

VALUE ENGINEERING CHANGE PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

Conceptual Proposal Final Proposal Date 2/12/2010
Contract ID 091120-X04 Job No. J0B0801H
County Perry 51 Original Bid Cost \$15,937.50
Contractor Penzel Construction Co., Inc. By Luke Miget
Designed By _____ Phone (573) 243-8191
VECP# 10-13 (to be completed by C.O.) VECP or PDVECP

1. Description of existing requirements and proposed change(s). Advantages/Disadvantages
The plans call for the Temporary Traffic Barrier to be bolted to the slab for Stage 1 construction only (bolted to the existing deck). This leaves a 12 ft. travel lane for Stage 1. Stage 2 does not require bolting down the barrier (bolting to the new deck). This only leaves 10 ft. travel lane. We propose to eliminate the bolting of the barrier on Stage 1 since it is not necessary given that Stage 2 does not require bolting and has a 2 ft. narrower travel lane.

This will eliminate hazards to the traveling public and workers due to drilling and bolting operations in the traffic lane (this cannot occur out of traffic due to barrier location over stringer #3).

2. Estimate of reduction in construction costs. \$4000.00

3. Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.

No effects.

RECEIVED

FEB 15 2010

Jackson Project Office

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

3/15/2010

(date)

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

NA

(date)

(effect)

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

NA

(date and/or dates)

Additional Comments:

RECEIVED

FEB 15 2010

Jackson Project Office

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

Comments: See comments attached to this VECP
If approved, this should be considered a PDVECP.

Don W. [Signature] 2-15-2010
Submitted By Resident Engineer Date

Comments: District Core team believes there is a value to the public
in bolting the barrier where possible. Bolting the barrier
to the old deck does no harm to the rehabilitated structure

Approval Recommended Mark Shelton by R. [Signature] 2-16-2010
 Rejection Recommended District Engineer Date

Comments:

Approval Recommended _____ Date
 Rejection Recommended Federal Highway Administration
Required for FHWA Full Oversight Projects

Comments: See attached for comments.

David D. [Signature] 3-10-10
 Approval State Construction and Materials Engineer Date
 Rejection

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

According to the EPG "The preferred installation method for temporary concrete traffic barrier is freestanding and requires a minimum 2 ft. buffer area behind the barrier to allow for lateral deflection in both work areas and lane separation situations." The bolt down installation is required, since a 2' minimum buffer is not available, and should be used during Stage 1 construction. Stage 1 construction leaves a 12' travel lane.

During stage 2 construction a 10' travel lane will be used and traffic will be riding on the new deck. It is not normal practice to bolt the Type F Barrier Curb into the new deck. Given the narrow travel lane width of 10', this may factor into the amount of lateral movement of the barrier if hit by a vehicle. I would have to defer to Bridge Division for guidance/reasons for not pinning down the barrier curb during Stage 2 construction.

I recommend rejecting this VE proposal as it violates our field practice according to section 617.1.1 in the EPG.

DWD-RE 2-15-2010



Andrew L Meyer/D10/MODOT
02/15/2010 09:25 PM

To Lynelle S Luther/D10/MODOT@MODOT
cc "Brian Williams" <Brian.Williams@modot.mo.gov>, Darius W
Dowdy/D10/MODOT@MODOT, Jeffery A
Wachter/D10/MODOT@MODOT
bcc

Subject Re: Fw: VECP for J0D0801H Perry County - comments

Lynelle: I agree with Darius' comments.

This question was raised during the bidding, and I discussed it with the SPM. As a department we choose to accept the risk associated with not drilling and bolting through the new deck during stage 2 because there is the potential of long-term detrimental effects on the new structure. This does not provide sufficient reason or justification for the elimination of this protective measure during stage 1 where damage to the deck is not an issue.

Thanks for the opportunity to review.



Andy Meyer, PE, NSPE
Southeast Regional Field Engineer, Districts 6, 9, 10

Office: 573-472-5296 Cell: 573-703-4526
MoDOT District 10, 2675 North Main Street
P.O. Box 160, Sikeston, MO 63801
Andrew.Meyer@modot.mo.gov

Lynelle S Luther/D10/MODOT

Lynelle S Luther/D10/MODOT

02/15/2010 04:31 PM

To "Andrew Meyer" <Andrew.Meyer@modot.mo.gov>, "Brian
Williams" <Brian.Williams@modot.mo.gov>
cc

Subject Fw: VECP for J0D0801H Perry County

I have not reviewed this yet, but would like you to review it and get your input.

L

Darius W Dowdy

----- Original Message -----

From: Darius W Dowdy
Sent: 02/15/2010 12:25 PM CST
To: Lynelle Luther
Subject: VECP for J0D0801H Perry County

LL

please review the attached VECP from Penzel. If you have any questions please call.

thank you

The Construction and Materials Division agrees with the District to reject this VECP. In reviewing this proposal with the Design and Bridge Divisions for safety compliance, it was also agreed that the temporary barrier shall be secured to the bridge deck during stage 2 construction.

David D. Coover

BAC

VALUE ENGINEERING CHECK SHEET

TYPE OF WORK

(Check one that applies)

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

SUMMARY OF PROPOSAL

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

Contractor proposed to eliminate securing the temporary barrier to the bridge deck. Because of safety compliance this was rejected.

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.
