

Form C-104
Rev. 2/01

CONSTRUCTION VALUE ENGINEERING CONCEPT PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

Date 06/28/2008

Contract ID 070928-606
County St. Louis Route 30
Contractor Gerstner Electric
Designed By Gerstner Electric

Job No. J6S2063
Original Bid Cost \$1,351,937.20
By Steve Truemper
Phone (636) 349-5999

VECP 08-51

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

Install wireless interconnect on Rte 30 between Weber Rd. and River Des Peres Blvd using 4.9 GHz radios in lieu of fiber optic cables.

2. Estimate of reduction in construction costs. \$61,650.00

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

Reduce labor cost of locating lines in r/w, reduced maintenance costs if cable is damaged.

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

06/28/2008

(date)

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

07/03/2008

(date)

delay in ordering wireless radio materials

(effect)

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

n/a

(date and/or dates)

Additional Comments:

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

Comments: After reviewing this VE proposal, MoDOT's ITS specialists recommend rejection of this proposal. Allowing the use of the radio's would not allow for the VLAN CI loop to work. This would reduce the potential reliability of the network. Therefore I recommend Rejecting this VE Proposal

Scott Carpenter 6/30/08
 Submitted By Resident Engineer Date

Comments: AS NOTED ABOVE.

Approval Recommended
 Rejection Recommended

[Signature] 7-3-08
 District Engineer Date

Comments:

Approval
 Rejection

David Coopers 7-15-08
 State Operations Engineer Date

Distribution: Resident Engineer, District Operations Engineer, State Operations Engineer
*Value Engineering Administrator - *MoDOT, P.O. Box 270, Jefferson City, MO 65102

plan	VE	ITEM	Description	Difference	Unit cost	extended cost
7	0	0130	Class 2 PB	-7	1539.88 \$	(10,779.16)
20	0	0160	FO jumper	-20	29.50 \$	(590.00)
18	0	0170	FO Pig tail	-18	15.92 \$	(286.56)
76	0	0180	FO splice	-76	43.66 \$	(3,318.16)
5	0	0240	intercept existing box	-5	149.67 \$	(748.35)
3	0	0340	WM Interconnect center	-3	454.24 \$	(1,362.72)
6362	0	0360	2" Drill	-6362	8.77 \$	(55,794.74)
25	0	0370	2" trench	-25	8.77 \$	(219.25)
7385	0	0390	24 SM FO	-7385	1.29 \$	(9,526.65)
0	6	0410	Wireless bridge	6	3775.25 \$	22,651.50
2	0	0450	ITS PB	-2	838.00 \$	(1,676.00)
						<u>61,650.09</u>
						61,650.09

06/27/2008 10:47 AM

cc

Subject VE proposal for J6S2063

Tyson,

I do not see any reason to approve the VE proposal to replace the wired connections with radios. We are working hard to eliminate the radios if possible. I do not see an engineering reason to make this change. Thanks!

Chris A. Mabrey
Senior Information Technologist
Gateway Guide / ITS
Missouri Department of Transportation (MoDOT)
1590 Woodlake Drive
Chesterfield, Mo. 63017
desk 314.340.4362
mobile 314.581.2108
fax 314.340.4509

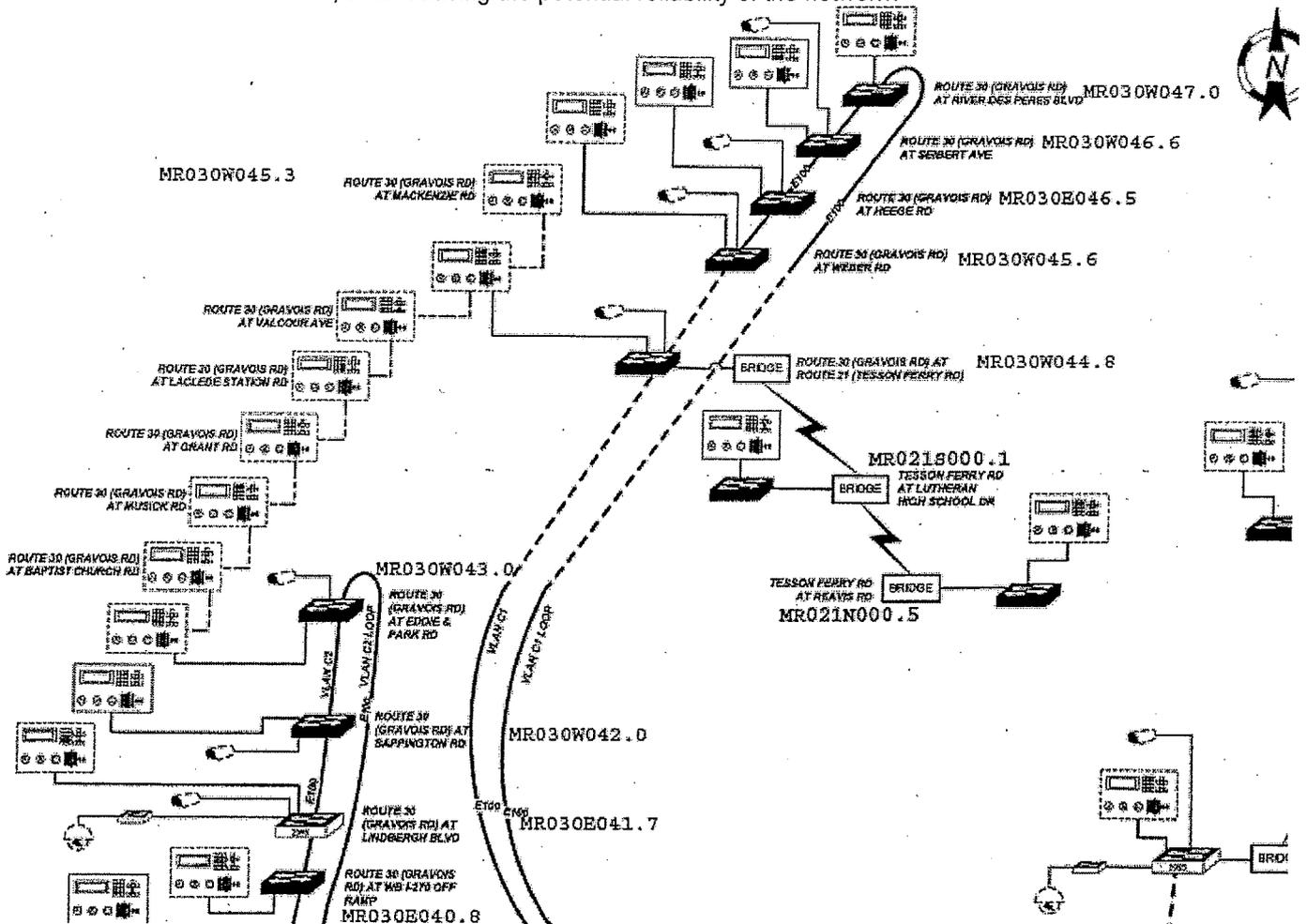
Tyson W King /D6/MODOT
06/27/2008 11:12 AM

To Robert W Weiss/D6/MODOT@MODOT, Scott J
Washausen/D6/MODOT@MODOT
cc Christopher A Mabrey/D6/MODOT@MODOT

bcc

Subject Fw: VE proposal for J6S2063

I agree with Chris' comments regarding the VE proposal to remove fiber from Rte. 30. At this time, we are not 100% comfortable with the wireless systems, although their performance has been better as we get more experience with them. Also, using the radios would not allow for the VLAN C1 loop, as the installation of new fiber would, thus reducing the potential reliability of the network.



Tyson King
Missouri Dept. of Transportation - District 6
Traffic Engineering Specialist - ITS
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Mobile: 314-568-6529
Fax: 314-340-4509
gatewayguide.com

— Forwarded by Tyson W King/D6/MODOT on 06/27/2008 11:04 AM —

Christopher A
Mabrey/D6/MODOT

To Tyson W King/D6/MODOT@MODOT



Michael K
Curtit/SC/MODOT
07/15/2008 07:08 AM

To Travis D Koestner/SC/MODOT@MODOT
cc Eileen H Rackers/SC/MODOT@MODOT
bcc
Subject Fw: Your scanned information!

Travis, we have reviewed and will defer to the district on this one. We know that wireless has been improving and believe it to be a viable alternative, but they know their systems need better than us (providing a redundant ring/loop).

Thanks for the chance to review.

----- Forwarded by Michael K Curtit/SC/MODOT on 07/15/2008 07:05 AM -----



Donna.Wallach@mod
ot.mo.gov
07/14/2008 01:34 PM

To Michael.Curtit@modot.mo.gov
cc
Subject Your scanned information!

Here is the info you requested!



scan.pdf

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)

*Install wireless interconnect at intersection of Rte 30/Weber Rd/River Des Peres Blvd
using 4.9 GHz radios in lieu of fiber optic cables.*

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.

All