

**TABLE 1  
CSAH 32 Extension: Alternatives Evaluation Matrix**

Alternative	Estimated Construction Costs <sup>(1)</sup>	Right-of-Way Acquisition <sup>(2)</sup>	Property Acquisitions	Wetlands Impacts	Archeological/Cultural Resource Impacts	Notes
<b>1A</b>	\$2.5 million (mainline) \$3.5 million (frontage) <b>\$6.0 million – total</b>	14 acres (CSAH 32) 20 acres (frontage) <b>34 acres total ROW</b>	2 residences/ 2 businesses	Low	Low/Medium	Alternatives 1A and 1B provide a connection to TH 52 at 117th Street via the interchange scheduled for construction in <b>2004</b> . Traffic analysis indicated acceptable traffic operations, but this analysis assumed only minor development of the property owned by Koch Refinery in the study area. High volumes of truck traffic on 117th Street will require mingling of truck and auto traffic. There will also be an increase in railroad exposures due to track crossings (spur track). Alternative 1A would provide additional local connectivity between neighborhoods east and west of TH 52. NOTE: 117th Street Interchange is slightly south of east-west alignment of CSAH 32.
<b>1B</b>	\$2.5 million (mainline) \$5.0 million (frontage) <b>\$7 million – total</b>	14 acres (CSAH 32) 27 acres (frontage) <b>41 acres total ROW</b>	4 residences	Low	Low/Medium	
<b>2A</b>	\$1.5 million (mainline) \$3.5 million (frontage) <b>\$5 million – total</b>	14 acres (CSAH 32) 18 acres (frontage) <b>32 acres total ROW</b>	1 residence/ 2 businesses	Low	Medium/Low	Alternatives 2A and 2B provide a connection to TH 52 via CSAH 73 (Barnes Avenue) and frontage road to the interchange at Concord Boulevard. Alternatives 2A and 2B would result in increases in volumes on CSAH 73, which primarily runs through residential areas. CSAH 73 has limited sight distance (hilly terrain) and frequent access. This is a safety concern. In addition, the route is fairly circuitous.
<b>2B</b>	\$1.5 million (mainline) \$5.0 million (frontage) <b>\$6.5 million – total</b>	14 acres (CSAH 32) 39 acres (frontage) <b>53 acres total ROW</b>	3 residences	Low	Medium/Low	
<b>3A</b>	\$3.0 million (mainline) \$4.0 million (frontage) \$10 million (Interchange) <b>\$17 million – total</b>	38 acres (CSAH 32) 23 acres (frontage) 10 acres (interchange) <b>71 acres total ROW</b>	5 residences 6 businesses	Medium	High/Medium	Alternatives 3A, 3B and 3C provide a connection to TH 52 via a newly-constructed interchange midway between 117th Street and Concord Blvd. This interchange spacing only marginally meets Mn/DOT spacing criteria for interchanges on principal arterial highways. The alignment of 3A, 3B, and 3C is slightly north of the east-west extension of CSAH 32 (similar distance north as 1A is south). Neighborhoods are concerned with through traffic issues. 2020 traffic projections are in the 8,000 ADT range, which is fairly low-demand for warranting an interchange. Alternative 3C uses current rail spur. This option would only be feasible if significant changes were made to rail connections near the Koch Refinery. Alternatives 3A, 3B, and 3C would better separate truck and vehicle traffic and provide more excess capacity for serving development should densities intensify beyond that shown in current comprehensive plans.
<b>3B</b>	\$3.0 million (mainline) \$4.3 million (frontage) \$10 million (Interchange) <b>\$17.3 million – total</b>	38 acres (CSAH 32) 22 acres (frontage) 10 acres (interchange) <b>70 acres total ROW</b>	4 residences 5 businesses	Medium	High/Medium	
<b>3C</b>	\$3.0 million (mainline) \$4.0 million (frontage) \$8.5 million (Interchange) <b>\$15.5 million – total</b>	38 acres (CSAH 32) 25 acres (frontage) 10 acres (interchange) <b>70 acres total ROW</b>	5 residences 4 businesses	Medium	High/Medium	
<b>4</b>	NA	NA	NA	Low	Low	This alternative has the significant disadvantage of not addressing the project need of enhancing east/west Countywide mobility.

**Description of Alternatives**

Alternatives 1A and 1B assume an improved connection to 117th Street .

Alternatives 2A and 2B assume an improved connection to Concord Boulevard Interchange with TH 52.

Alternatives 3A, 3B and 3C assume an extension of Cliff Road to a new highway interchange with TH 52 at Inver Grove Trail.

Alternative 4 is a No Build Alternative assuming no significant improvements and/or changes in access to TH 52.

Notes:

(1) Right-of-Way and any railroad costs were not included in the cost estimates

(2) Assumes 150' ROW width (new location areas for Cliff Road) and 100' ROW width (new location for frontage roads)

(3) The majority of building acquisitions are from frontage roads and the new interchange area.

**Safety and connectivity:** The alternatives described above did not vary greatly in the degrees of safety and connectivity provided, with the exception of Alternatives 2A and 2B (using Barnes Avenue as a connection to TH 52). Due to the greater incidence of access onto this roadway, in addition to sight distance and numerous curves, safety was less favorable for this alternative than for the other build alternatives and the route is more circuitous.

**TABLE 1**  
**CSAH 32 Extension: Alternatives Evaluation Matrix**

	<b>Environmental Impacts</b>				
<b>Alternative</b>	<b>Wetlands</b>	<b>Archeological/Cultural Resources</b>	<b>Neighborhood Impacts</b>	<b>Construction Costs <sup>(1)</sup></b>	<b>Consistency with Regional Plans</b>
<b>1A (117th Street Connection with Hwy. Overpass)</b>	Low	Low/Medium	Fair	\$6 Million	Yes (cited in Dakota County's 2020 Transportation Policy Plan and the City of Inver Grove Heights's Comprehensive Plan)
<b>1B (117th Street Connection)</b>	Low	Low/Medium	Fair	\$7 Million	Yes (cited in Dakota County's 2020 Transportation Policy Plan and the City of Inver Grove Heights's Comprehensive Plan)
<b>2A (Barnes Avenue Connection with Hwy. Overpass)</b>	Low	Medium/Low	Poor	\$5 million	No
<b>2B (Barnes Avenue Connection)</b>	Low	Medium/Low	Poor	\$6.3 Million	No

**TABLE 1  
CSAH 32 Extension: Alternatives Evaluation Matrix**

	<b>Environmental Impacts</b>				
<b>3A (Cliff Road Extension, folded-diamond south)</b>	Medium	High/Medium	Good	\$12.8 Million	No
<b>3B (Cliff Road Extension, folded-diamond north)</b>	Medium	High/Medium	Good	\$13.3 Million	No
<b>3C (Cliff Road Extension, rail spur alignment)</b>	Medium	High/Medium	Good	\$13 Million	No
<b>4 (No Build)</b>	Low	Low/Low	Poor	NA	No

**TABLE 1**  
**CSAH 32 Extension: Alternatives Evaluation Matrix**