Form C-104
Rev. 02/2009

VALUE ENGINEERING CHANGE PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

☒ Conceptual Proposal ☐ Final Proposal

Date 6/10/11

Contract ID 100618-601

Job No. J6U1028B

County St. Charles 364/94

Original Bid Cost $24,488,236.57

Contractor Fred Weber, Inc.

By Brett Lennon

Designed By MODOT

Phone 314-316-6154

VECP# 11-38 (to be completed by C.O.)

VECP ☒ or PDVECP ☐

1. **Description of existing requirements and proposed change(s). Advantages/Disadvantages**
   Current staging plans call for the existing right turn lane on east bound 94 at Kisker Rd. be shored to allow the new South Outer Road lanes to be constructed. Without shoring the turn lane we have enough room to pour both lanes from 504+75 to 510+00 and only one lane from station 510+00 to 512+45. Once these lanes are poured we can put a temporary connection from existing 94 to these lanes at approx. 506+00 and a temporary connection at the east end to Kisker Rd. This would then allow us to use these lanes as a temporary turn lane to southbound Kisker allowing the existing turn lane to be closed and excavated.See attached sketch of this staging configuration.

2. **Estimate of reduction in construction costs.** $0.00

3. **Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.**
   None

4. **Anticipated date for submittal of detailed change(s) of items required by Section 104.6 of the Specifications.**

   6/10/11
   (date)

5. **Deadline for issuing a change order to obtain maximum cost reduction, noting the effect of contract completion time or delivery schedule.**

   _____ (date) _____ (effect)

6. **Dates of any previous or concurrent submission of the same proposal.**

   N/A
   (date and/or dates)

Additional Comments:
This would remain the turn lane to southbound Kisker until traffic is switched to the outer roads in Stage IV. By using this staging configuration the temporary shoring can be elminated and the installation time of the shoring can be saved. Additional costs will be temporary asphalt and construction signs.

**** Portion Below This Line To Be Filled Out by MoDOT ****

Comments: I recommend approval of this VE with the following comments. 1. Any additional costs will be borne by the contractor for signing, striping, etc. because right now the proposal offers no savings. 2. The slopes must be minimum of 1:1 and contiguous. The slopes must be reviewed and approved by certified geotechnical engineer for a saturated condition. Supporting calcs. shall be furnished. (see attached memo from Rob Lauer).

Michael Castro

Digitally signed by Michael Castro
DN: cn=Michael Castro, c=US, o=MoDOT, ou=Route 364 Project Office, email=michael.castro@modot.mo.gov
Date: 2011.07.05 09:27:23 -05'00'

Submitted By Resident Engineer — Date

Comments: I recommend approval as noted above. The contractor is responsible for providing satisfactory results in the field. Any additional cost in doing so, will be theirs to address.

[X] **Approval Recommended**

[ ] **Rejection Recommended**

Ed Hennings

Digitally signed by Matthew Budd
DN: cn=Matthew Budd, o=MoDOT, ou=D6 Construction and Materials, email=Matthew.Budd@modot.mo.gov, c=US
Date: 2011.07.05 10:12:46 -05'00'

District Engineer — Date

Comments:

Not required.

[ ] **Approval Recommended**

[ ] **Rejection Recommended**

Federal Highway Administration
Required for FHWA Full Oversight Projects — Date

Comments: Approval is contingent on satisfactory results achieved in the field and written acknowledgement by the contractor that they are responsible for the consequences including unanticipated impacts or delays.

[X] **Approval**

[ ] **Rejection**

David D. Geaslen

Digitally signed by Ronald Morris
DN: cn=Ronald Morris, o=MoDOT, ou=3H35, email=Ronald.Morris@modot.mo.gov, c=US
Date: 2011.07.11 14:44:37 -05'00'

State Construction and Materials Engineer — Date

Distribution: **Resident Engineer, Project Manager, District Construction & Materials Engineer, State Construction & Materials Engineer, FHWA Value Engineering Administrator – MoDOT, P. O. Box 270, Jefferson City, MO 65102**

Project Number	Line Item Number	Description	Units	Units Previously Provided For	Units To Be Constructed	Units Overrun, Underrun	Unit Price	Amount Of Overrun	Amount Of Underrun
J6U1028B	5003	Temporary shoring	LS	1.00	0.00	1.00	$11,580.49		-$11,580.49
	190	Bituminous Pavement Mixture PG64-22 (Base)	TN	380.90	530.90	150.00	$67.26	$10,089.00	
	860	Construction Signs	SF	2,382.00	2,430.00	48.00	$9.00	$432.00	
	5019	Relocating Temporary Traffic Barrier	LF	0.00	250.00	250.00	$4.00	$1,000.00	
								$11,521.00	-$11,580.49

Additional Cost	$59.49
Total Savings - MoDot (50%)	$29.74
Total Savings - Fred Weber, Inc. (50%)	$29.74

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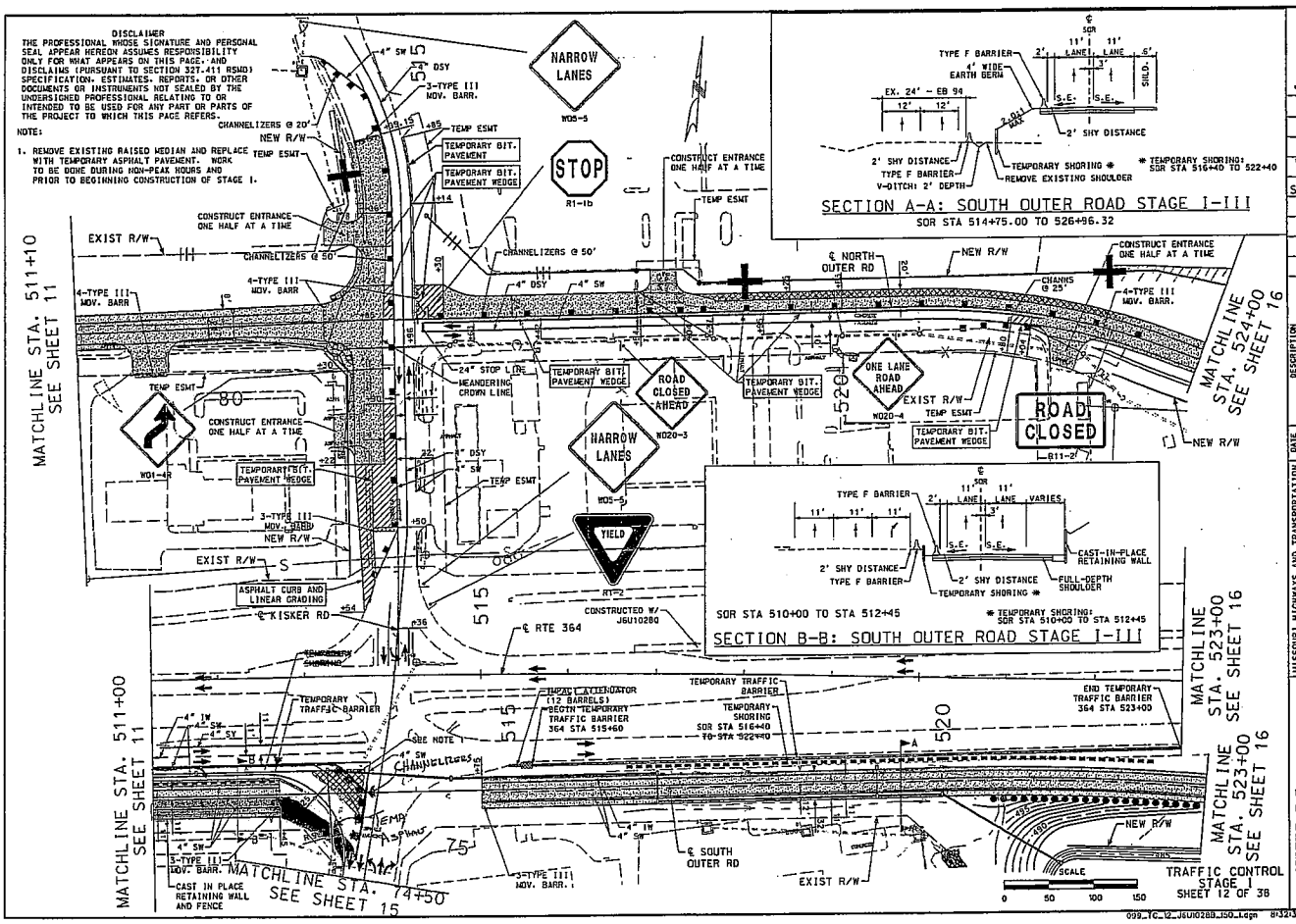
NOTE:

1. REMOVE EXISTING RAISED MEDIAN AND REPLACE WITH TEMPORARY ASPHALT PAVEMENT. WORK TO BE DONE DURING NON-PEAK HOURS AND PRIOR TO BEGINNING CONSTRUCTION OF STAGE I.



THIS SHEET AND DISK WERE SEALED, SIGNED AND DATED ELECTRONICALLY

DATE

DATE PREPARED	
4/2/2010	
ROUTE	STATE
364	MO
DISTRICT	SHEET NO.
6	99

COUNTY: ST. CHARLES

JOB NO.: J6U1028B

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-275-6636

MoDOT

EFK+Moen, LLC
Civil Engineering Design
13323 Barrett Parkway Dr. St. Louis, MO 63021
Phone 314-225-4100 Fax 314-729-4189
Missouri Certificate of Authority: 001578

TRAFFIC CONTROL STAGE I
SHEET 12 OF 38

REV.

099_TC_12_J6U1028B_150_1.dgn 8:32:37 AM 4/2/2010

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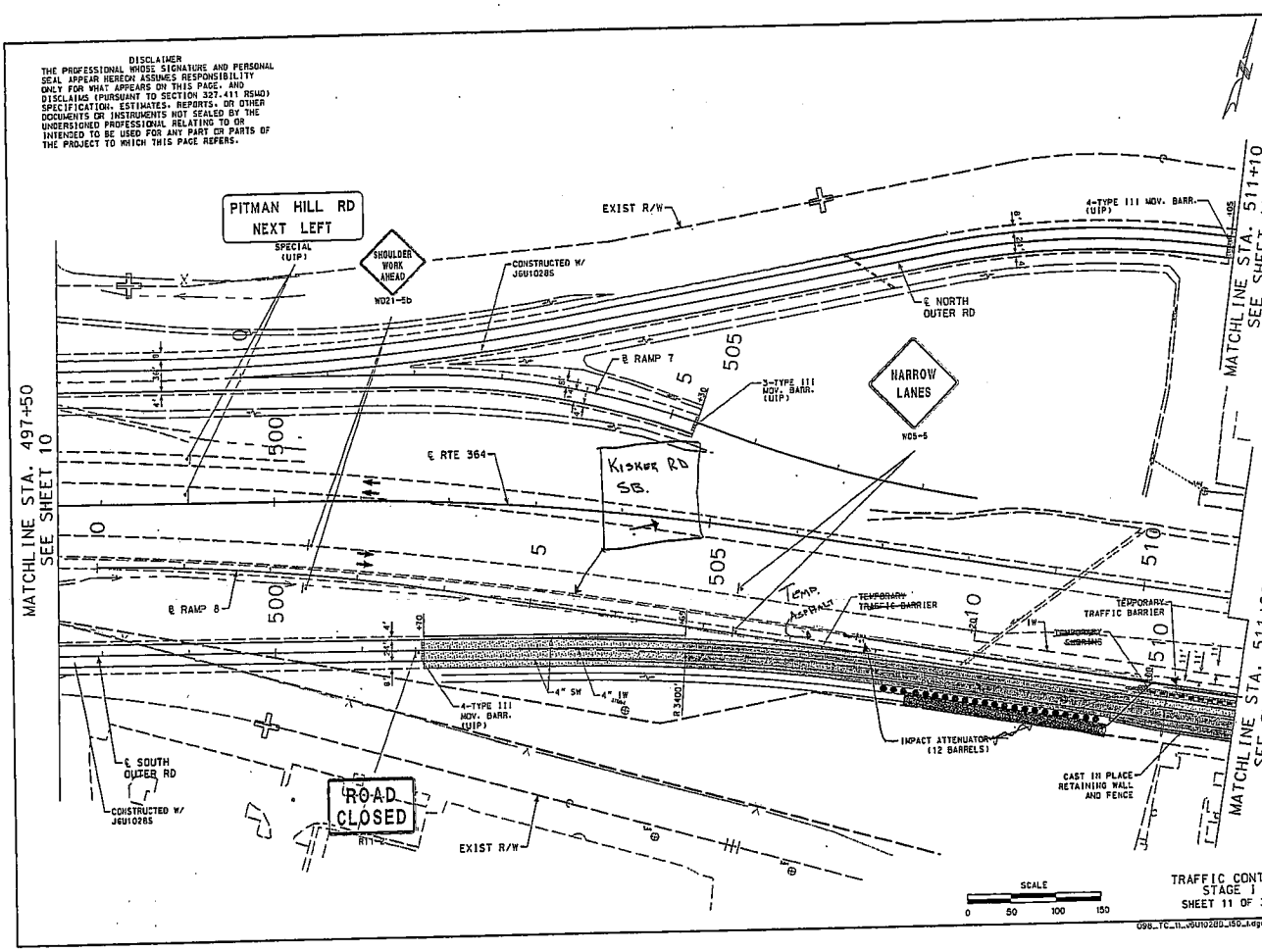

TRAFFIC CONTROL
STAGE I
SHEET 11 OF 38

DATE PREPARED 4/2/2010
ROUTE 364 STATE MO
DISTRICT 6 SHEET NO. 98
COUNTY ST. CHARLES
JOB NO. J6U1028B
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DATE | DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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Fax 314-724-1159
Missouri Certificate of Authority: 001575

REV.

098_TC_11_J6U1028B_150_1.dgn 7/12/25 AM 4/2/2010

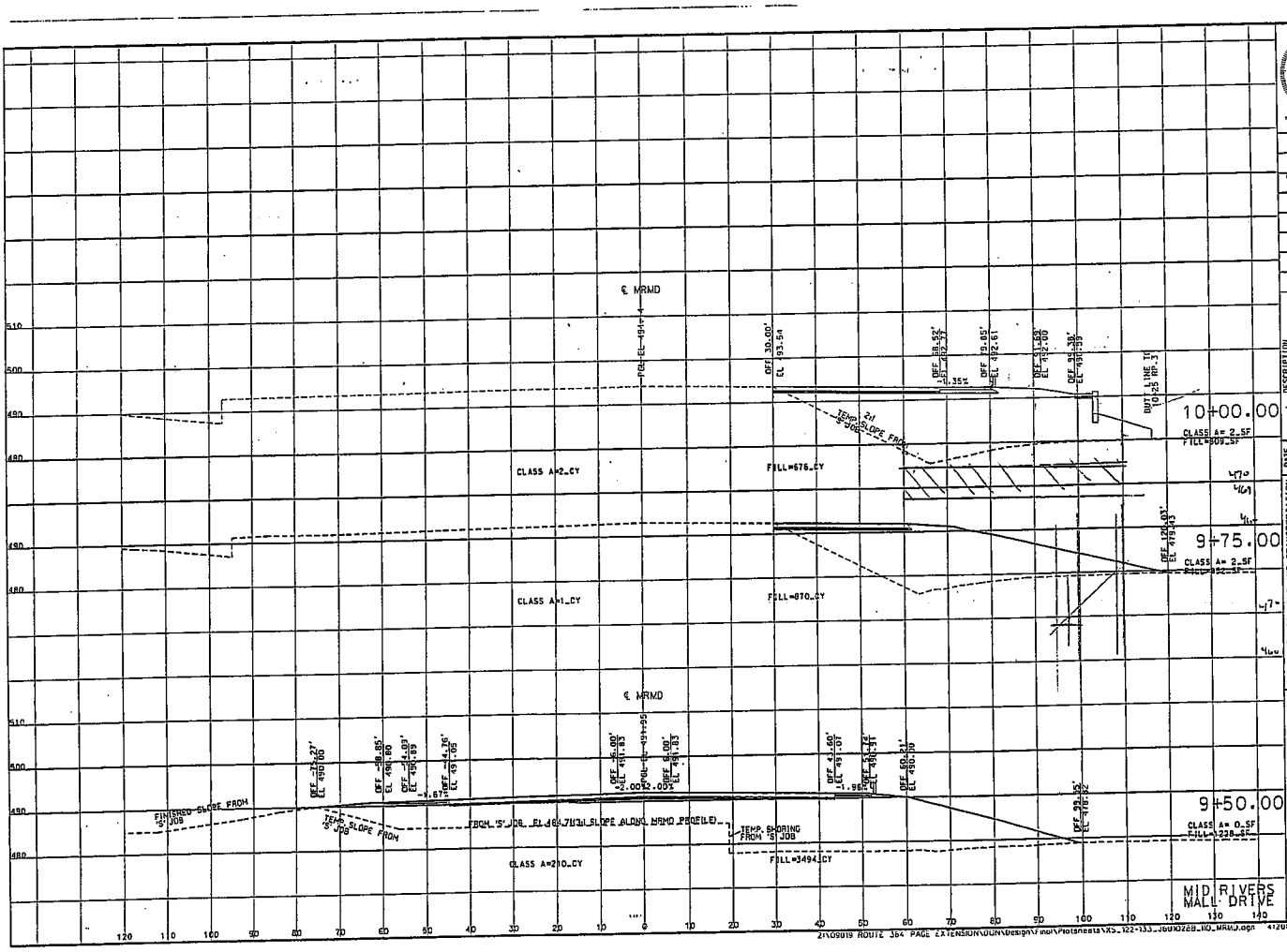
Tab 601 - J6U1028B
Temporary Shoring

West of Kisker Shoring					
Beg. Station	End Station	Length	Height	Cut SF	Fill SF
510+00.00	510+50.00	50.00	0.00	0.00	0.00
510+50.00	511+00.00	50.00	2.00	100.00	0.00
511+00.00	511+50.00	50.00	2.50	125.00	0.00
511+50.00	512+00.00	50.00	2.50	125.00	0.00
512+00.00	512+50.00	50.00	2.50	125.00	0.00
512+50.00	513+00.00	50.00	2.00	100.00	0.00
		300.00		**575.00**	**0.00**

Mid Rivers Mall Dr.					
Beg. Station	End Station	Length	Height	Cut SF	Fill SF
MRMD					
8+80.00	9+00.00	20.00	3.00	60.00	0.00
9+00.00	9+50.00	50.00	3.00	150.00	0.00
9+50.00	9+80.00	30.00	3.00	90.00	0.00
Ramp 3					
10+30.00	10+50.00	20.00	7.00	140.00	0.00
10+50.00	10+80.00	30.00	7.00	210.00	0.00
		150.00		**650.00**	**0.00**

Summary			
Location	SF	%	$
MRMD	650.00	0.24	$13,090.99
West of Kisker	575.00	0.21	$11,580.49
East of Kisker	1,500.00	0.55	$30,209.97
	2,725.00	1.00	$54,881.45
			$20.14 /SF

9000 SF
↳ 7000 SF



DATE PREPARED
4/7/2010

ROUTE	STATE
364	MO
DISTRICT	SHEET NO.
6	127

COUNTY
ST CHARLES

JOB NO.
J6U0288

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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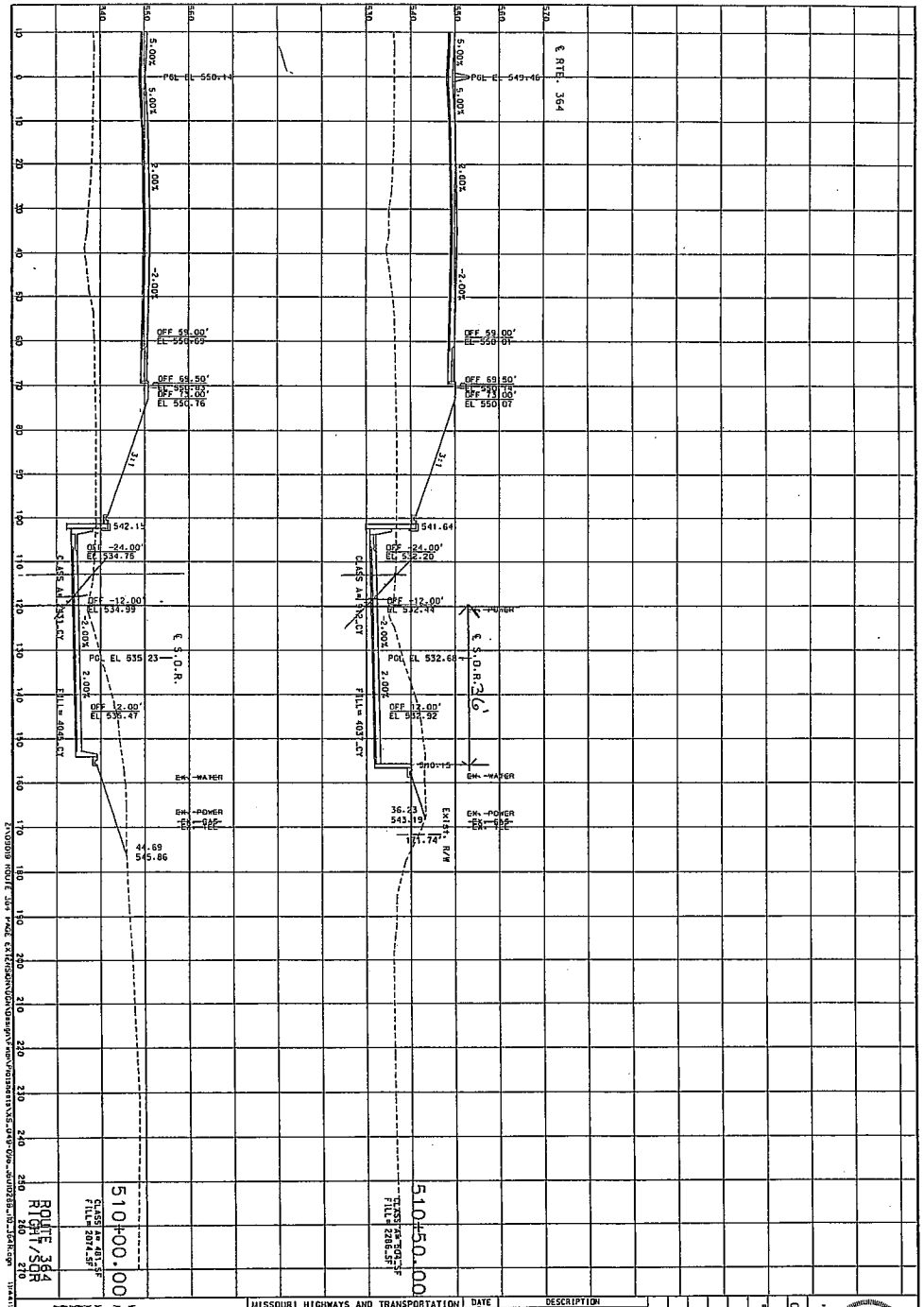
Civil Engineering Design
12055 Manchester Parkway Dr
Suite 130
St. Louis, MO 63131
Phone 314-729-1008
Fax 314-729-1059
Missouri Certificate of Authority: 001528



EFK·Moen, LLC
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Fax 314-729-4109
Missouri Certificate of Authority: 001578

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
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DATE	DESCRIPTION

BRIDGE NO.:
PROJECT NO.:
CONTRACT NO.:
J6L10.028B
COUNTY: ST CHARLES
ROUTE: 364
SHEET: 72
STATE: MO
DATE: 04/05/2010

THE MISSOURI DEPARTMENT OF TRANSPORTATION
MISSOURI DEPARTMENT OF TRANSPORTATION
JAMES R. MOEN
NUMBER 2003000233
STATE OF MISSOURI

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REV. -

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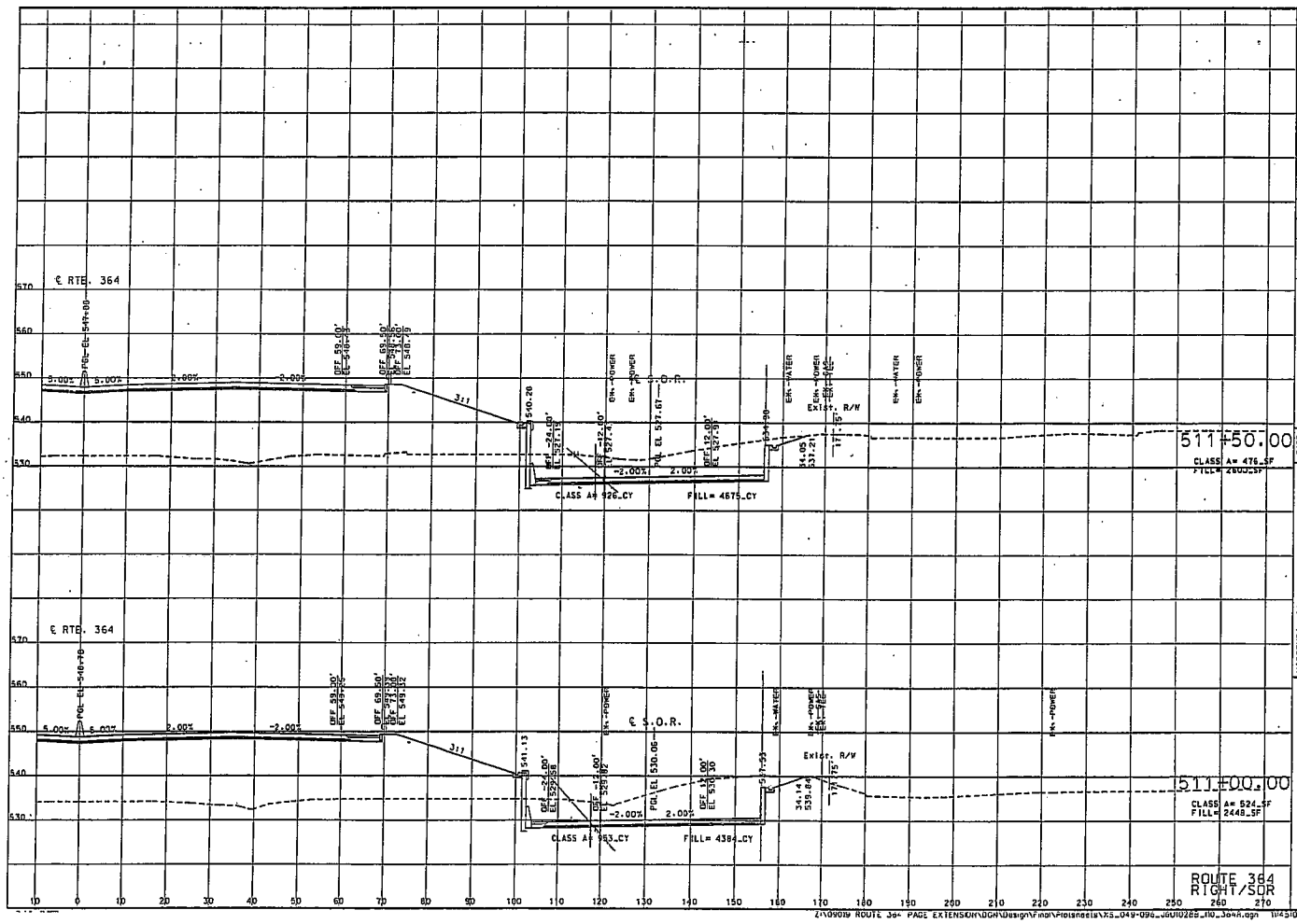

STATE OF MISSOURI
KYLE ALLEN BRUCKLAGE NUMBER
PROFESSIONAL ENGINEER

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04/05/2010

ROUTE	STATE
364	MO

DISTRICT	SHEET NO.
6	73

COUNTY
ST CHARLES

JOB NO.
J6U1028B

CONTRACT NO.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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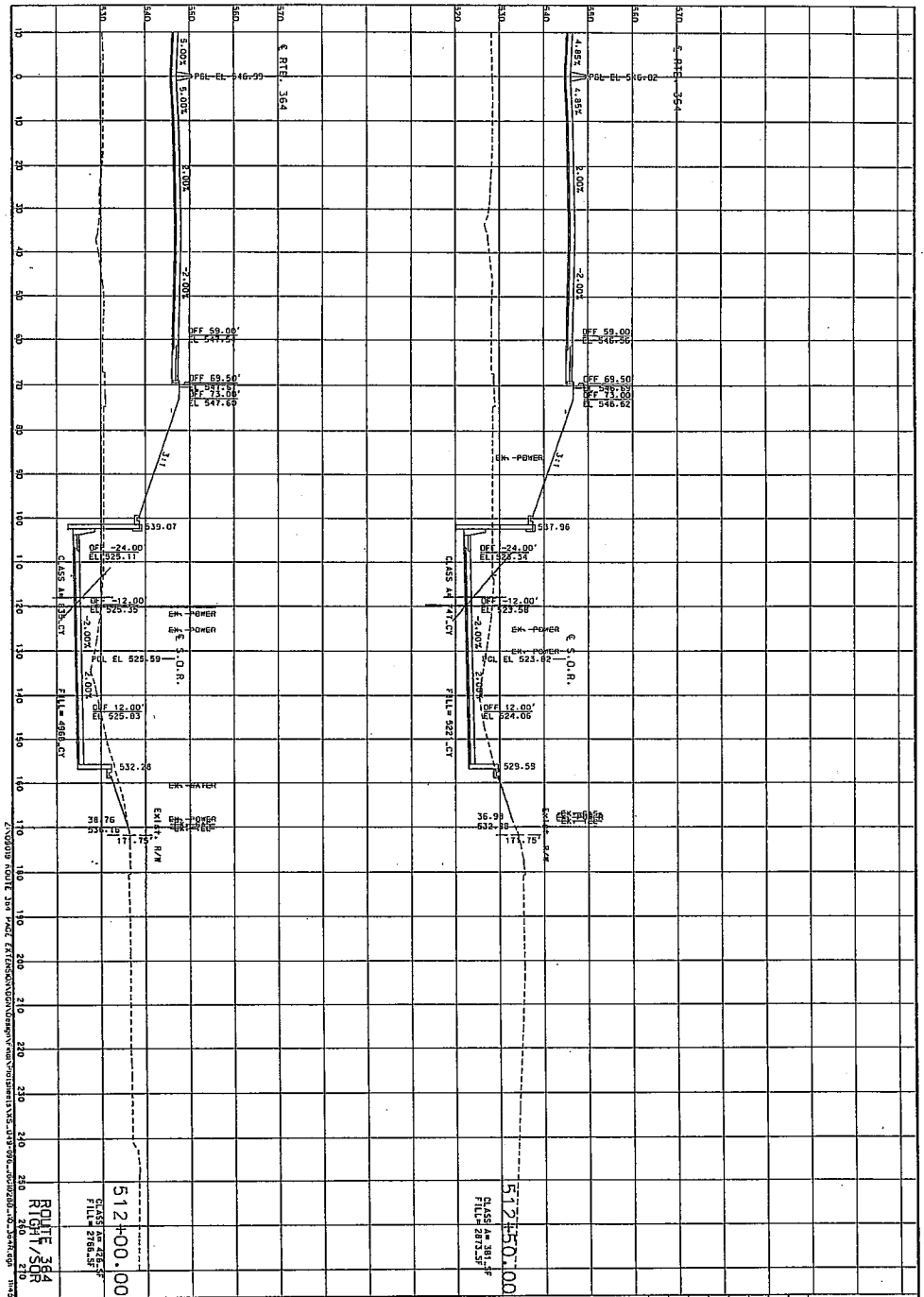
REV.



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DATE	DESCRIPTION

BRIDGE NO.
PROJECT NO.
J6U1028B
CONTRACT NO.
ST CHARLES
COUNTY
MO
STATE
364
ROUTE
04/05/2010
DATE PRESENTED
SHEET NO. 14
TOTAL SHEETS 15

REV.

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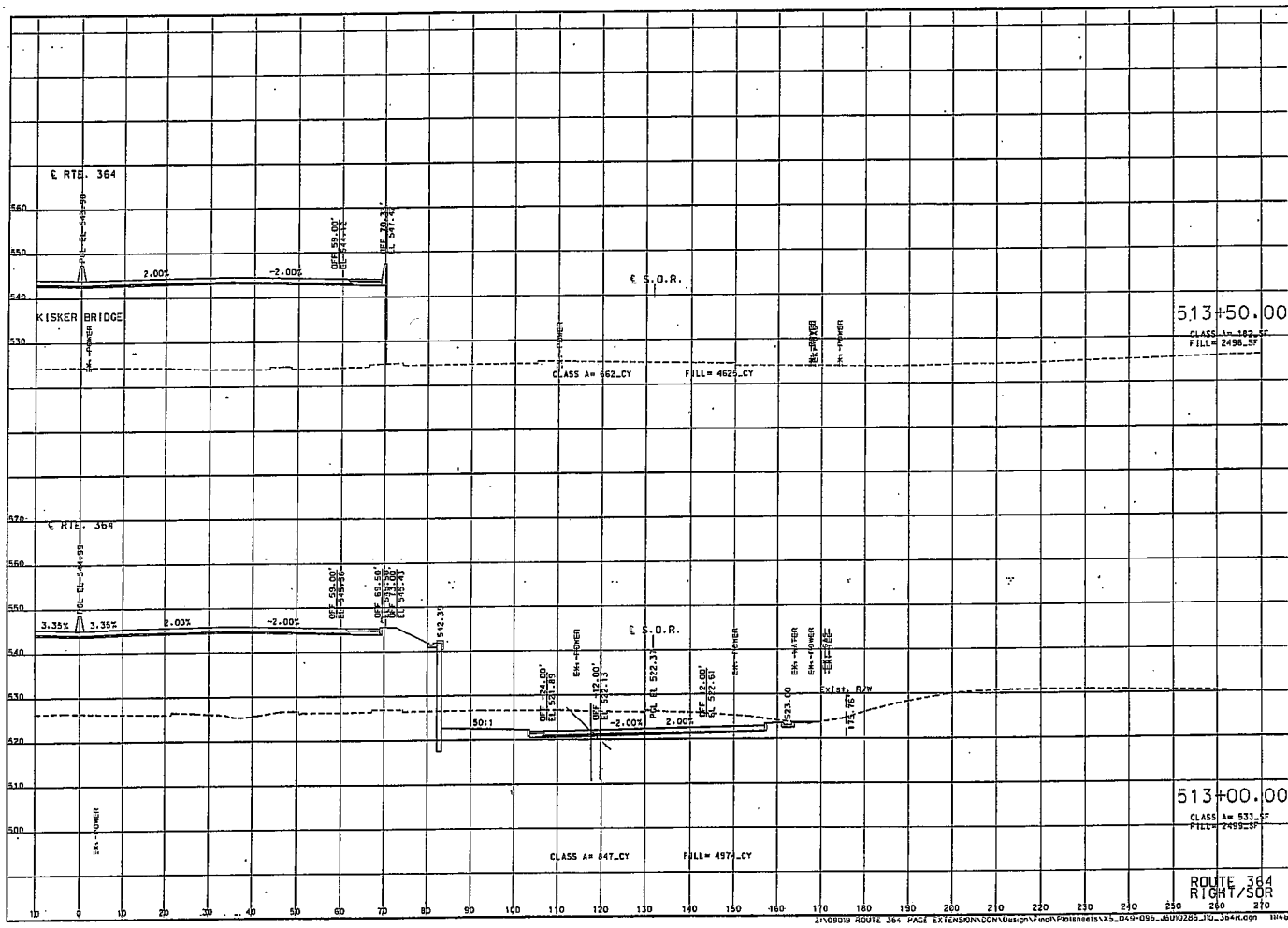

DATE PREPARED
04/05/2010

ROUTE	STATE
364	MO

DISTRICT	SHEET NO.
6	75

COUNTY
ST CHARLES

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REV.

21\09019 ROUTE 364 PAGE EXTENSION\DGN\Design\Final\Plotsheets\X5_049-096_J6U1028B_10_364R.dgn 11:46:30 AM 04/05/2010

Re: VE Shoring elimination
Robert C Lauer to: Michael J Castro 07/05/2011 07:09 AM

History: This message has been forwarded.

Mike,

Kevin McLain and I have reviewed this proposal. Based on moving the ditch out another 3' minimum, the steepest proposed temporary slope should be no steeper than approx. 1:1. The slope should be continuous, ie. no vertical 2' cut at the base as shown in the hand drawn typical section at Station 509+00.) We conceptually approve this idea, however, the contractor should provide engineering calculations from a qualified geotechnical engineer that indicates the slopes are stable in the short term (2-3 months). In addition, they should consider saturated conditions in their analysis.

Rob Lauer, R.G.
Geologist
MoDOT St. Louis Metro District
1590 Woodlake Dr., Chesterfield, MO 63017
ph. 314 453-1743
fax 573 522-6477

Michael J Castro Rob - I talked a bit more with Fred Weber and on... 06/30/2011 10:57:25 AM

From: Michael J Castro/D6/MODOT
To: "Robert Lauer" <Robert.Lauer@modot.mo.gov>
Date: 06/30/2011 10:57 AM
Subject: VE Shoring elimination

Rob - I talked a bit more with Fred Weber and on the cross sections they are showing to leave 6 feet for the paved track line. They now plan to hand pour this so we should have another 3 or 4 feet which will give is. 1:1 at all locations. Also this 1:1 should only be in place for 2 months max.

Sent from my iPhone

VALUE ENGINEERING CHECK SHEET

TYPE OF WORK

(Check one that applies)

- o Bridge/Structure/Footings
- o Drainage Structures (RCP, RCB, CMP's, ect.)
- ✓ TCP/MOT
- o Paving (PCCP, ect.)
- o Grading/MSE Walls
- o Signal/Lighting/ITS
- o Misc

SUMMARY OF PROPOSAL

(If needed, condense summary to a couple of lines)

The contractor will be eliminating temporary shoring and utilizing temporary asphalt pavement to revise the staging plan. This will be done at no additional cost to MoDOT.

SCANNING OF DOCUMENT

If the proposal is large, please mark or make note, which pages need to be scanned into the database. If there are special instructions, make note of them here.