to revise and re-detail the integrated segment shop drawings due to numerous incomplete details regarding the placement of reinforcing steel and post-tensioning tendons and hardware.

Submitted: September 20, 2002  
Response: September 27, 2002  
Hearing Date: Not scheduled at this time.  
Status: Requested further details prior to analyzing claim.  
Additional information provided – Position under review.

**NOPC #4 RT Testing of the Hinge Pipe Beams**

Description: KFM claims that 100% RT testing of the CJP butt welds in the hinge-pipe beams is not required by the Contract documents.

Submitted: July 24, 2003  
Response: July 25, 2003 (RT required), referred to the DRB October 2, 2003  
Hearing Date: Scheduled to be heard December 4, 2003  
Status: Board ruled in favor of CT

**NOPC #5 Post Tensioning Duct Blockage in Segment E12E-9E**

Description: KFM claims that the Engineer directed vertical profile change in a rib tendon, to avoid reinforcing steel congestion, resulted in a tight radius that prevented KFM from pushing strand through the duct following segment casting.

Submitted: December 03, 2003  
Response: December 23, 2003  
Hearing Date: Pending  
Status: Pending

**NOPC #6 Responsibility for Composite Drawing Interference**

Description: KFM claims that Special Provision Section 10-1.28, sub-section *Furnish Precast Concrete Segment*, part M, does not include work involved in conflict identification, resolution, and implementation of mitigation measures for conflicts found in the Contract Plans.

Submitted: December 11, 2003  
Response: January 20, 2004 (CT/KFM Meeting held December 17, 2003)  
Hearing Date: N/A  
Status: Resolved