

CONSTRUCTION VALUE ENGINEERING CONCEPT PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

Date 02/11/2008

Contract

ID 070629-609
County St. Charles **Route** 364
Contractor Fred Weber, Inc.
Designed By Crawford Murphy & Tilly

Job No. J6U1028E
Original Bid Cost \$19,736,169.72
By Brian J. Carlson
Phone (636) 978-9835

VE # 08-21

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

Perform grading in Stage 1A with steep temporary slopes to allow as much excavation to complete during this stage as possible. Stage 1A also shows partial completion of Ramps 15 & 16 which is not absolutely necessary at this particular stage. This condition produces temporary slopes ranging from 1:1.5 to 1:2 which requires temporary traffic barrier to be placed next to the exposed roadway. The disadvantages of these methods are the additional grading and unnecessary paving of ramps during Stage 1A and reduction of shoulder space for emergency situations.

Proposed:

Alter grading operations in Stage 1A by maintaining 1:3 temporary slopes from Stations 18+925 Lt. to 19+946 Lt. and 18+743 Rt. to 19+922 Rt. along proposed Route 364; thus eliminating the need for temporary traffic barrier. This will reduce the amount of dirt excavated in Stage 1A which will have to be removed in later stages. Significantly reduce the construction of Ramps 15 & 16 in Stage 1A and move to Stage 2 for a longer, more continuous paving operation. The advantages of these changes in grading and paving operations include better traffic flow without traffic barrier, additional room along shoulders for increased safety and smoother, more consistent paving on ramps as well as substantial cost savings.

2. Estimate of reduction in construction costs. \$131,805.00
See attached spreadsheet with quantity adjustments.

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

Wider shoulders from the reduction of temporary traffic barrier could improve the maintainability of snow plowing operations with additional room for storage, vehicle breakdowns, etc.

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

02/15/2008

(date)

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

02/25/2008

(date)

Need to know for grading operations.

(effect)

Route 364 - St. Charles County

Line	Description	Plan Quantity	Unit Price	Total	Proposed Quantity	Unit Price	Total
J6U1028E - Woodstone Drive to East of Harvester Road							
0450	Impact Attenuator (17 Sand Barrels)	3.00 EA	\$5,950.00	\$17,850.00	1.00 EA	\$5,950.00	\$5,950.00
0670	Temporary Conc. Traffic Barrier, Type F	2,900.00 M	\$60.00	\$174,000.00	987.00 M	\$60.00	\$59,220.00
0680	Temporary Conc. Barrier Height Transition	5.00 EA	\$500.00	\$2,500.00	3.00 EA	\$500.00	\$1,500.00
0690	Relocating Temporary Conc. Traffic Barrier	2,715.00 M	\$5.00	\$13,575.00	1,890.00 M	\$5.00	\$9,450.00
	Total			<u>\$207,925.00</u>			<u>\$76,120.00</u>
	Savings			(\$131,805.00)			