

# ROCKY FORK ROAD TO MCEWEN DRIVE CORRIDOR STUDY



APRIL 2023

## Table of Contents

1. BACKGROUND.....	1
1.1. INTRODUCTION.....	1
1.2. STAKEHOLDER GROUP.....	1
1.3. STUDY AREA CONTEXT.....	2
2. STUDY OVERVIEW.....	4
2.1. STUDY PROCESS .....	4
2.2. STAKEHOLDER COORDINATION.....	5
3. CORRIDOR SCREENING .....	6
3.1. POTENTIAL ALIGNMENTS .....	6
3.2. INITIAL ALIGNMENT SCREENING RESULTS .....	12
3.3. SHORTLISTED ALIGNMENTS.....	20
4. EVALUATION OF SHORTLISTED ALIGNMENTS .....	21
4.1. ENVIRONMENTAL SCREENING .....	21
4.2. TOPOGRAPHY .....	27
4.3. LAND USE.....	28
4.4. RIGHT-OF-WAY AND PARCEL IMPACTS.....	33
4.5. COMMUNITY IMPACTS.....	39
4.6. MOBILITY BENEFITS .....	49
4.7. CONCEPTUAL COST .....	57
4.8. SUMMARY OF SHORTLISTED ALIGNMENTS.....	58
5. PREFERRED ALIGNMENT .....	59
5.1. INITIAL DECISION .....	59

5.2.	HYBRID ALIGNMENTS .....	59
5.3.	PREFERRED ALIGNMENT .....	62
6.	CONCLUSION AND NEXT STEPS .....	65
6.1.	FORMAL RESOLUTION OR AGREEMENT .....	65
6.2.	LOCAL PLAN AMENDMENTS .....	65
6.3.	REGIONAL PLAN AMENDMENT .....	65
7.	APPENDIX .....	67
7.1.	BIFURCATED PARCEL DETAIL .....	67
7.2.	AFFECTED BUILDING DETAIL .....	71
7.3.	STAKEHOLDER COORDINATION MEETING NOTES .....	75
7.4.	EXAMPLE CORRIDOR MANAGEMENT AGREEMENT .....	79

## 1. BACKGROUND

### 1.1. Introduction

Rutherford and Williamson Counties have experienced tremendous growth in municipalities such as Smyrna, La Vergne, Nolensville, Franklin, and Brentwood, as well as the unincorporated areas of both counties. A new east-west corridor connecting Rutherford and Williamson Counties has been identified as an important need to address travel demand associated with this growth.

A new road between Smyrna and Franklin is included in the current Nashville Area MPO 2045 Regional Transportation Plan (RTP). This proposed road is classified as an “Illustrative” project, meaning no funding source and no horizon year has been identified. The Town of Smyrna (the Town) has coordinated a group of affected local government stakeholders to advance the proposed new east-west road connection.

The purpose of this Rocky Fork Road to McEwen Drive Corridor Study (Corridor Study) is to complete a planning level study of potential alignments that identifies fatal flaws, obstacles or challenges and an order of magnitude of cost. This information is intended to enable local, regional and state stakeholders to make informed decisions on the feasibility of potential corridor alignments.

### 1.2. Stakeholder Group

The study included representation from all local governments directly impacted by the study corridor and proposed alignments, including:

- Town of Smyrna
- City of Franklin
- City of Brentwood
- Town of Nolensville
- City of LaVergne
- Williamson County
- Rutherford County

Collectively, these local governments are referred to as the Stakeholder Group. Additionally, the Greater Nashville Regional Council (GNRC) participated in the study process in an observatory capacity.



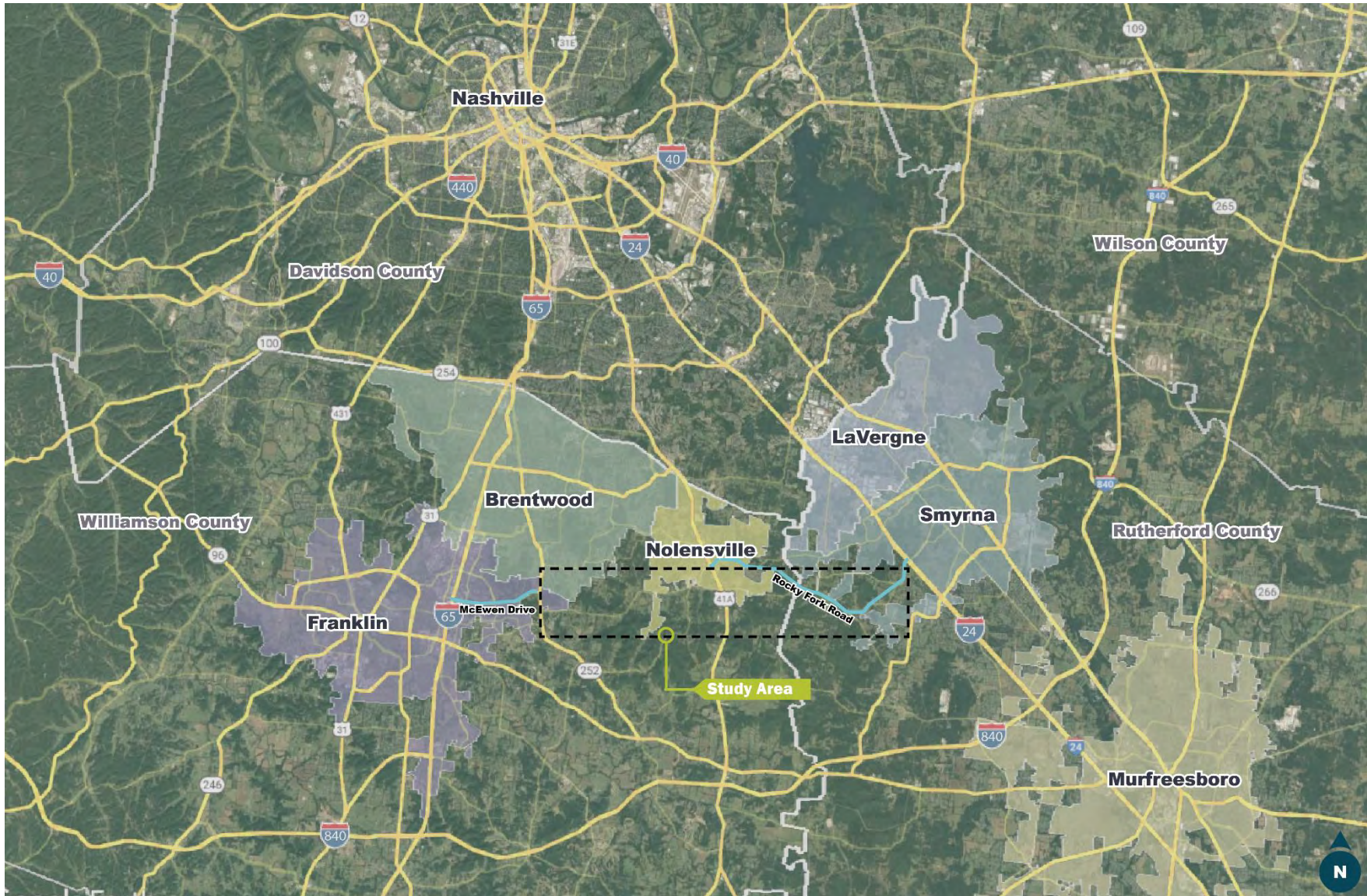
## 1.3. Study Area Context

The study area is bounded by State Route 96 (SR-96) and Interstate 840 (I-840) on the south, Old Hickory Boulevard (SR-254) on the north, I-65 on the west and I-24 on the east. Proposed corridor alignments would link the planned extension of McEwen Drive, currently under design, east of Wilson Pike (SR-252) in Franklin to various locations at Rocky Fork Road between Rocky Fork, Almadale Road and Lee Road in Smyrna. The study area is delineated in Figure 1.

# Rocky Fork Road to McEwen Drive Corridor Study

April 2023

Figure 1. Study Area with Regional Context





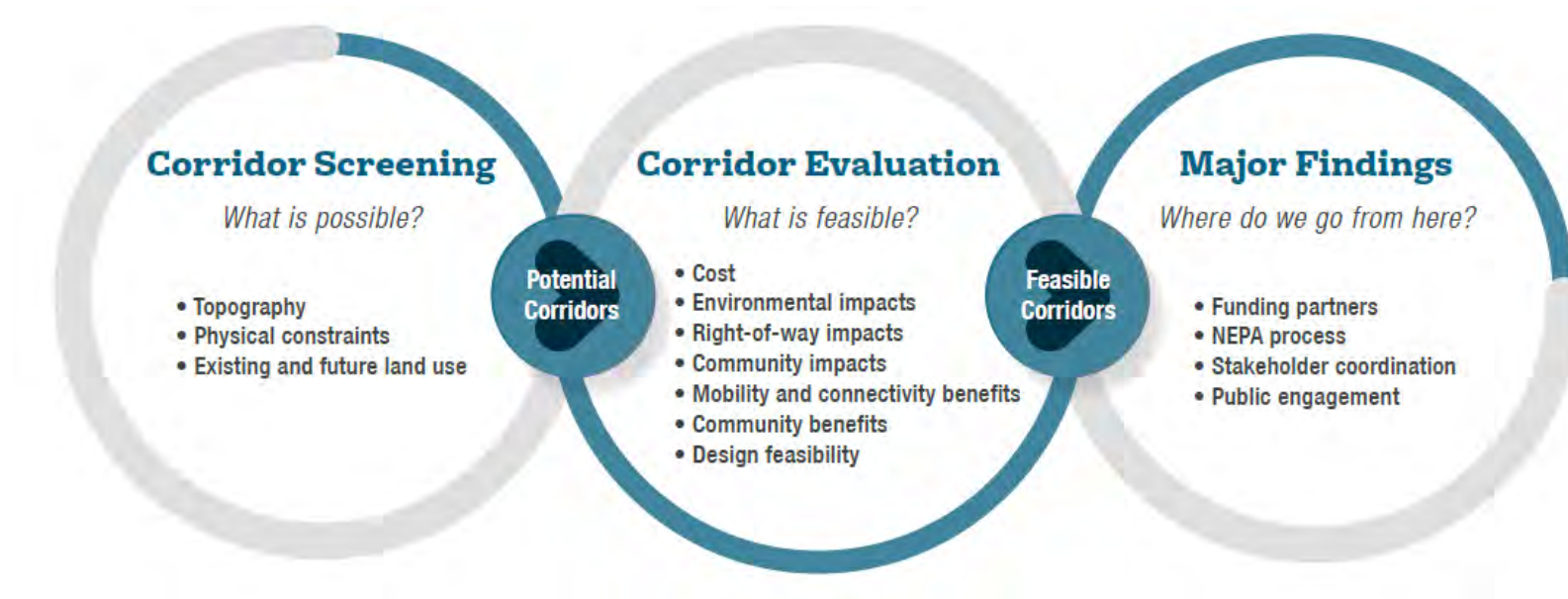
## 2. STUDY OVERVIEW

### 2.1. Study Process

The study process, illustrated in Figure 2, follows a three-step process to progressively arrive at a preferred alignment:

- Corridor Screening: A universe of potential alignments are identified. A high-level screening eliminates alignments based on topography, physical constraints or development conflicts.
- Corridor Evaluation: A shortlist of alignments from the previous step is subject to a more detailed screening of criteria such as cost, environmental impacts, right-of-way impacts, community impacts and mobility and connectivity benefits.
- Major Findings: A preferred alignment or set of alignments are selected based on the evaluation results. Future next steps, such as funding, more detailed environmental analysis and stakeholder coordination are identified.

Figure 2. Study Process



## 2.2. Stakeholder Coordination

Meetings with study stakeholders were held throughout the process to review and provide feedback on proposed alignments and their evaluation results. Notes from Stakeholder Meeting Number 1 on February 2, 2022, Stakeholder Meeting Number 2 on May 16, 2022, Stakeholder Meeting Number 3 on August 8, 2022 and Stakeholder Meeting No. 4 on January 30, 2023 are included in the Appendix.



## 3. CORRIDOR SCREENING

### 3.1. Potential Alignments

The corridor study evaluates several potential alignments from the existing intersection of McEwen Drive with Wilson Pike in Franklin to Rocky Fork Road in Smyrna. While many of the proposed alignments would include portions along new alignment which would warrant the acquisition of new right-of-way, the proposed alignments also incorporate existing roads:

- Pleasant Hill Road
- Clovercroft Road
- Williams Road
- York Road
- Rocky Fork Road
- Lee Road
- Santos Road
- Del Thomas Road
- Burke Hollow Road
- Skinner Road
- Osburn Road
- McCanless Road

Seven initial alignments were evaluated, as shown in Figure 3 . A brief description of each alignment, from west to east, is provided below:

Alignment 1 connects the McEwen Drive extension to Pleasant Hill Road via a new alignment. It continues east from Pleasant Hill Road to Clovercroft Road and Williams Road through the intersection of Nolensville Road (US 41A), continuing along York Road. The alignment follows York Road to its intersection with Rocky Fork Road, where it continues to a proposed interchange with I-24.

Alignment 2 follows the same path as Alignment 1 through York Road, where it deviates to the north via Lee Road. The alignment follows Lee Road to its intersection with Rocky Fork Road, where it continues to a proposed interchange with I-24.

Alignment 3 includes the same new roadway connection east of McEwen Drive as Alternatives 1 and 2. Instead of continuing along Clovercroft Road, it swings to the south and follows a new southern alignment parallel to Clovercroft Road, Williams Road and York Road, where it ultimately connects to Rocky Fork Road, where it continues to a proposed interchange with I-24.

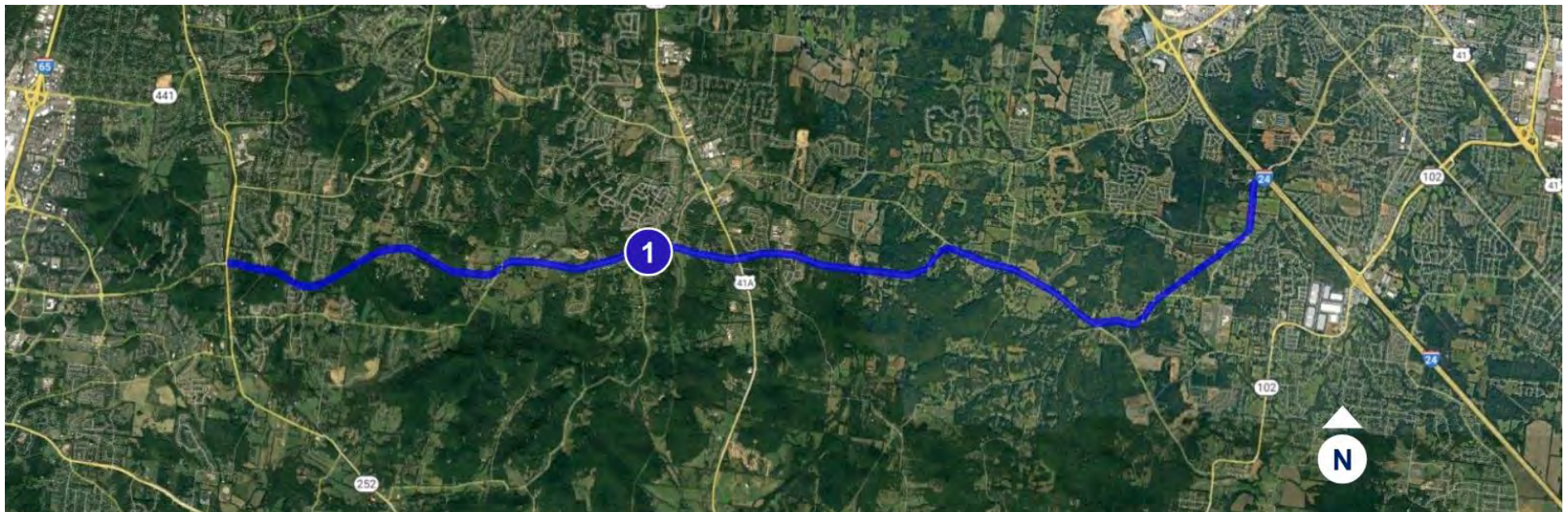
Alignment 4 follows the same path as Alignment 3 to approximately 1.5 miles past the intersection of Nolensville Road, where it swings north to York Road just west of Rocky Fork Road, then follows the same path as Alignment 3 to its eastern terminus.

Alignment 5 follows the same path as Alignments 3 and 4, up to the intersection with Nolensville Road, where it swings to the south using portions of Santos Road and Del Thomas Road, ultimately connecting to Rocky Fork Road following the same path as Alignments 3 and 4 to its eastern terminus.

Alignment 6 heads south along Wilson Pike from the existing intersection at McEwen Drive. It deviates from Wilson Pike by following the alignment of the CSX rail line, then heads east using Burke Hollow Road, Skinner Road and Osburn Road. East of Nolensville Road, the alignment follows McCanless Road and Del Thomas Road, where it connects to Rocky Fork Road, then follows the same path as Alignments 3 and 4 to its eastern terminus.

Alignment 7 follows the same path as Alignment 6 up to Burke Hollow Road. Instead of transitioning to Skinner Road, it continues along Burke Hollow Road for approximately 1.4 miles. It then deviates from Burke Hollow Road to the north, following a new alignment eastward through Nolensville Road to Rocky Fork Road, where it follows the same path as Alignments 3, 4, 5 and 6 to its eastern terminus.

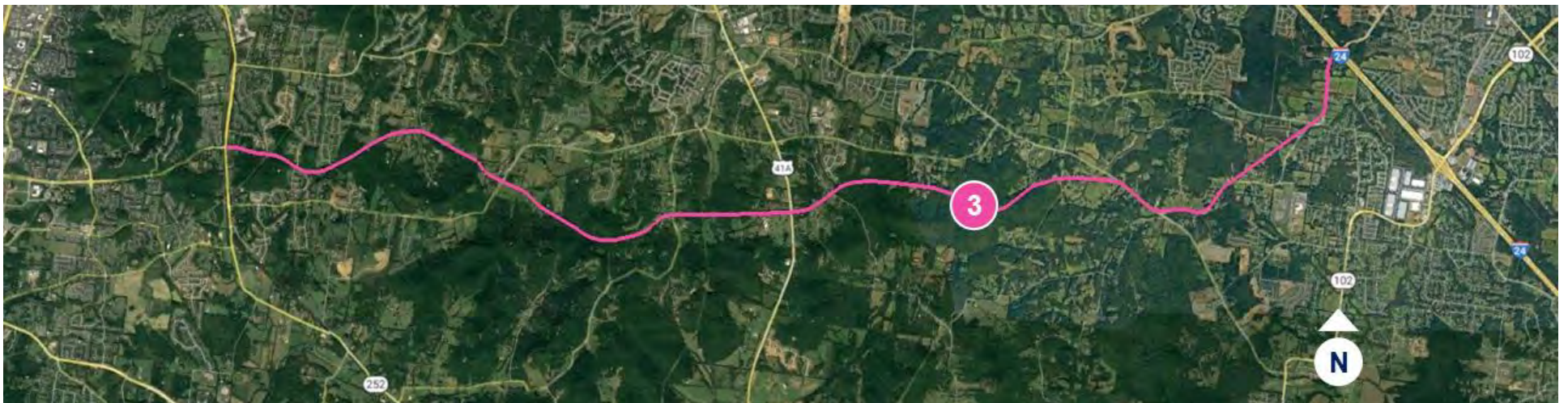
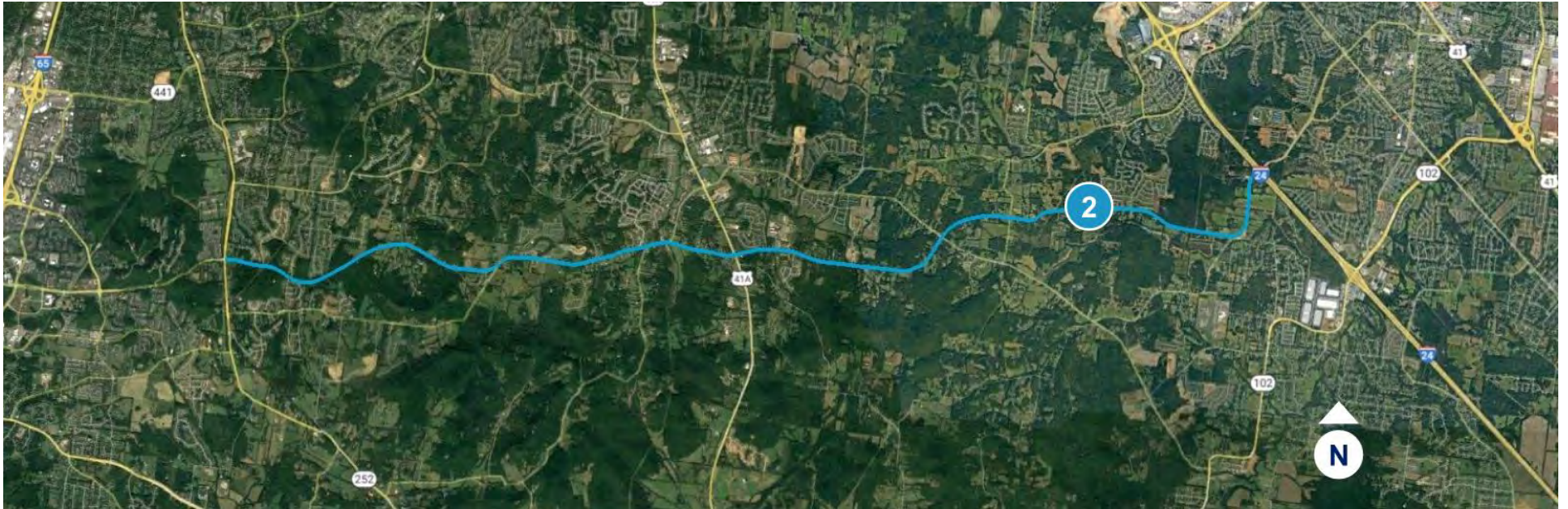
*Figure 3. Initial Alignments*



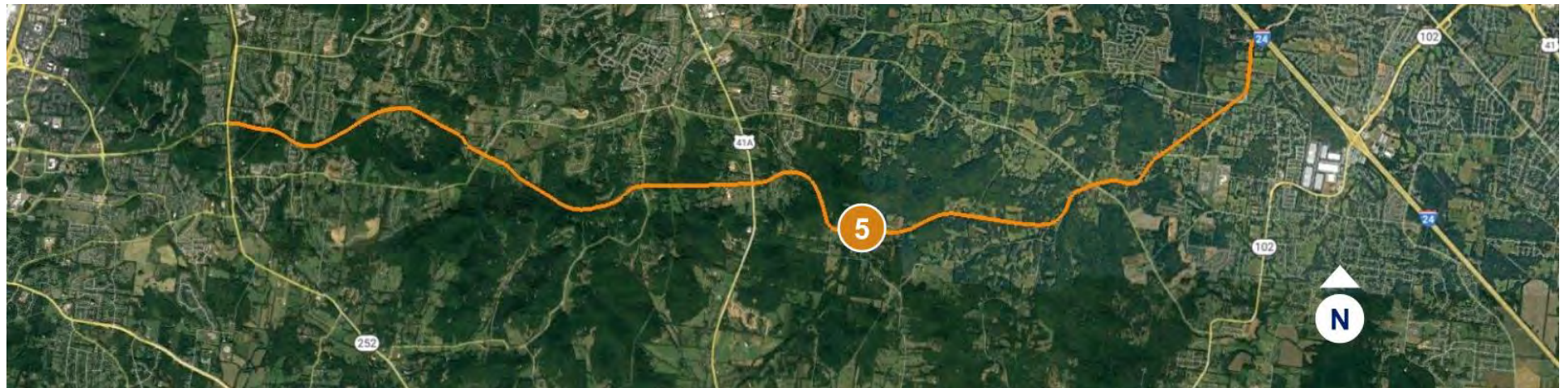
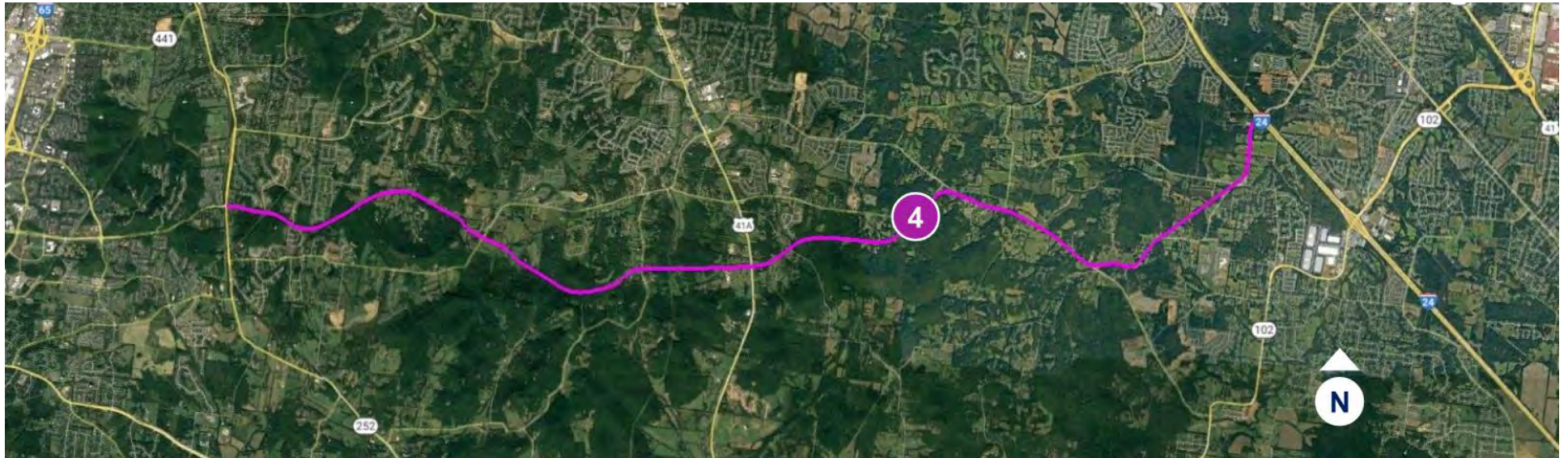


# Rocky Fork Road to McEwen Drive Corridor Study

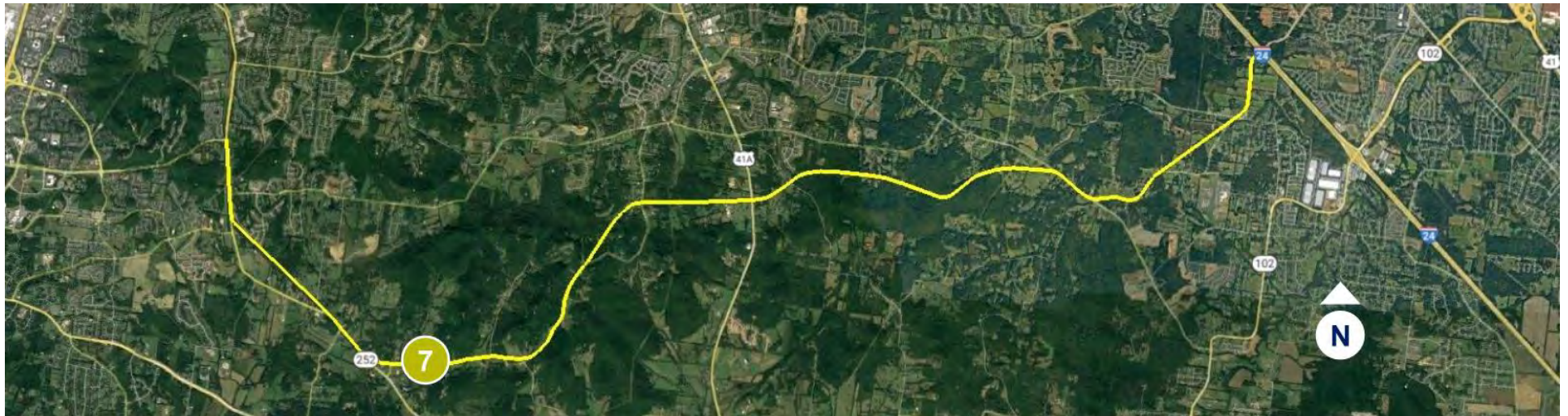
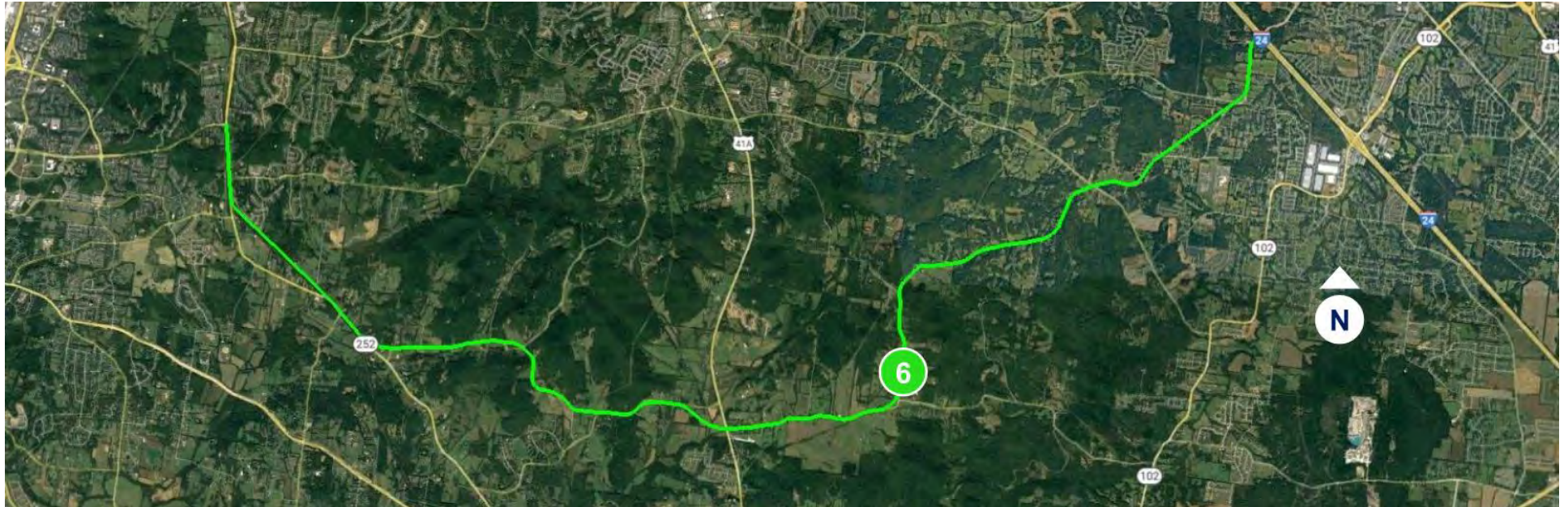
April 2023





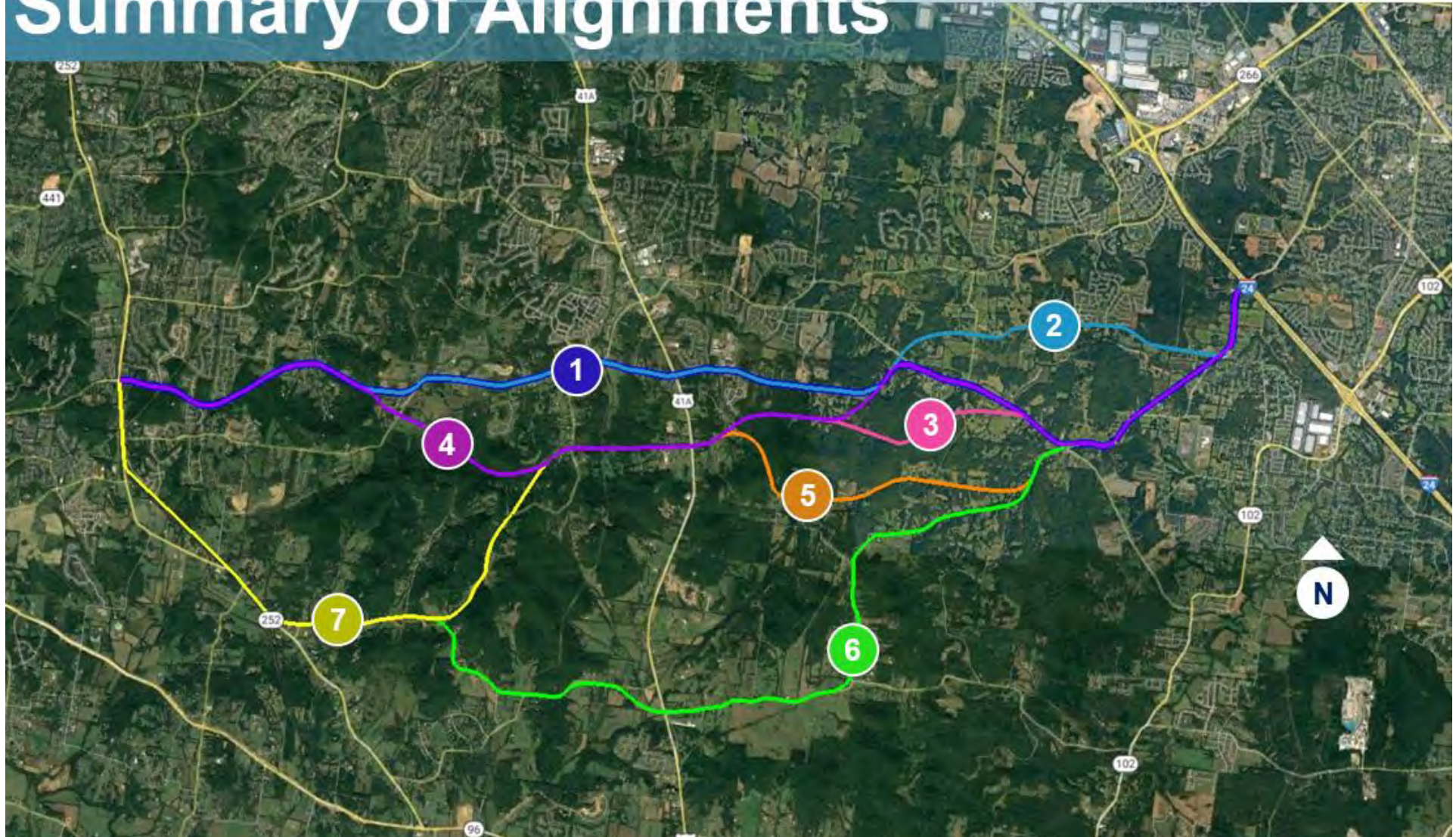








## Summary of Alignments





## 3.2. Initial Alignment Screening Results















An initial alignment screening evaluated each initial alignment based on route directness, topography, land use, development conflicts, stream crossings, and utility impacts. The objective of this analysis is to quickly and efficiently assess a universe of potential alignments in order to identify a smaller number of alignments for more detailed analysis.


The results of the screening of initial alignments are summarized in Figure 4. The following are major conclusions of the analysis:

- Alignments 1 and 2 are the most efficient as they are the shortest in length, while Alignments 6 and 7 are the least efficient.
- Alignments 1, 2 and 6 are predominantly comprised of existing roads, while Alignments 3, 4, 5 and 7 are more evenly distributed between existing roads and new road construction.
- All alignments have topography challenges.
- Alignments 3, 4 and 5 have the fewest potential parcel impacts while Alignments 1, 2 and 6 have the greatest potential parcel impacts.
- All alignments have stream crossings, ranging from a low of 9 (Alignment 2) to a high of 13 (Alignment 4).
- All alignments cross a natural gas transmission line; Alignments 1 and 2 cross a single electrical transmission line, while the rest of the alignments cross two.

The following sections describe the initial alignment screening results in greater detail.

Figure 4. Initial Alignment Screening Summary

	1	2	3	4	5	6	7
Length	13.8	13.4	13.8	14.2	14.3	17.1	16.0
Efficiency Ratio*	1.14	1.11	1.14	1.17	1.19	1.41	1.32
New vs. Existing Road							
Topography							
Parcels Impacted	430	470	260	290	280	460	340
Stream Crossing	10	9	12	13	11	12	12
Major Utility Crossing	Gas Electric (1)	Gas Electric (1)	Gas Electric (2)	Gas Electric (2)	Gas Electric (2)	Gas Electric (2)	Gas Electric (2)

 = topography challenges present

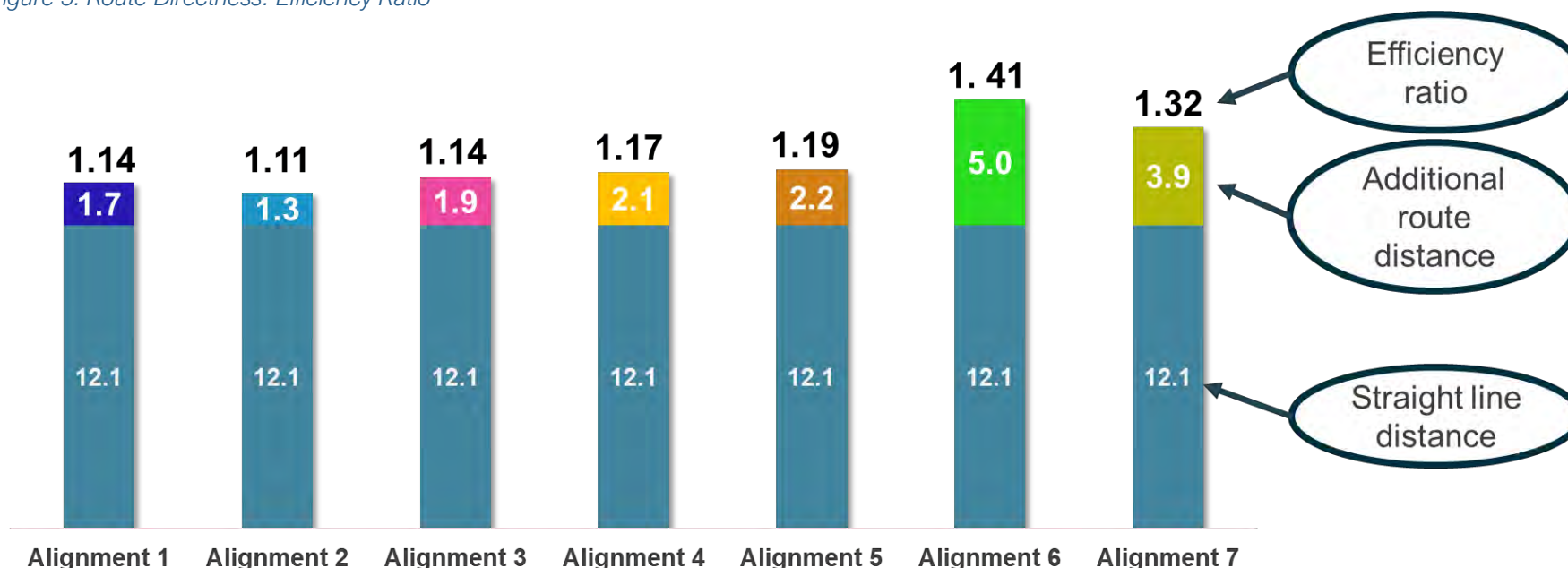
\*Route distance divided by the straight-line distance (12.1).

## Route Directness

The efficiency ratio is a measure of directness of each potential alignment. A more direct alignment will have positive impacts on cost and travel time. The efficiency ratio is calculated by dividing the linear distance of each alignment by the straight-line distance between the study area termini of 12.1 miles. Figure 5 identifies the efficiency ratio of each alignment. Alignments 1 through 5 are the most efficient, with ratios ranging

from 1.11 to 1.19, reflecting additional lengths of 1.3 to 2.2 miles. Alignments 6 and 7 have significantly higher ratios of 1.41 (additional 5 miles) and 1.32 (additional 3.9 miles), respectively, a reflection of how far to the south each of these alignments extends.

Figure 5. Route Directness: Efficiency Ratio



## Topography

Topographic conditions affect the cost and development potential of an alignment. The study area as a whole experiences significant variations in topography, and all initial alignments are impacted to various degrees. Table 1 shows the topography analysis of each alignment, as measured by the maximum and average slope. Generally speaking, alignments with significant portions that do not follow an existing road, including Alignments 3, 4, 5 and 7, experience the greatest topographic impacts: maximum slopes ranging from 20.6 to 27.3 percent and average slopes ranging from 4.8 to 5.4 percent. Alignments 1, 2, and 6, which follow existing roads for a majority of their lengths, experience less topographic impacts: maximum slopes ranging from 17.6 to 19.7 percent and average slopes ranging from 2.7 to 3.8 percent.



*Table 1. Topography Analysis*

Alignment	Maximum Slope	Average Slope
Alignment 1	19.7%	3.5%
Alignment 2	19.4%	3.8%
Alignment 3	21.4%	5.4%
Alignment 4	20.6%	5.0%
Alignment 5	23.8%	4.8%
Alignment 6	17.6%	2.7%
Alignment 7	27.3%	4.0%

## New Versus Existing Roadway

All else being equal, the construction of a new roadway alignment is more costly and disruptive than improving an existing roadway alignment due to the amount of right-of-way and new construction required. The length of new and existing roadway was estimated for each of the potential alignments. Alignments 1, 2 and 6 are estimated to include approximately 85 percent existing roadway and 15 percent new roadway, while Alignments 3, 4, 5 and 7 are estimated to be comprised of an even amount of new and existing roadway. A summary of new and existing roadway for each alignment is summarized in Table 2.

*Table 2. Estimated Amount of New and Existing Roadway*

Alignment	Total Length	Percent Existing	Length Existing	Percent New	Length New
Alignment 1	13.8	85%	11.7	15%	2.1
Alignment 2	13.4	85%	11.4	15%	2.0
Alignment 3	13.8	50%	6.9	50%	6.9
Alignment 4	14.2	50%	7.1	50%	7.1
Alignment 5	14.3	50%	7.2	50%	7.2
Alignment 6	17.1	85%	14.5	15%	2.6
Alignment 7	16	50%	8.0	50%	8.0

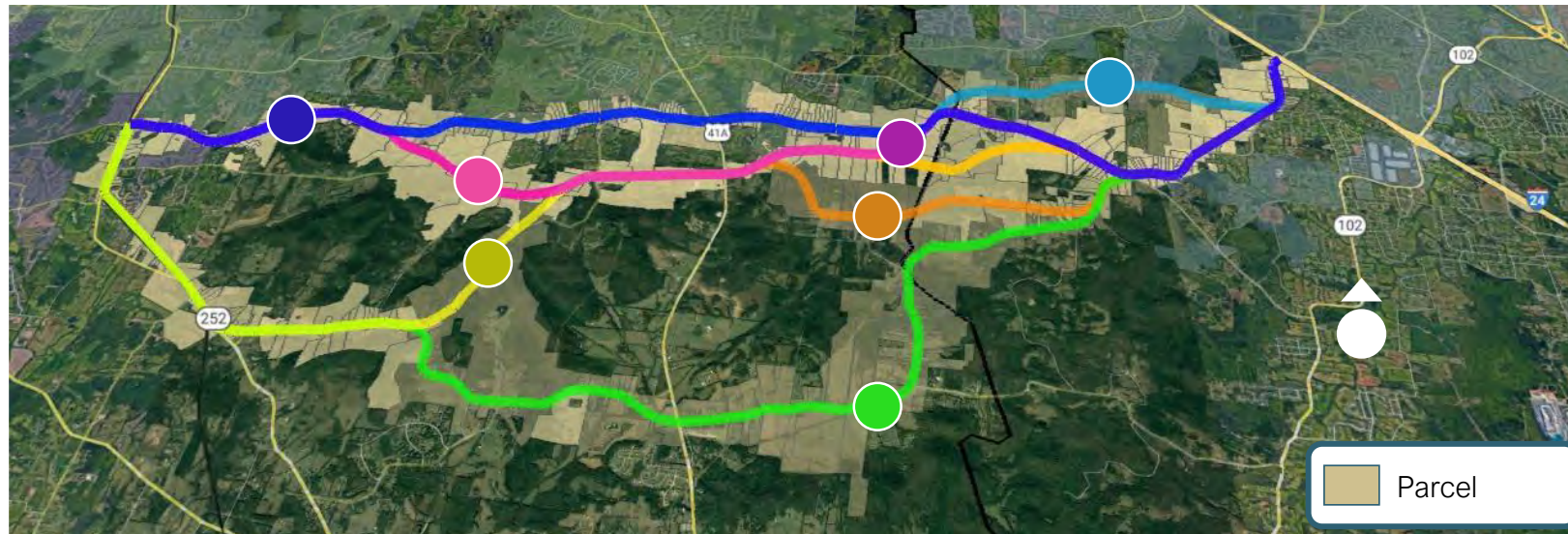
## Parcel Impacts

The number of parcels impacted is another measure of cost and disruption. A 110-foot buffer was created for each alignment to determine the number of parcels that could be potentially impacted. The analysis assumes an 85-foot roadway typical section, consistent with the design of the McEwen Drive extension. A 110-foot buffer of the alignment centerline was used to provide a margin of error. Alignments 3, 4 and 5 have the fewest potential parcel impacts, ranging between 260 and 290 parcels, while Alignments 1, 2 and 6 have the greatest impacts, ranging from 430 to 460 parcels. Table 3 summarizes the results of the parcel impact analysis. Figure 6 shows the parcels impacted by each alignment.

*Table 3. Summary of Parcel Impacts*

Route	Number of Parcels Potentially Impacted
Alignment 1	430
Alignment 2	470
Alignment 3	260
Alignment 4	290
Alignment 5	280
Alignment 6	460
Alignment 7	340

Figure 6. *Parcels Impacted*



## Stream Crossings

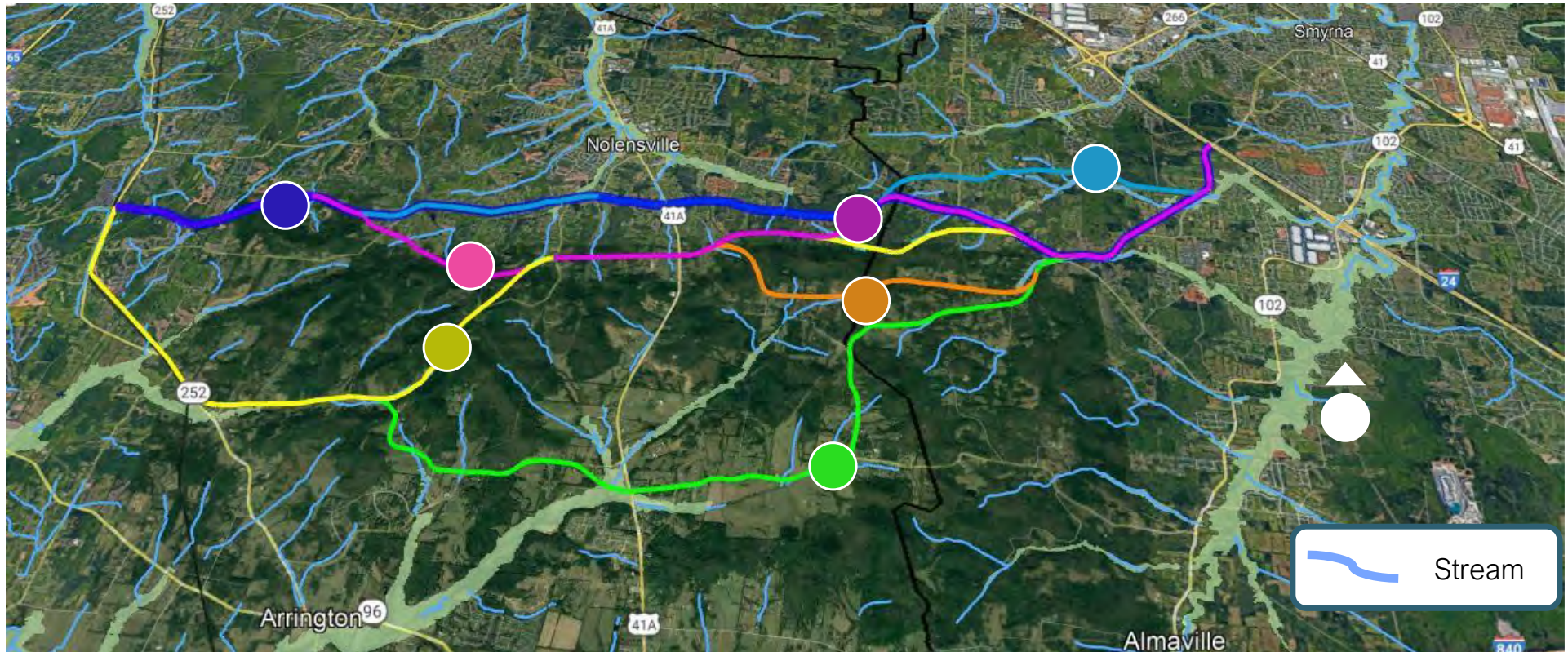
Each alignment was analyzed for potential stream crossings. The number of potential stream crossings range from a low of 9 (Alignment 2) to a high of 13 (Alignment 4). Table 4 summarizes the results of the stream crossing analysis. Figure 7 shows the streams crossed by each alignment.

Table 4. *Stream Crossings*

Route	Number of Potential Stream Crossings
Alignment 1	10
Alignment 2	9
Alignment 3	12
Alignment 4	13
Alignment 5	11
Alignment 6	12
Alignment 7	12



Figure 7. Stream Crossings



## Utility Crossings

The study area is traversed by three utility transmission lines: one underground natural gas transmission line and two overhead electrical transmission lines. The natural gas transmission line intersects the study area diagonally from northeast to southwest and is crossed by all of the potential alignments. The first electrical transmission line runs from north to south just west of Nolensville Road and is crossed by all of the potential alignments except Alignments 1 and 2. The second electrical transmission line runs along the eastern edge of the study area from I-24 to Almadale Road and is crossed by all of the potential alignments. Figure 4 shows the utility transmission lines crossed by each alignment.



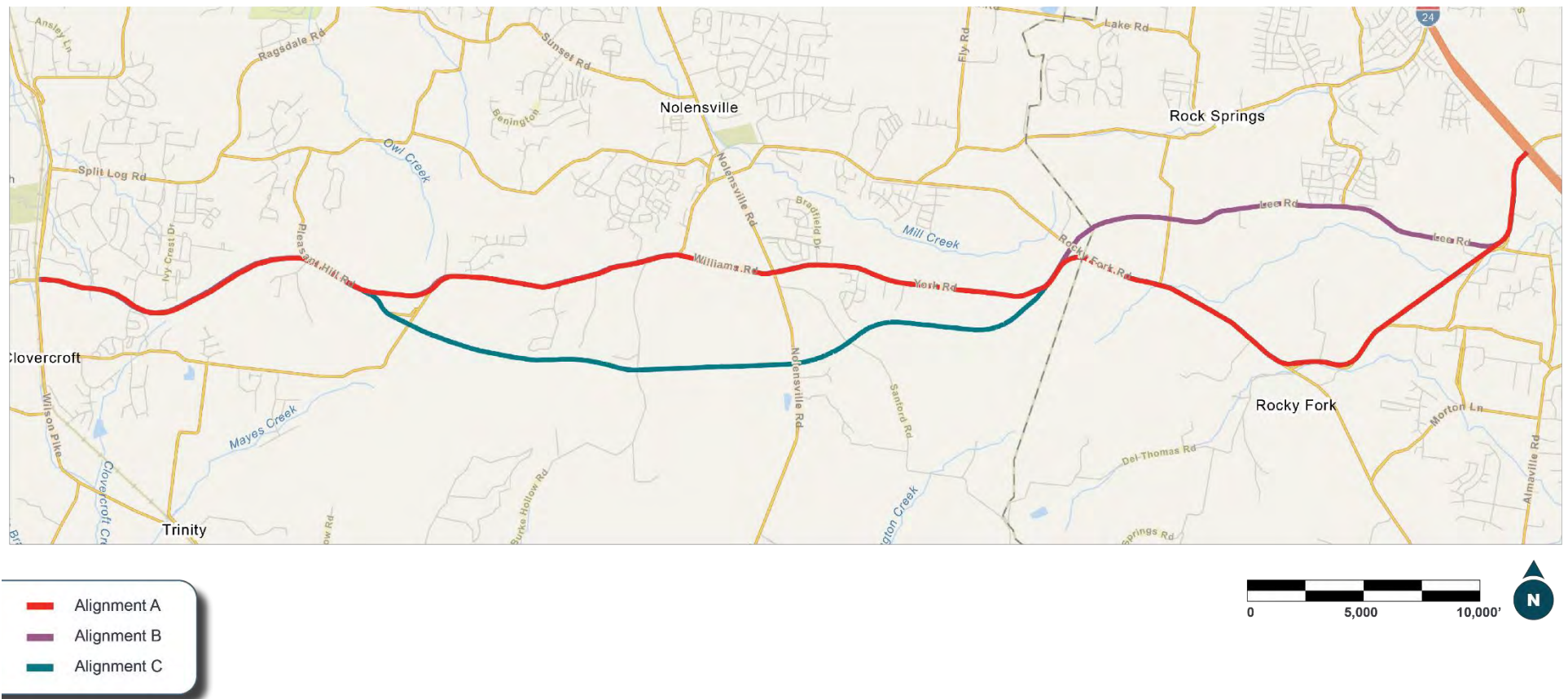
Figure 8. Utility Crossings



### 3.3. Shortlisted Alignments

The Stakeholder Group met to consider the results of the initial alignment screening. Three alignments were chosen for further evaluation: Alignments 1, 2 and 4. These alignments were chosen because they represent the most direct routes. Additionally, Alignments 1 and 2 were chosen because they make the best use of existing roads, while Alignment 4 was chosen because it is potentially less disruptive to existing land uses. Alignments 1, 2 and 4, renamed to A, B, and C, respectively, are shown in Figure 9 below.

Figure 9. Shortlisted Alignments





## 4. EVALUATION OF SHORTLISTED ALIGNMENTS

The shortlisted alignments (Alignments A, B, and C) were subjected to a more detailed evaluation that addresses potential environmental impacts, right-of-way impacts, community impacts and benefits, mobility benefits, and conceptual cost estimates. The purpose of this evaluation is to enable the Stakeholder Group to make an informed decision on a preferred alignment. The results of the individual analyses are described in the sections below.

### 4.1. Environmental Screening

A desktop environmental screening using readily accessible GIS and database sources was performed on the shortlisted alignments. The purpose of the environmental screening is to evaluate the potential for major environmental issues that would need to be addressed through a formal decision-making process such as the National Environmental Policy Act (NEPA).

None of the environmental criteria reviewed would preclude any of the reviewed alignments from further study. In the event that federal funding is applied to this project, any of the proposed alignments would require analysis and coordination for potential Environmental Justice (EJ) and farmland impacts. Alignments A and B have the greatest potential for wetland impacts, but Alignment A has the lowest acreage associated with potential stream impacts. Alignment C has the highest acreage associated with potential stream impacts.

#### Environmental Justice

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (1994), requires federal agencies to develop a strategy for their programs, policies, and activities to avoid disproportionately high and adverse impacts on minority and low-income populations with respect to human health and the environment. U.S. Census data was reviewed to determine if low-income or minority persons are present within the project study area. Though this review indicates the presence of low-income and minority persons within the project study area, this review did not indicate that any of the proposed shortlisted alignments should be precluded from further review. Figure 10 and Figure 11 provide detail on the concentration of low-income and minority persons within U.S. Census Block Groups in the project area.

In the event that federal funds are applied to this project, appropriate analyses and coordination for compliance with EO 12898 would be required during the NEPA process.

Figure 10. Low Income Populations

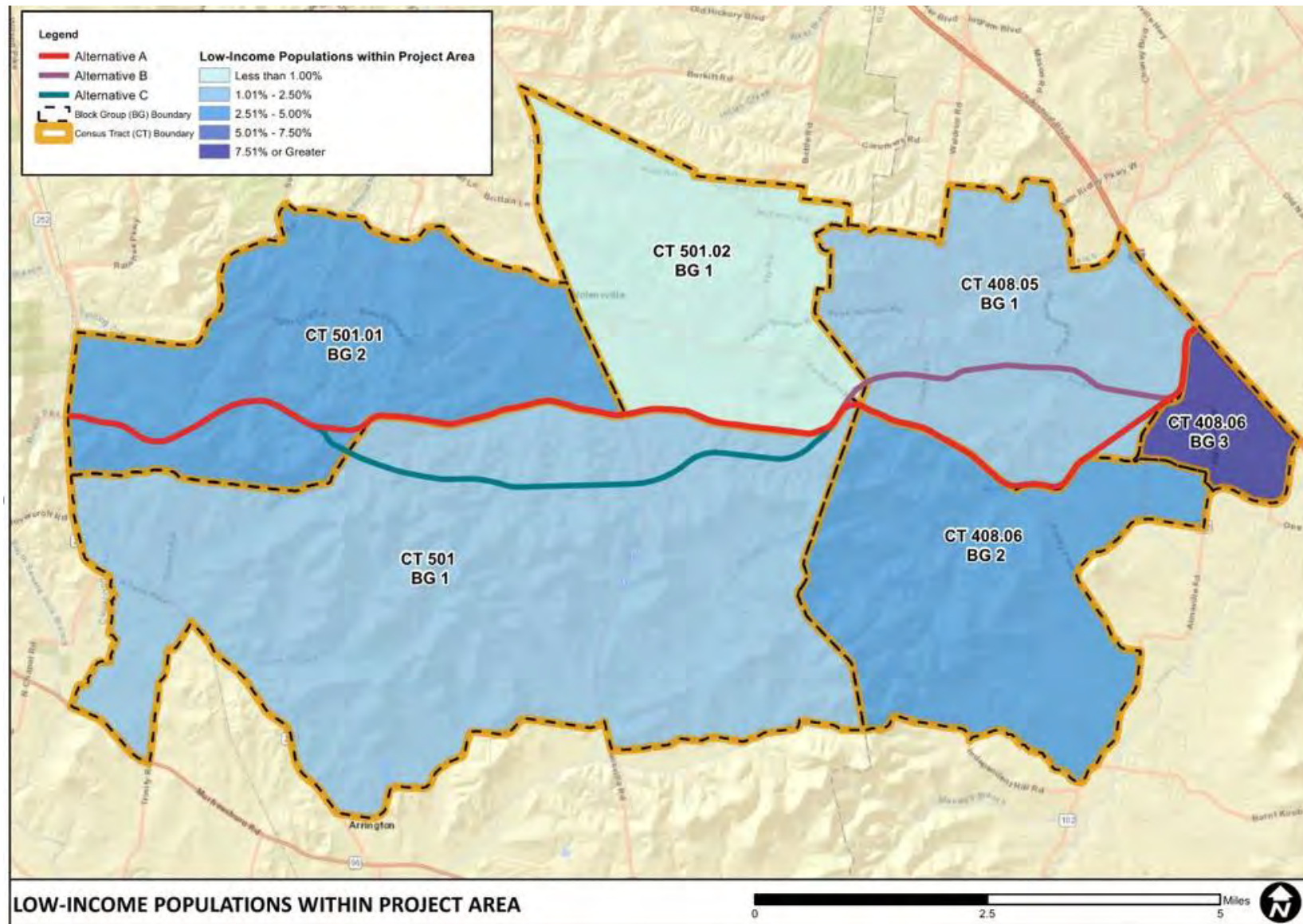
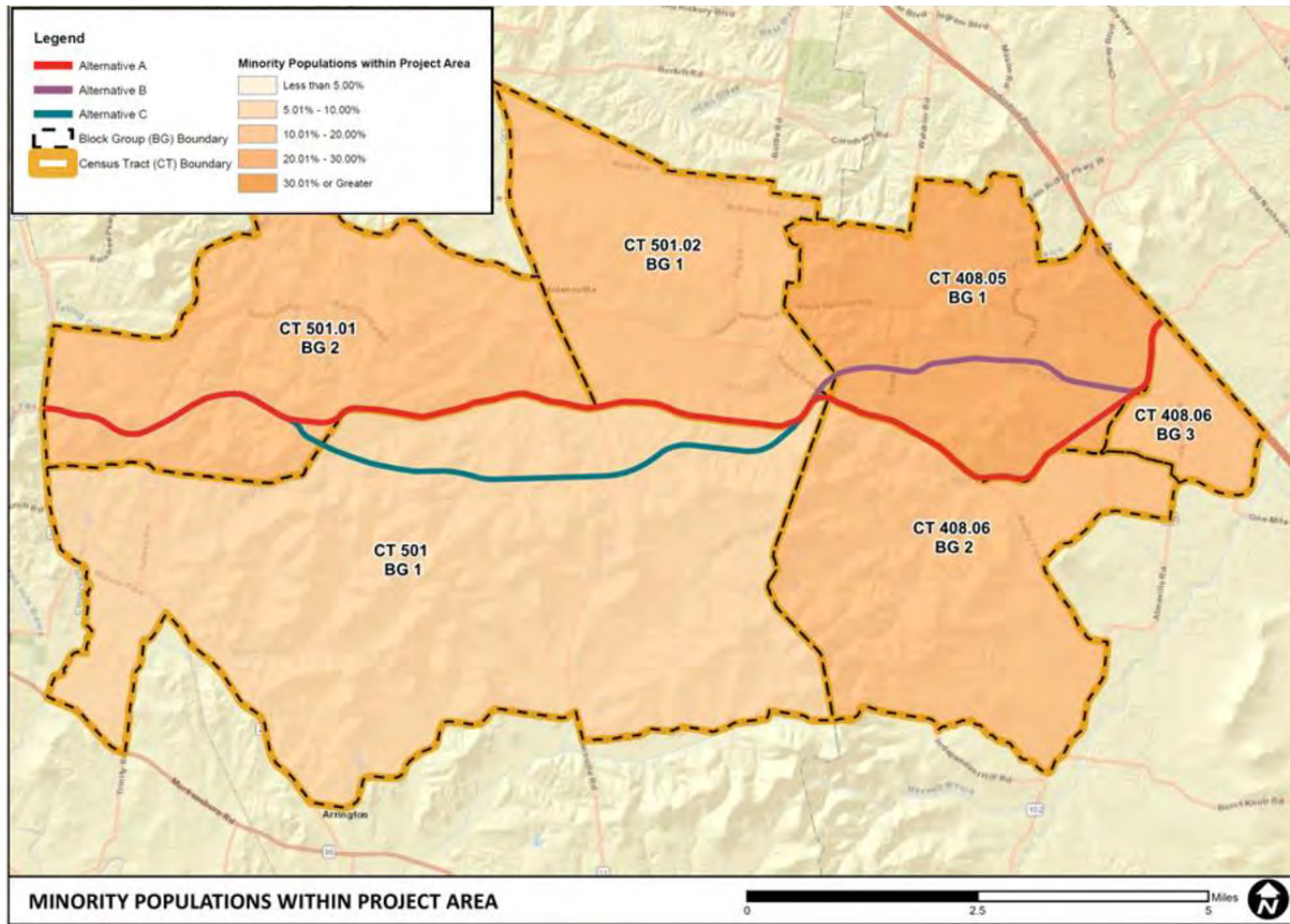




Figure 11. Minority Populations





## Farmland

Pursuant to the Farmland Protection Policy Act of 1994 (FPPA), federal programs that may convert prime, unique, and/or statewide or locally important farmlands to nonagricultural uses should conduct appropriate analyses and coordinate with the Natural Resources Conservation Service (NRCS) to determine a farmland conversion impact rating score. The shortlisted alignments are outside of the designated urban designation boundary for which such analyses are required (see Figure 12). In the event that federal funds are applied to this project, appropriate analyses and coordination with the NRCS for compliance with the FPPA would be required during the NEPA review; however, nothing in this environmental screening effort indicated that any of the shortlisted alignments should be precluded from further review.

Figure 12. NRCS Farmland Urban Boundary



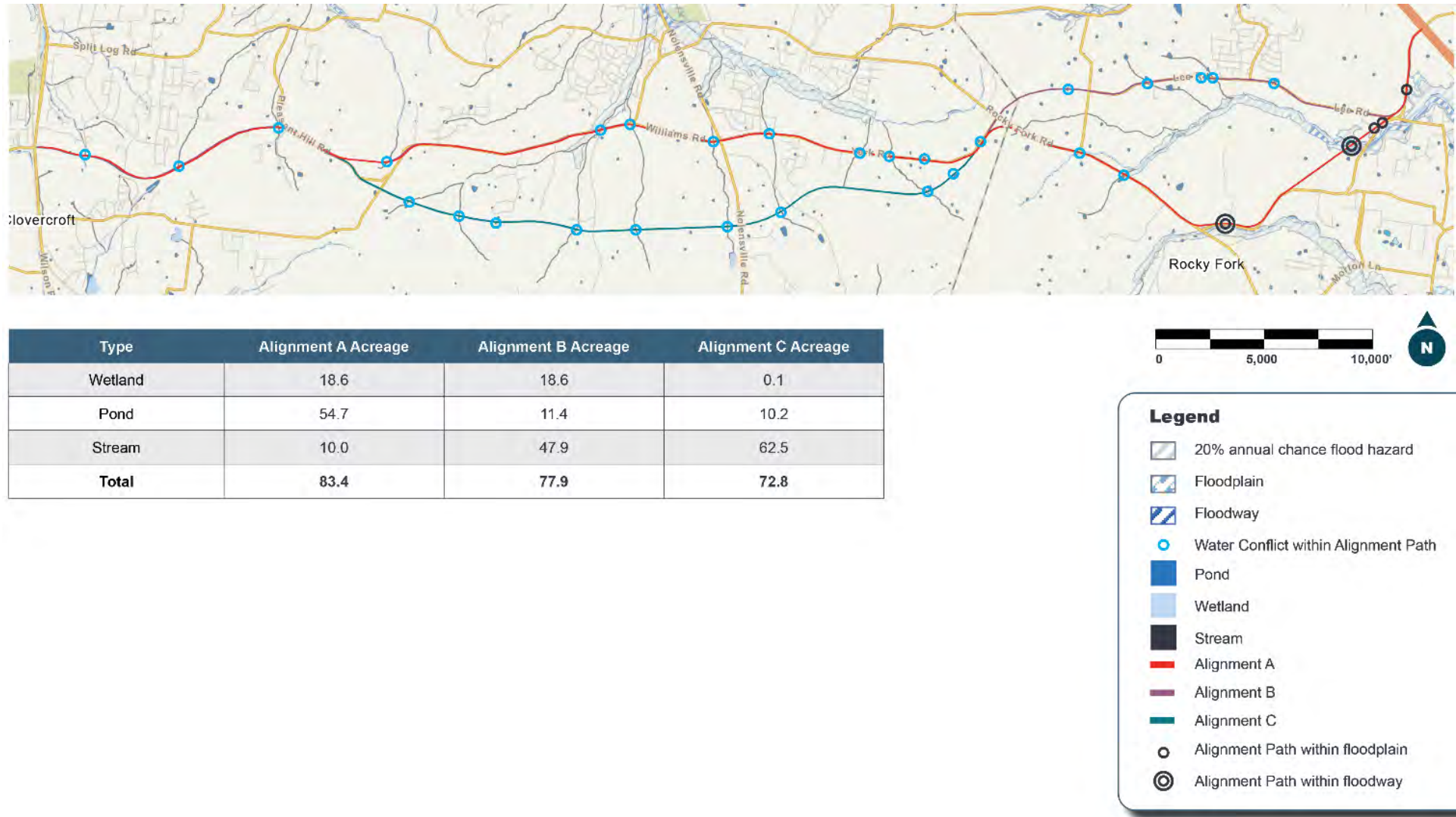
## Floodplains and Waterways

Building upon the stream crossing review completed in the initial environmental screening, a desktop review of GIS and online database sources, including Federal Emergency Management Agency (FEMA) flood maps, was completed to provide additional floodplain and waterway information for the shortlisted alignments. Figure 13 illustrates the proximity of the proposed alignments to floodplains and waterways. A “water conflict” is labeled each time an alignment path crosses a designated water feature. By acreage, Alignment C would have the largest impact to streams, and the smallest impact to wetlands, while Alignments A and B would have the largest impact to wetlands. Alignment A shows the smallest impact, in acreage, to streams.

# Rocky Fork Road to McEwen Drive Corridor Study

April 2023

Figure 13. Floodplains and Waterways

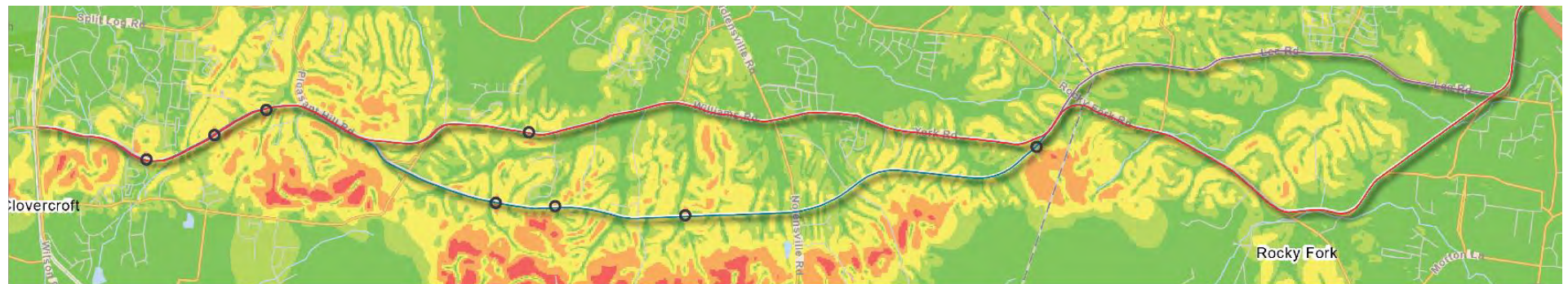




## 4.2. Topography

A slope analysis was completed to better understand where shortlisted alignments may encounter topographic issues. Generally speaking, areas with a slope of 20 percent or greater represent significant concern with respect to roadway design. Figure 14 shows the results of the slope analysis relative to the shortlisted alignments. All three alignments avoid areas of 20% slope or greater for most of their length, although Alignment C may encounter some topographic issues between Clovercroft Road and Nolensville Road.

Figure 14. Slope Analysis



### Legend

- Alignment A
- Alignment B
- Alignment C

### Percent Slope

- 0-5%
- 5-10%
- 10-20%
- 20-30%
- >30%

- Alignment Path >20% Slope

## 4.3. Land Use

All shortlisted alignments (A, B and C) are located in areas with predominantly agricultural, residential and vacant land uses. Jurisdiction future land use map designations generally reinforce existing land uses, with the exception of the Town of Smyrna, where all three alignments traverse land designated as General Urban at the proposed interchange of Rocky Fork Road and I-24.

### Existing Land Use

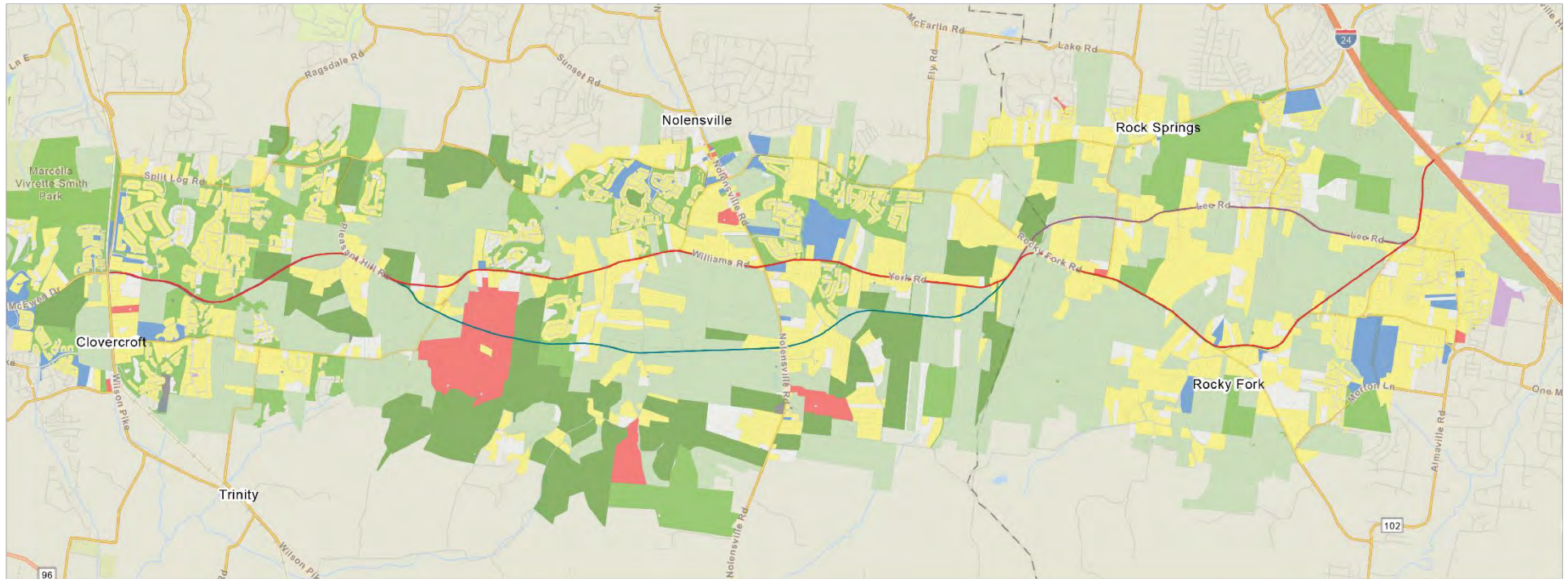
Figure 15 shows existing land use within a one (1) mile buffer and Figure 16 provides the results of a land use analysis summarizing the number and area of parcels within a 110-foot buffer of the shortlisted alignments. The existing land use for all alignments is predominantly residential and agricultural, both in terms of the number of parcels and corresponding area.



# Rocky Fork Road to McEwen Drive Corridor Study

April 2023

Figure 15. Existing Land Use



## Legend

Agriculture (39%)	Commercial (2%)
Residential (27%)	Industrial (1%)
Open Space (12%)	Transportation/Utilities (0.1%)
Natural Conservation (10%)	Alignment A
Vacant/Other (6%)	Alignment B
Civic/Institutional (2%)	Alignment C

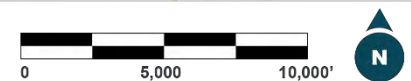


Figure 16. Land Use Analysis

Alignment A

Land Use	Number of Parcels	Acreage
Agriculture	57	2468
Civic Facilities	5	16
Education	1	94
Retail Commercial	1	4
Natural Conservation	6	271
Open Space	32	151
Cemeteries	1	46
Other	30	140
Single Family	190	1115
<b>Total</b>	<b>323</b>	<b>4,307</b>

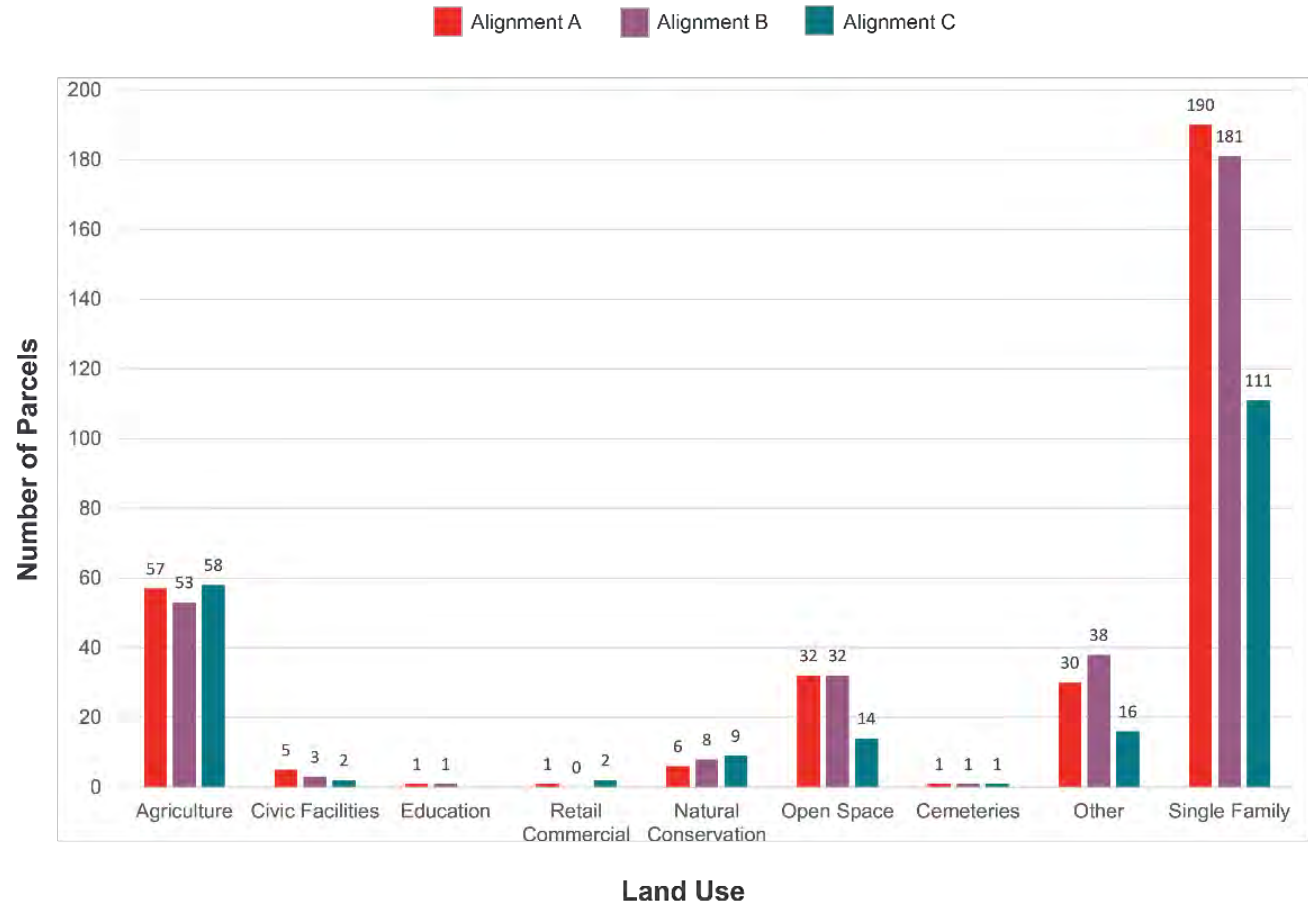
Alignment B

Land Use	Number of Parcels	Acreage
Agriculture	53	2259
Education	1	94
Civic Facilities	3	12
Natural Conservation	8	341
Open Space	32	151
Cemeteries	1	25
Other	38	147
Single Family	181	909
<b>Total</b>	<b>317</b>	<b>3,937</b>

Alignment C

Land Use	Number of Parcels	Acreage
Agriculture	58	2669
Civic Facilities	2	5
Retail Commercial	2	387
Natural Conservation	9	557
Open Space	14	151
Cemeteries	1	46
Other	16	96
Single Family	111	764
<b>Total</b>	<b>213</b>	<b>4,675</b>

Existing Land Use by Parcel Within 110' Buffer Zone of Each Alignment





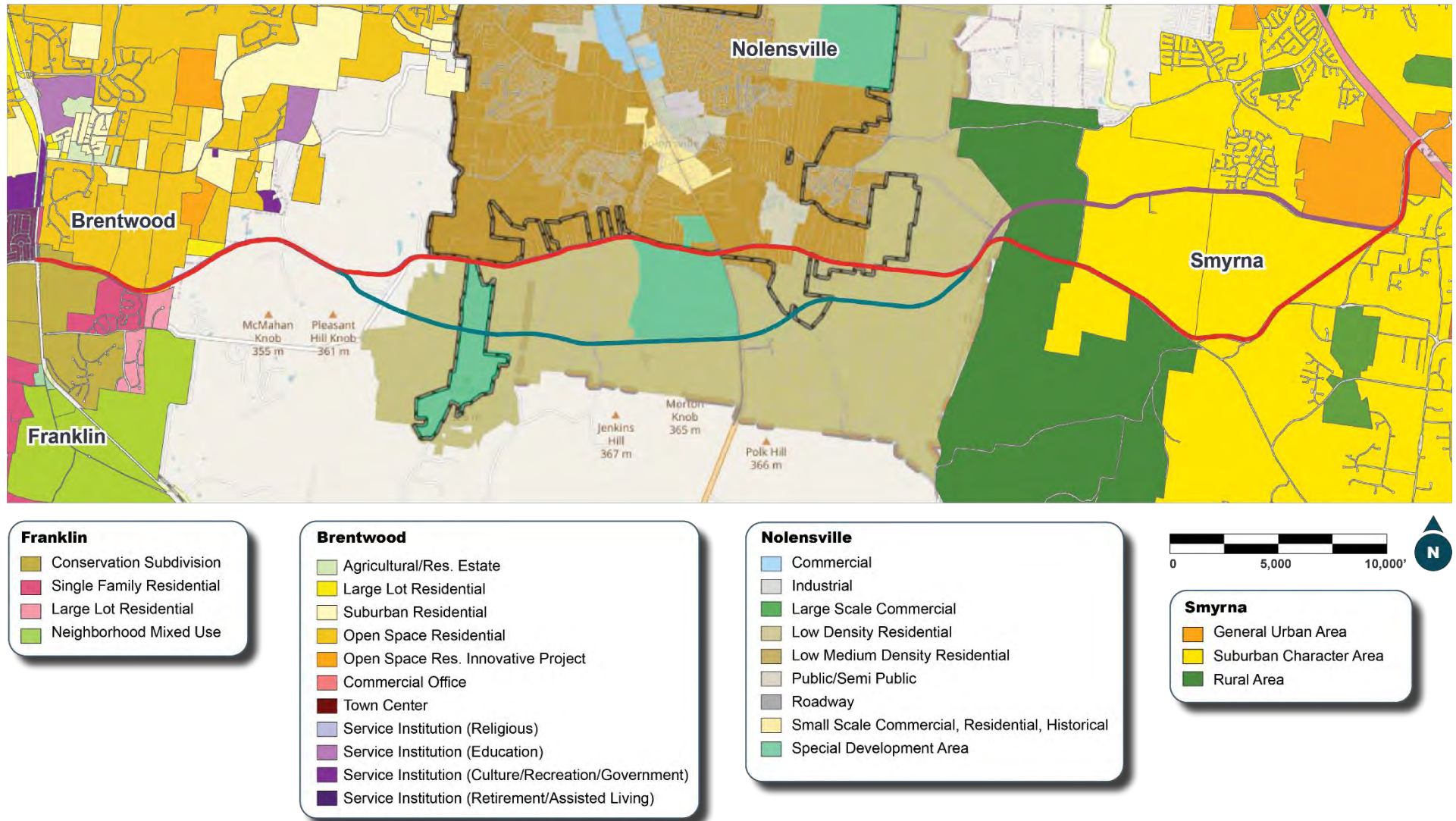
### Future Land Use

Future land use maps for each of the four municipalities (including their urban growth boundaries) in the study area, Brentwood, Franklin, Nolensville and Smyrna, were compiled and analyzed to determine how the land around each alignment could potentially change. The impacted future land use categories are summarized in Table 5 and the compiled future land use maps are shown in Figure 17.

*Table 5. Impacted Future Land Use Categories*

Jurisdiction	Alignment A	Alignment B	Alignment C
Brentwood	Open space residential	Open space residential	Open space residential
Franklin	Conservation subdivision Single family residential Large lot residential	Conservation subdivision Single family residential Large lot residential	Conservation subdivision Single family residential Large lot residential
Nolensville	Low density residential Low/medium density residential Special Development area Industrial	Low density residential Low/medium density residential Special Development area Industrial	Low density residential Special Development area
Smyrna	Rural area Suburban character area General urban area	Rural area Suburban character area General urban area	Rural area Suburban character area General urban area

Figure 17. Future Land Use



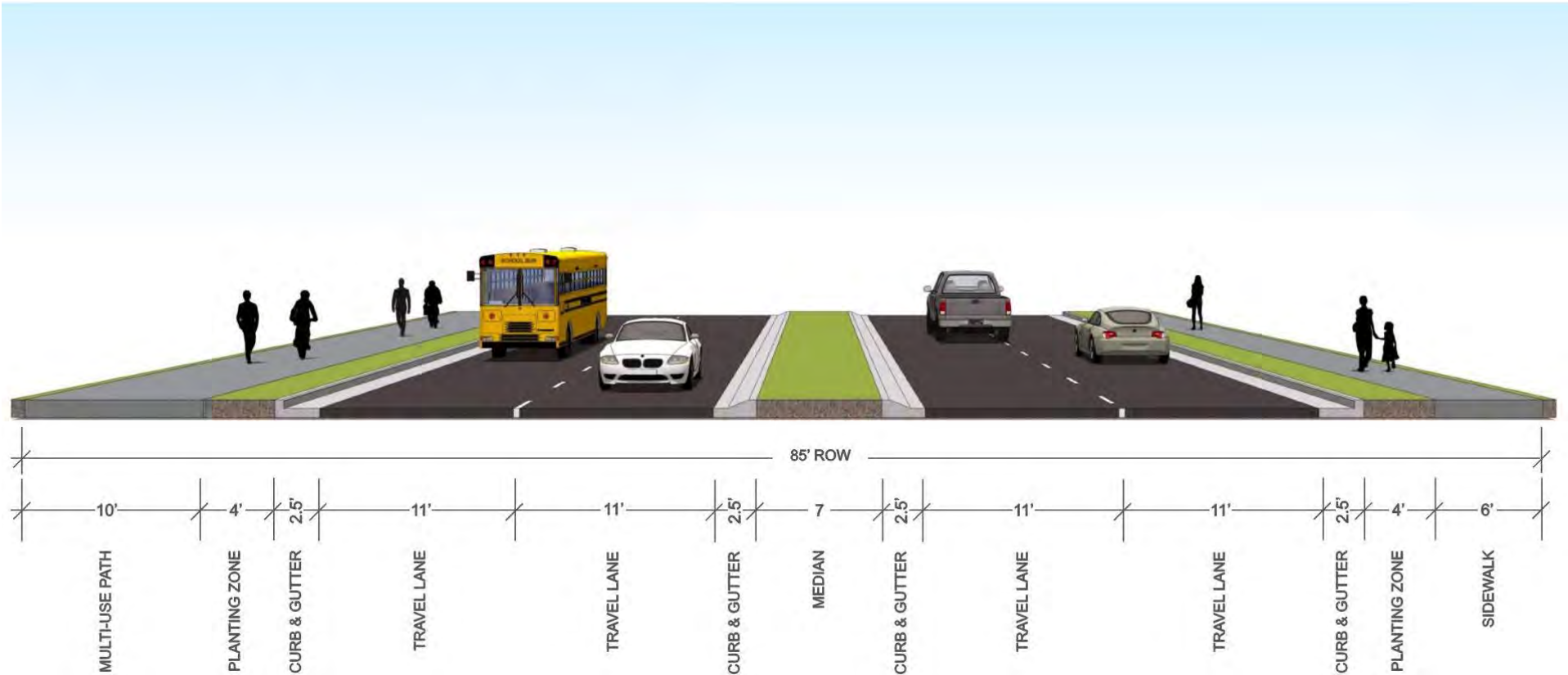


## 4.4. Right-of-Way and Parcel Impacts

A parcel analysis was performed to better understand how each alignment impacts property and the extent to which a complicated and potentially costly right-of-way acquisition process might be required. No right-of-way constraints were identified that would preclude any of the shortlisted alignments from further study. All proposed alignments have the potential to impact buildings. Alignment A and Alignment B impact the greatest number of parcels. Alignment C would affect the largest number of buildings and would bifurcate the largest number of parcels, including the parcels planned for the Morley Property and Four Springs future developments.

The analysis assumes an 85-foot roadway typical section, consistent with the design of the McEwen Drive extension, as shown in Figure 18. The right-of-way impact analysis considers parcels within a 110-foot buffer of the alignment centerline to provide a margin of error.

Figure 18. Corridor Typical Section



## Parcel Impacts by Size

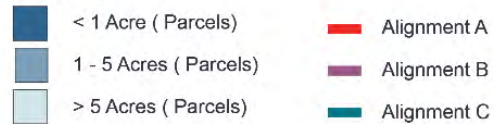
Figure 19 categorizes parcels that intersect a 110-foot buffer of each shortlisted alignment by size (less than an acre, 1 to 5 acres, greater than 5 acres). Alignments A and B impact the largest number of parcels that are both less than an acre and between 1 and 5 acres, indicative of their paths adjacent to single family neighborhoods. Alignment C, which traverses mostly rural and greenfield areas west of Rocky Fork Road, impacts virtually no small (less than one acre) parcels. Overall, Alignment C impacts approximately 50 percent fewer parcels than Alignments A and B (217 versus 317 and 323, respectively).



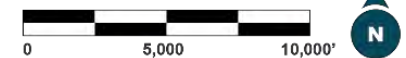
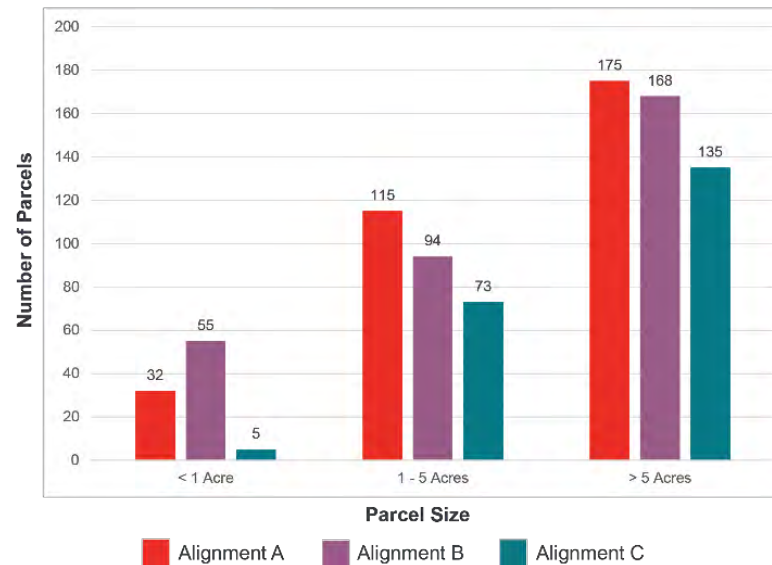
Figure 19. Parcel Impacts by Size



## Legend



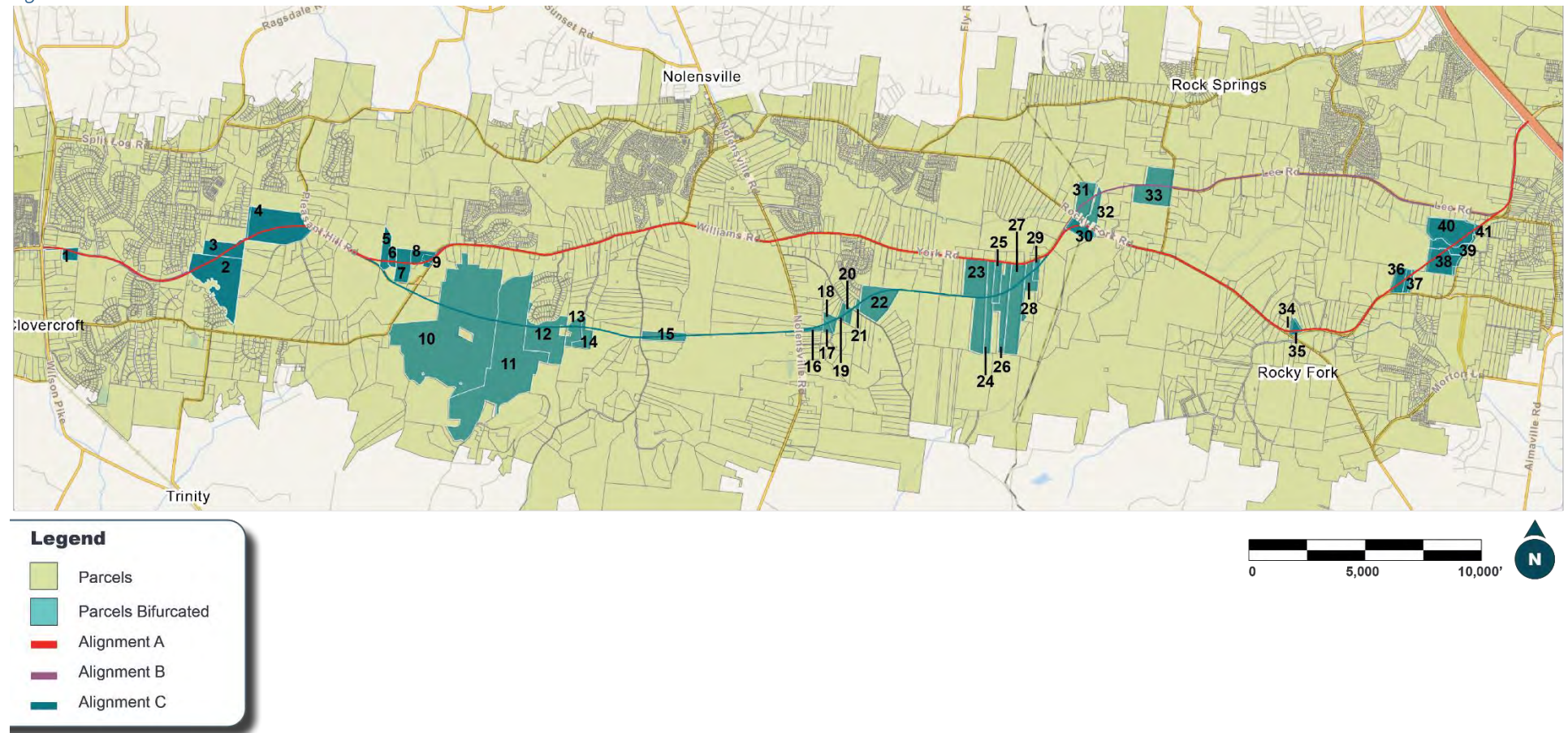
110' Buffer Zone		
Alignment	Number of Parcels	Acreage
Alignment A	323	4,310
Alignment B	317	3,940
Alignment C	213	4,680



## Bifurcated Parcels

Figure 20 identifies parcels that could potentially be bifurcated by one of the shortlisted alignments. Bifurcation is generally the most significant way that an alignment can impact a parcel. Alignment C has the potential to bifurcate the largest number of parcels because it includes a significant amount of new roadway passing through large swaths of undeveloped land. More detail on parcel bifurcation is provided in the Appendix..

Figure 20. Bifurcated Parcels

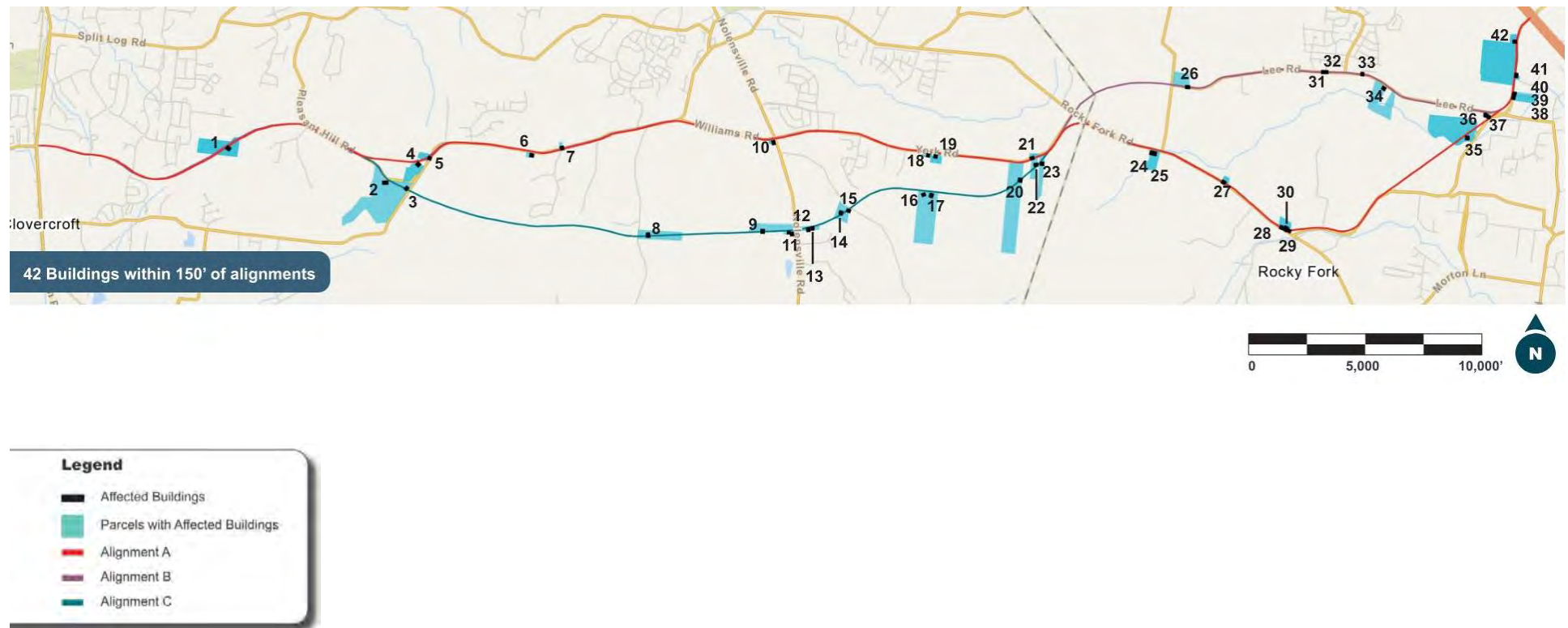




## Building Impacts

Figure 21 identified locations where each alignment would potentially impact structures. Where a structure is within 150 feet of an alignment centerline, that building and its associated parcel is identified on the map. Alignment C has the greatest number of potentially impacted structures. More detail on building impacts is provided in the Appendix.

Figure 21. Potentially Impacted Buildings



## Pending and Known Development Impacts

Figure 22 identifies locations of known and pending developments relative to the shortlisted alignments. Known and pending developments are parcels for which specific developments have been proposed and have or will soon enter the regulatory process. For the most part, the shortlisted alignments will impact these developments, but could provide improved access. There are two exceptions: Alignment C bifurcates two large parcels south of Clovercroft Road, colloquially known as the “Morley Property” and “Four Springs.” Alignment C would significantly impact plans for both developments.

Figure 22. Pending and Known Development





## 4.5. Community Impacts

An analysis of potential community impacts associated with the shortlisted alignments includes community resources, construction detours, proximity to existing and anticipated future populations and proximity to existing and future employment centers. Potential impacts to community resources are relatively minimal, although Alignments A and B pass within 110 feet of an elementary school on York Road. During construction of the new alignment, regardless of which alignment is constructed, there would be an approximately two-mile detour, on average, from beginning and end points at Rocky Fork Road to McEwen Drive. Alignment C has the fewest anticipated construction impacts because this alignment has the smallest amount of proposed new roadway.

Alignment A and Alignment B are the most accessible to existing and projected populations, providing better access for those populations; however, the proximity to these populations also indicates that Alignments A and B have the greatest potential for noise and visual impacts. None of the alignments have significant adjacent existing employment but projected employment ranges from 24,000 to 27,000, depending on the alignment. Significant population and employment projections for the study area underscore the need to identify a preferred alignment as soon as possible to that right-of-way preservation and coordination can begin.

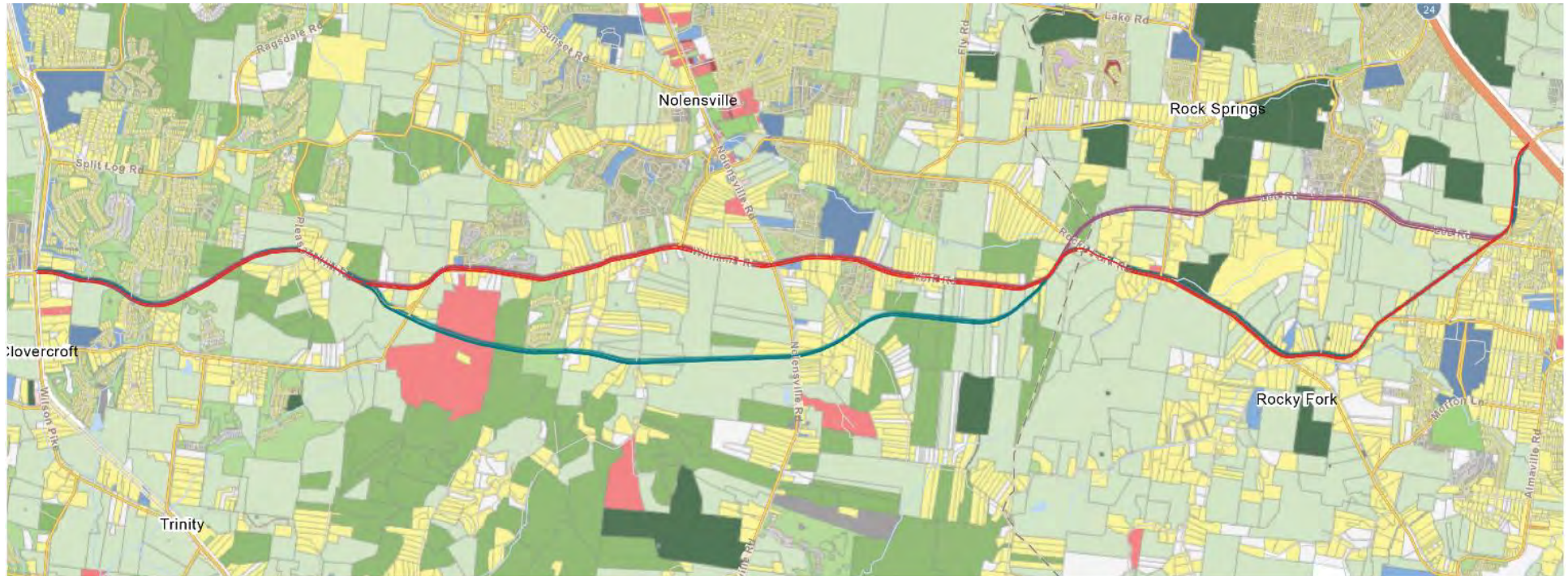
### Community Resources

Figure 23 identifies community resources that intersect a 110-foot buffer of each alignment. All alignments could potentially impact cemeteries and churches. Alignments A and B could potentially impact up to three churches, while Alignment C could potentially impact one. More notably, Alignments A and B could potentially impact Mill Creek Elementary and Middle Schools, which is located on York Road.

# Rocky Fork Road to McEwen Drive Corridor Study

April 2023

Figure 23. Community Resources



## Legend

- Alignment A
- Alignment B
- Alignment C
- Single-family
- Multifamily
- Retail/Commercial
- Office
- Commercial recreation
- Industrial/Warehouse
- Civic facilities
- Education
- Hospitals
- Transportation/Utilities
- Parks/Recreation
- Cemeteries
- Open space
- Vacant/Other
- Agriculture
- Natural/Conservation
- Water



Community Resource Type	Number of Occurrences within Alignment		
	A	B	C
Parks	0	0	0
Schools	1	1	0
Community Centers	0	0	0
Churches	3	3	1
Cemetery	4	3	3

Source: UrbanFootprint

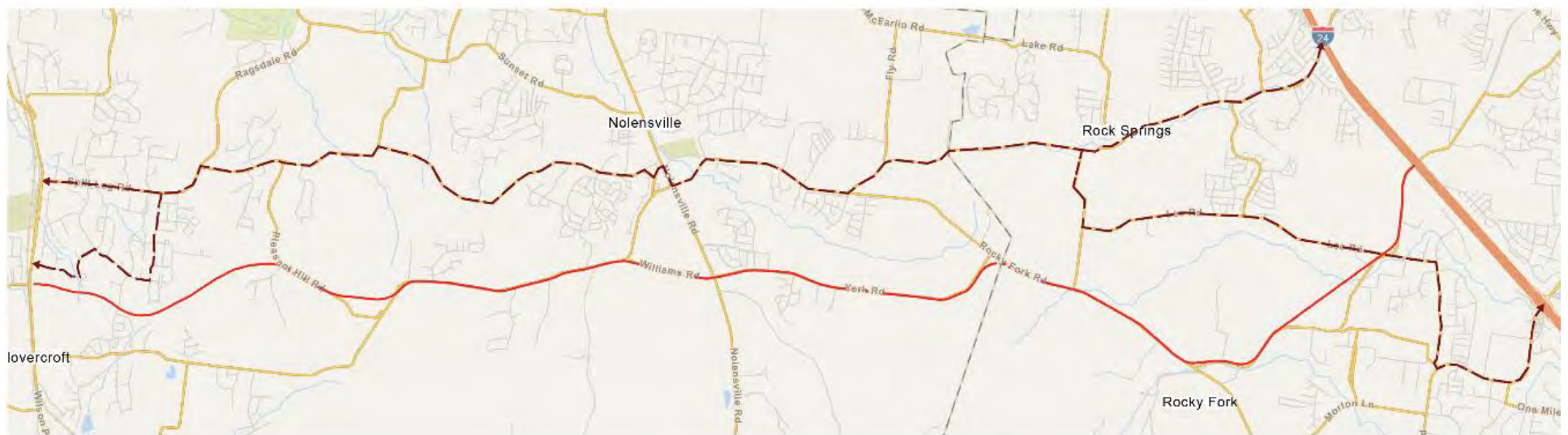


## Potential Detours

The construction of a new major east-west road corridor will have significant impacts on the existing roadway network. Figure 24, Figure 25 and Figure 26 identify potential detour routes for area residents and visitors during the construction phase for Alignments A, B and C, respectively. Potential detour alignments include a combination of Split Log Road, Sunset Road and Rock Springs Road to the north and Clovercroft Road (Alignment C), Lee Road (Alignments A and C), Rocky Fork Road (Alignment B) to the south. The maximum additional distance a resident or visitor must travel to reach a detour route is two miles.

Figure 24. Alignment A: Potential Detour Routes

### Alignment A

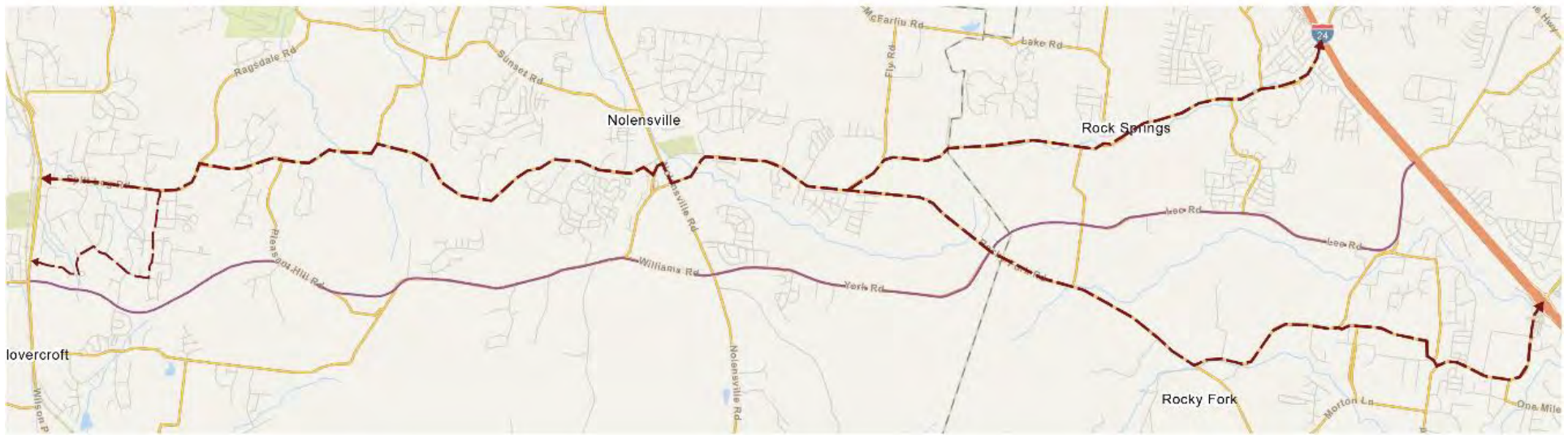


- Alignment A
- Parallel Route for Potential Detour



Figure 25. Alignment B: Potential Detour Routes

## Alignment B



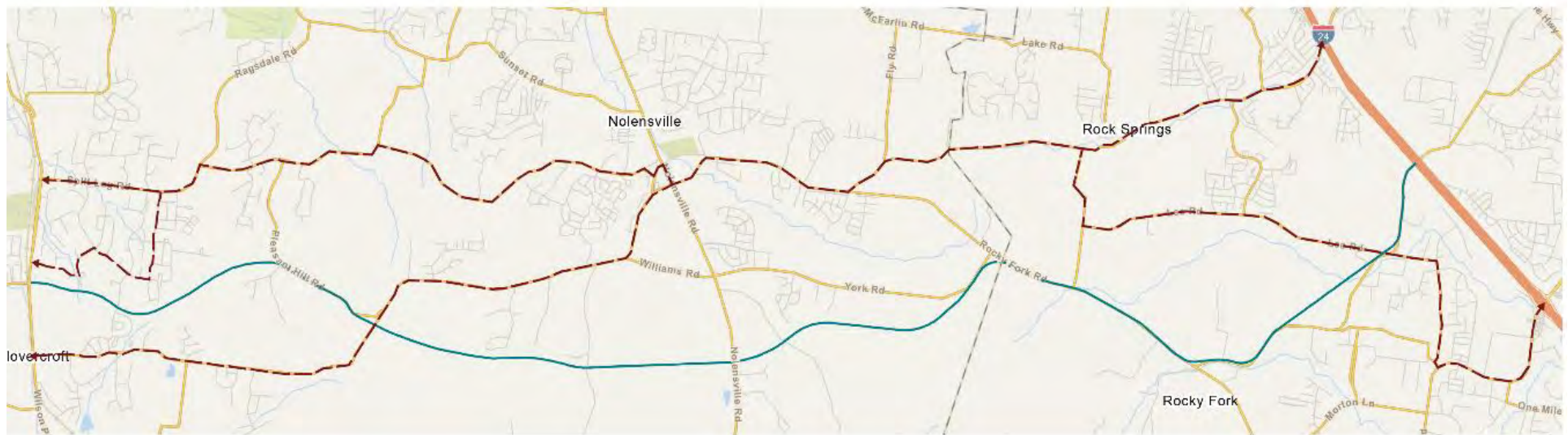
- Alignment B
- Parallel Route for Potential Detour





Figure 26. Alignment C: Potential Detour Routes

## Alignment C



- Alignment C
- Parallel Route for Potential Detour

## Proximity to Existing and Future Population and Employment

An analysis of existing and projected population and employment within the project area was conducted to better understand potential impacts to the communities within the project area. UrbanFootprint uses a proprietary algorithm to allocate existing population and employment data from U.S. Census geographies to parcels, while the Greater Nashville Regional Council (GNRC) develops projections of future (2045) population and employment data at the traffic analysis zone (TAZ) level.

Existing population and employment are shown in Figure 27 and Figure 28, respectively and projected population and employment are shown in Figure 29 and Figure 30, respectively. All three corridors pass through an area of relatively low population and employment density. The number of existing residents that live within one mile of the proposed alignments range from approximately 14,000 (Alignment C) to 20,000 (Alignment B), which is projected to increase to between 79,000 (Alignment C) and 93,000 (Alignment B) by 2045. Existing employment within one mile is approximately 2,000 for all three shortlisted alignments, which is projected to increase to between 24,000 (Alignment C) and 27,000 (Alignments A and B) by 2045.

The significant projected population and employment increases within the study area underscores a need to identify and preserve a road corridor as soon as possible so that the necessary development and right-of-way coordination can take place.



# Rocky Fork Road to McEwen Drive Corridor Study

April 2023

Figure 27. Existing Population



## Population Per Parcel

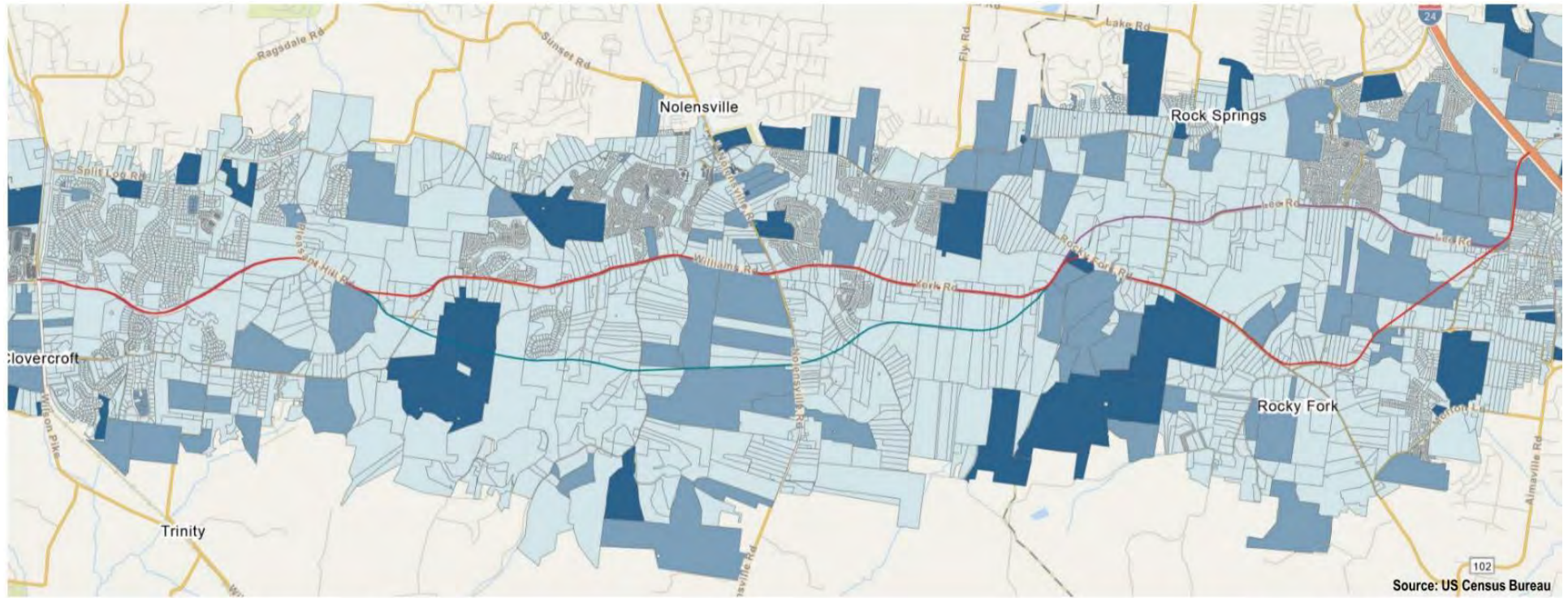
- 0 People
- 1 - 3 People
- > 3 People



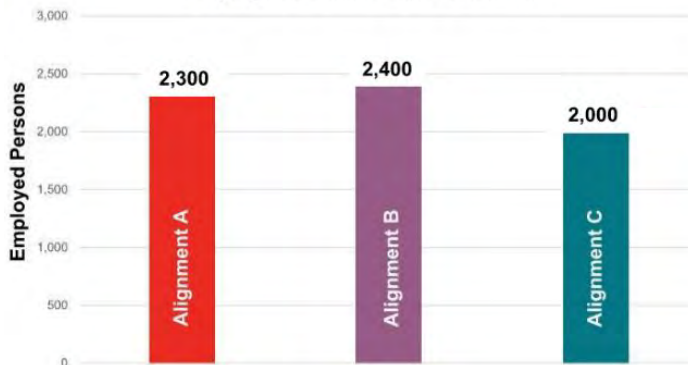
# Rocky Fork Road to McEwen Drive Corridor Study

April 2023

Figure 28. Existing Employment



Employment within 1 Mile Buffer Zone



Employment Per Parcel

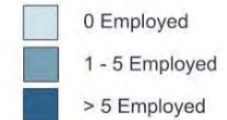
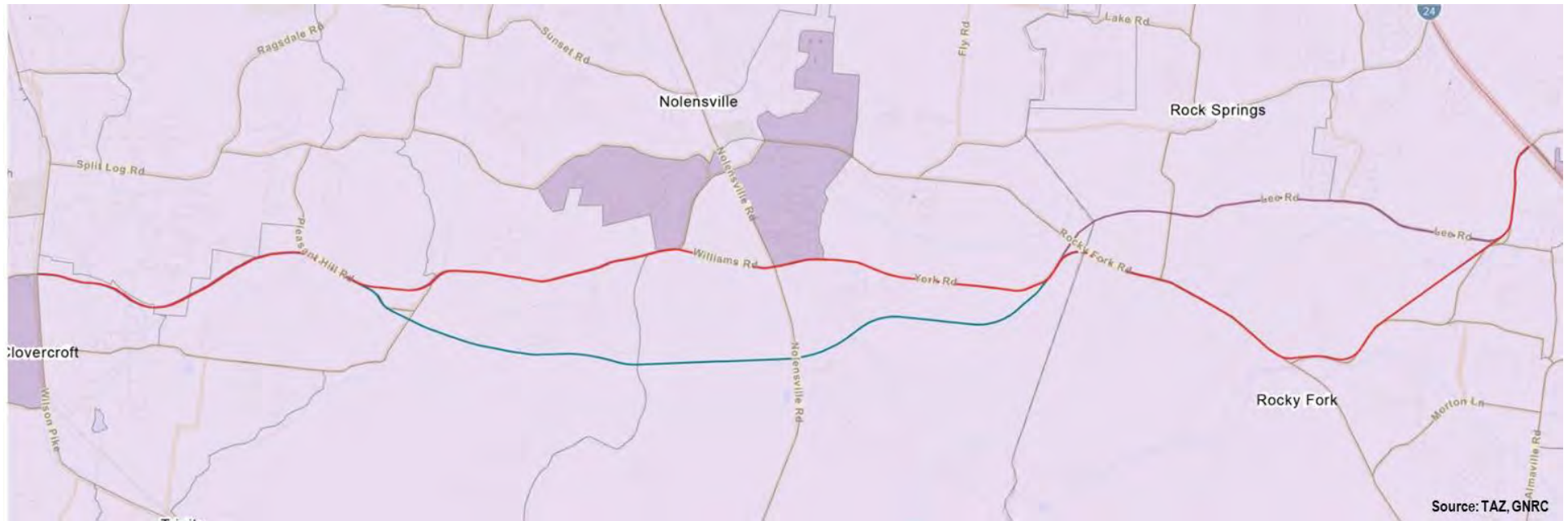
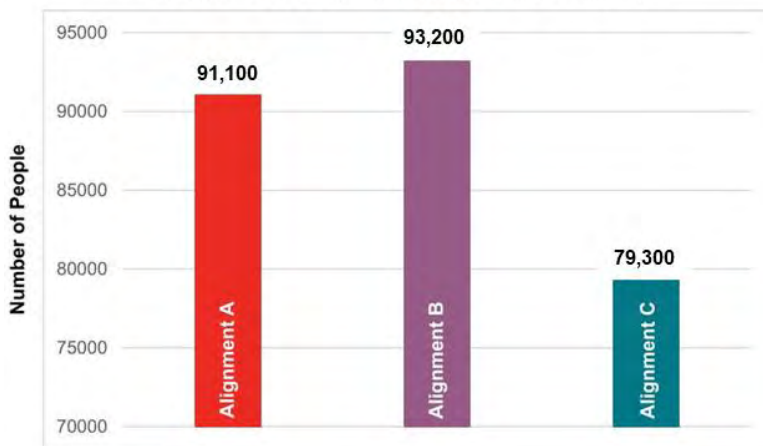




Figure 29. Projected Population



Projected 2045 Population within 1 Mile Buffer Zone



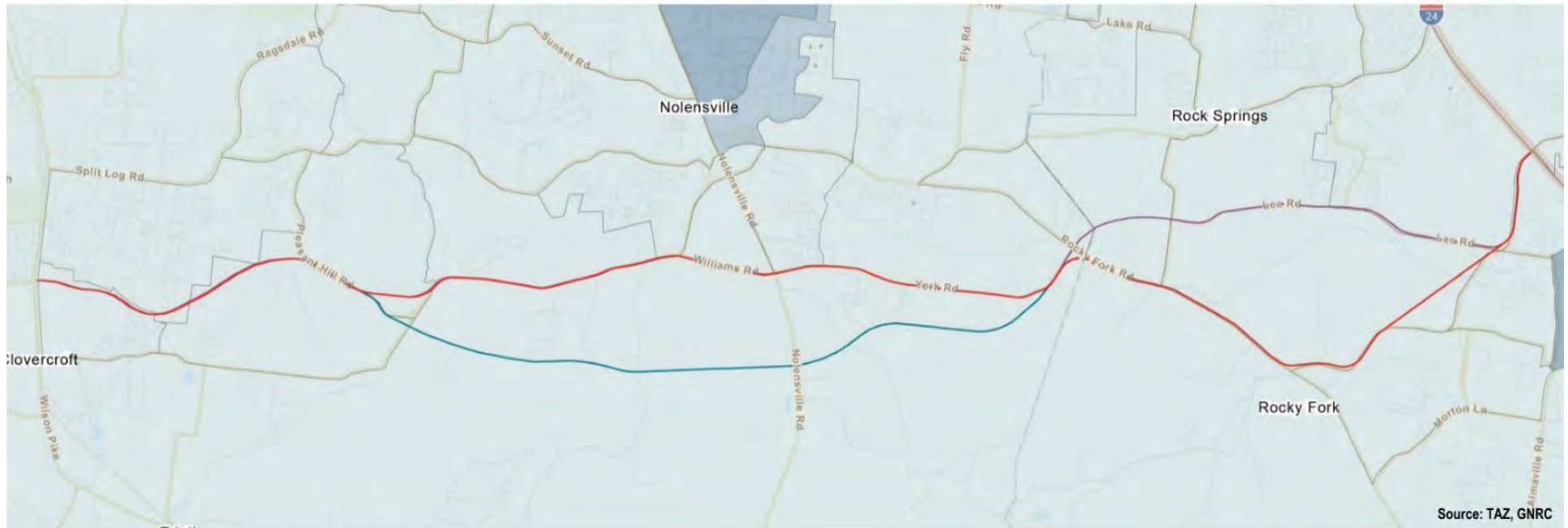
## Population Per Acre



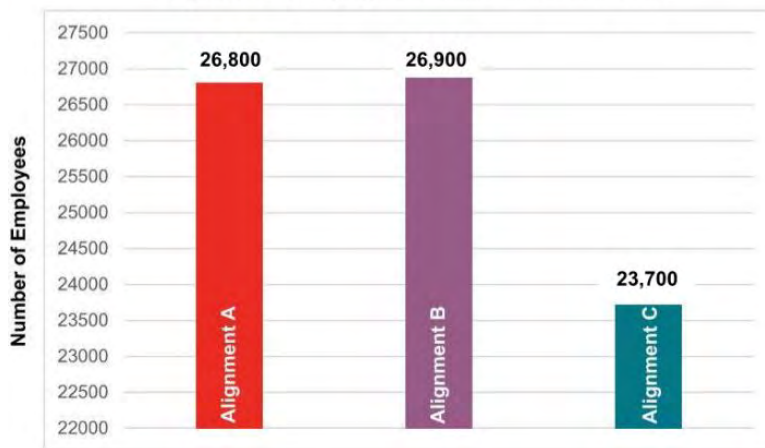
# Rocky Fork Road to McEwen Drive Corridor Study

April 2023

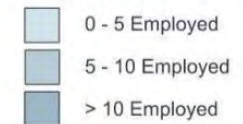
Figure 30. Projected Employment



Projected 2045 Employment within 1 Mile Buffer Zone



## Employment Per Acre





## 4.6. Mobility Benefits

The shortlisted alignments were reviewed to determine how they would impact mobility in terms of connectivity and travel time. Alignments A and B offer the greatest connectivity (defined as the number of times an alignment intersects with an existing or proposed road).

### Connectivity

Figure 31 identifies the connectivity potential of each shortlisted alignment relative to the existing road network. Connectivity potential is defined as the intersection of an alignment with an existing road. Alignment A has the greatest connectivity potential with nine connection points, compared to eight and six connection points for Alignments B and C, respectively. When new roads identified in Smyrna's Major Thoroughfare are taken into account (Figure 32), Alignment A has 14 potential connection points, Alignment B has 13 and Alignment C has nine.

Figure 31. Connectivity Potential: Existing Network

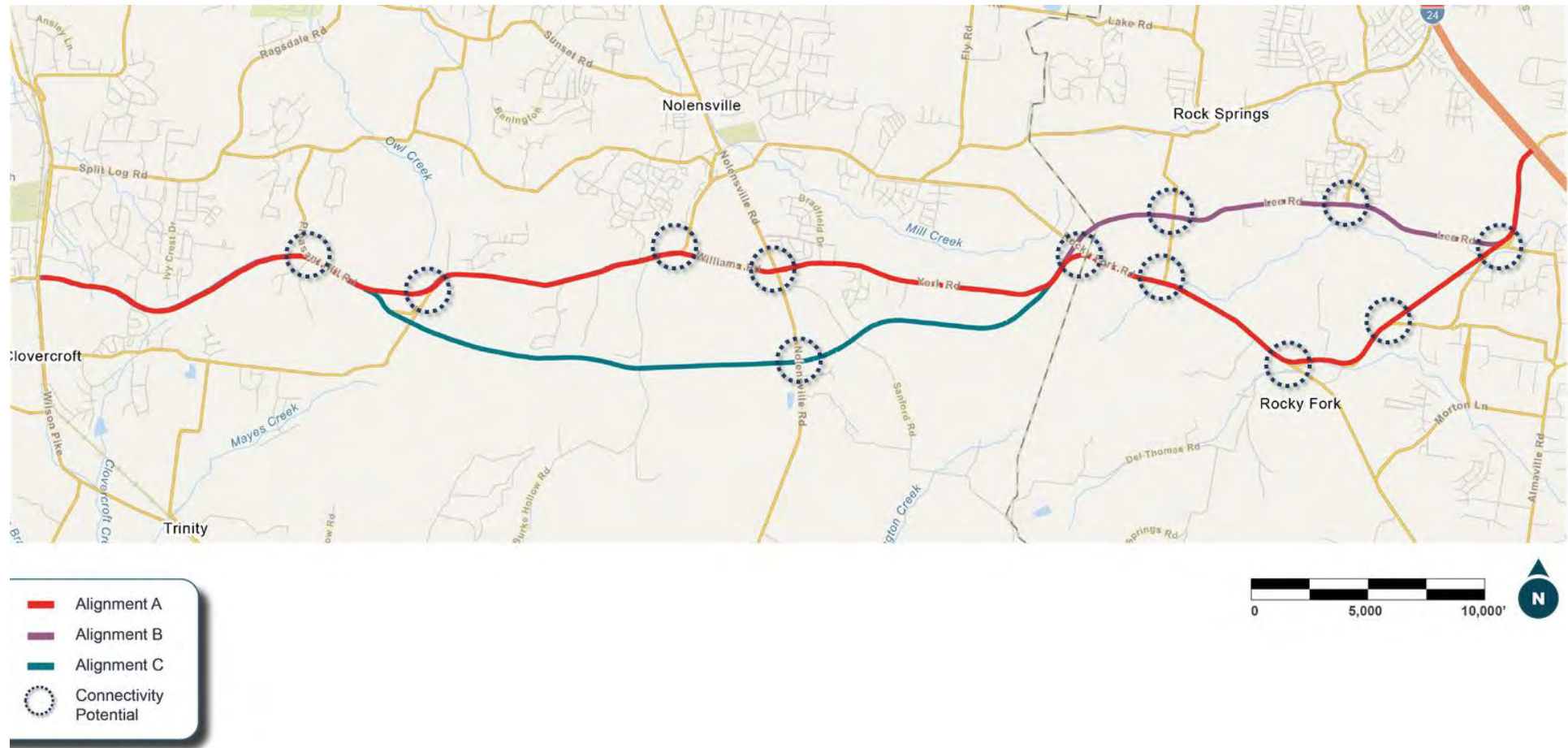
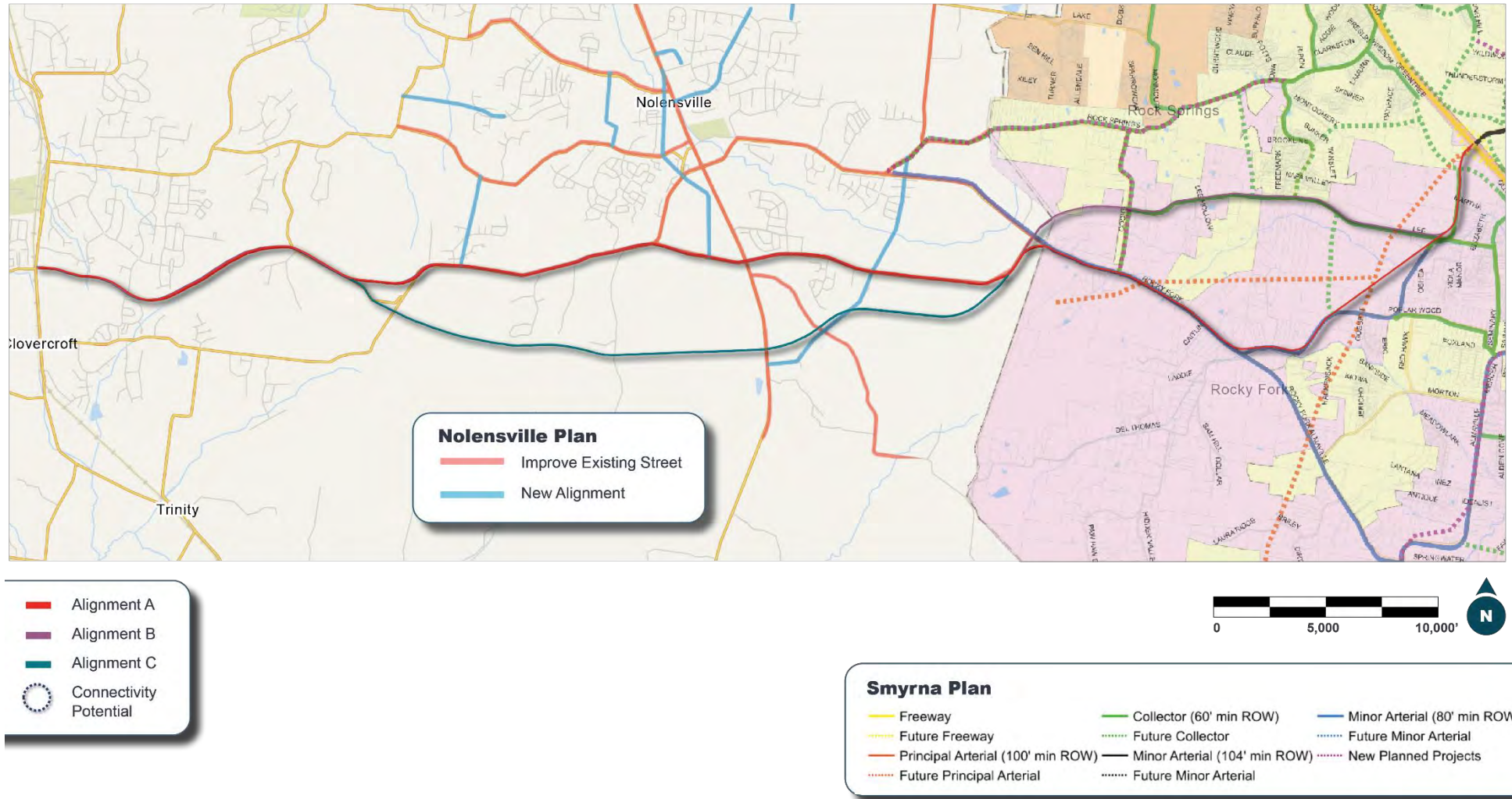




Figure 32. Connectivity Potential: Future Network



## Travel Time

Travel time is a function of distance, speed and delay. The speed of each shortlisted alignment (A, B and C) is assumed to be 45 miles per hour (mph), except for the portion of Alignments A and B that are located in a school zone, where 15 mph is assumed. Estimated travel delay was determined by the presence of signalized intersections within each alignment. Each signalized intersection assumes 30 seconds of average delay.

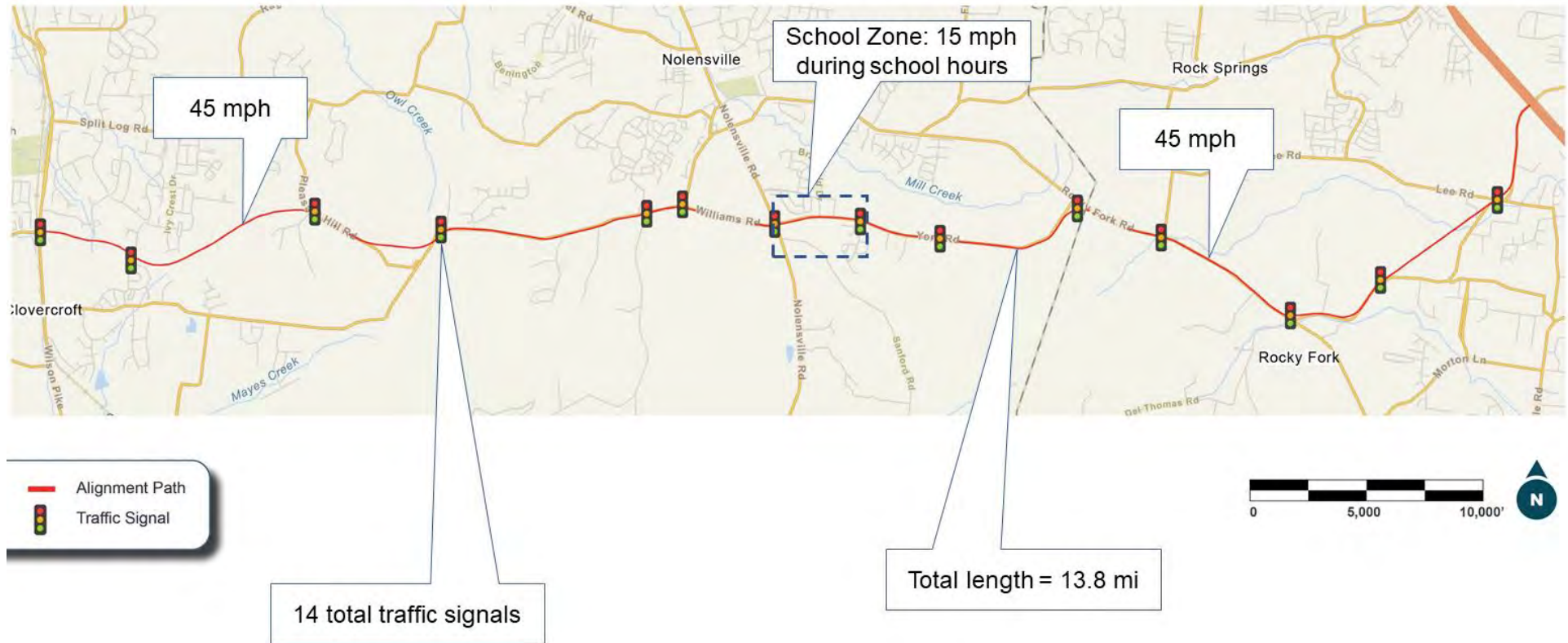
Speeds, distance and traffic signals for Alignments A, B and C are identified in Figure 33, Figure 34 and Figure 35, respectively, and Figure 36 summarizes the travel time calculations. Alignment C has the longest alignment length, but the fewest number of signalized intersections (12) and does not pass through a school zone; it has the fastest estimated travel time at 24.6 minutes. Alignment B is slightly shorter than Alignment A and has one less signalized intersection (13) and has an estimated travel time of just under 26 minutes, while Alignment A has an estimated travel time of almost 27 minutes.



# Rocky Fork Road to McEwen Drive Corridor Study

April 2023

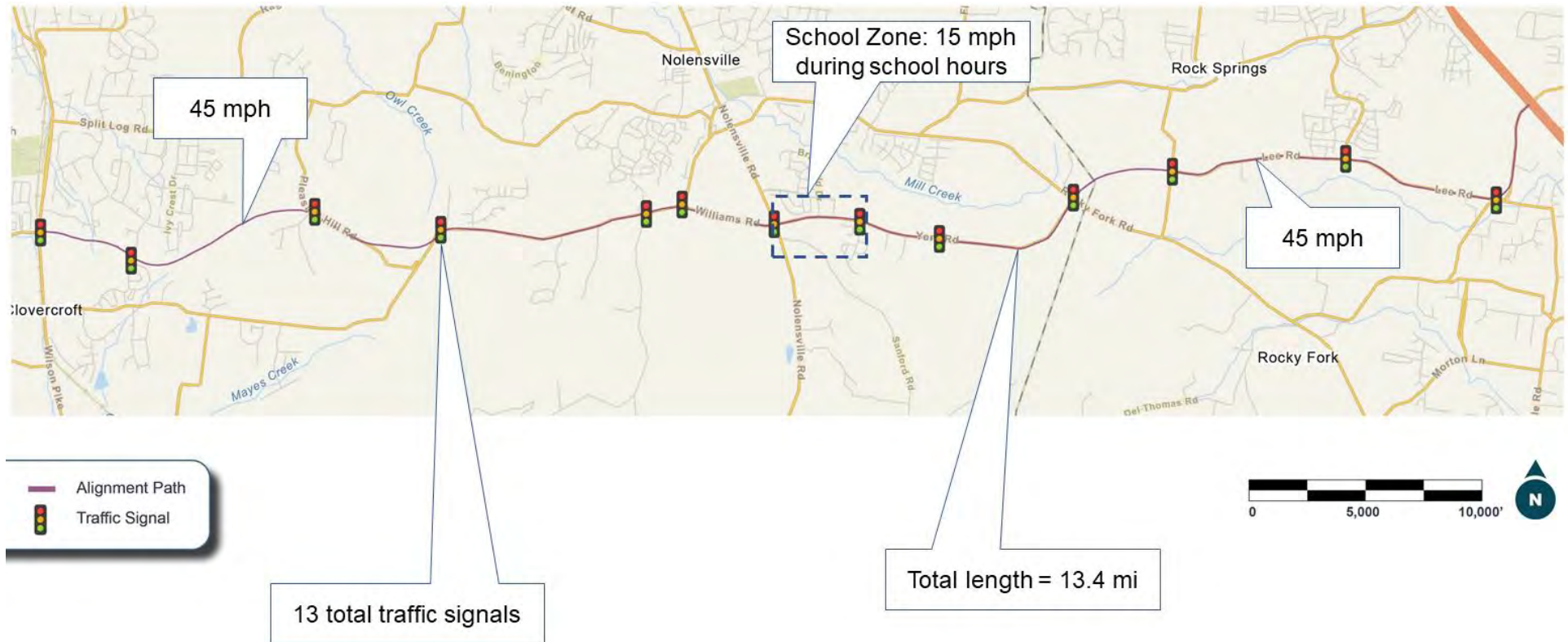
Figure 33. Alignment A: Corridor Speeds and Signalized Intersections



# Rocky Fork Road to McEwen Drive Corridor Study

April 2023

Figure 34. Alignment B: Corridor Speed and Signalized Intersections





# Rocky Fork Road to McEwen Drive Corridor Study

April 2023

Figure 35. Alignment C: Corridor Speed and Signalized Intersections

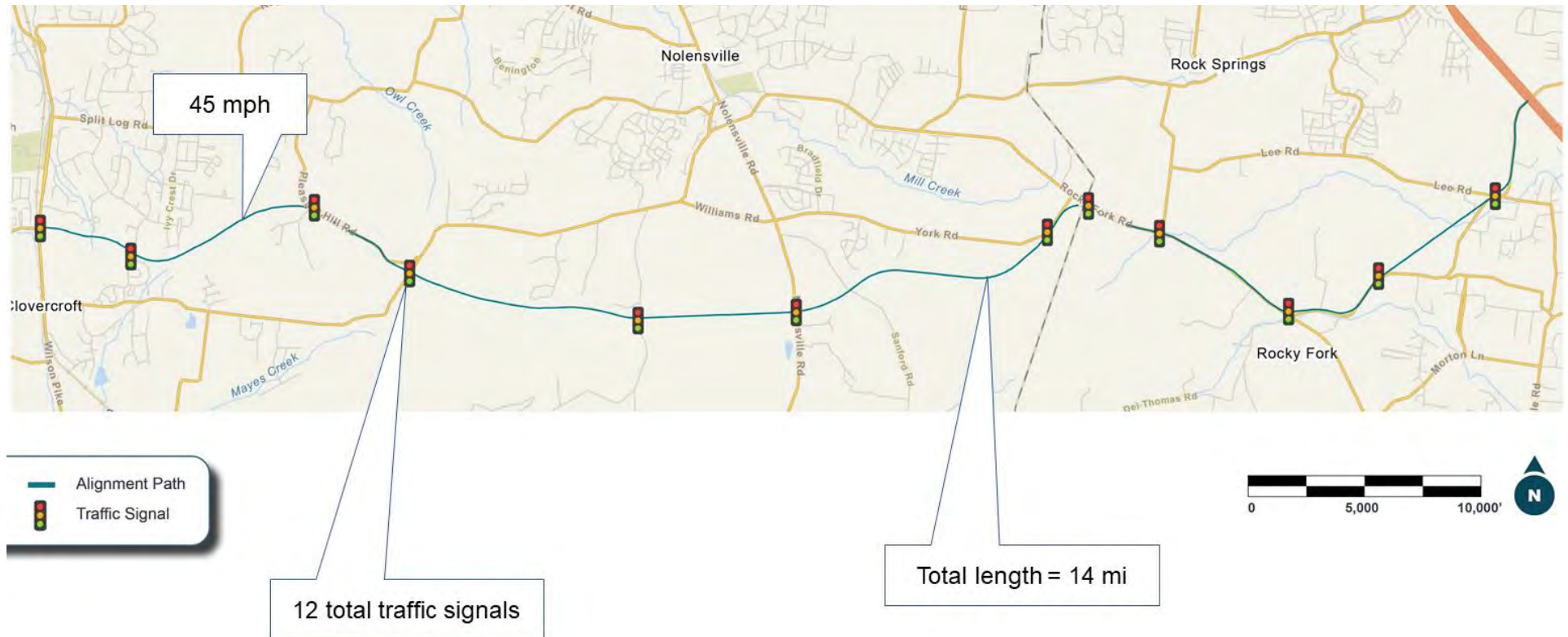
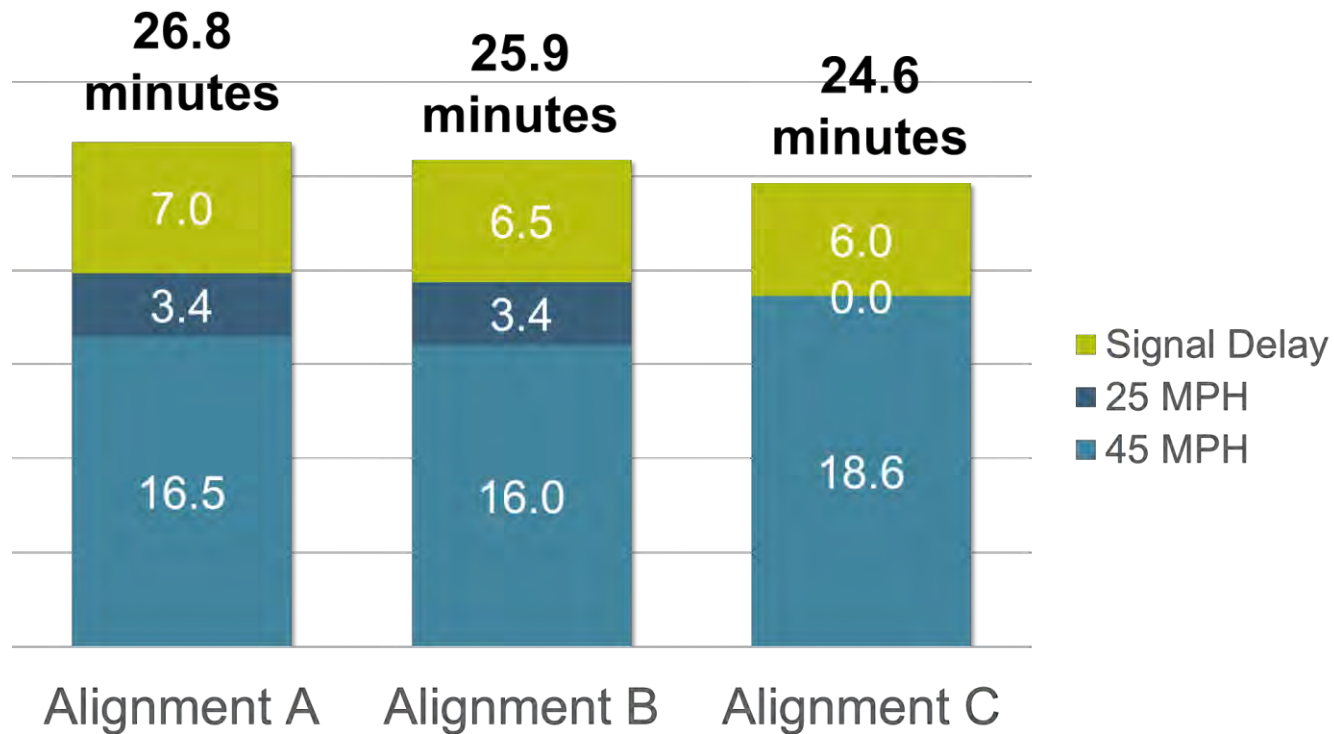


Figure 36. Estimated Travel Time





## 4.7. Conceptual Cost

Conceptual cost estimates to construct each alignment are identified in Table 6. Base year (2022) cost estimates are inflated to potential opening year (2027) and design year (2032) costs using a five percent annual escalation rate. The costs presented in Table 6 do not include right-of-way.

Alignment C, which is estimated to cost \$320 million in 2027, is the most expensive to construct due to its length and anticipated topographic constraints. Alignments A and B do not exhibit the same topographic issues but will incur higher utility relocation costs because of the extensive utilities located along existing roads within each of these alignments. Alignments A and B are estimated to cost \$303 million and \$293 million in 2027, respectively.

*Table 6. Conceptual Cost Estimates*

Alignment	Length (miles)	Unit Cost Per Mile	Total Estimated Construction Cost (2022)	Total Estimated Construction Cost (2027)	Total Estimated Construction Cost (2032)
Alignment A	13.75	\$17,240,000	\$237,000,000	\$303,000,000	\$387,000,000
Alignment B	13.41	\$17,150,000	\$230,000,000	\$293,000,000	\$375,000,000
Alignment C	13.97	\$18,000,000	\$252,000,000	\$320,000,000	\$409,000,000

### 4.8. Summary of Shortlisted Alignments

Table 7 summarizes the key findings of the evaluation of shortlisted Alignments A, B and C. Alignments A and B provide greater accessibility and connectivity, while Alignment C provides the fastest travel time and impacts the least number of total parcels. The biggest drawbacks to Alignments A and B are impacts to existing parcels and land uses and population. The biggest drawbacks to Alignment C are that it is the least accessible and it bifurcates two large parcels where major developments are proposed.

*Table 7. Summary of Shortlisted Alignments*

	A	B	C
Length (mi.)	13.8	13.4	14.2
Pros	<ul style="list-style-type: none"> <li>• More accessible</li> <li>• Better connectivity with existing and future thoroughfares</li> <li>• Least potential stream impacts</li> </ul>	<ul style="list-style-type: none"> <li>• More accessible</li> <li>• Better connectivity with existing and future thoroughfares</li> <li>• Least expensive</li> </ul>	<ul style="list-style-type: none"> <li>• Quickest route</li> <li>• Fewest parcels impacted</li> <li>• Fewer potential construction impacts</li> <li>• Less utility relocation</li> </ul>
Cons	<ul style="list-style-type: none"> <li>• Adjacent to Mill Creek Elementary and Middle schools</li> <li>• Potential to impact a larger number of parcels and buildings</li> <li>• Greatest potential for construction impacts</li> <li>• Greatest potential wetland impact</li> <li>• Slowest travel time</li> </ul>	<ul style="list-style-type: none"> <li>• Adjacent to Mill Creek Elementary and Middle schools</li> <li>• Potential to impact a larger number of parcels and buildings</li> <li>• Greatest potential for construction impacts</li> <li>• Greatest potential wetland impact</li> </ul>	<ul style="list-style-type: none"> <li>• Least accessible</li> <li>• Bifurcates two large parcels where major developments are proposed</li> <li>• Greatest building impacts</li> <li>• Greatest topographic issues</li> <li>• Most expensive</li> <li>• Least connectivity</li> <li>• • Greatest potential wetland impact</li> </ul>
Cost (2032)	\$387M	\$375M	\$409M



## 5. PREFERRED ALIGNMENT

The project Stakeholder Group carefully considered the results of the shortlisted alignment evaluation results to select a Preferred Alignment. The thoughtful and deliberate process progressed from a second shortlist of three to two alignments, and then the development of a series of hybrid alignments.

### 5.1. Initial Decision

The Stakeholder Group initially met to consider the three shortlisted alignments: A, B and C. The stakeholders coalesced around two of the three: Alignments A and C. Both represent distinct approaches to the development of a new east-west corridor: Alignment A is comprised primarily of improvements to existing roads, while Alignment C is an even mix of existing roads and new construction.

### 5.2. Hybrid Alignments

The Stakeholder Group sought to explore options that combine Alignments A and C. Figure 37 and Figure 38 identify the four hybrid alignments developed. Generally speaking, all four hybrid alignments are consistent with Alignment A west of Nolensville Pike and are consistent with Alignment C west of Nolensville Road. They vary in how they transition east and west of Nolensville Road.

#### Alignment AC1

This alignment follows Alignment A at McEwen Drive to Clovercroft Road. It transitions from Alignment A west of Burke Hollow Road, quickly turning south, running perpendicular to Alignments A and C before turning east to transition to Alignment C west of Nolensville Road. Alignment AC1 avoids impacts to multiple parcels. However, one large parcel is completely bifurcated, which may render it unusable. Keeping the majority of the alignment on a single parcel is primarily a benefit, but requires crossing the existing ridge at its highest point. Additionally, while the reverse horizontal curve is able to maintain the desired design speed, it provides a less direct connection between Alignments A and C.

#### Alignment AC2

Alignment AC2 transitions from Alignment A at Clovercroft Road west of Burke Hollow Road similar to Alignment AC1, but more gradually transitions to Alignment C just west of Nolensville Road. This option results in a more direct route, but, as a result, bifurcates a number of parcels between Burke Hollow Road and Nolensville Road. This route also requires crossing the same ridge that AC1 crosses, but it does so at a lower point along the ridge and crosses at an angle which reduces the steepness of the slope compared to AC1.

Figure 37. Hybrid Alignments

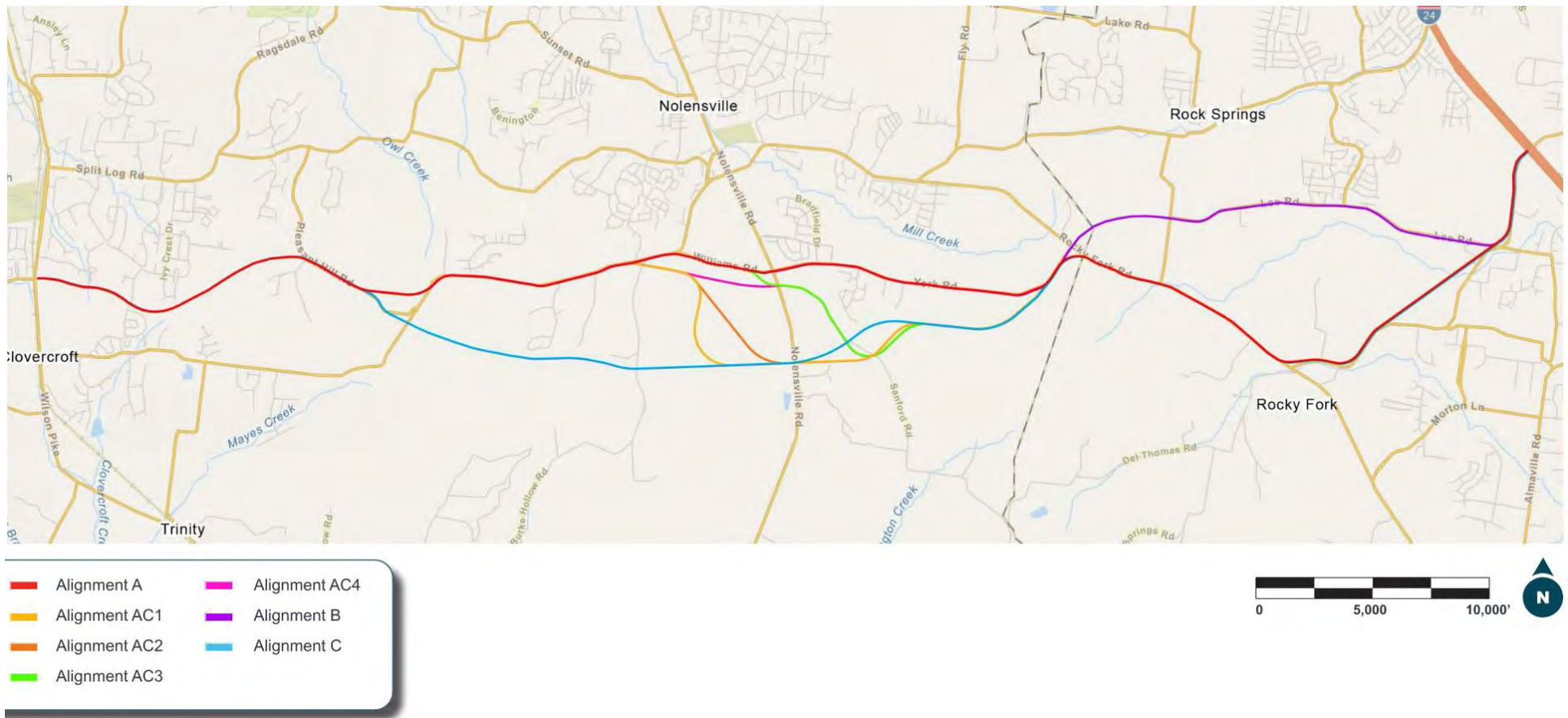
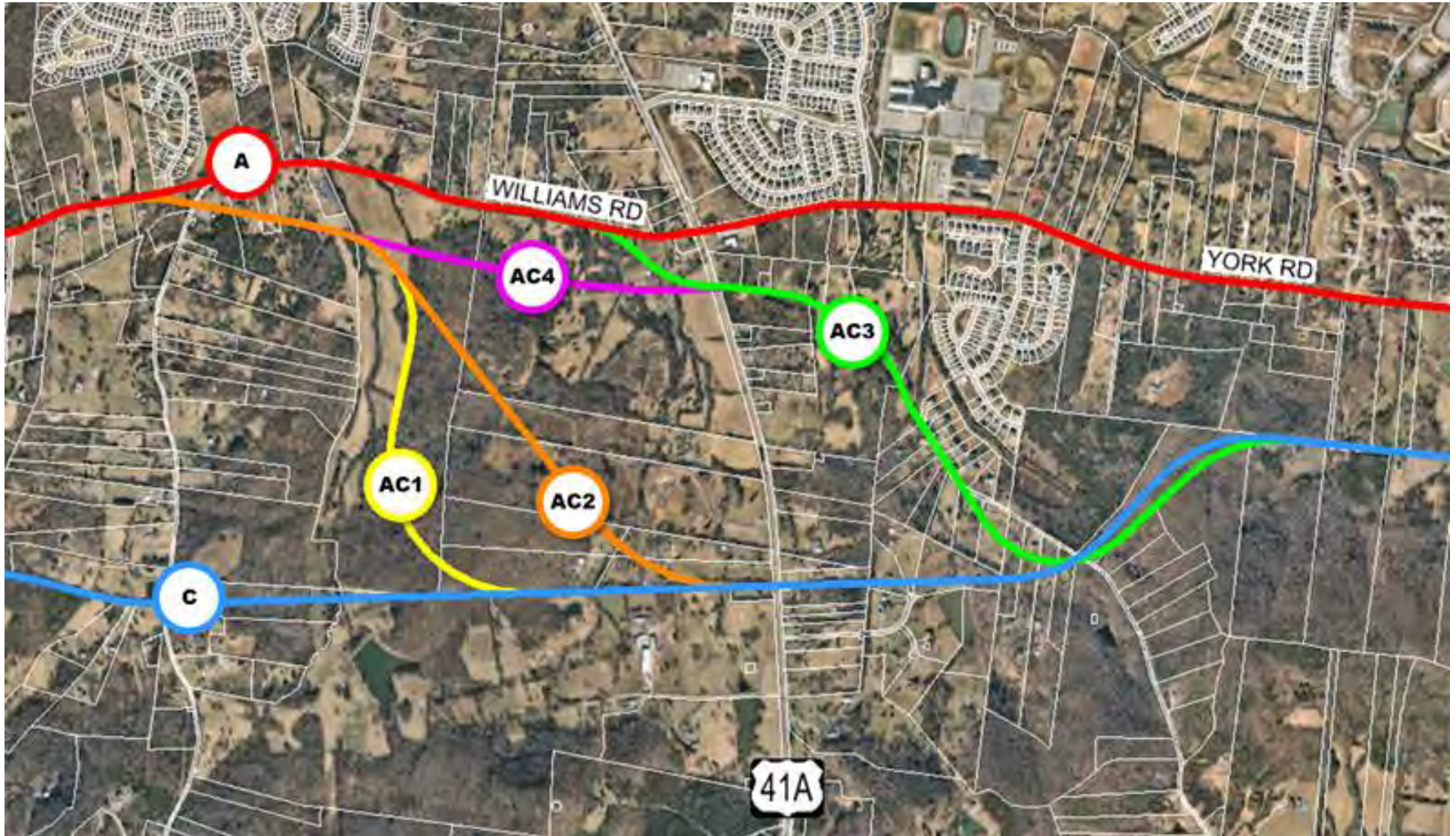




Figure 38. Hybrid Alignments Zoomed in View



## Alignment AC3

Alignment AC3 transitions from Alignment A just east of Burke Hollow Road, crossing Nolensville Road just south of the existing intersection at Williams Road, where it follows the existing alignment of Sanford Road to connect to Alignment C. This alignment avoids the topographic challenges associated with Alignments AC1 and AC2. However, it will result in significant community impacts to the parcels that front Sanford Road. Additionally, because it intersects Nolensville Road so close to the existing intersection of Williams Road, the western leg of that intersection could potentially close, resulting in a “T” intersection with York Road. Finally, in order to connect from Sanford Road to Alignment C, a curve will be needed that will impact the corner of the planned development parcel just east of McClellan Lane.

## Alignment AC4

Alignment AC4 transitions from Clovercroft Road west of Burke Hollow Road, similar to Alignments AC1 and AC2, but runs parallel to Williams Road, following the same path as Alignment AC3 east of Nolensville Road. The alignment has greater impacts to the parcel southwest of the intersection of Nolensville Road and Williams Road (colloquially known as the “Williams Property”), but results in a much greater distance from the existing intersection of Williams Road and Nolensville Road, potentially easing operational concerns.

## 5.3. Preferred Alignment

After carefully considering Shortlisted Alignments A and C and Hybrid Alignments AC1, AC2, AC3 and AC4, the Stakeholder Group agreed to a Preferred Alignment that is a combination of Alignments A and AC3 as depicted in Figure 39. Each of these alignments has its advantages and disadvantages.

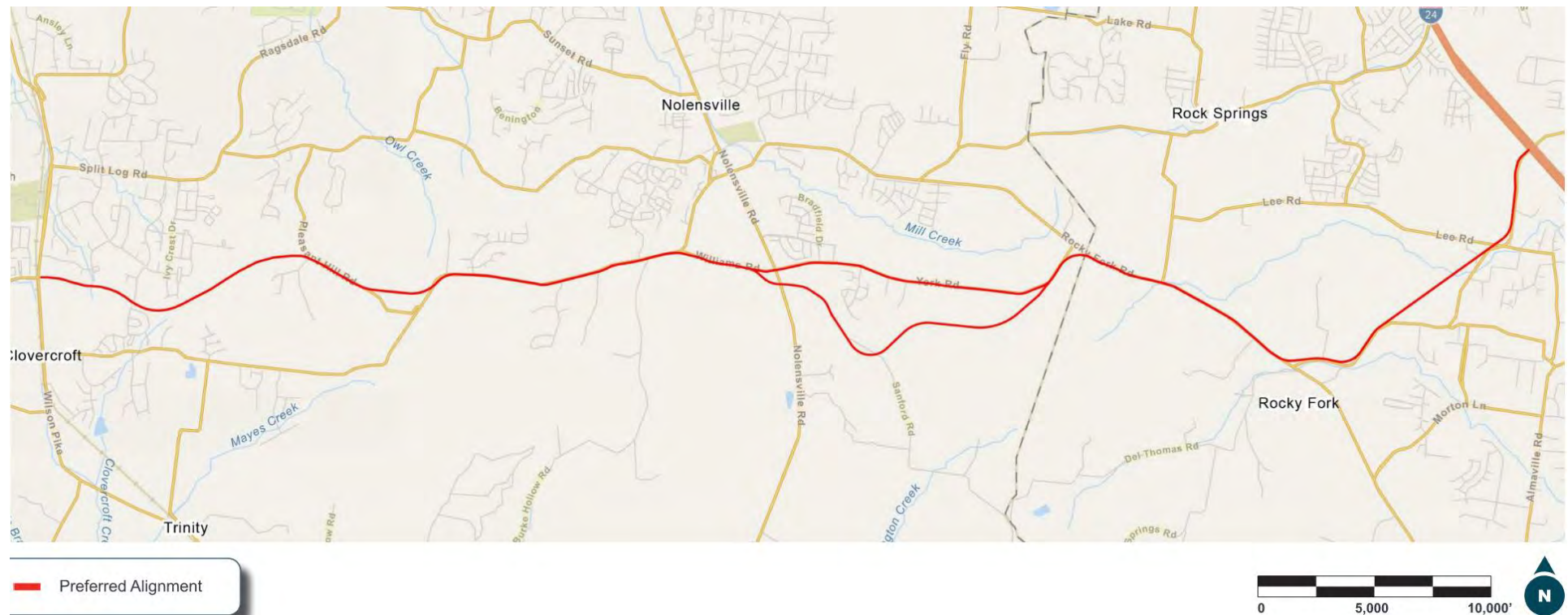
Alignment A provides a more direct connection, maintains the existing route and intersection at Williams Road/York Road and Nolensville Road, and avoids impacts to the Williams Property southwest of the intersection. In contrast, Alignment AC3 is a less direct route and will impact the Williams Property as well as potentially the properties on Sanford Road. If this alignment is constructed, there is a possibility that the remaining segment of Williams Road between Alignment AC3 and Nolensville Road would be removed, resulting in a three-way intersection at York Road and Williams Road.

The advantage of Alignment AC3 is that it avoids passing through the school zone adjacent to Mill Creek Elementary and Middle schools on York Road. The Town of Nolensville is concerned that a major road corridor will form a barrier between the school and neighborhoods on the opposite side of the street. In response to this concern, Figure 40 illustrates an alternative typical section for the corridor with design elements that encourage lower motor vehicle speeds and includes a dedicated high-intensity activated crosswalk (HAWK) signal for pedestrian crossing at the school. Nolensville would also like for a pedestrian bridge to be considered in corridor design if this alignment is ultimately chosen.



The ultimate alignment, whether the path that follows Alignment A or AC3, will be determined in a future, more detailed study phase. In the meantime, Nolensville has agreed to preserve right-of-way for both alignments and to amend both into the Major Thoroughfare Plan.

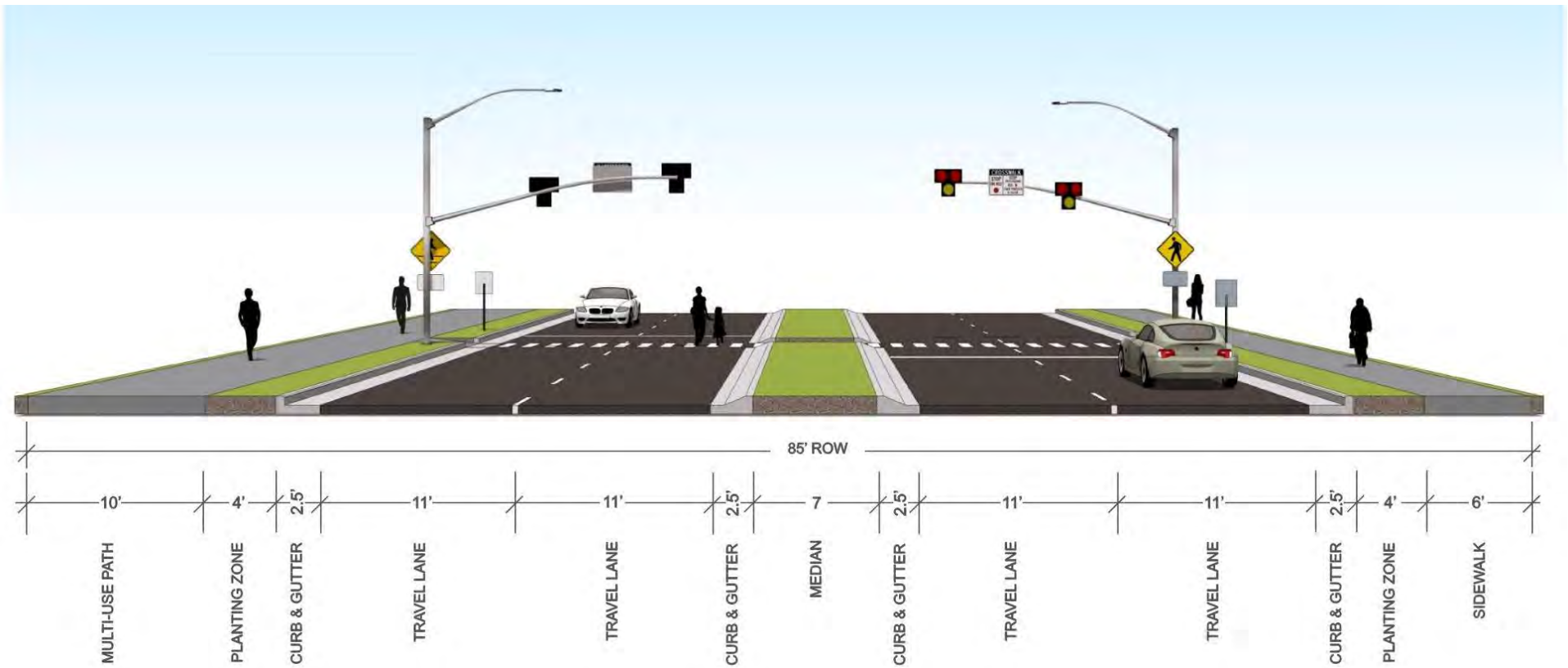
Figure 39. Preferred Alignment



# Rocky Fork Road to McEwen Drive Corridor Study

April 2023

Figure 40. Lower Speed Option with HAWK Signal Crossing





## 6. CONCLUSION AND NEXT STEPS

The Rocky Fork Road to McEwen Drive Corridor Study provides a thorough and comprehensive analysis of potential alignments to develop a new east-west corridor linking Rutherford and Williamson Counties. It begins with a universe of potential alignments that are refined to a shortlist of three alignments through a high-level screening process. Shortlisted Alignments A, B and C are subjected to a more detailed evaluation that considers potential environmental impacts, right-of-way impacts, community impacts and benefits, mobility benefits, and conceptual cost estimates. The Stakeholder Group further explored a series of hybrid alignments before ultimately agreeing on a Preferred Alignment.

The identification of a Preferred Alignment through consensus of six participating local governments and with participation of GNRC is a significant step forward to the development of a new east-west corridor. These partners can continue to advance the development of the corridor through the following next steps.

### 6.1. Formal Resolution or Agreement

In addition to the completion and endorsement of this study, local government partners can more formally agree to the Preferred Alignment through adoption of a joint resolution or agreement. At its most basic level, a joint resolution or agreement can simply identify the Preferred Alignment and that all participants have agreed to it. More complex agreements can also identify steps that participants will agree to take to preserve and advance the corridor. An example of the SR-6 Corridor Management Agreement between the City of Franklin, City of Spring Hill, Town of Thompson's Station, Maury County, Rutherford County, GNRC and TDOT is provided in the Appendix.

### 6.2. Local Plan Amendments

In order to preserve right-of-way and receive serious consideration in state and regional transportation plans and funding, the Preferred Alignment should be included in each local government's adopted Major Thoroughfare Plan. Local governments may also consider amending other local plans to include the Preferred Alignment, such as their Comprehensive Plan.

### 6.3. Regional Plan Amendment






Once the Preferred Alignment is included in their Major Thoroughfare Plans, local governments should seek to get it included in GNRC's Regional Transportation Plan (RTP). The RTP is one of GNRC's core planning documents and is a mandatory precursor to receiving federal funds. The RTP is amended periodically, but the RTP Update is the most likely opportunity to incorporate the Preferred Alignment. The 2045 RTP was adopted in February

2021 and is updated every five years, which means the 2050 RTP Update will be adopted in early 2026. GNRC will likely begin the update process in late 2023 or early 2024.



## 7.1. Bifurcated Parcel Detail



-  Parcels  
 Parcels with Affected Buildings  
 Alignment A  
 Alignment B  
 Alignment C





# Rocky Fork Road to McEwen Drive Corridor Study

April 2023

**Alignment A**  
17 Parcels



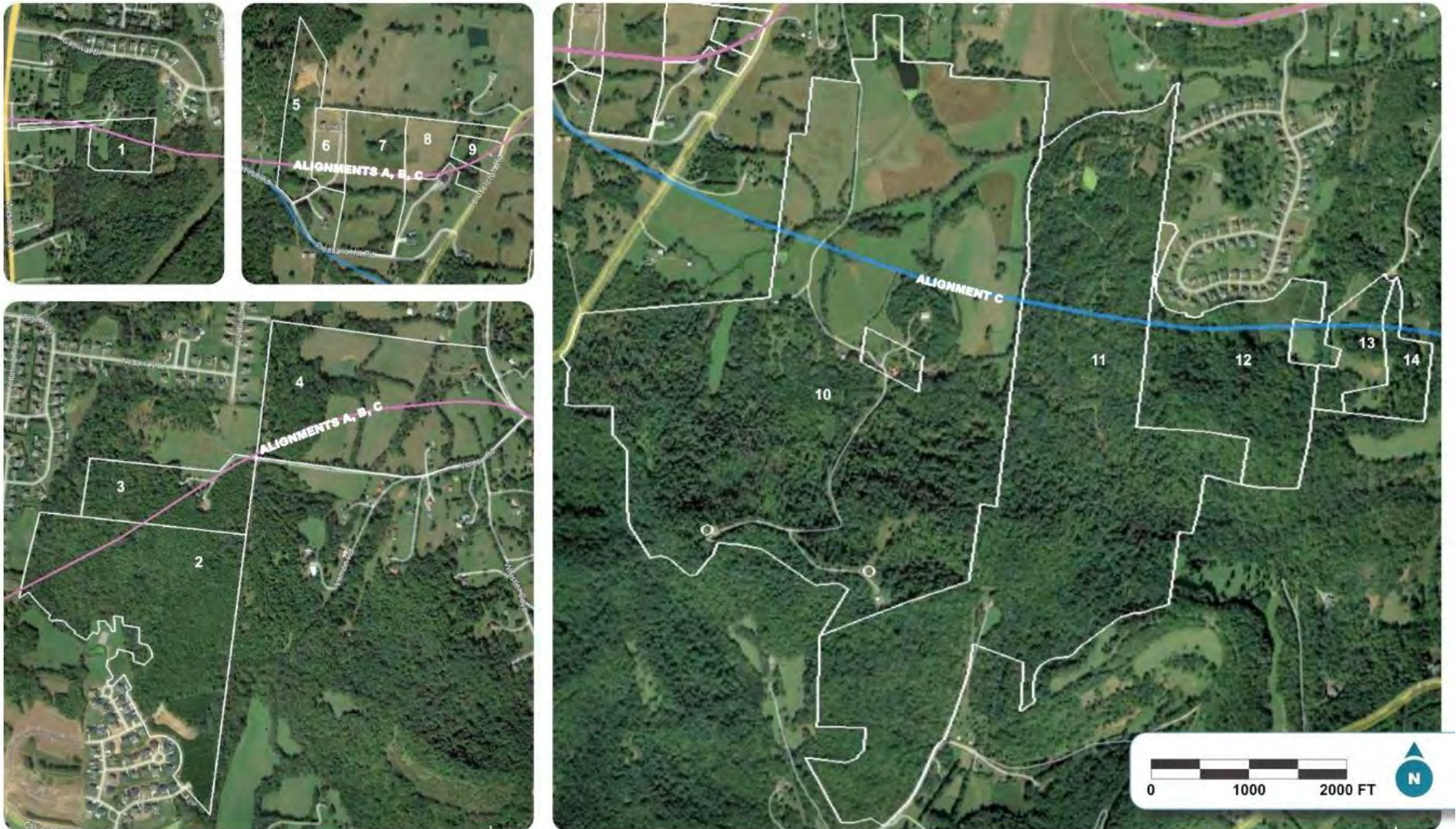
**Alignment B**  
12 Parcels



**Alignment C**  
32 Parcels





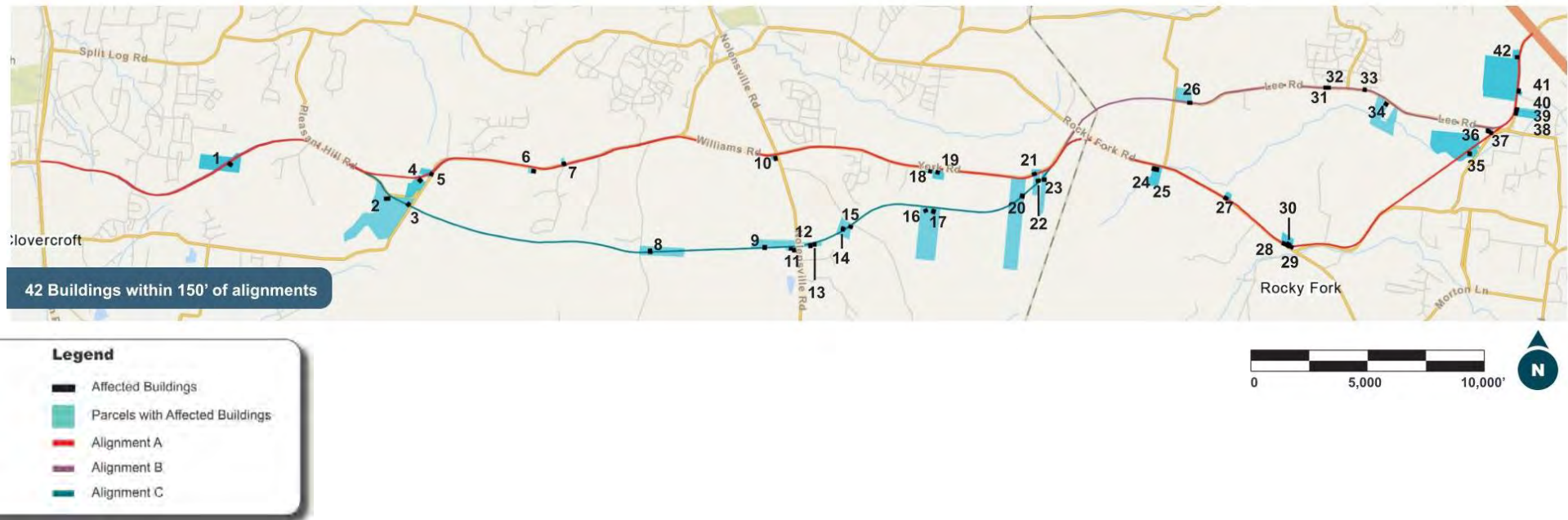








## 7.2. Affected Building Detail





# Rocky Fork Road to McEwen Drive Corridor Study

April 2023

## Affected Buildings by Alignment

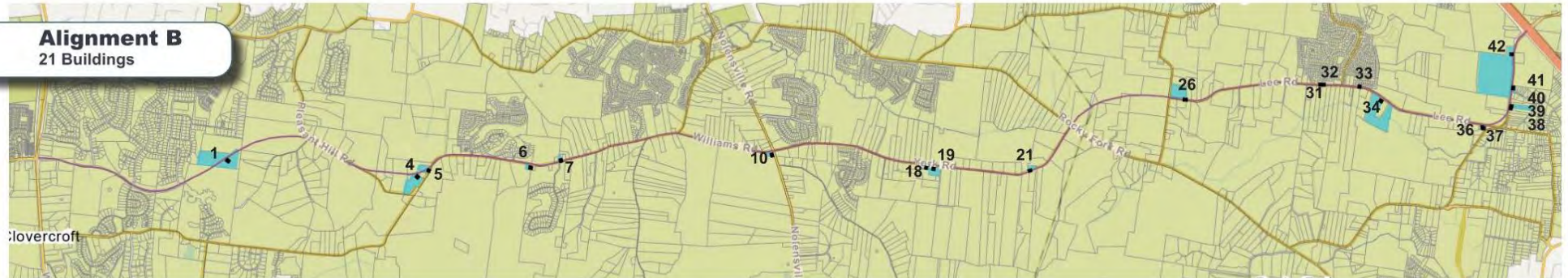
ROCKY FORK TO MCEWEN CORRIDOR

APRIL 2022

### Alignment A 23 Buildings



### Alignment B 21 Buildings



### Alignment C 28 Buildings





# Rocky Fork Road to McEwen Drive Corridor Study

April 2023









### 7.3. Stakeholder Coordination Meeting Notes

#### Rocky Fork Road to McEwen Drive Stakeholder Meeting No. 1

Wednesday, February 2, 2022 1:51 PM

##### Attendance

Doug Demosi, Rutherford County  
Mike Hughes, Rutherford County  
Joe Horne, Williamson County  
Lori Lange, Brentwood  
Victor Lay, Nolensville  
Brent Schultz, Nolensville  
Don Swartz, Nolensville  
Charles King, Smyrna  
Mitchell Wensman, Smyrna  
Brian Hercules, Smyrna  
Kevin Rigsby, Smyrna  
Tom Rose, Smyrna  
Todd Spearman, Smyrna  
Kevin Tilbury, Kimley-Horn  
David Corley, Kimley-Horn  
Doug Delaney, Kimley-Horn

##### Discussion of Alternative Alignments

###### Brentwood

- Thought the intent was for a direct east/west connector.
- Surprised to see alignments 6 & 7, would that also require us to look at a northern (shorter) alignment?

###### Franklin

- Curious about Nolensville / County growth plans in the area of the southern alignments, putting a road in that area would increase development pressure.
  - Kimley-Horn – need to show alignments in relation to the Urban Growth Boundaries.
- Question - average size of parcel with potential impacts?
  - # of parcels within ranges (<1 acre, <5 acres, >5 acres)
- Like alignments to the south, if they fix the stretch of Wilson Pike that needs improvement.
- Would be interested to see average size of properties being impacted.
- Potential impacts to septic systems.
- Would also be helpful to look at cut/fill balancing by sections (impacts to residents with trucks and cost to the project)
- Anything you can do to keep right-of-way costs down would be good.
- Existing McEwen cost are high due to topography and widening along existing alignment, due to having to keep the road open to traffic, right-of-way, and increasing construction costs.
- Franklin would like to get TDOT at the table once an alignment is selected to present it as a state route
  - TDOT is waiting to be brought in

###### Nolensville

- New development will follow any new road that gets built - do we want to increase development by adding a new corridor?
- Magenta route is just south of the McCandless property.
  - Kimley-Horn – pushed magenta alignment to as far south as could before running into topography issues.
- Big separation between northern lines and magenta alignment.
- City sees nice flat farm at the southwest corner of Williams Road and Nolensville Road for major commercial development.
- Four Springs property in discussions for new development
  - What is the anticipated right-of-way?
  - Brentwood – current right-of-way is 110' ROW, with a 20' median, 4-lanes, sidewalks or multi-use trail.
  - Not sure what right-of-way is current shown in new road plan.
  - One physical constraint is high school and development across the street.

###### Rutherford County

- Not a whole lot of suitable soils for septic on the Rutherford side (Alignments 5, 6 and 7).
- Would maybe spur less economic growth due to that.

###### Smyrna

- The magenta alignment lessens commercial development opportunities due to topography.
- Based on conversations with TDOT/Nashville Area MPO – they are waiting for this group to bring them a preferred alignment.

###### Williamson County

- UGB boundaries are in flux today.
- There is already some right-of-way dedicated for Wilson Pike.

- Mayor Anderson wanted to see how far south the alignment could go, but not to the detriment of the overall economics (i.e., cost of the roadway).
- People have already found existing road between Rutherford County and Williamson County, not just future traffic, the existing traffic is pretty heavy already.
- Looking a future interchange at Rocky Fork Road and I-24 as separate project from this effort.
- Looking at a 110'/120' ROW with 20' median.

##### Discussion of Shortlisted Alignments

###### Franklin

- Alignments 6 & 7 – people wouldn't use, too far south.

###### Nolensville

- Agree with comments about Alignments 6 and 7. SR-96 is currently being improved.
- Alignments 1, 2 and 3 (at least on the west side) should be good.
- Nolensville wants alternative #1 - alternative #3 would be at southern edge of proposed UGB and would be secondary alternative
- Nolensville's strong preference is #1 or #2, willing to study #3 or #4
  - Best economic benefit is #1 or #2 due to planned major developments at the Williams/41A intersection

###### Rutherford County

- Alignments 1 & 2 should be considered.
- Alignments 6 & 7 are too far south – would encourage development where we don't want it.
- Alignments 3, 4 and 5 – just pick one.

###### Smyrna

- Alignments 1 & 2 are what we are looking at.
- Alignment 4 could work as well.
- Alignments 6 & 7 are too far south

###### Williamson County

- The alignments make sense, but wants to talk with the Mayor.

##### Final Shortlisted Alignments

- Alignment 2 - McEwen extension to Pleasant Hill Road, Clovercroft Road, Williams/York Road and Rocky Fork Road.
- Alignment 2 - Same as Alignment 1 to Rocky Fork Road, deviation to the north via Lee Road.
- Alignment 3 - Same as Alignment 1 to Clovercroft Road, deviation to the south via a new alignment to York Road and Rocky Fork Road.

##### Discussion of Shortlisted Alignment Evaluation

- ROW impacts:
  - Character of parcels, partial vs. full takes, septic systems
- Earthwork evaluation - cut/fill
- Stream crossings - bridges vs. box culverts
- Evaluate existing traffic counts to consider what will happen to existing traffic during construction
  - Potential detour routes for each alternative
  - Will this new route divert traffic from existing east-west routes (I-840, SR 96, Concord Road)?

##### Next Steps

- Kimley-Horn to distribute screen shots of Alignments 1, 2 and 4.
- KH will combine and distribute meeting notes.
- Detailed evaluation of shortlisted alignments to begin.
- Next meeting in April.

### Rocky Fork Road to McEwen Drive Stakeholder Meeting No. 2

Saturday, May 21, 2022 5:03 AM

May 16, 2022

#### Attendance

Doug Demosi, Rutherford County  
Mike Hughes, Rutherford County  
Joe Horne, Williamson County  
Derek Baskin, Brentwood  
Jonathan Marston, Franklin  
Victor Lay, Nolensville  
Brent Schultz, Nolensville  
Don Swartz, Nolensville  
Charles King, Smyrna  
Brian Hercules, Smyrna  
Kevin Rigsby, Smyrna  
Tom Rose, Smyrna  
Sean Pfalzer, GNRC  
Jessica Hill, GNRC  
Kevin Tilbury, Kimley-Horn  
David Corley, Kimley-Horn  
Doug Delaney, Kimley-Horn

#### General Discussion of Shortlisted Alignments Evaluation Results

- Four Springs and Mosley properties have submitted concept plans to Nolensville, but have been rejected so still in planning phase
  - Original Mosley plan had 2 access points off Clovercroft, one on the west side of the clovercroft frontage and then one to the west close to Pleasant Hill through other properties
  - Mosely would not be accommodated with alignment
  - How much of lot are they planning to utilize?
    - Everything south on parcel is open green space, alignment c goes through density
  - Nolensville recommended both property owners work together to develop a plan and submit a joint plan
- Nolensville planning for corridor along Williams/York (Alignments A&B), will need to make improvements for development and traffic regardless on whether the corridor follows that alignment or not
- Smyrna preference
  - A is preference, more existing development on Lee Road that would be impacted
  - Rocky Fork is the better long-term route for connectivity/mobility from Smyrna's perspective
- Question about width between Nolensville schools property and neighborhood across the street - there is about 150' width here, wide enough for new road
- Affected buildings = affected utilities
  - Stakeholders to let us know if any are historic/showstoppers
- Community Impact: think about medians & access
  - Worry about access management - property owners will not want to give up access, but if you don't say no to one owner you can't say no to any owner about access
  - Immediate disillusion of median might create a 5 lane highway
  - No one wants that, would like to keep some green space
  - Municipalities will need to be strong in enforcing access management in order to accomplish a 4-lane divided section with the median, which is safer and provides better traffic flow
  - Corridor management agreement between all jurisdictions? GNRC to help
- What is goal of roadway?
  - Commuting east to west or growing economic development?
  - Connectivity is first goal - provide another way to get East/West
  - A direct route with quick travel time was primary goal, but local access for development is still important

- Regional Connectivity has to be primary goal, with local connectivity as secondary goal
- Protect this property/save this ROW in a plan
- Having the 3 schools on the arterial route would negatively impact traffic probably more than what we are showing in the travel time
- Might have to push alignments A & B slightly to south in Nolensville, as neighborhood will be expanding
- ROW cost will be a major additional cost not included in the current project cost #'s

#### Conclusions

- Stakeholders agree they have enough information to discuss with themselves and decision makers about which alternative is preferred
- Most important part of this study is to protect the ROW and put this in the RTP and make sure we give ourselves the opportunity to build this road in the future
- Group agrees that we would like to do a meeting with TDOT - lets plan for that in the next phase
- Each jurisdiction should put the decided on route on their thoroughfare plan to be able to enforce it with developers in the future

#### Next Steps

- Victor's question - if the council is ready, can we do a presentation to them and make this public? Yes, we can
- Stakeholders would like a condensed document to hand off to elected officials, make sure we add "DRAFT" to each slide
- Add "DRAFT" to every slide
  - Send this document to jurisdictions
  - Make it 10ish slides
- Stakeholders complete survey
- Come back together again mid-June
  - Web conference.
  - Tentative decision



### Rocky Fork Road to McEwen Drive Corridor Study Stakeholder Meeting No. 3

Monday, August 8, 2022  
2:27 PM

#### Via Microsoft Teams

#### Attendance:

Derek Baskin, Brentwood  
Jonathan Marston, Franklin  
Victor Lay, Nolensville  
Don Swartz, Nolensville  
Doug Demosi, Rutherford County  
Mike Hughes, Rutherford County  
Greg Brooks, Rutherford County  
Charles King, Smyrna  
Mitchell Wensman, Smyrna  
Kevin Rigsby, Smyrna  
Tom Rose, Smyrna  
Joe Horne, Williamson County  
Mike Matteson, Williamson County  
Sean Pfalzer, GNRC  
Jessica Hill, GNRC  
Kevin Tilbury, Kimley-Horn  
David Corley, Kimley-Horn  
Doug Delaney, Kimley-Horn  
Liz Tufnell, Kimley-Horn  
Farwa Hussein, Kimley-Horn

#### Notes:

- **Preferred Alignment:**
  - Brentwood & Williamson - Alignment C
  - Nolensville & Smyrna - Alignment A
  - Franklin & Rutherford - No response; will defer to stakeholders with a greater interest
- **Rutherford Co.**
  - No preference, as long as Smyrna is good with it they are good too
  - Why would we not want to choose Lee Road for alignment B? There is a new sewer line along Olive Branch that will spur development (see response from Smyrna below)
- **Franklin**
  - Doesn't have a preference of the alignment because the alignment is set in Franklin
  - Wants to stay up-to-date and wants to help keep pushing it forward
  - Will support the project no matter the alignment - important as a regional initiative
- **Smyrna**
  - No preference for what happens outside of their boundary line
  - Response to Rutherford Co. question: Lee Rd is a residential road and they worry that it shouldn't have the character of an arterial roadway

- Also prefer the connection to Rocky Fork Almadale Rd to support development and connectivity to the southeast
- **Brentwood**
  - Similar to Franklin, their own route is already pretty set, "vote should be weighted."
  - The City feels that opening up as many east-west connections is the best thing to do, so prefer C because it creates another east-west option on top of Williams/York
  - Believe cost of ROW would be cheaper than existing alignment options
  - Option C also would not impact traffic as much as construction on existing roads
  - Understand other municipalities like Nolensville and Smyrna will be affected more and will support the project regardless
  - Question: looking to future funding options, would a new location road have more likelihood of getting state route designation and federal funding than an existing route?
    - GNRC response: Given the cross section, a new alignment might be more likely to get funding (more consistent with state routes across TN)
- **Nolensville**
  - BOMA unanimously chose Alignment A
  - Alignment C is on a hillside, want this to remain as untouched as possible
    - Town has been adamant with developers that the hillside should be untouched, so alignment C would be contradictory to their plan
    - Could explore hybrid alignment alternative that uses C to the east of Nolensville Rd
  - County citizens have come out strongly against the Morley and Four Springs developments thus far - Town anticipates a lot of public outrage over a new road going through the pristine hillside environment
- **Williamson**
  - Agrees with Brentwood's comments
  - Alignment A would be much more disruptive to existing citizens, lots of driveways and neighborhoods along the existing corridor that would be impacted
    - Many new neighborhoods will get built along the existing corridor that will make the improvements along Clovercroft/Williams too difficult
  - Improvements to Clovercroft Road have been programmed
    - Alignment C would be more useful to the county and provide more east-west connectivity on top of existing roads
- **Is only possibility of project moving forward to have it designated as a state route?**
  - TDOT would be a key player to get on board with the project
  - Their position on alignment preference is unknown
- **Next steps:**
  - Victor Lay to coordinate meeting between Nolensville and Williamson County Staff and leadership to discuss Alignments A and C
    - KH to provide support
  - Next Stakeholder Group meeting to be scheduled after meeting above

### Rocky Fork Road to McEwen Drive Corridor Study Stakeholder Meeting No. 4 Virtual

January 30<sup>th</sup>, 2023  
10 AM

#### Attendees:

##### Smyrna

Tom Rose  
Charles King  
Kevin Rigsby

##### Rutherford County

Mike Hughes  
Doug Demosi  
Greg Brooks

##### Williamson County

Joe Home  
Williamson Co Hwy Dept

##### Nolensville

Mayor Hallie Gallik  
Victor Lay

##### Franklin

Jonathan Marston

##### Brentwood

Derek Baskin

##### GNRC

Jessica Hill  
Sean Pfalzer

##### Kimley-Horn

Kevin Tilbury  
David Corley  
Doug Delaney  
Liz Tuffnell

#### Notes:

##### Recap/Hybrid Alignments

- From Stakeholder Meeting No. 3 - Alignments A (Nolensville and Smyrna) and Alignments C (Williamson County and Brentwood)
- Nolensville and Williamson County have strongest interest and impacts from the alignments, so we have been discussing with these parties offline to land on a preferred alignment with those two parties
- Considered Alignments A and C, plus four hybrids

##### Recommended Alignment

- Williamson and Nolensville have reached an agreement, ready to move forward with the plan (recommended alignment of A and AC3)
- Question - can Nolensville show both on the MTP?
- If we have two separate alignments, does that hurt us in the future to get detailed planning/design dollars in funding? Does it hurt us if we don't have a singular alignment chosen for the entire corridor?
  - Biggest thing is that we have an agreement, we can show TDOT and the GNRC that we agreed and are taking steps to preserve the ROW. Can say this decision will be worked out later. NEPA will look at other alignments as well, so in this phase some of the alignments will come back to show we've done due diligence

- Per Sean Pfalzer, we have gone above and beyond in the pre-NEPA screening process so we should be in a great spot to get future funding - its fine that a singular alignment hasn't been selected
- Sanford Road route does bypass Mill Creek Middle and Nolensville High - one less school zone to go by (City of Franklin)
- Sanford Rd route will create some complicated intersection designs at Williams and York with how close Sanford is to York on Nolensville
- Brentwood would still like Alignment C, but want to defer to Nolensville/Rutherford. Glad that something was able to be agreed upon
- Franklin excited to add it to the major thoroughfare plan

#### Next steps

- Formal show of support/document signed by all stakeholders?
  - Resolution would be helpful throughout all phases, whether ROW, design, construction etc.
  - Template for such a resolution? Jonathan Marston has a corridor management agreement that could be used as an example for the joint resolution
  - KH to develop short powerpoint presentation (3-4 slides) to give more context concurrent with resolution
- Implementation
  - GNRC updates their long rang plan every 5 years, most recent was updated in 2/2021 - next will be 2/2026
  - GNRC will kick off the update process for next plan in end of 2023/early 2024
  - Sean recommends this project be pursued and recommended in the upcoming plan update
  - If the project is not on the long range plan, it will not get on a TIP
  - Project will need to be on the plan to be competitive for future grant opportunities
- KH to share KMZ file of final alignment
- KH to finalize and send out final report



### 7.4. Example Corridor Management Agreement

COF Contract No. 2017-0209

COF Contract No. 2017-0209

#### TENNESSEE STATE ROUTE 6 CORRIDOR MANAGEMENT AGREEMENT

##### MEMORANDUM OF UNDERSTANDING CORRIDOR MANAGEMENT ALONG STATE ROUTE 6

###### i. Purpose

The purpose of this Agreement is to provide a framework for the signatory agencies, organizations and governments, within Williamson County, Maury County, the City of Franklin, the Town of Thompson's Station, the City of Spring Hill, the City of Columbia, the Nashville Area Metropolitan Planning Organization (MPO), and the Tennessee Department of Transportation (TDOT), to work collaboratively in the management of State Route 6 (SR 6) and promote safe and efficient operation, enhance and sustain economic development and support environmental conservation along the corridor.

###### ii. Agreement

WHEREAS, Tennessee's *Long Range Transportation Policy Plan* recognizes the value of interregional highway corridors in providing citizens and businesses throughout Tennessee with high quality access to educational, employment, health care and recreational opportunities and supports commerce and tourism; and

WHEREAS, the State of Tennessee Department of Transportation and the Nashville Area MPO have identified transportation improvements along the SR 6 corridor in their respective plans and work programs; and

WHEREAS, SR 6 has been identified as a corridor that enhances the economic vitality of the state, providing essential access for the region of the state and Williamson and Maury Counties to major economic markets and cultural centers; and

WHEREAS, the continued growth of the region is leading to increasing travel demand in the corridor, which, if unmanaged, can negatively affect the level of performance and safety experienced by users of the roadway; and

WHEREAS, community leaders, residents and transportation officials have identified this growing travel demand and development pressure as a concern with potential negative consequences for the safety and operation of the corridor, with potential to degrade the performance of the corridor, and the resulting implications for the economy and quality of life of the region; and

WHEREAS, elected officials, agency staff, and representatives of the Tennessee Department of Transportation, Williamson County, Maury County, the City of Franklin, the Town of Thompson's Station, the City of Spring Hill, the City of Columbia, and the Nashville Area MPO have identified the following list of corridor management goals for the SR 6 corridor:

- Improve Regional Transportation for Local Residents, Commuters, and Freight;
- Controlling Access/Safety;
- Multimodal Options;
- Coordination between Municipalities, School Systems, and Local Businesses;
- Education of Alternative Routes; and
- Improving streetscape along the corridor.

WHEREAS, those same representatives identified the following corridor management strategies and associated tools for purposes of achieving the identified corridor management goals, including:

- Access Management;
- Traffic Management and Operations/ITS;
- Land Use Planning; and
- Roadway Design and Capacity.

NOW, THEREFORE, the Tennessee Department of Transportation, Williamson County, Maury County, the City of Franklin, the Town of Thompson's Station, the City of Spring Hill, the City of Columbia, and the Nashville Area MPO agree to cooperate in the pursuit, adoption, and implementation of the strategies and actions detailed below:

1. **Access Management** - defines the relationship of adjacent land uses and activities to the corridor itself. The nature of that access can have a significant impact on mobility, congestion, and safety. Tools to implement the access management strategy include:

- Medians/channelization standards;
- Spacing standards;
- Corner clearance standards;
- Driveway design standards;
- Connectivity and cross-access standards;
- Street network standards;
- Access management plans; and
- Wayfinding signage.

Law Dept. approved 08.29.17

Law Dept. approved 08.29.17

COF Contract No. 2017-0209

COF Contract No. 2017-0209

Parties to this Agreement recognize the importance of the Access Management strategy and tools to achieving the corridor management goals established for the SR 6 corridor. The parties agree to:

- a. Develop and seek approval of the corridor access management standards and a corridor access management plan. The standards and plan will establish the location, spacing, design, and operation of driveways, traffic signals, median openings, interchanges, and street connections to the roadway;
  - b. Seek approval and adoption of the corridor access management standards and corridor access management plan into their individual design standards and guidelines.
- 2. Traffic Management and Operations/ITS/Multimodal Options** - encompasses a wide range of activities aimed at maintaining or improving the overall safety and efficiency of a corridor for all users. This strategy is employed for a variety of reasons including maximizing roadway capacity, facilitating alternative modes (pedestrians, bicycles, transit), minimizing impacts from non-recurring events (traffic crashes, construction projects, maintenance activities, special events, etc.), and improving safety. Tools to implement the Traffic Management and Operations strategy may include:
- Coordination between Municipalities, School Systems, and Local Businesses
  - Traffic Signal Timing and Coordination;
  - Integrated Intelligent Transportation Systems (ITS) applications;
  - Emergency Responder Technology;
  - Truck/Freight Plan;
  - Work Zone Management;
  - Travel Demand Management;
  - Traffic Bottleneck Removal;
  - Traffic Impact Studies (rezoning, subdivision, site plans, access requests);
  - Transportation Plans; and
  - Setting and Measuring Corridor Performance Goals

Parties to the Agreement recognize the importance of the Traffic Management and Operations strategy and tools to achieving the corridor management goals established for the SR 6 corridor. The parties agree to:

- a. Develop a process for coordinated traffic management and operations, including corridor wide traffic impact study requirements;
- b. Development corridor traffic management and operations standards and performance goals; and

- c. Develop a coordination process between municipalities, schools systems, and local business along the corridor.

**3. Land Use Planning** - describes the location and type of places and activities along a corridor. The organization of those land uses can influence a variety of factors, including traffic patterns, economic activity and community character. Tools to implement the land use strategy may include:

- Land use plans;
- Zoning, including design overlays;
- Subdivision regulations; and
- Urban services plan

Parties to this Agreement recognize the importance of the Land Use Planning strategy and tools to achieving the corridor management goals established for the SR 6 corridor. The parties agree to:

- a. Consider accepting, by resolution of their respected legislative bodies and planning commissions, the findings and recommendations of any proposed recommendations that come from the SR 6 Corridor Management Agreement in the future.

**4. Roadway Design and Capacity** - design improvements enhance the safety and operation of the road, while capacity improvements allow more vehicles to travel on the road. Roadway design and capacity is also an important strategy to protect environmental resources in a corridor. Tools to implement the Roadway Design and Capacity Strategy may include:

- Roadway alignment;
- Travel lane and shoulder widths;
- Medians;
- Crosswalks;
- Bicycle lanes;
- On-street parking;
- Sustainable stormwater controls;
- On and off-ramp locations;
- Number of travel lanes;
- Intersection geometry and curb radii;
- Channelized right-turns;
- Roundabouts; and
- Interchange improvements.

Law Dept. approved 08.29.17

Law Dept. approved 08.29.17



COF Contract No. 2017-0208

COF Contract No. 2017-0209

## 2. Programming, Funding, Budgeting, and Reimbursement

This Agreement is neither a fiscal nor a funding obligation. Any transfer of funds between signatories that occurs as a result of the actions outlined in the Agreement may take place through applicable laws, agreements, existing authorities, and procedures.

Nothing in the Agreement shall obligate the signatories to expend appropriations, obligate funds, or enter into any contract or agreement.

This Agreement will be coordinated by the Tennessee Department of Transportation in cooperation with the other signatories. The signatory parties, moreover, shall form a Corridor Management Committee to implement the course of action described in this Agreement. The Corridor Management Committee shall include a designated representative from each of the signatories to this Agreement. Committee members will develop committee rules and operating procedures and establish a regular schedule of meetings.

The Corridor Management Committee will function as the steering committee for this Agreement with the responsibility of providing strategic guidance on the actions described herein. In the absence of corridor wide policies, plans, standards and regulations, the Corridor Management Committee will also serve as a coordinating committee for proposed improvements and projects affecting the corridor. Adoption or approval of any policies, plans, standards or regulations recommended under this Agreement will be at the sole discretion of the legislative and/or appointed bodies of the signatory parties.

The parties agree to cooperate fully in order to successfully execute the terms and conditions of this Agreement including obtaining all regulatory and governmental approvals required by this Agreement recognizing that the intent of each party to the other is to serve the individual interest of each party while respecting the conditions and obligations of this Agreement.

Each party shall be responsible for receiving all approvals from the appropriate governing bodies prior to executing this Agreement as well as future required approvals in a diligent manner.

Parties to this Agreement recognize the importance of the Roadway Design and Capacity strategy and tools to achieving the corridor management goals established for the SR 6 corridor. The parties agree to:

- a. Develop ultimate, long-range corridor roadway design concepts and cross sections with the Tennessee Department of Transportation and Nashville Area MPO; and
- b. Develop a corridor alignment and capacity plan that defines and preserves required future right-of-way.

## III. Governance

### 1. Adoption, Amendment and Termination

This Agreement will become effective when an appointed and authorized representative of each the Tennessee Department of Transportation, the Nashville Area MPO, Williamson County, Maury County, the City of Franklin, the Town of Thompson's Station, the City of Spring Hill, and the City of Columbia have placed their signature in the block below.

This Agreement may be amended, in whole or in part, by mutual agreement of all parties as evidenced by signatures on an amended agreement. The signatory parties agree to confer with respect to the continuation of the Agreement, or if there is the necessity for any amendments, on an annual basis. The State Department of Transportation will coordinate this meeting by identifying the date and location along with gathering input from the participating Agencies, Counties, Cities, Towns, and MPO for preparation of the agenda.

The signatory parties may withdraw from this Agreement at any time provided that the withdrawing party notifies the other signatories sixty (60) days in advance of the desired date of withdrawal in writing to allow time to remedy the reason for withdrawal. In the event efforts to remedy the reason for withdrawal are unsuccessful, the withdrawing party may withdraw from the Agreement without prejudice but at the risk of forfeiting its ability to participate in future activities and improvements taken as part of this Agreement.

Notwithstanding the foregoing, however, this Agreement shall remain in force until terminated by written agreement of the signatory parties.

Law Dept. approved 08.29.17

Law Dept. approved 08.29.17

# Rocky Fork Road to McEwen Drive Corridor Study

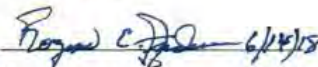
April 2023

COF Contract No. 2017-0209

## IV. Signatures

IN WITNESS WHEREOF, each of the parties hereto has executed this Agreement as of the date shown with the signature below:

WILLIAMSON COUNTY

  
Rogers Anderson, Mayor Date 6/14/18


MAURY COUNTY

  
Charlie Norman, Mayor Date 6/12/18

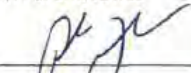
CITY OF FRANKLIN

  
Ken Moore, Mayor Date 6/13/18


TOWN OF THOMPSON'S STATION

  
Corey Napier, Mayor Date 6/12/18

CITY OF SPRING HILL

  
Rick Graham, Mayor Date 6/12/18

CITY OF COLUMBIA

  
Dean Dickey, Mayor Date 6/13/18

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

  
John Schroer, Commissioner Date JUL 25 2018

Greater Nashville Regional Council

  
Michael Skipper, Director Date 7/18/18

Law Dept. approved 08.29.17