

# STONE ROAD FUTURE ALTERNATIVES SUMMARY

6/21/2022

## Assumed Conditions

2021 Average Daily Traffic (ADT)*	5,167
Growth Factor (%)	1.5
Percent Heavy Trucks (%) (assumed)	5.0
ESAL Truck Factor (assumed)	1.7
Minimum Right-of-Way Width (ft)**	50
2-Lane Road Capacity***	10,000

## Projected Average Daily Traffic (ADT)

Projected Year	2021	2025	2030	2035	2040	2045
Average Daily Traffic (ADT)	5,167	5,484	5,908	6,364	6,856	7,386

## Proj Yr to top 10k

2066

Typical Sections	EB Width (ft)	Center Width (ft)	WB Width (ft)	Total (ft)	Add'l ROW	Curb & Gutter	New Culverts	Surface / Base	Base Type
Existing	10.5	0.0	10.5	21.0	N	N	N	3"/6"	Sand/Gravel
2-Lane Asphalt (Match Existing)	10.5	0	10.5	21.0	N	N	N	9"/8"	Flex w/ Geogrid
2-Lane Concrete, no impvd drainage	13	0	13	26.0	N	N	N	8"/8"	Flex w/ Geogrid
2-Lane Concrete, w/ impvd drainage	13	0	13	26.0	Y (70' min)	N	Y	8"/8"	Flex w/ Geogrid
3-Lane Concrete	12	14	13	39.0	Y (70' min)	Y	Y	8"/8"	Flex w/ Geogrid

\*-From "E. Stone Improvements Study" report, prepared by Binkley & Barfield Consulting Engineers for Collin County, highest count of 4 locations.

\*\*Maximum width considered 50' before needing to purchasing right-of-way.

\*\*\*-From "E. Stone Improvements Study" report, prepared by Binkley & Barfield Consulting Engineers for Collin County, listed as a "general rule of thumb."