

VALUE ENGINEERING CHANGE PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

Conceptual Proposal Final Proposal Date 3/6/13

Contract ID 130125-F01 Job No. J6I2412

County St. Charles Route 70 Original Contract Amount \$12,409,196.96

Contractor Millstone Bangert, Inc. By Millstone Bangert, Inc.

Designed By _____ Phone 636-949-0038

VECP# 13-19 (to be completed by C.O.) VECP or PDVECP

1. **Description of existing requirements and proposed change(s). Advantages/Disadvantages**
The plans show removing a section of the existing shoulder along the NOR and I-70 WB for the proposed Temporary Ramp 7 and replacing with Optional Temporary Pavement 7". We are proposing to leave the existing shoulders in place and wedge a lift of temporary asphalt from the I-70 shoulder down onto the NOR. Upon removing the temporary asphalt wedge, the existing NOR pavement may require diamond grinding to restore the existing concrete surface.

See attachment for additional details.

2. **Estimate of reduction in construction costs.** \$40,000.00

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.**

(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.**

(date and/or dates)

Additional Comments:

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

Comments: I recommend the approval of this VE. Millstone Bangert will be responsible for the maintenance of the temporary ramp through out the construction staging. This VE only affects the temporary ramp from WB 70 to Mid Rivers Mall Dr. and has no effect on the finished project. The VE has been reviewed by the area team and concur with this recommendation.

Submitted By Resident Engineer

Date

Comments:

**Approval
Recommended**

**Rejection
Recommended**

District Engineer

Date

Comments:

**Approval
Recommended**

**Rejection
Recommended**

Federal Highway Administration
Required for FHWA Full Oversight Projects

Date

Comments:

Approval

Rejection

State Construction and Materials Engineer

Date

I-70 / Mid Rivers Mall Drive

Ramp 7 (Temporary Slip Ramp I-70 WB)

Comments: Below is an itemized breakdown of the contract items proposed to be underrun and includes an adjustment to the removal limits for the existing Type C Barrier. The alternate option to provide an asphalt wedge and restore the NOR is estimated at \$25,000, resulting in an approximate savings of \$40,000. In an effort to maximize the VE savings, we are proposing to conduct the alternate option under a cost plus method and finalize the VE savings subsequent to restoring the NOR.

Plan

Line No.	Item No.	Description	Quantity	Unit	Unit Price	Cost
30	2031000	Class A Excavation	(538.00)	CY	\$6.85	(\$3,685.30)
50	2036000	Compacting Embankment	(12.00)	CY	\$1.00	(\$12.00)
60	2037075	Compacting in Cut	(4.00)	STA.	\$240.00	(\$960.00)
120	3040504	Type 5 Base Rock 4"	(908.00)	SY	\$5.00	(\$4,540.00)
140	4019905	Misc. Option Pavt. Temp. Ramp 7	908 (907.97)	SY	\$28.75	(\$26,104.14) 26105.00
320	6071050	Chain Link Fence (Barrier)	(80.00)	LF	\$16.20	(\$1,296.00)
580	6173000	Type C Barrier	(80.00)	LF	\$45.20 25	(\$3,616.00) 3620.00
1330	5021340	Type A2 Shoulder	(882.24)	SY	\$28.00	(\$24,701.88) 24701.60
1340	626000A	Concrete Shoulder Rumble Stripe	4 (3.97)	STA.	\$79.50	(\$315.62) 318.00
						(\$65,230.93) 65237.90

Alternate

Asphalt Wedge	<i>Estimated tonnage or SY for easier estimate</i>	\$15,000.00
Restore NOR	<i>estimated breakdown</i>	<u>\$10,000.00</u>
		\$25,000.00

Estimated Savings: \$40,230.93

Survey Data

Sta.	I-70		NOR		Difference	Inches
	Offset (LT.)	E.O.S.	Offset (LT.)	E.O.S.		
100000	91.2	444.70	95	444.20	0.50	6.0
100100	91.2	444.62	94	444.08	0.54	6.5
100200	91.2	444.30	94	443.52	0.78	9.4
100300	91.1	443.80	93.4	443.14	0.66	7.9
100400	91	443.30	93.5	442.80	0.50	6.0
100500	91	442.80	93.2	442.60	0.20	2.4

I-70 / MRMD

Temporary Slip Ramp 7 - Alternate Method

<u>Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Cost</u>
Asphalt Wedge				
Asphalt Crew (6)	1	Day	\$3,000.00	\$3,000.00
Asphalt	150	Ton	\$60.00	\$9,000.00
Trucking	24	Hrs.	\$80.00	<u>\$1,920.00</u>
			Subtotal:	\$13,920.00
Restore NOR				
Roto Mill	1	Day	\$5,000.00	\$5,000.00
Trucking	24	Hrs.	\$80.00	\$1,920.00
Diamond Grinding	1	Day	\$5,000.00	<u>\$5,000.00</u>
			Subtotal:	\$11,920.00
			Combined Estimated Cost:	\$25,840.00

