

RESOLUTION 20-177

**A RESOLUTION TO APPROVE BUDGET APPROPRIATION FOR
RIGHT-OF-WAY AND EASEMENT ACQUISITION
FOR NORTH SEGMENT OF BUCKNER LANE WIDENING PROJECT**

WHEREAS, the City of Spring Hill Major Thoroughfare Plan identifies Buckner Lane under the existing functional classification system as an “Arterial” street; and

WHEREAS, the City of Spring Hill Major Thoroughfare Plan identifies the widening of Buckner Lane from 2 lanes to 4 to 5 lanes from Duplex Road to Thompsons Station Road; and

WHEREAS, the widening and realignment of Buckner Lane is an essential road improvement project to support the implementation of the pending Buckner Road extension and interchange project; and

WHEREAS, the City of Spring Hill has committed initially to fund the design, right-of-way acquisition, and construction of the Buckner Lane widening project from Duplex Road to Buckner Road, with the remaining portion from Buckner Road to Thompsons Station Road to be completed by others; and

WHEREAS, the Buckner Lane Widening Project was divided into a North Segment and South Segment in order to effectively advance engineering design, right-of-way acquisition, and construction of the widening project in an orderly manner; and

WHEREAS, Kimley-Horn, the City’s design consultant for the Buckner Lane Widening Project, has completed preliminary engineering and is nearing completion of right-of-way plans for the Buckner Lane Widening Project and is ready to proceed with the next phase of work in their scope of services to assist the City with the acquisition of right-of-way and/or easements for the North Segment required to move forward with construction of the North Segment of the widening project; and

WHEREAS, the right-of-way and easement acquisition phase of the North Segment of the Buckner Lane widening project is tentatively scheduled begin in November 2020 and conclude by November 2021; and

WHEREAS, the Randy Button & Associates, a subconsultant of Kimley-Horn, prepared a preliminary estimate attached hereto of acquisition cost for acquiring right-of-way and easements associated with the North Segment of the widening project of One Million Five Hundred Thousand dollars (\$1,500,000.00); and

WHEREAS, the Board of Mayor and Aldermen desires to fund the right-of-way and easement acquisitions necessary to permit construction of the road widening project to advance; and

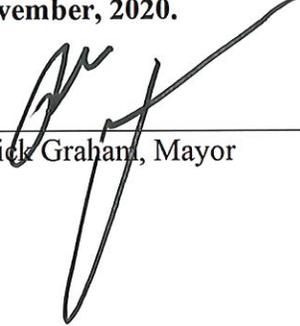
WHEREAS, the Traffic Impact Fee fund has an uncommitted balance of \$1,448,543 available that may be utilized for the purpose of funding a portion of the right-of-way and easement acquisitions in the recommended amount of One Million dollars (\$1,000,000.00) in order to begin the right-of-way and easement acquisition process with the understanding a supplemental budget appropriation by the Board will be necessary at a later date to appropriate the remaining funding necessary to fully cover costs for right-of-way and easement acquisitions for the North Segment of the widening project.

NOW, THEREFORE BE IT RESOLVED, that the City of Spring Hill, Board of Mayor and Aldermen:

1. Approves an appropriation from the Traffic Impact Fee fund in the amount of One Million dollars (\$1,000,000.00) for the purpose of acquiring right-of-way and easements necessary for the construction of the North Segment of Buckner Lane widening project.

2. Acknowledges the initial funding of One Million dollars (\$1,000,000) from the Traffic Impact Fee fund will cover only a portion of the anticipated right-of-way and easement expense and that an additional supplemental appropriation of as much as Five Hundred Thousand dollars (\$500,000.00), more or less, will be necessary later in Fiscal Year 2020-21 from a funding source to be determined by the Board in order to fully fund all the required right-of-way and easement expenses estimated for the North Segment of the Buckner Lane widening project

Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on the 16th day of November, 2020.



Rick Graham, Mayor

ATTEST:



April Goad, City Recorder

LEGAL FORM APPROVED:



Patrick Carter, City Attorney

RBA

Randy Button & Associates Valuation Services

October 26, 2020

Lee Schumann, P.E.
Kimley-Horn
214 Oceanside Drive
Nashville, Tennessee 37204

RE: Preliminary Right-of-Way Acquisition Estimate – North Buckner Lane Widening in Spring Hill

Dear Lee,

As part of our sub-agreement with Kimley-Horn you have asked for a preliminary right-of-way acquisition estimate for Phase One of our contract. I understand this estimate is needed for you to determine if we shall proceed to Phase Two of this assignment, which is producing appraisal reports for affected tracts or budgeting purposes.

We have evaluated the 31 affected tracts shown on the proposed project's acquisition table. With considerations given to fee acquisitions, drainage easements, slope easements, construction easements (estimated at two years) and the impact to improvements, an estimate of acquisition cost for the reasons stated above, should be near:

\$1,500,000

One Million and Five-Hundred Thousand Dollars

Please let me know if you wish to proceed to Phase Two of our sub-agreement; producing a Market Data Brochure and appraisal reports for the affected tracts.

Sincerely,



Randy Button, President
Randy Button and Associates, inc.



REQUEST: Resolution 20-177, Approve Budget Appropriation for Right-of-way and Easement Acquisition for North Segment of Buckner Lane Widening Project

SUBMITTED BY: Chuck Downham, Assistant City Administrator and Victor Lay, City Administrator

DATE: November 2, 2020

ATTACHMENTS: Resolution 20-177 and Supporting Documents

PURPOSE:

To approve Resolution 20-177 to approve an initial funding appropriation of \$1M from Traffic Impact Fee fund for right-of-way and easement acquisition for the North Segment of Buckner Lane widening project.

BACKGROUND:

In October 2019 the Board of Mayor and Aldermen approved Resolution 19-191 to approve the Professional Services Agreement between the City and Kimley-Horn for design services for the Buckner Lane widening project that initiated the beginning of the Buckner Lane widening project. Following engaging Kimley-Horn, the project was divided into two segments (North and South segments) in order to more effectively manage design and right-of-way acquisition as well as construction of the widening project. Since October 2019 Kimley-Horn has completed preliminary engineering for the North Segment of the widening project.

Kimley-Horn is also approaching the completion of right-of-way and easement plans for the North segment that will serve as the basis for contacting property owners within the North segment beginning in November or December 2020 regarding rights-of-way and/or easements required for the widening project. The right-of-way acquisition phase for the North segment is expected to be completed within one year, beginning in November or December 2020 and concluding by November 2021. During the right-of-way acquisition phase of the project for the North Segment, engineering design services will continue to progress for the North Segment while also getting preliminary engineering underway for the South segment. A copy of the master schedule is attached for reference.

On October 27, 2020, the City, along with Kimley-Horn, facilitated a third public meeting to present plan documentation for both the North segment (right-of-way and easement plans) and initial conceptual plan documentation for the South segment. The meeting was well attended by property owners with a good exchange of questions and responses between the City and Kimley-Horn and those in attendance. A copy of the PPT presentation is provided as an attachment to the staff report.

In order to progress to the right-of-way and easement acquisition phase for the North segment, it will be necessary for the Board of Mayor and Aldermen to appropriate funding for the purchase of rights-of-way and easements that will be required. To ensure sufficient budgeting for such expenditures, the appraiser consultant was requested by the City to provide an estimate of the expenditure for rights-of-way and easements for the North segment. Randy Button & Associates, a subconsultant for Kimley-Horn that will be integrally involved in the right-of-way and easement acquisition process, prepared an initial estimate (attached) reflecting a valuation of \$1,500,000, noting various qualifiers in the estimate provided. Until detailed appraisals have been prepared for each parcel, the exact dollar amount needed will not be known. However, in order to advance the right-of-way and easement acquisition process, City staff recommends that a partial initial funding appropriation in the amount of \$1,000,000 be approved by the Board to allow the acquisition process to begin. Later in the fiscal year during the beginning of the fourth (4th) quarter of FY2020-21 (or sooner if the acquisition process is progress more quickly), an additional supplemental funding appropriation would be presented by Staff to the Board for consideration and approval in order to fully fund the required right-of-way and easement acquisitions needed so construction work can follow for the North segment.

PRELIMINARY UPDATED PROJECT COST ESTIMATE

As part of the scope of services for the preparation of 30% preliminary engineering plans, Kimley-Horn was to prepare a preliminary project cost estimate based upon the plans prepared utilizing the TDOT cost estimate model. Kimley Horn presented with the preliminary engineering plan package the preliminary project cost estimate for the North Segment in the amount of \$14.1M (attached). The cost estimate provides a detailed breakdown of cost components using the TDOT model that is a planning-level cost estimating tool, including a preliminary estimate for ROW and utilities along with project contingencies. You'll note the preliminary cost estimate for ROW was initially estimated at just over \$1M for the North segment.

The City has been generating cost estimates for this project since 2015 with the initial estimate (\$9,453,900) being submitted by ICA as part of the feasibility study for the widening project. The initial planning-level cost estimate that has been most recently provided for the entire road widening project from Duplex Road to Buckner Road was \$14.88M. That estimate was generated by HDR (formerly ICA) in February of 2019 using the TDOT planning-level cost estimating tool. It was noted that the estimate could be as high as \$18M if the City bore the costs of all the utility relocations. Staff has mentioned several times in the past when discussing the Buckner Lane widening that the estimates were probably low based on our recent experience with Duplex Road.

Given the difference between the initial planning-level cost estimate and the latest preliminary cost estimate for the Northern Segment, it will be necessary and appropriate for the City to recalibrate its project financial model to the preliminary cost estimate for the North Segment along with an appropriate extrapolation of cost for the South Segment, for which preliminary engineering has not yet begun. A straight proration of the latest cost estimate for the entire corridor would suggest \$22M. Of course, that does not take into account the different conditions and constraints that vary between the sections. Additional financial information will be prepared by City staff for presentation to BOMA outlining adjusted financial modeling that will be needed for the project to ensure sufficient funding is in place to fully execute the project.

FINANCIAL IMPACT:

There are a few different funding sources available, but City staff recommends consideration be given to utilizing uncommitted funds in the Traffic Impact Fee fund currently estimated to be approximately \$1,448,543, and to appropriate \$1,000,000 from this fund for the purpose of acquiring rights-of-way and easements required for the North Segment of the Buckner Lane

widening project. Alternatively, the City does have remaining bond funds available from the initial General Obligation bond issued for the Buckner Road Interchange project. The total bond amount was \$25M and the initial contractual commitment as provided in the BUILD Agreement between the City and FHWA was approximately \$21.139M, excluding contingency. A portion of the difference was going to be utilized to replenish the City's cash reserves expended for the construction of the Crossings North bridge project that cost just over \$2M. However, it is recommended by Staff that the remaining bond funds remain uncommitted until such time as the contract has been awarded by TDOT to the design-build contractor for the Buckner Interchange project. At that time, the City will have an understanding of the contract value and the amount of local funding that will be required, along with an appropriate project contingency budget to maintain for the duration of the design and construction of the Interchange Project.

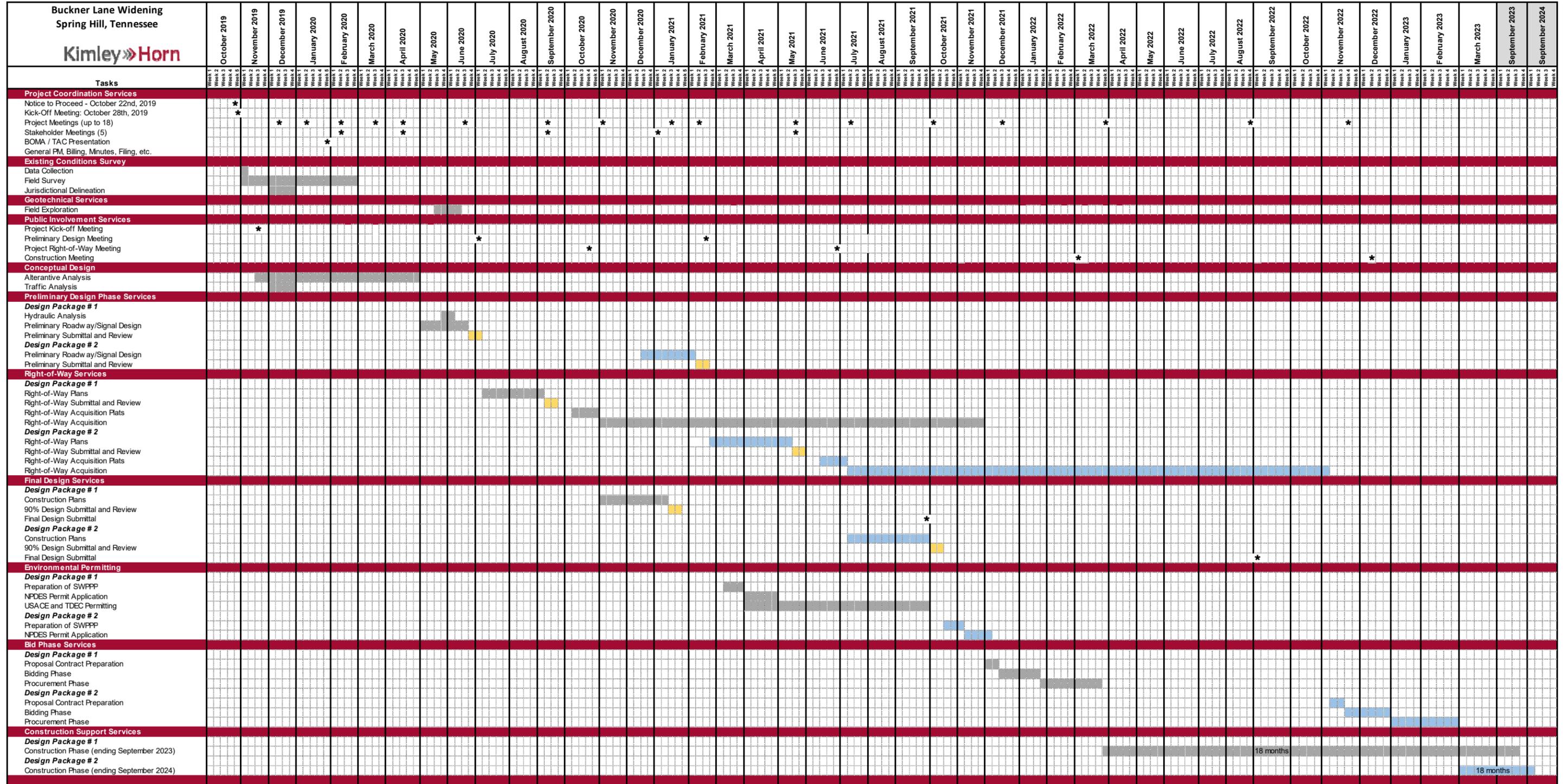
Another option is to utilize monies from cash reserves. As recently shared by the City's financial advisor, Cumberland Securities, this option is not recommended, as the use of cash reserves is often looked upon negatively by bond rating entities. This will be especially important in consideration that future, near-term bond issues will be needed for various road and utility projects. It is recommended, however, that the Board consider approving the Refunding Resolution provided in the Work Session agenda package for consideration with this funding appropriation to preserve the option and ability for the City to replenish the Traffic Impact Fee fund using future bond monies so that the replenished Traffic Impact Fee fund can be utilized for other arterial projects in the City.

RECOMMENDATION:

Staff recommends approval of Resolution 20-177 to approve an initial funding appropriation of One Million dollars (\$1,000,000.00) from the Traffic Impact Fee fund for right-of-way and easement acquisition for the North Segment of Buckner Lane widening project. City staff will present a subsequent supplemental funding appropriation request in the beginning of the fourth quarter (or sooner if the acquisition process is progressing more quickly) of FY2020-21 for the remaining estimated \$500,000, more or less, funding that will be required to fully complete right-of-way and easement acquisition for the North Segment of the Buckner Lane widening project. The right-of-way and easement acquisition process is expected to take approximately 12 months to complete from November 2020 until November 2021 after which time preparation for construction of the North Segment will follow.

Project Schedule

Exhibit A

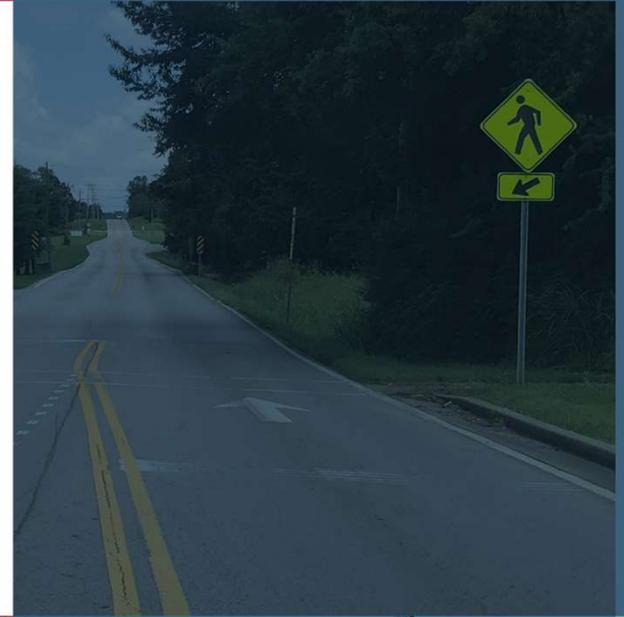


★ Milestone / Deliverable
 ■ Design Package # 1 Project Team Task
 ■ Design Package # 2 Project Team Task
 ■ City Review Time

Updated: May 12, 2020

BUCKNER LANE

WIDENING PROJECT



Public Meeting # 3
October 27th, 2020

WELCOME



Tonight's meeting

- Project Overview
- Next Steps for the North Segment (Design Package # 1)
- Conceptual Look at South Segment (Design Package # 2)
- Schedule
- Your Questions

Questions?

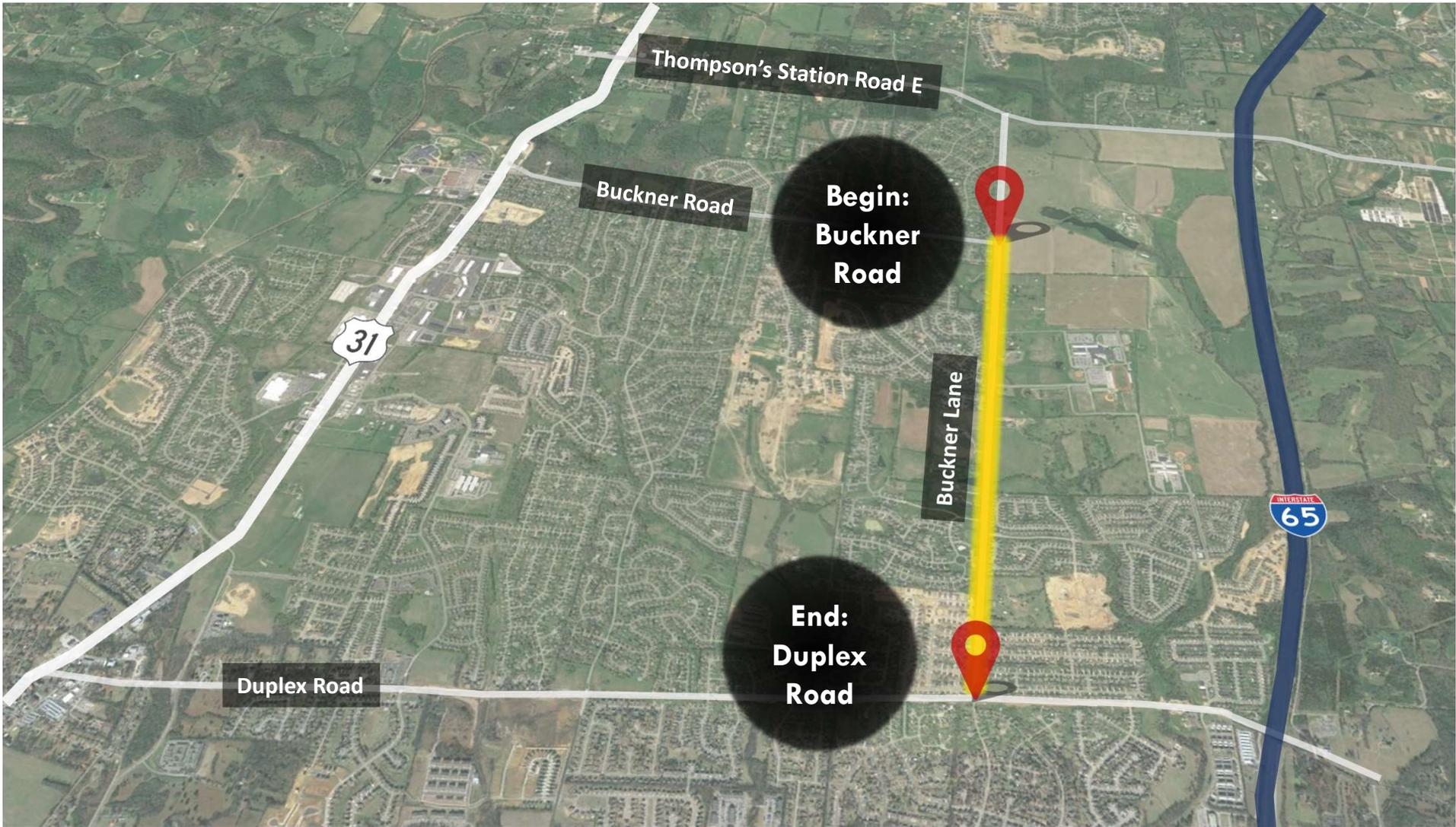
Use the Q&A button at the bottom of the screen.





Project Overview

Buckner Lane Widening Project



Project location map

Project limits: Duplex Road (South) and Buckner Road (North)



Design and construction will be split into two phases – South Segment (Duplex Road to 500' north of Wades Crossing) and the North Segment (500' north of Wades Crossing to Buckner Road)

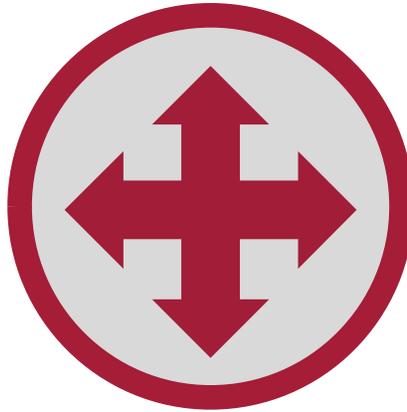


North Segment (500' north of Wades Crossing to Buckner Road)

Project Goals



Traffic capacity.



Connectivity to Duplex Road and Buckner Road interchange.



Address federal requirements.



Bicycle/pedestrian connectivity.



Minimize property impacts.

Existing conditions

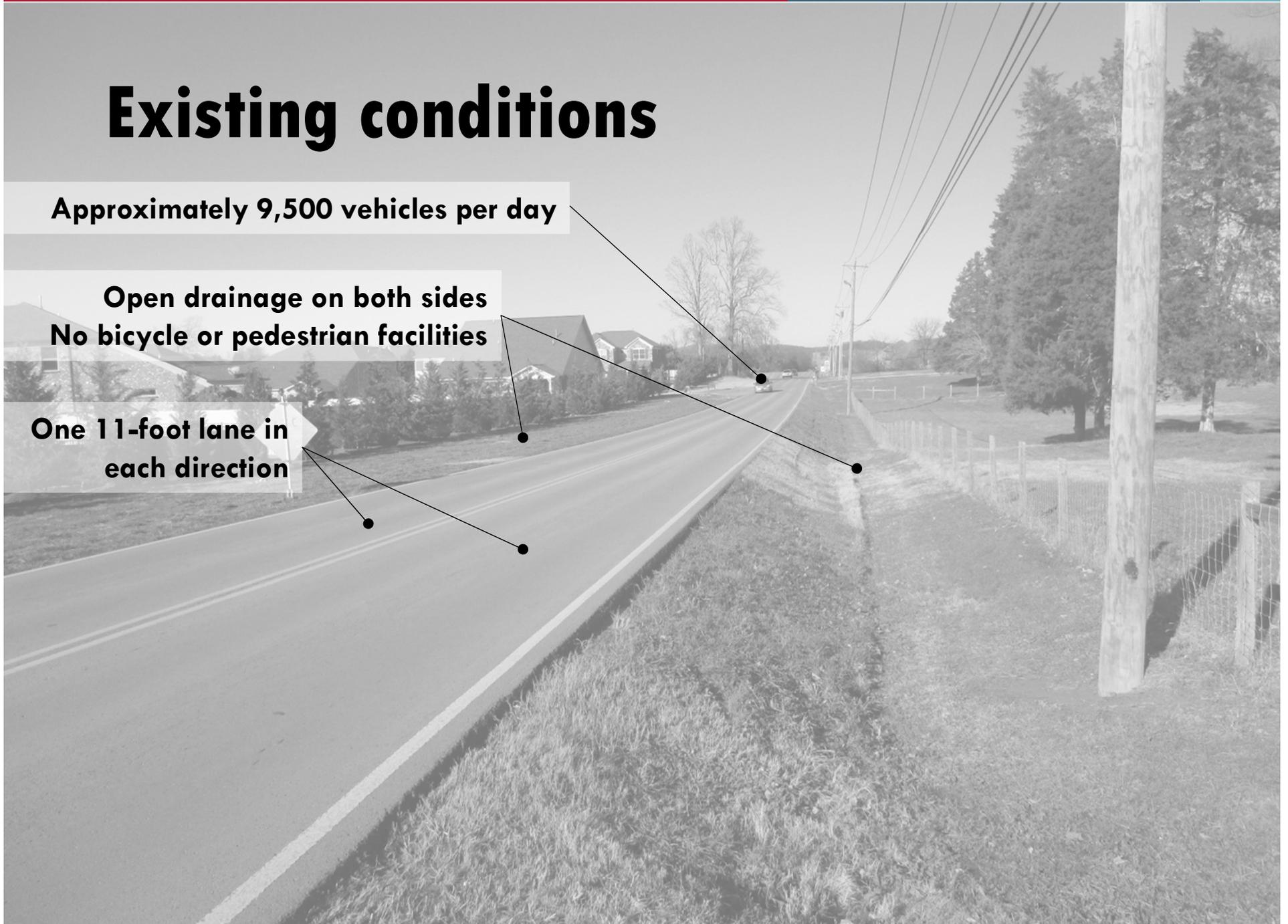


Existing conditions

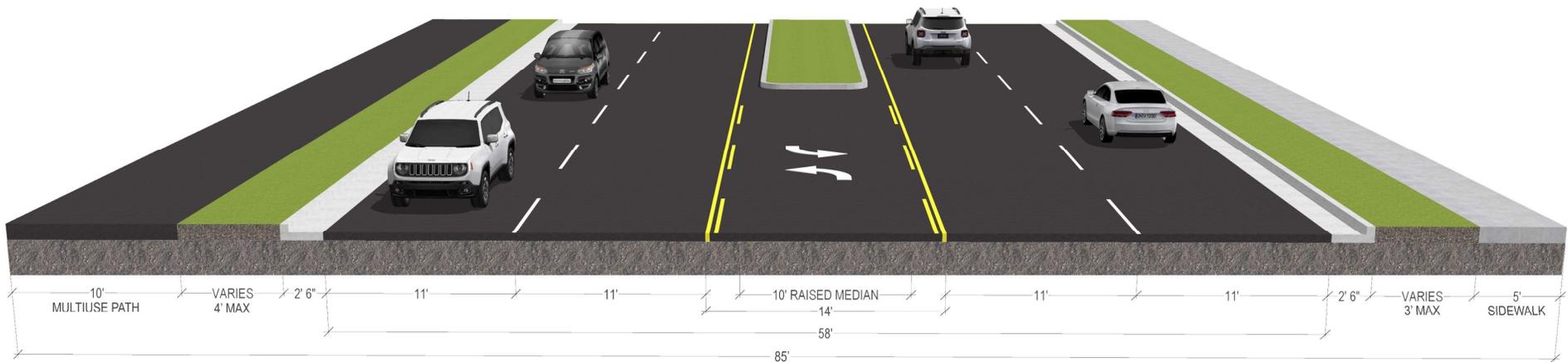
Approximately 9,500 vehicles per day

Open drainage on both sides
No bicycle or pedestrian facilities

One 11-foot lane in
each direction



Proposed Typical Section



Key Design Features:

- ⬇️ **IMPACT REDUCTION:** Grass strip widths have been narrowed to limit property impacts.
- ⬇️ **IMPACT REDUCTION:** Curvature has been added to the horizontal alignment to minimize property impacts.

- ✅ **ADDED SAFETY FEATURE:** Curvature in horizontal alignment helps to manage vehicle speed.
- ✅ **ADDED SAFETY FEATURE:** Traffic signals added along corridor to provide safe turn movements and pedestrian crossings.
- ✅ **ADDED SAFETY FEATURE:** Raised medians have been added to provide traffic calming.

Questions?

Use the Q&A button at the bottom of the screen.



Where are we?

- Finalizing Right-of-Way Design
- Preparing to begin Right-of-Way Acquisition services
- Preparing to begin Design for the South Segment (Design Package #2)



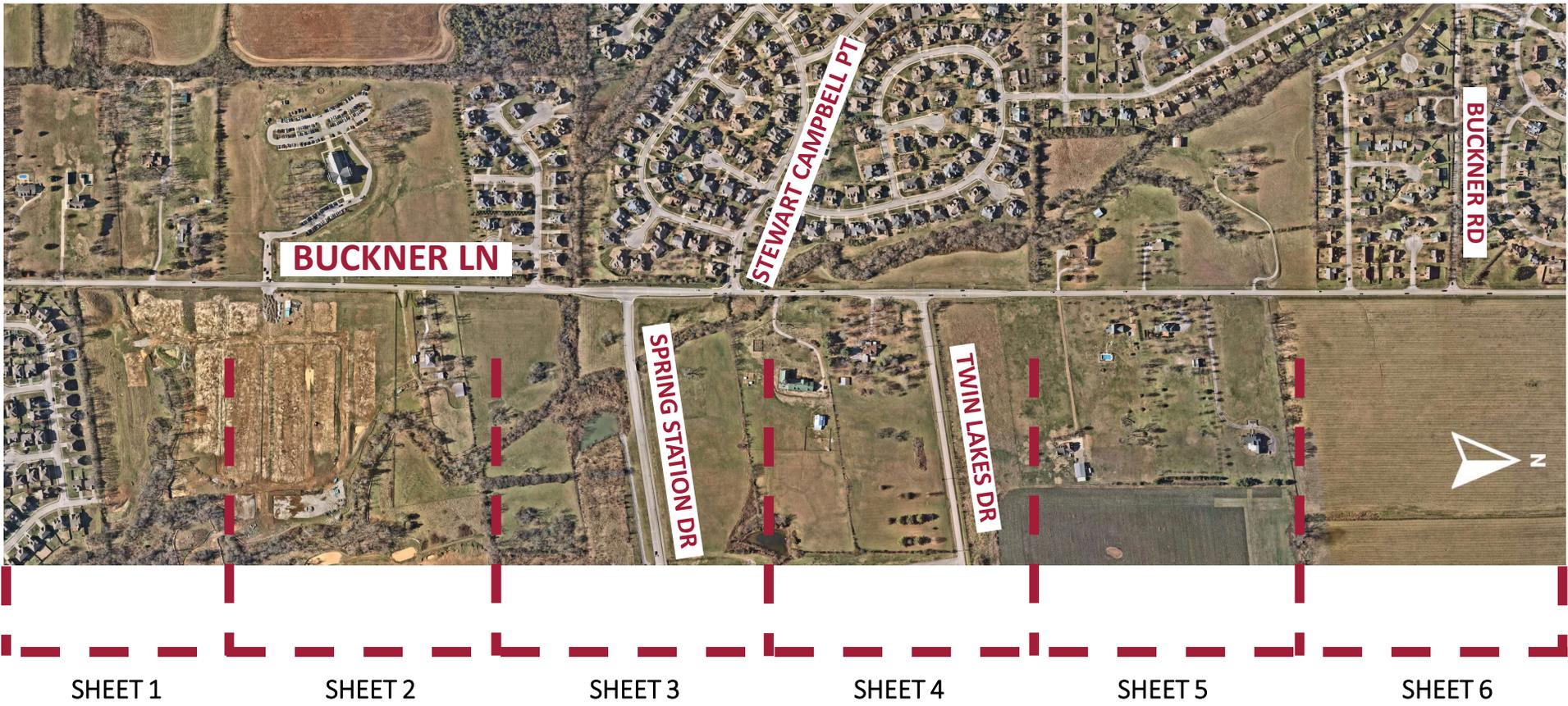
Right-of-Way Design

Buckner Lane Widening Project

Next Steps

- Right-of-Way Acquisition Services
 - Property/Market Research – November 2020
 - Property Owner Meeting – December 2020
 - Appraisals/Coordination – Beginning December 2020

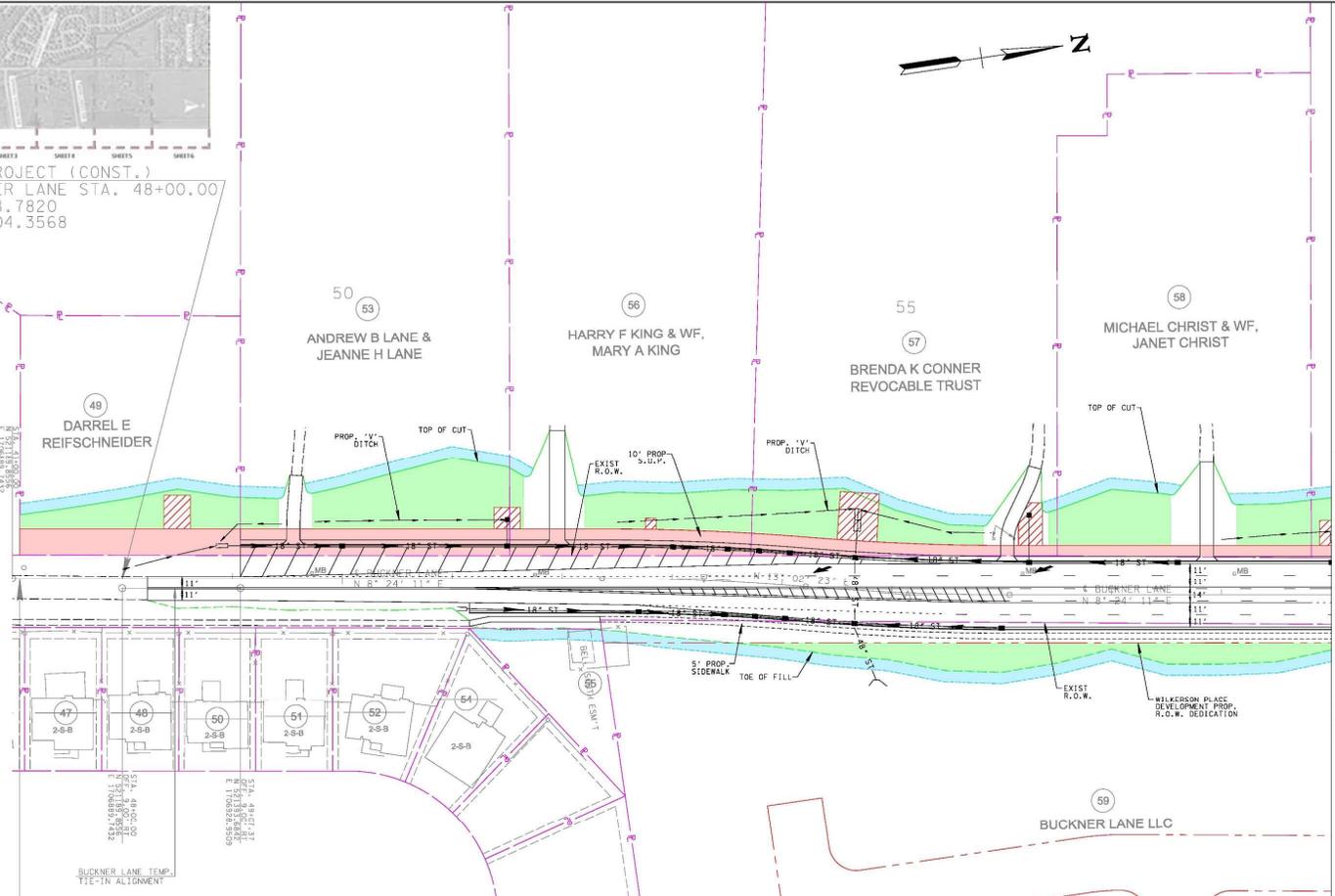




NORTH SECTION – DESIGN PACKAGE #1



BEGIN PROJECT (CONST.)
 @ BUCKNER LANE STA. 48+00.00
 N 521288.7820
 E 1706904.3568



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2020		1

MATCH LINE STA. 59+00.00 SEE SHIT. NO. 2

**R.O.W. PLANS
 PLANS
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 PACKAGE #1**

SEALED BY

COORDINATES ARE NAD 83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00058 AND TIED TO THE TORN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988 WITH GEOID 22003007.

**CITY OF
 SPRING HILL**

**PROPOSED
 LAYOUT**

B.O.P. TO STA. 59+00
 SCALE: 1"= 50'

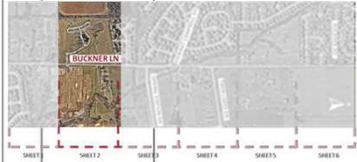
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 @ BUCKNER LANE STA. 47+06.86
 N 521196.6410
 E 1706890.7455

LEGEND

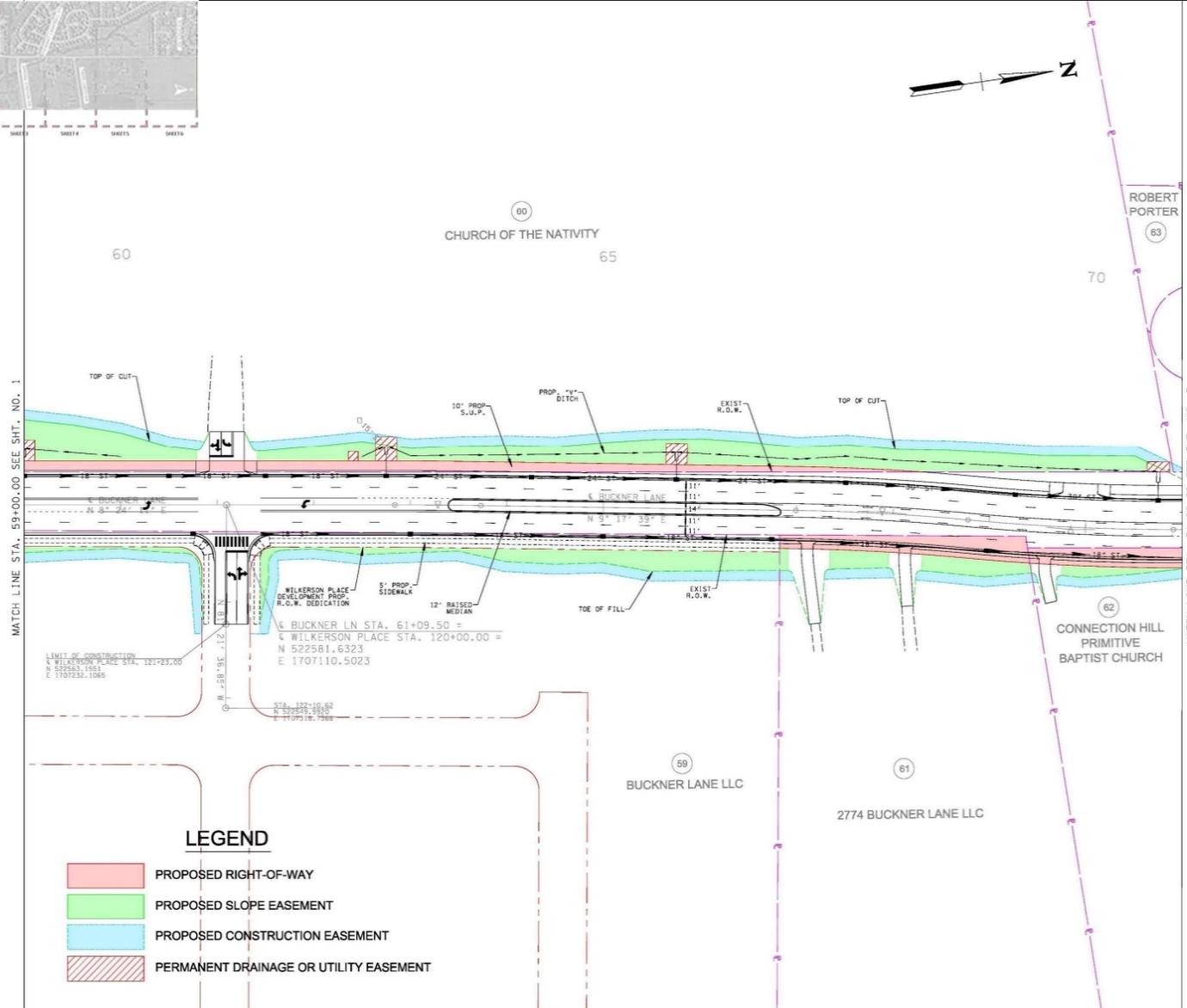
- PROPOSED RIGHT-OF-WAY
- PROPOSED SLOPE EASEMENT
- PROPOSED CONSTRUCTION EASEMENT
- PERMANENT DRAINAGE OR UTILITY EASEMENT

- ④7 JOSEPH R ALBERGO & WF, ANGEA H ALBERGO
- ④8 AMH 2014-3 BORROWER LLC
- ④9 AMH 2014-3 BORROWER LLC
- ④1 AH4R-TN3 LLC
- ④2 JONATHAN ANDREW GOSS & MICHAEL JAMES CAMERON GOSS
- ④4 JEANETTE L RAMER & HS, DOUGLAS M RAMER
- ④5 WADE'S GROVE HOMEOWNERS' ASSOCIATION, INC

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**R.O.W.
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CITY OF
SPRING HILL

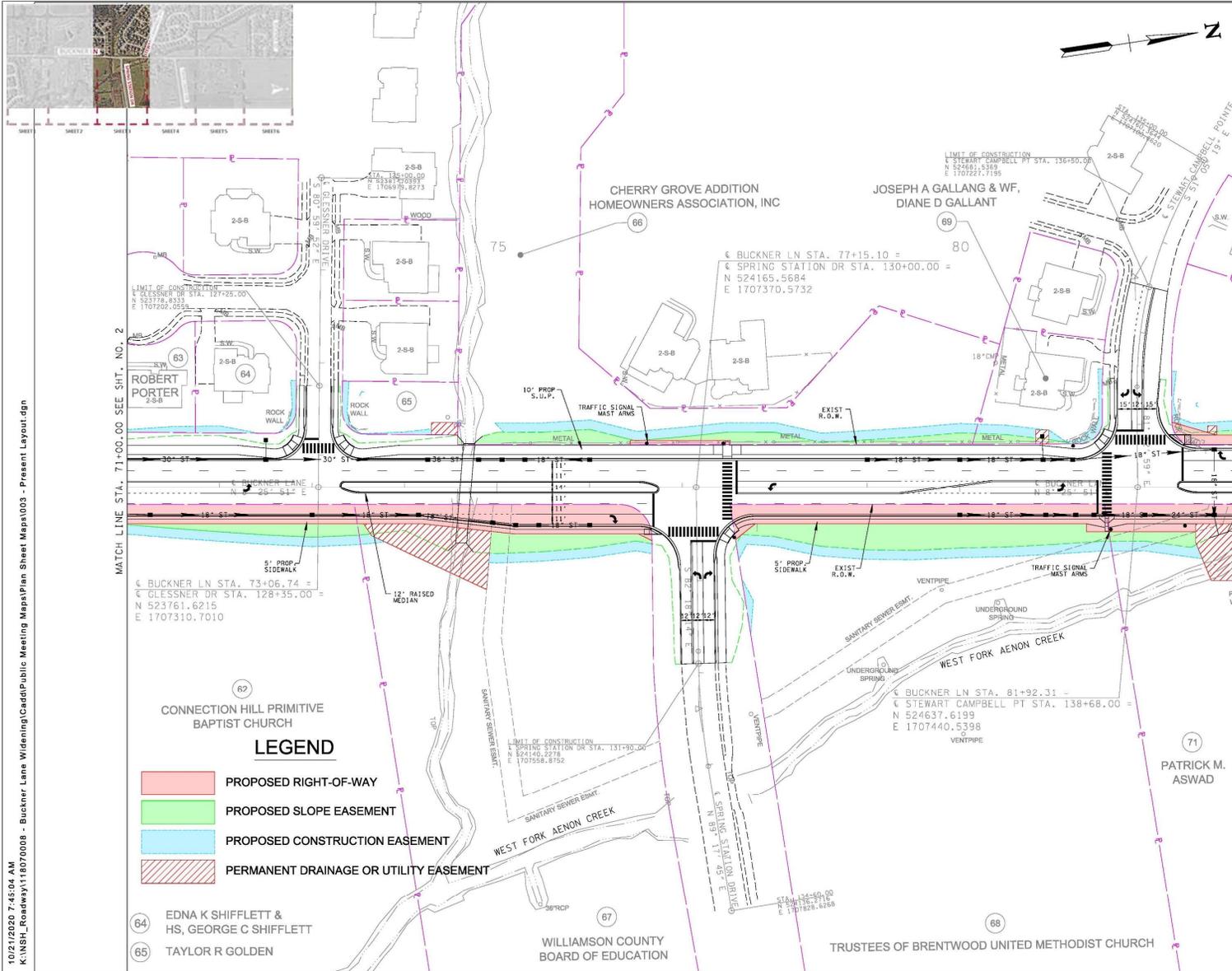
**PROPOSED
LAYOUT**

STA. 59+00 TO STA. 71+00
SCALE: 1"= 50'

LEGEND

	PROPOSED RIGHT-OF-WAY
	PROPOSED SLOPE EASEMENT
	PROPOSED CONSTRUCTION EASEMENT
	PERMANENT DRAINAGE OR UTILITY EASEMENT

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MATCH LINE STA. 71+00.00 SEE SHT. NO. 2

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LEGEND

- PROPOSED RIGHT-OF-WAY
- PROPOSED SLOPE EASEMENT
- PROPOSED CONSTRUCTION EASEMENT
- PERMANENT DRAINAGE OR UTILITY EASEMENT

- 64 EDNA K SHIFFLETT & HS, GEORGE C SHIFFLETT
- 65 TAYLOR R GOLDEN

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2020		3

R.O.W. PLANS

DESIGN PACKAGE #1

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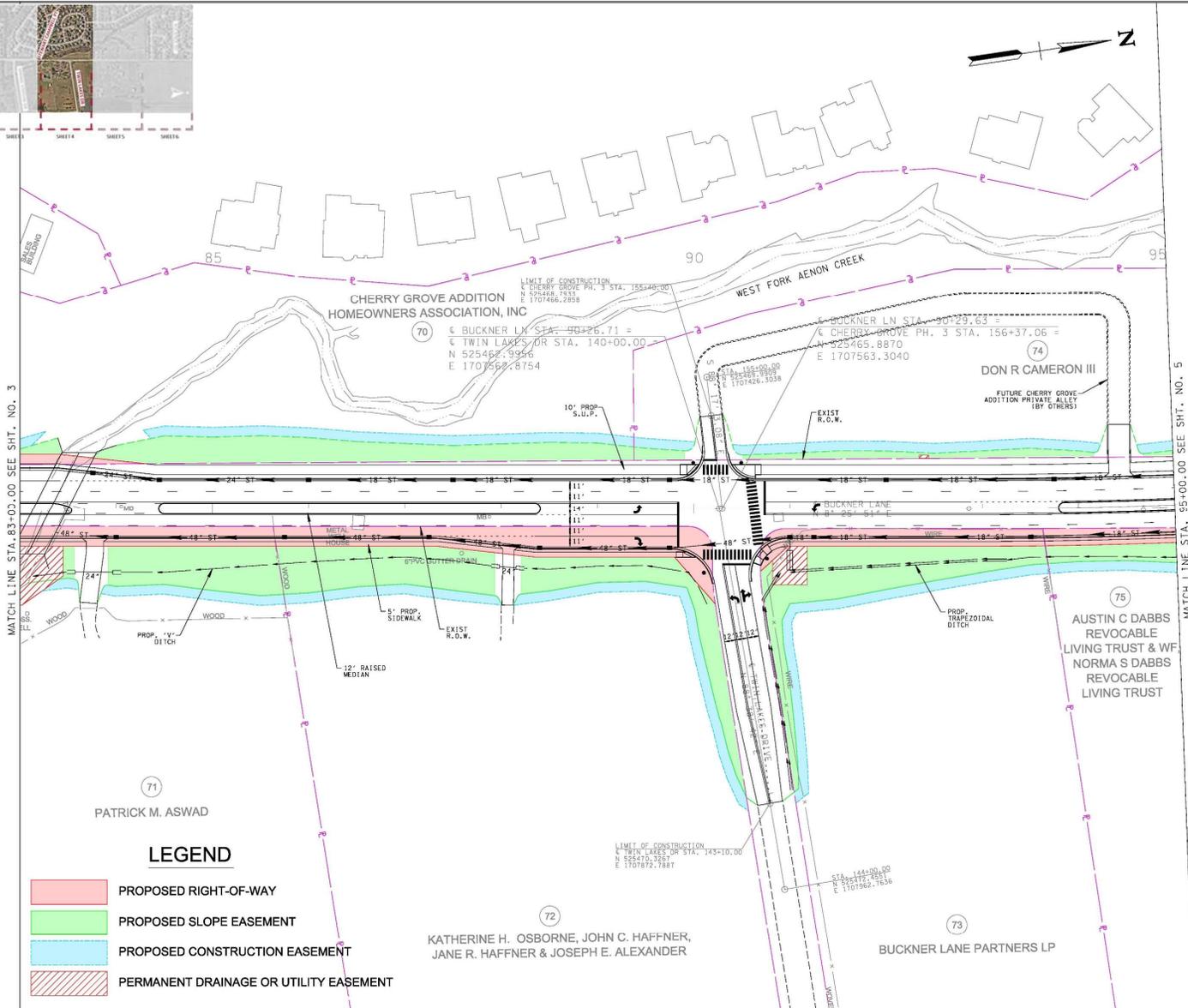
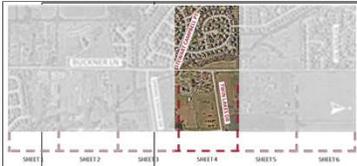
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CITY OF SPRING HILL

PROPOSED LAYOUT

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LEGEND

- PROPOSED RIGHT-OF-WAY
- PROPOSED SLOPE EASEMENT
- PROPOSED CONSTRUCTION EASEMENT
- PERMANENT DRAINAGE OR UTILITY EASEMENT

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R.O.W.	2020		4

**R.O.W.
PLANS
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PACKAGE #1**

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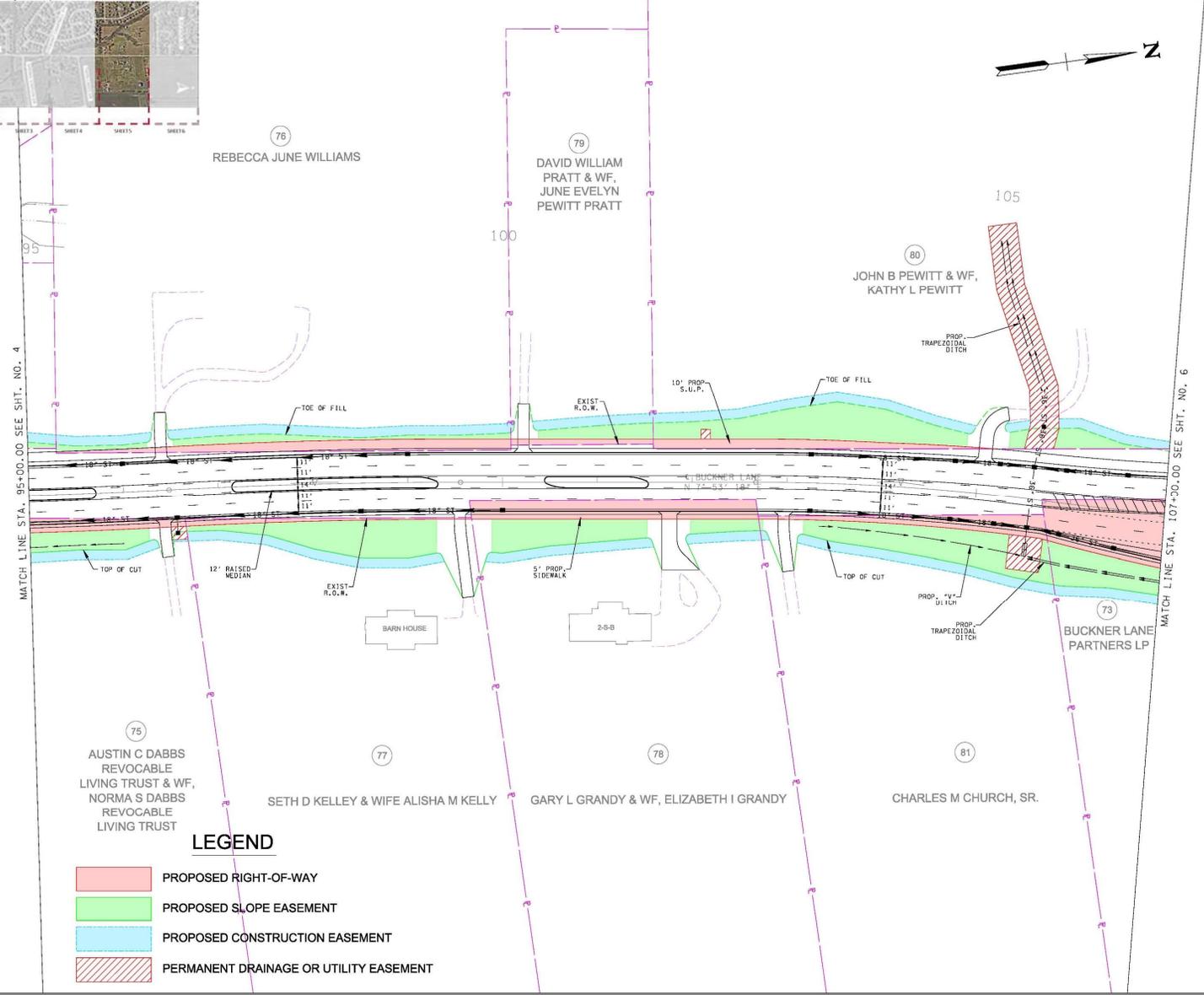
CITY OF
SPRING HILL

**PROPOSED
LAYOUT**

STA. 83+00 TO STA. 95+00
SCALE: 1"= 50'



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R.O.W.	2020		5



R.O.W. PLANS

DESIGN PACKAGE #1

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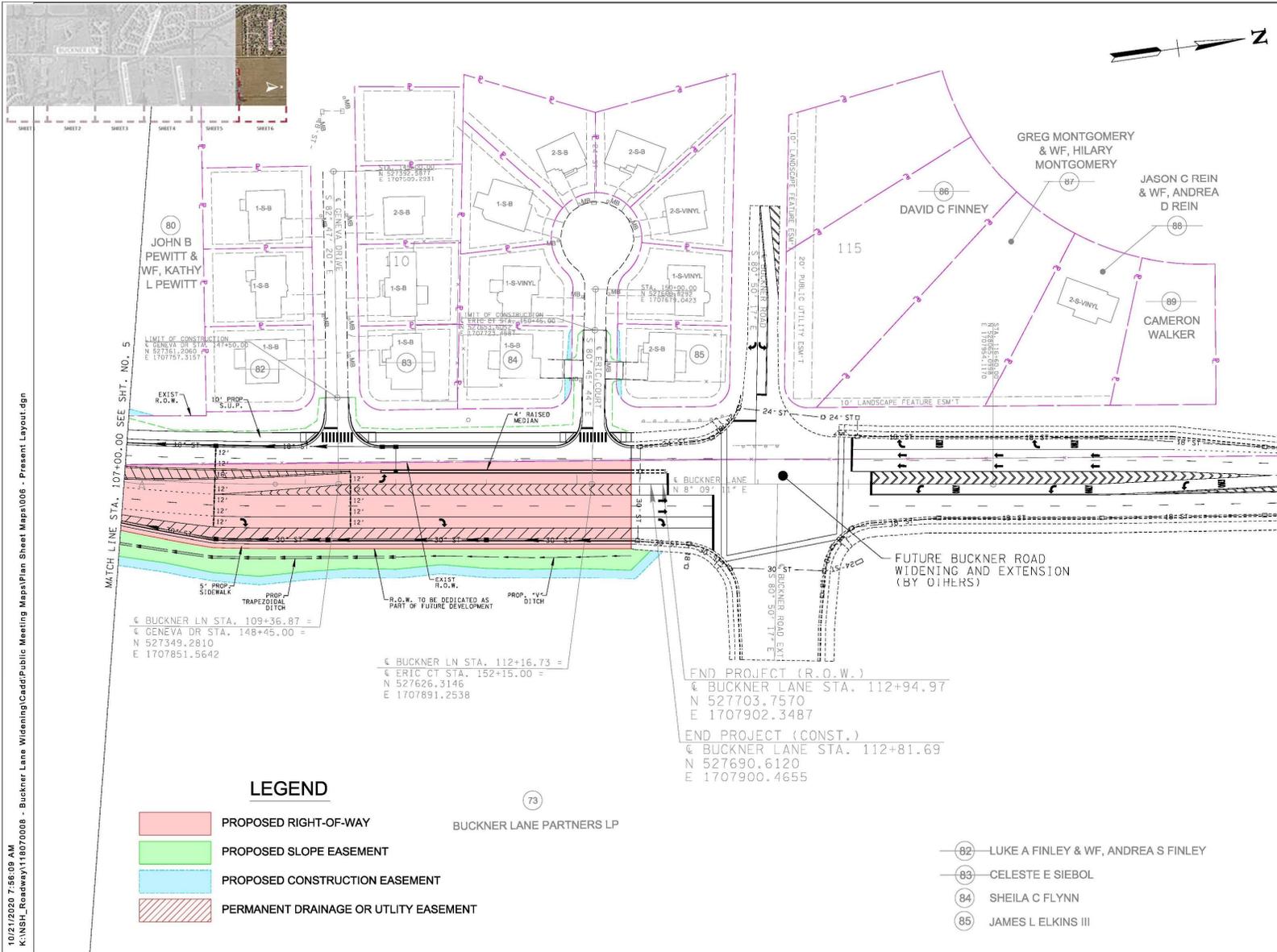
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CITY OF SPRING HILL

PROPOSED LAYOUT

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R.O.W.	2020		6

**R.O.W.
PLANS
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PACKAGE #1**

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CITY OF
SPRING HILL

**PROPOSED
LAYOUT**

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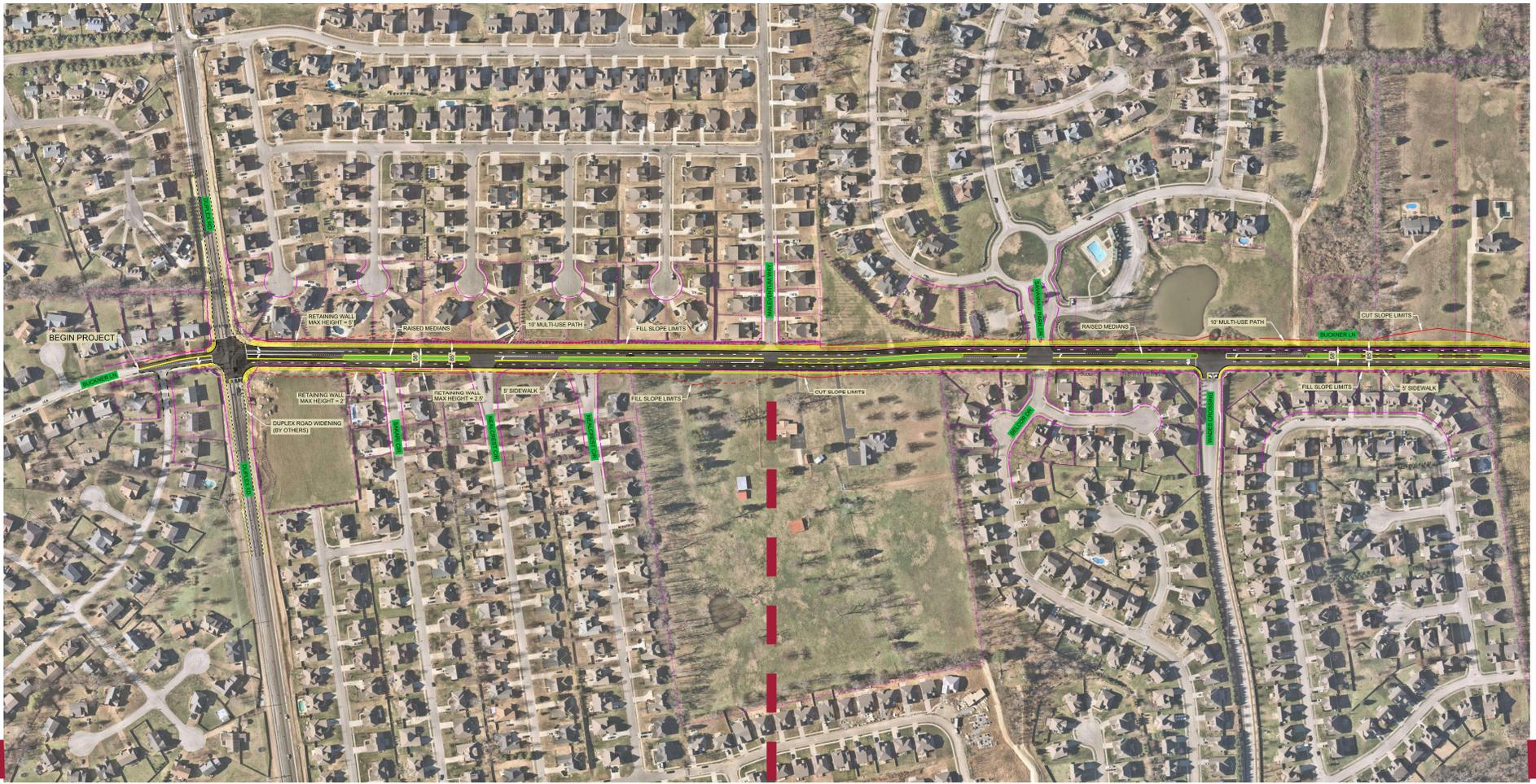
South Segment Design (Package # 2)

- Survey/Geotechnical Investigation – Complete
- Conceptual Design – Complete
- *Preliminary Design – December 2020
- *Right-of-Way Design – March 2021
- Right-of-Way Acquisition Phase – July 2021
- Final Design – Fall of 2022
- *Construction – March 2023

**A public meeting will be held in conjunction with this phase of work*

South Segment Design (Package # 2)

- Conceptual Design
 - Prepared in conjunction with the Northern Segment
 - Signal location and dedicated turn lanes based on corridor-wide traffic study
 - Seeks to provide capacity and connectivity while limiting impacts

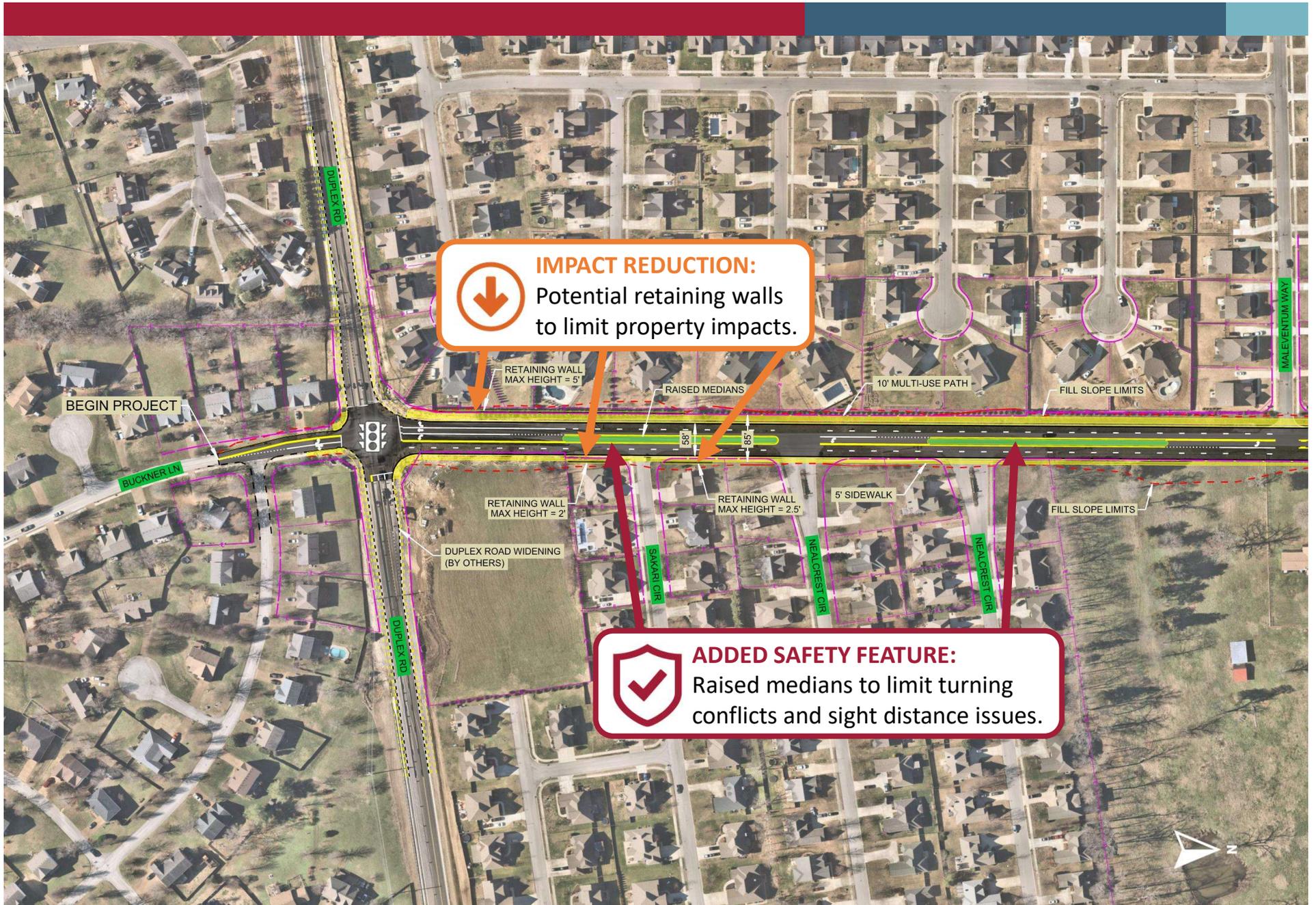


SOUTH SECTION A

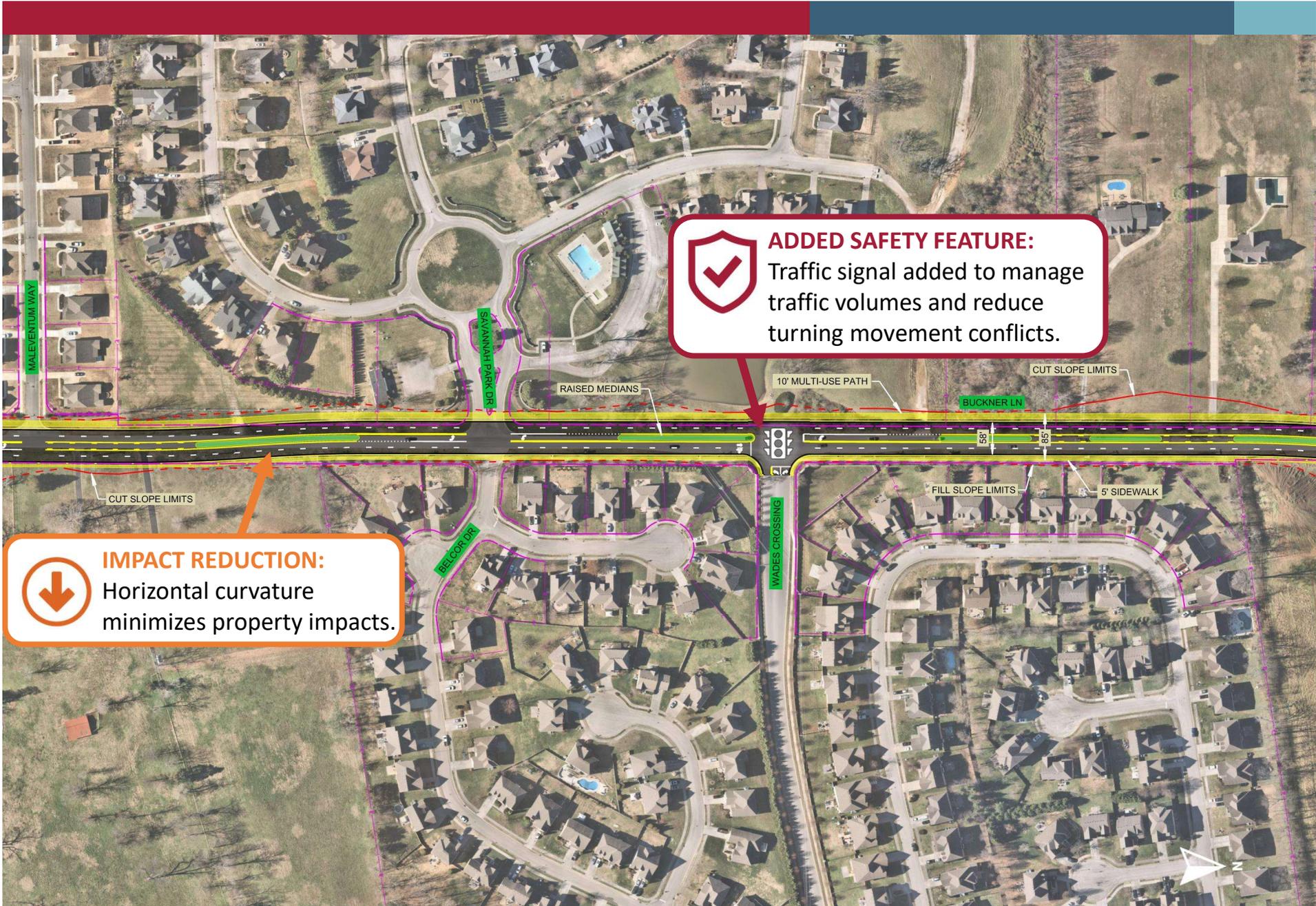
SOUTH SECTION B

SOUTH SECTION – DESIGN PACKAGE #2

Conceptual alignment of the South Segment



SOUTH SECTION - A Roadway width – 58' / Right-of-way width – 85'



ADDED SAFETY FEATURE:

Traffic signal added to manage traffic volumes and reduce turning movement conflicts.



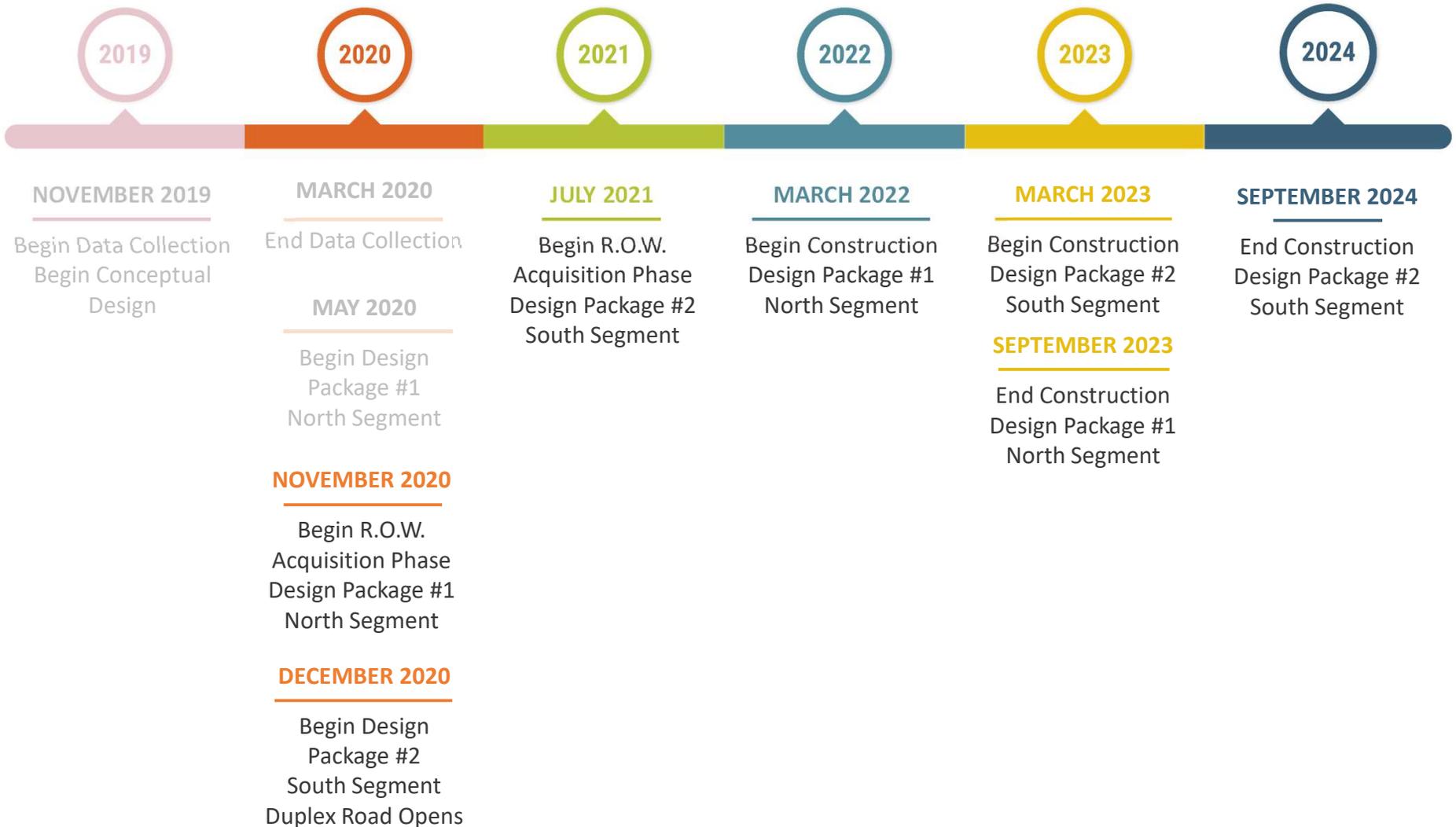
IMPACT REDUCTION:

Horizontal curvature minimizes property impacts.

SOUTH SECTION - B

10' multiuse path along the west side / 5' sidewalk along the east side of the roadway

Tentative Project Schedule



Questions?

Use the Q&A button at the bottom of the screen.





Please visit the project website for previous meeting content and additional information on the Buckner Lane project!

www.springhilltn.org/606/Buckner-Lane-Widening-Project





Questions?

Buckner Lane Widening Project

Project Cost Summary		
Description	Estimate	Contingency
Construction	\$ 11,800,000	30%
Right-of-Way	\$ 1,020,000	
Utility Relocation	\$ 1,230,000	
Interchanges & Roundabouts	\$ -	
Preliminary Engineering	\$ -	
Construction Engineering	\$ 1,070,000	10%
Total Estimated Project Cost:	\$ 14,100,000	

Additional Specifications	
Graded Solid Rock:	Moderate

Notifications	
Roadway:	No Errors
Median:	No Errors
Right-of-Way:	No Errors
Contingency:	Default
General:	No Errors

Construction Estimate		
Category	Cost	Contribution
Pavement Removal	\$ 35,700	0.49%
Asphalt Paving	\$ 2,630,000	36.18%
Concrete Paving	\$ -	0.00%
Drainage	\$ 1,220,000	16.78%
Appurtenances	\$ 657,000	9.04%
Structures	\$ 550,000	7.57%
Fencing	\$ -	0.00%
Signalization	\$ 750,000	10.32%
RR X or Separation	\$ -	0.00%
Earthwork	\$ 1,030,000	14.17%
Clear & Grub	\$ 61,000	0.84%
Seeding & Sodding	\$ 44,200	0.61%
Rip-Rap or Slope Prot.	\$ 63,800	0.88%
Guardrail	\$ 61,000	0.84%
Signing	\$ 7,100	0.10%
Pavement Markings	\$ 29,200	0.40%
Maint. of Traffic	\$ 131,000	1.80%
Mobilization (5%)	\$ 304,000	4.22%
Other Items (25%)	\$ 763,000	10.32%
Contingency	\$ 2,350,000	32.94%
Total:	\$ 11,800,000	

Pavement Calculator				
Area:				
TRAVELED-WAY				
Area	COLD PLANE	SqYd =		
415-01.02				0.0
Item #	Description	Thickness (in)	Tons	
411-03.10	"D" mix	1.25		0.0
403-01	1st Layer - Tack	N/A		0.0
307-02.08	"BM-2" mix	2		0.0
403-01	2nd Layer - Tack	N/A		0.0
307-02.01	"A" mix	3.5		0.0
403-01	3rd Layer - Tack	N/A		0.0
307-02.21	3R "A-S" Mix	3		0.0
402-01	Prime Coat	N/A		0.0
402-02	Agg. Cover	N/A		0.0
303-01	Base Stone	12		0.0
SHOULDER				
Area				
Item #	Description	Thickness	Tons	
411-01	"E" mix	1.5		0.0
403-01	Tack	N/A		0.0
307-02.08	"BM-2" mix	2		0.0
402-01	Prime Coat	N/A		0.0
402-02	Agg. Cover	N/A		0.0
303-01	Base Stone	20.25		0.0

Project Location and Termini

Location Information			
Route:	Buckner Lane	Project Begin (mi):	0.000
County:	Williamson		
Unit Prices:	Statewide	Project End (mi):	1.219
PIN:	N/A		

ROADWAY DESIGN

INPUT ROAD SEGMENT CHARACTERISTICS								TERRAIN		ROADSIDE DESIGN		
PAVEMENT								TERRAIN		ROADSIDE DESIGN		
How Many Segments (1-30)?										Urban Only		
Segment	Begin (mi)	End (mi)	Pavement Design (ft)	Proposed Full Depth Pavement Width (ft)	Outside Shldr Width (ft)	Existing Pavement - If Widening	Replace Existing Full Depth Pavement?	Terrain Type	Widen to One Side or Both?	Rural/Urban	Curb and Gutter on one side or both?	5' Sidewalks
1	0.000	1.053	Collector	58	0	22	No	Flat	Both Sides	Urban/C&G	Both Sides	One Side
2	1.053	1.219	Collector	90	0	0	No	Flat	One Side	Urban/C&G	Both Sides	One Side

ADD MEDIAN						
How Many Segments (1-20)?						
Segments	Begin (mi)	End (mi)	Type	Inside Shldr. Width (ft)	Interior Width (ft)	Terrain Type
1	0.000	0.345	Raised Grass	2	10	Flat

Pavement Removal	
AREA OF PAVEMENT REMOVAL (SF)	
Asphalt:	
Concrete:	

Concrete Islands	
Total Concrete Island Area (SF)	SQFE:

Terrain Assumptions		
Terrain Type	Cut/Fill Depth	
Flat (1 - 3ft):	2.0	
Rolling (4 - 7 ft):	6.0	
Mountainous (8 - 11 ft):	9.0	
Heavy Mountainous (12 - 25 ft):	15.0	

Shared Use Path			
Terrain Type	Length (mi)	Grass Strip Width (ft)	Pav Width (8 - 12 ft)
Flat:	1.219	4	10
Rolling:			
Mountainous:			
Heavy Mountainous:			

BRIDGES AND STRUCTURES

Structure Removal			
How Many (1-20)?			
Number	Length	Width	Type
1	34.0	8.0	Box
2	31.0	16.0	Box

New Structures				
How Many (1-20)?				
Number	Length	Width	Type	Feature Crossed / No Spans
1	108.0	12.0	Box	
2	118.5	32.0	Box	

Structure Rehabilitation & Widening				
How Many (1-20)?				
Number	Length (ft)	Width (ft)	Type	Bridge Location
1				

Retaining Walls	
Average Height:	
Total Length:	

ADDITIONAL ROAD FEATURES

Miscellaneous	
Number of Roundabouts:	
Number of Traffic Signals:	3
Length of ITS Installation:	

BALLPARK INTERCHANGE COSTS

New Interchanges			
	Diamond	Par-Clo	Cloverleaf
Rural			
	Diamond	TUDI	SPUI
Urban			

RIGHT-OF-WAY AND UTILITIES

Utility Relocation	
Overhead	
Distribution (mi):	1.22
Transmission (mi):	
Underground	
Power (mi):	
Water (mi):	1.00
Gas (mi):	1.00
Comm. (mi):	0.50
Sewer (mi):	0.10

Additional ROW & Utilities Co	
Right-of-Way:	
Utilities:	

Right-of-Way Properties					
Enter Segments (1-20):					
Segments	Begin	End	Land Use	Existing Width	Proposed Width (ft)
1	0.000	1.219	Residential	60	85

COST ESTIMATE SUMMARY



Route:	Buckner Lane
Description:	North Segment
Project Type of Work:	From 500' north of Wades Crossing to Buckner Road
County:	Widen
Length:	Williamson
Date:	1.22 Miles
Estimate Type:	July 22, 2020
	Concept

DESCRIPTION	LOCAL	STATE	FEDERAL	TOTAL
	0%	0%	0%	
Construction Items				
Removal Items	\$0	\$0	\$0	\$35,700
Asphalt Paving	\$0	\$0	\$0	\$2,630,000
Concrete Pavement	\$0	\$0	\$0	\$0
Drainage	\$0	\$0	\$0	\$1,220,000
Appurtenances	\$0	\$0	\$0	\$657,000
Structures	\$0	\$0	\$0	\$550,000
Fencing	\$0	\$0	\$0	\$0
Signalization & Lighting	\$0	\$0	\$0	\$750,000
Railroad Crossing	\$0	\$0	\$0	\$0
Earthwork	\$0	\$0	\$0	\$1,030,000
Clearing and Grubbing	\$0	\$0	\$0	\$61,000
Seeding & Sodding	\$0	\$0	\$0	\$44,200
Rip-Rap or Slope Protection	\$0	\$0	\$0	\$63,800
Guardrail	\$0	\$0	\$0	\$61,000
Signage	\$0	\$0	\$0	\$7,100
Pavement Markings	\$0	\$0	\$0	\$29,200
Maintenance of Traffic	\$0	\$0	\$0	\$131,000
Mobilization	5%	\$0	\$0	\$364,000
Other Items	10%	\$0	\$0	\$763,000
Const. Contingency	30%	\$0	\$0	\$2,350,000
Const. Eng. & Inspec.	10%	\$0	\$0	\$1,070,000
Construction Estimate	\$0	\$0	\$0	\$11,800,000
Right-of-Way & Utilities				
	LOCAL	STATE	FEDERAL	TOTAL
	0%	0%	0%	
Right-of-Way	\$0	\$0	\$0	\$1,020,000
Utilities	\$0	\$0	\$0	\$1,230,000
Total Project Cost (2020)	\$0	\$0	\$0	\$ 14,100,000