

VALUE ENGINEERING CHANGE PROPOSAL  
MISSOURI DEPARTMENT OF TRANSPORTATION

Date 09-03-08

Contract ID 080125-402  
County Henry Route 7  
Contractor Hilty Quarries Inc.  
Designed By Jon Voss/ Steve Markham (MoDOT)  
VECP # 08-76

Job No. J4P1934  
Original Bid Cost \$7,464,593.80  
By MoDOT  
Phone (660) 885-5665  
VECP  or VECPP/PDU

1. Description of existing requirements and proposed change(s). Advantages/Disadvantages

The original plans provided quantity for two 1.5-inch lifts of SP095C asphalt to be laid atop a ¾-inch lift of SP095E in the area between log mile 74.379 and 148.375 (equation 79.33 BK=148.129AH). Prior to the placement of the SP095C mix, MoDOT proposed to eliminate the second lift of SP095C and increase the depth of the first lift to 1 ¾-inches in the area described above with the exception of the intersection areas from log mile 76.915 to 77.105 and 78.991 to 148.375. These areas were paved with 1 ¼-inches of SP095C asphalt. In addition, MoDOT proposed to pay Hilty Quarries Inc. a 30% Value Engineering cost on the difference between the B-Sheet quantities in the plans and the quantity of SP095C and BP-1 asphalt mix that was actually placed in the area. The B-Sheet quantity of BP-1 also reflected a reduction of 894.6 tons in quantity for a prior VE proposal. Hilty Quarries Inc. agreed to this design change as well as to accept a 30% VE payment for the unused quantities described above. The B-Sheet quantities were tabulated by MoDOT and given to Hilty Quarries Inc. prior to their agreement to this proposal. During construction, these quantities were reduced furthermore due to an agreement between MoDOT and Hilty Quarries to exclude the quantity used on the southside of the Route 13/7 intersection. This quantity resulted in a total reduction of 206.85 tons of SP095C and BP-1. This proposal resulted in a reduction of 9,076.71 tons of SP095C and 2,915.69 tons of BP-1 asphalt. See attached for a breakdown of cost savings.

2. Estimate of reduction in construction costs. \$599,597.81

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

This VE proposal resulted in the reduction of asphalt tonnage that in turn reduced the amount of AC Index costs that would have been paid to the contractor. The total amount of these cost savings would have been contingent on the month in which the asphalt was placed.

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:**

See attached for a breakdown of cost savings.

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

**Comments:**

This VE was proposed by MoDOT and accepted by Hilty Quarries. The attached sheet depicts the final cost savings and it is my recommendation to pay the 30% VE proposal to Hilty Quarries in the amount of \$179,879.34.

Jon Bloss  
Submitted By Resident Engineer

9/9/08  
Date

**Comments:** AS DISCUSSED AND VERBALLY APPROVED BY DIVISION CM. HILTY QUARRIES RECEIVED A 30% AWARD IN LIEU OF THE CUSTOMARY 25%.

- Approval Recommended  
 Rejection Recommended

Elizabeth A. Nott  
District Engineer

9/11/08  
Date

(PTN)

**Comments:**

PROPOSAL APPROVED AS RECOMMENDED  
BY DISTRICT

Approval

Rejection

David D. Coover

by JEB

9-15-08

State Construction and Materials Engineer

Date

Distribution: Resident Engineer, Project Manager, District Operations Engineer, State Construction and Materials Engineer  
\*Value Engineering Administrator - \*MoDOT, P.O. Box 270, Jefferson City, MO 65102

**Value Engineering Quantities**  
**J4P1934 - Route 7 - Log mile 74.379 to 148.375**

*SP095C*            29,813.74 tons = B sheet quantities  
                   minus    206.85 tons reduced due to Route 13 intersection  
                           29,606.89 tons = VE SP095C original quantity  
                   minus    20,530.18 tons used in area  
                           9,076.71 tons reduced  
  
                           9,076.71 tons reduced  
                   x \$52.94 per ton  
                           \$480,521.03 reduced

*BP-1*                8,828.79 tons = B sheet quantities  
                   minus    1,101.45 tons reduced by prior VE and Route 13 intersection  
                           7,727.34 tons = VE BP1 original quantity  
                   minus    4,811.65 tons used in area  
                           2,915.69 tons reduced  
  
                           2,915.69 tons reduced  
                   x \$40.84 per ton  
                           \$119,076.78 reduced

*Total VE proposal*    \$480,521.03 reduction of SP095C costs  
                                   \$119,076.78 reduction of BP1 costs  
                                   \$599,597.81 reduction in asphalt costs  
  
                                   \$599,597.81  
                   x            30%  
                                   \$179,879.34 = total payment to contractor as per VE  
  
                                   \$599,597.81  
                   minus    \$179,879.34  
                                   \$419,718.47 = cost savings to MoDOT as per VE

Missouri  
Department  
of Transportation



District 4 - Clinton Project Office  
1057 E. Gaines Drive  
Clinton, MO 64735  
(660) 885-5665  
Fax (660) 885-5871  
Toll free 1-888 ASK MoDOT

Jon G. Voss, Resident Engineer



2007 Missouri Quality Award Winner

August 4, 2008

Hilty Quarries Inc.  
190 NW 251 Rd.  
P.O. Box 407  
Clinton, Mo 64735

Subject: MoDOT VE Agreement  
Contract ID: 080125-402  
Job No. J4P1934 / Route 7  
Henry County

Mr. John Hilty:

This letter is being written to document our conversation and agreement concerning the SP095C and the BP-1 throughout the J4P1934 project.

- 1) We agreed that the lift of SP095C would be laid according to plan as a 1-1/4 inch lift with radius adjustments at the intersections.
- 2) The SP095C from log mile 74.379 to 148.375, Martin's Curve south to the end of the project, excluding the intersections in item #1, will be laid as a single 1-3/4 inch lift and be subject to profilograph specifications. The original contract called for two lifts of SP095C with a thickness of 1-1/2 inches each.
- 3) Based on the previous construction at the intersections, all work hour restrictions through this part of the project are waived.
- 4) Because the SP095C is a major item and this adjustment directly impacts the BP-1 quantity, MoDOT and Hilty Quarries agreed that Hilty will receive a 30% VE contract adjustment calculated on the unused SP095C and BP-1 tonnage between the above log miles. This unused quantity will be the 2B Sheet quantities of the SP095C and the BP-1 minus the actual ticket tonnage placed in that area. Any previous VE tonnage will be subtracted from the plan quantity.

- 5) The Route 52 Ramps will be a single 1-3/4 inch SP095C lift as well. The original contract called for two lifts of SP095C with a thickness of 1-1/2 inches each. The difference in plan and actual tonnage used will also be part of the 30% VE share for Hilty Quarries.
- 6) MoDOT and Hilty quarries will finalize this VE within 1 week of final asphalt placement in this area based on 2B sheet quantities and actual tonnage used.
- 7) With this VE agreement regarding adjusted quantities of the SP095C and BP-1, Hilty Quarries waives all rights to later request additional compensation for these line items. All computations and payment will be done at the contract unit price.

Please review this agreement and provide a letter agreeing to the points above.

If you have any questions or if I may help you in any way, please feel free to contact me.

Sincerely,



Jon G. Voss, P.E.  
Resident Engineer

jv



190 NW 251 RD  
PO Box 407  
Clinton, MO 64735  
Phone 660.885.8135  
Fax 660.885.3935

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General Contractor • Earthwork • Concrete • Asphalt • Crushed Aggregates • Utilities

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8-7-08

Jon Voss, Resident Engineer  
Missouri Department of Transportation  
1057 E Gaines Drive  
Clinton, MO 64735

RE: VE Agreement  
Job No. J4P1934  
Route 7 Henry Co.

Dear Mr. Voss,

I have reviewed your letter dated 8-4-08 in which you detail a proposal reduce thickness on the above referenced project.

I agree on all points as they are expressed in your letter.

Sincerely,

A handwritten signature in black ink, appearing to read "John Hilty". The signature is fluid and cursive, with a large initial "J" and "H".

John Hilty  
Hilty Quarries, Inc

**Value Engineering Quantities**  
**J4P1934 - Route 7 - Log mile 74.379 to 148.375**

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                              \$599,597.81  
                              x        30%  
                              \$179,879.34 = total payment to contractor as per VE

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          minus            \$179,879.34  
                              \$419,718.47 = cost savings to MoDOT as per VE

# 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)

\_\_\_\_\_ Eliminate one lift of SP095C from the planned resurfacing profile.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## 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.

\_\_\_\_\_ Proposal is not large

\_\_\_\_\_

\_\_\_\_\_