TOWN OF SMYRNA
TOWN COUNCIL WORKSHOP
March 26, 2026
Town Hall
5:00 PM

Recycling Opportunities Presentation by Recycle Right TN

Proposed Consent Agenda (Items 1-4)

Items for Discussion

1. Approval of the terms of, and authorization for the Mayor to execute, an amendment with Neel Schaffer for additional CEI services associated with the ITS Phase 3, 4, 5 project to oversee installation of the replacement fiber along Lowry Street.

2. Approval of the terms of, and authorization for the Mayor to execute, addendum 2 with Kimley Horn for the Old Nashville Highway Sidewalk project.

3. Approval of the terms of, and authorization for the Mayor to execute, a contract from the Tennessee Commission for the United States Semiquincentennial for the Smyrna Greenway Historical Signage Revitalization project in the amount of $23,482.

4. Consideration and authorization of a list of items to be auctioned through online surplus sale with GovDeals.

5. Consideration of a Resolution revising the updated Town of Smyrna logo.

6. Consideration of an Ordinance relative to the annexation and PRD zoning of property located on Tax Map 54, Parcels 20.00, 20.01, and 3.04 requested by Catalyst Design Group on behalf of the property owners containing 102 acres. The properties are located at 7025 Del Thomas Road.

7. Consideration of an Ordinance amending the Smyrna Municipal Code Title 7 relative to the adoption of the 2024 International Fire Code. Second Reading.

8. Consideration of an Ordinance relative to an update to the Sewer Use Ordinance.

9. Consideration of the appointment of one (1) member to the Board of Zoning appeals to serve a three-year term ending in 2029.

10. Consideration of the appointment of one (1) member to the Sister City Relations Committee to serve an unexpired term ending in 2028.

Public Comment.
Note: The Town's Public Comment Period shall be reserved for those citizens that have signed up to address the Town Council, or a Board or Committee, at least 24 hours in advance of the meeting, pursuant to the Town's Public Comment Policy. Speakers are limited to 3 minutes. Additional comments may be submitted in writing.

Town of Smyrna
Town Council Meeting
Agenda Summary

Agenda Item Number 1.
Department: Public Works
Date: March 26, 2026

Subject:
Approval of the terms of, and authorization for the Mayor to execute, an amendment with Neel Schaffer for additional CEI services associated with the ITS Phase 3, 4, 5 project to oversee installation of the replacement fiber along Lowry Street.

Fiscal Impact:
This project is 100% Grant funded under TIP 125507. Currently, we are projecting to have $35,337.04 available in grant funding. The difference of $66,957.96 would be born by the Town. We are working with the contractor, Stansell Electric, to see if we can reduce our spare parts from the project to help offset some of these costs. Account 320-43150-952

Contract Type:
Contract Change Order /Amendment

Contract Term (if applicable):
Project to be substantially complete by May 2026.

Background:
The ITS Phase 3, 4, 5 completes our traffic signal system project to connect our signals to our traffic operations center. This project allows us to remotely monitor our traffic signals and make signal timing changes, assess signal issues, and support PD and FD from a central location. This project was delayed while waiting on TDOT approval of changes to incorporate the Smart Corridor project and other changes that occurred to the signals between design and construction. Also, we have been waiting on TDOT approval of the additional fiber for the project. This additional fiber will replace the existing Murfreesboro GIS fiber from Sam Griffin to Town Hall. This will save the town future expenditures of approximately $250,000.

Summary:
This final phase of the ITS project will have 49 signals connected throughout town and 19 video cameras. As the Town continues to grow, and developers install signals, we require them to follow our standard and connect them into our system. The currently estimated date for substantial completion of work is August 12th, 2026, including 60 days for the burn-in period.

Recommended Council Action:
Staff recommends the council approve the Mayor to sign the addendum.

Attachments:
1. 125507 TOS ITS Phase 3,4,5 Addendum #3 Binder 2-24-26
2. Neel-Schaffer Addendum #2- Additional CEI for ITS Phases III, IV & V
3. Neel-Schaffer for CEI Services ITS Phases III, IV & V

February 24th, 2026

Mr. Tom Rose, P.E.
Public Works Director
Town of Smyrna
315 South Lowry Street
Smyrna, TN 37167

RE: Addendum #3 – Additional CEI Inspection Services
Intelligent Transportation System Phases III, IV & V
CM-9315(11), 75LPLM-F3-066; PIN 125507.00

Mr. Rose:

As requested by your office, please accept this correspondence as documentation of the referenced estimate for additional CEI Inspection Services to cover the project time extension related to the subject project.

Addendum 3 includes amended CEI Inspection Services for the TOS ITS Phase 3, 4, and 5 deployment project. The initial estimate included inspection services for the project time duration with a start date of February 20th, 2024, and completion date of December 1st, 2024. Due to the delays caused by external factors as documented by the contractor, the currently estimated date for substantial completion of work is August 12th, 2026, Including 60 days for Burn-In period. The primary reasons for the added project duration as requested by the contractor in the letter dated December 5th, 2025, include:

1. REP Integration Work and Cutover of Existing TOS Network, and
2. Fiber Optic Trunk Line along S. Lowry St.

The addition of the FO trunk line along S. Lowry St. requires applying for a permit with MTE. Field measurement of poles and cable heights will be surveyed as part of the permit application process. Neel-Schaffer will coordinate with MTE to ensure the approval of a complete application according to the project and MTE requirements.

To ensure the continuation of CEI services concurrently with the remaining project construction tasks, Neel-Schaffer has estimated the additional work at a fee of approximately **$102,295.00.** The additional fee is estimated to cover the CEI inspection services needed for the added project duration. With the supplement adjustment, the revised total not-to-exceed professional services fee becomes $467,612.60. The original contract agreement ceiling was established at $365,317.60.

This addendum agreement includes the following items:

1. Exhibit A – Schedule of Fee Estimate
2. Exhibit B - Project Contractor Time Extension Request Letter

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engineers | planners | surveyors | environmental scientists | landscape architects

The amended project CEI services contract fee of $467,612.60 will not be exceeded without written authorization from TOS. Services will follow the terms and conditions as specified in the original contract for professional services. Tasks to be completed by Neel-Schaffer are limited to those described in the original contract and addendum agreement. Any additional needs or required tasks will be executed as additional services. Additional tasks will be negotiated and provided only with written notice from the Town of Smyrna.

If you have any questions or need additional information, please don't hesitate to contact us.

Respectfully,

NEEL-SCHAFFER, INC.

Said El Said, P.E., PhD
Transportation Systems Manager

ACCEPTED – ADDENDUM #3:

Town of Smyrna **DATE:**

_____ _____

Tom Rose, P.E.
Public Works Director, Town of Smyrna

EXHIBIT B

N-S FEE ESTIMATE FOR ENGINEERING SERVICES
CONSTRUCTION ENGINEERING AND INSPECTION SCOPE OF SERVICES
Intelligent Transportation System / Traffic Management System – Phases III, IV, V – CM-9315(11), 75LPLM-F3-066; PIN 125507.00
Town of Smyrna, Tennessee

Task	*Labor in Hours*				
	Engineer Manager	Project Manager	Senior ITS Engineer	Engineer	Technician/ Inspector
Construction Engineering and Inspection Services					
1. Project Management and Administration	2	40			
2. Pre-construction, Material Submittals, RFIs		5			
3. Observation, Inspection, Pay Requests, Labor Compliance	2	30			360
4. Documentation and Reporting	2	10			40
5. Final Inspection and Acceptance, Contigency	2	20			160
Total CEI Hours	8	105	0	0	560
Hourly Rate	$260.00	$235.00	$190.00	$165.00	$130.00
Subtotal CEI Labor	*$2,080*	*$24,675*	*$0*	*$0*	*$72,800*
Subtotal CEI Services Labor (A)					$99,555.00
Subtotal CEI Subconsultant Fees (B)					$0.00
					$0.00
Subtotal CEI Direct Expenses (C)					$ 2,740.00
				Mileage	$ 1,190.00
				Printing	$ 800.00
				Miscellaneous	$ 750.00
Total CEI Fee (A + B + C)					**$102,295.00**

December 5th, 2025

Mr. Said El Said, PE, PhD
Transportation Systems Manager
Neel-Schaffer, Inc.
210 25th Ave. N.
Suite 800
Nashville, TN 37203

Re:
Smyrna ITS PH 3-5
State Project No.: 75LPLM-F1-064
Federal Project CM-9315(11)
PIN: 125507.00
County: Rutherford
SEC Letter No.: 243403-059

Mr. El Said,

Stansell Electric Company (SEC) respectfully submits this change order request to include a time extension of four hundred sixty-three (463) calendar days for the Smyrna ITS Phase 3-4-5 Project. This adjustment would revise the current contract final completion date from May 6, 2025, to a projected completion date of August 12th, 2026. This will also include additional costs of $36,900.00 for added network configuration, as well as multiple quantity overruns to install a new section of 48F trunk cable totaling roughly $211,450.00. Bringing the cumulative total of this change order to **$248,350.00**. The basis for this request stems from delays caused by external factors beyond our control, including Request for Information (RFI) responses concerning network architecture previously outlined in CO #1. As well as changes to the network design and construction. Below, we outline the primary reasons for this extension request:

1. Cut-Over of Existing TOS Network

Based on responses to RFI #10 and RFI #11, a new network design was adopted. To implement this new design, a coordinated cut-over plan and reconfiguration of existing TOS network devices is required. In an attached document, Parsons has outlined the additional work that is needed to complete this cut-over, as well as the added cost of $36,900.00 for conducting this work.

2. Lowry 48F Installation – Estimated Quantity Overruns

Based on RFI #16 response, SEC will install a 48F trunk along Lowry St from Sam Griffin intersection to Smyrna TMC. These changes involve adjustments to the fiber optic trunk line connectivity, which is critical to project continuity.

The project includes the use of four (4) fibers from an existing 24-count Rutherford County GIS fiber trunk line running along S. Lowry Street. However, it was discovered during construction that the existing trunk does not include sufficient slack for splicing or maintenance.
Standard and project-specific requirements:

- Fiber optic installations typically require a minimum of 6% slack.
- TDOT standard requires approximately 200 feet of slack per 1,200 feet of fiber (or ~16.7%).
- Slack is necessary to support splicing, future network expansion, and potential cable repairs.

To comply with these requirements:

- A new 48-count fiber optic cable will be installed between the Sam Griffin splice location and the TOS Traffic Management Center (TMC) at Town Hall.
- Required slack loops and connectivity will be incorporated to support proper system integration.
- This will also require approval to over lash to the existing 24ct GIS fiber. If it is determined that new attachments are required, this will incur additional fees/time for permits and labor.

Estimated Pay Item Quantity Overruns

The following contract pay items will experience quantity increases due to the above modifications:

Pay Item No.	Description	Quantity Overrun	Unit	Unit Price	Total Price
725-23.24	FO Cable (48F Aerial)	15,000.00	LF	$10.00	$150,000.00
725-02.80	FO Splice Enclosure (48F Aerial)	5.00	EA	$1,500.00	$7,500.00
725-02.79	Fiber Splice Enclosure (Modification of Existing)	3.00	EA	$2,000.00	$6,000.00
725-23.28	FO Fusion Splice	64.00	EA	$100.00	$6,400.00
725-23.32	FO Splice Modification	12.00	EA	$850.00	
730-03.34	FO Termination Cabinet	1.00	EA	$10,750.00	
712-01	Traffic Control	1.00	LS	$9,800.00	
717-01	Mobilization	1.00	LS	$10,800.00	$10,800.00
					$10,200.00
					$10,750.00
					$9,800.00

Total: $211,450.00

In lieu of these challenges, SEC was able to achieve substantial completion for all locations outside of the additional work areas. As of today, every device has successfully passed SAT testing, and the fiber optic SAT documentation for all locations, excluding the Lowry Street intersections, has been submitted and is currently pending approval.

Please note that this timeline includes the subsequent 60-day burn-in period. As well as a lead time of 10 weeks for the procurement of the 48ct SMFO cable. This timeframe gives TDOT a 30-day window beginning December 5th, 2025 to review and approve this work to commence the procurement phase. If this CO is not approved within 30 days, the subsequent completion date will be adjusted accordingly.

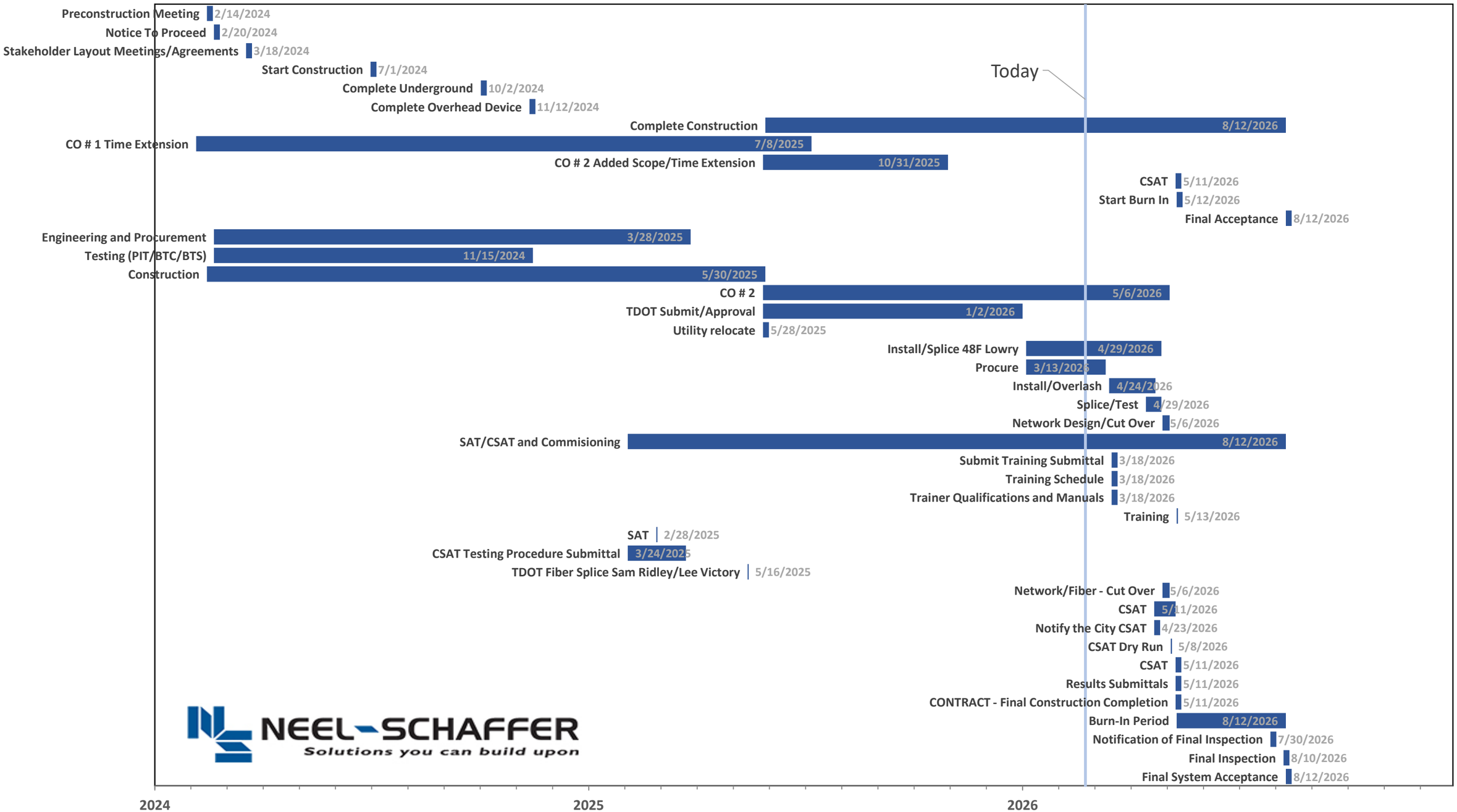
This adjustment is necessary to account for the delays encountered and to ensure the successful completion and delivery of the project. We appreciate your consideration of this request and remain committed to maintaining the highest standards of quality and performance.

Sincerely,



William Tanner
Project Manager
Stansell Electric Company
615-604-2489

TOS Phase 3, 4, &5



NEEL-SCHAFFER
Solutions you can build upon

ID	% Complete	Intersection	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes
1	**83%**		**243403 Smyrna ITS 345**	**316 days?**	**Wed 2/14/24**	**Wed 4/30/25**			
2	**57%**		**Milestones**	**316 days?**	**Wed 2/14/24**	**Wed 4/30/25**			
3	100%	Milestones	Preconstruction Meeting	0 days	Wed 2/14/24	Wed 2/14/24			
4	100%	Milestones	Notice To Proceed	0 days	Tue 2/20/24	Tue 2/20/24			
5	100%	Milestones	Stakeholder Layout Meetings/Agreements	0 days	Mon 3/18/24	Mon 3/18/24		93SS	
6	100%	Milestones	Start Construction	0 days	Mon 7/1/24	Mon 7/1/24	107SF		
7	100%	Milestones	Complete Underground	0 days	Wed 10/2/24	Wed 10/2/24	283		
8	100%	Milestones	Complete Overhead Device	0 days	Tue 11/12/24	Tue 11/12/24	306		
9	0%	Milestones	Complete Construction	198 days	Fri 5/30/25	Mon 8/30/27	324		
10	100%	Milestones	CO # 1 Time Extension	372 days?	Mon 2/5/24	Tue 7/8/25			
11	13%	Milestones	CO # 2 Added Scope/Time Extension	113 days	Wed 5/28/25	Fri 10/31/25	309SF		
12	0%	Milestones	CSAT	0 days	Mon 5/11/26	Mon 5/11/26	330		
13	0%	Milestones	Start Burn In	0 days	Tue 5/12/26	Tue 5/12/26	333SS		
14	0%	Milestones	Final Acceptance	0 days	Wed 8/12/26	Wed 8/12/26	336		
15	**100%**		**Engineering and Procurement**	**289 days**	**Tue 2/20/24**	**Fri 3/28/25**			
53	**100%**		**Testing (PIT/BTC/BTS)**	**194 days**	**Tue 2/20/24**	**Fri 11/15/24**			
89	**99%**		**Construction**	**338 days?**	**Wed 2/14/24**	**Fri 5/30/25**			
308	**0%**		**CO # 2**	**246 days**	**Wed 5/28/25**	**Wed 5/6/26**			
309	0%		TDOT Submit/Approval	158 days	Wed 5/28/25	Fri 1/2/26		312,11SF	
310	100%		Utility relocate	0 days	Wed 5/28/25	Wed 5/28/25			Completed via verbal approval
311	**0%**		**Install/Splice 48F Lowry**	**83 days**	**Mon 1/5/26**	**Wed 4/29/26**			
312	0%		Procure	10 wks	Mon 1/5/26	Fri 3/13/26	309	313	
313	0%		Install/Overlash	30 days	Mon 3/16/26	Fri 4/24/26	312	314FS-7 days	
314	0%		Splice/Test	10 days	Thu 4/16/26	Wed 4/29/26	313FS-7 days	315,324	
315	0%		Network Design/Cut Over	5 days	Thu 4/30/26	Wed 5/6/26	314	326FF	
316	**32%**		**SAT/CSAT and Commisioning**	**398 days**	Mon 2/3/25	Wed 8/12/26			
317	0%		~~Submit Training Submittal~~	~~0 days~~	~~Wed 3/18/26~~	~~Wed 3/18/26~~	~~320FS-41 day~~	~~318SS,319SS~~	
318	0%		~~Training Schedule~~	~~0 days~~	~~Wed 3/18/26~~	~~Wed 3/18/26~~	~~317SS~~		
319	0%		~~Trainer Qualifications and Manuals~~	~~0 days~~	~~Wed 3/18/26~~	~~Wed 3/18/26~~	~~317SS~~		
320	0%		~~Training~~	~~2 days~~	~~Tue 5/12/26~~	~~Wed 5/13/26~~	~~330~~	~~317FS-41 days~~	
321	100%		SAT	2 days	Thu 2/27/25	Fri 2/28/25			
322	100%		CSAT Testing Procedure Submittal	36 days	Mon 2/3/25	Mon 3/24/25		328	
323	100%		TDOT Fiber Splice Sam Ridley/Lee Victory	2 days	Thu 5/15/25	Fri 5/16/25			
324	99%		Fiber Trunk/Splice Installation Completion	0 days	Fri 5/30/25	Wed 11/25/26	314	9,325FF	
325	0%		TOC Fiber Install/Splice	5 days	Thu 11/19/26	Wed 11/25/26	324FF		
326	0%		Network/Fiber - Cut Over	5 days	Thu 4/30/26	Wed 5/6/26	315FF	329	
327	**0%**		**CSAT**	**13 days**	**Thu 4/23/26**	**Mon 5/11/26**			
328	0%		Notify the City CSAT	1 day	Thu 4/23/26	Thu 4/23/26	322,329SS-10		
329	0%		CSAT Dry Run	2 days	Thu 5/7/26	Fri 5/8/26	326	330,328SS-10	

Task	Project Summary	Manual Task	Start-only	Deadline	Baseline Milestone
Split	Inactive Task	Duration-only	Finish-only	Critical	Baseline Summary
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Critical Split	Progress
Summary	Inactive Summary	Manual Summary	External Milestone	Baseline	Manual Progress

ID	% Complete	Intersection	Task Name	Duration	Start	Finish	Predecessors	Successors	Notes
330	0%		CSAT	1 day	Mon 5/11/26	Mon 5/11/26	329	331SS,12,320,	
331	0%		Results Submittals	1 day	Mon 5/11/26	Mon 5/11/26	330SS		
332	0%		CONTRACT - Final Construction Completion	0 days	Mon 5/11/26	Mon 5/11/26	330SS		
333	0%		Burn-In Period	67 days	Tue 5/12/26	Wed 8/12/26	330	334FS-10 days	
334	0%		Notification of Final Inspection	1 day	Thu 7/30/26	Thu 7/30/26	333FS-10 day	335SS+7 days	
335	0%		Final Inspection	1 day	Mon 8/10/26	Mon 8/10/26	334SS+7 days		
336	0%		Final System Acceptance	0 days	Wed 8/12/26	Wed 8/12/26	333	14	

Task	Project Summary	Manual Task	Start-only	Deadline	Baseline Milestone
Split	Inactive Task	Duration-only	Finish-only	Critical	Baseline Summary
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Critical Split	Progress
Summary	Inactive Summary	Manual Summary	External Milestone	Baseline	Manual Progress

March 21, 2025

Mr. Tom Rose, P.E.
Public Works Director
Town of Smyrna
315 South Lowry Street
Smyrna, TN 37167

RE: Addendum #2 – Addendum Services for Additional CEI Inspection Services
Intelligent Transportation System Phases III, IV & V
CM-9315(11), 75LPLM-F3-066; PIN 125507.00

Mr. Rose:

As requested by your office, please accept this correspondence as documentation of the referenced estimate for additional CEI Inspection Services to cover the project time extension related to the subject project.

Addendum 2 includes amended CEI Inspection Services for the TOS ITS Phase 3, 4, and 5 deployment project. The initial estimate included inspection services for the project time duration with a start date of February 20th, 2024, and completion date of December 1st, 2024. Due to the delays caused by external factors as documented by the contractor, the currently estimated date for substantial completion of work is May 6th, 2025, and additional 30 days for Burn-In period. The primary reasons for the added project duration as requested by the contractor in the letter dated February 4th, 2025, include:

1. MTE Pole Upgrade Project, and
2. Network Architecture Design Update

To ensure the continuation of CEI services concurrent with the remaining project construction tasks, Neel-Schaffer has estimated the additional work at a fee of approximately **$65,580.00.** The additional fee is estimated to cover the CEI inspection services needed for the added project duration. With the supplement adjustment, the revised total not-to-exceed professional services fee becomes $365,317.60. The original contract agreement ceiling was established at $299,737.60.

This addendum agreement includes the following items:

1. Exhibit A – Schedule of Fee Estimate
2. Exhibit B - Project Contractor Time Extension Request Letter

The amended project CEI services contract fee of $365,307.60 will not be exceeded without written authorization from TOS. Services will follow the terms and conditions as specified in the original contract for professional services. Tasks to be completed by Neel-Schaffer are limited to those described in the original contract and addendum agreement. Any additional needs or required tasks

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will be executed as additional services. Additional tasks will be negotiated and provided only with written notice from the Town of Smyrna.

If you have any questions or need additional information, please don't hesitate to contact us.

Respectfully,

NEEL-SCHAFFER, INC.

Said El Said, P.E., PhD
Transportation Systems Manager

ACCEPTED – ADDENDUM #2:

Town of Smyrna

Mary Esther Reed
Mayor Town of Smyrna

DATE:

5/13/25

EXHIBIT A

EXHIBIT B

N-S FEE ESTIMATE FOR ENGINEERING SERVICES
CONSTRUCTION ENGINEERING AND INSPECTION SCOPE OF SERVICES
Intelligent Transportation System / Traffic Management System – Phases III, IV, V – CM-9315(11), 75LPLM-F3-066; PIN 125507.00
Town of Smyrna, Tennessee

Task	*Labor in Hours*				
	Engineer Manager	Project Manager	Senior ITS Engineer	Engineer	Technician/ Inspector
Construction Engineering and Inspection Services					
1. Project Management and Administration 2. Pre-construction, Material Submittals, RFIs 3. Observation, Inspection, Pay Requests, Labor Compliance 4. Documentation and Reporting 5. Final Inspection and Acceptance, Contigency	9	84			417
Total CEI Hours	9	84	0	0	417
Hourly Rate	$230.00	$210.00	$215.00	$130.00	$110.00
Subtotal CEI Labor	*$2,070*	*$17,640*	*$0*	*$0*	*$45,870*
Subtotal CEI Services Labor (A)					$65,580.00
Subtotal CEI Subconsultant Fees (B)					$0.00
					$0.00
Subtotal CEI Direct Expenses (C)					$ -
				Mileage Printing Miscellaneous	
Total CEI Fee (A + B + C)					**$65,580.00**

EXHIBIT B

STANSELL Electric Company, Inc.

THE POWER TO INNOVATE
THE EXPERIENCE TO SUCCEED

February 4th, 2025

Mr. Said El Said, PE, PhD
Transportation Systems Manager
Neel-Shaffer, Inc.
210 25th Ave. N.
Suite 800
Nashville, TN 37203

Re: Smyrna ITS PH 3-4-5
State Project No.: 75LPLM-F1-064
Federal Project CM-9315(1)
PIN: 125507.00
County: Rutherford
SEC Letter No.: 243403-043-Time Extension Request

Dear Mr. El Said,

Stansell Electric Company (SEC) respectfully submits this request for a time extension of one hundred fifty-six (156) calendar days for the Smyrna ITS Phase 3-4-5 Project. This adjustment would revise the current contract final completion date from December 1st, 2024, to a projected completion date of May 6th, 2025.

The basis for this request stems from delays caused by external factors beyond our control, including Request for Information (RFI) concerning network architecture and a concurrent Middle Tennessee Electric (MTE) project that directly impacted on the project footprint. Below, we outline the primary reasons for this extension request:

1. **MTE Pole Upgrade Project:**
   In June 2024, Middle Tennessee Electric Company initiated a project to upgrade multiple poles along Lee Victory Parkway, directly within the Smyrna ITS project footprint. As the MTE project took precedence, construction activities for Smyrna ITS along Lee Victory were halted until MTE's upgrades were completed. While the MTE project is still pending completion, it has caused a delay of 248 +/- calendar days in the aerial fiber installation on Lee Victory Parkway.

2. **Network Architecture:**
   To ensure alignment with the existing infrastructure, revisions were necessary to the project plans regarding the fiber topology and network design. RFI #10 and RFI #11 were submitted on May 22, 2024, and the response was provided on December 9, 2024. Once RFI responses were provided, this enabled SEC to continue the RDD and network architecture submittal process. However, this delay of approximately 6 ½ months significantly impacted the network design schedule.

Despite these challenges, SEC continued to make progress on other portions of the project, including completing all underground conduit work, installing fiber optic drops at various intersection cabinets outside the MTE upgrade area, and installing wireless radios and CCTVs.

Due to circumstances beyond our control, SEC respectfully requests a 156-calendar-day extension for the project completion date. This extension would set the revised completion date to May 6, 2025, which marks the conclusion of CSAT testing. Please note that this timeline does not include the subsequent 30-day burn-in period.

This adjustment is necessary to account for the delays encountered and to ensure the successful completion and delivery of the project. We appreciate your consideration of this request and remain committed to maintaining the highest standards of quality and performance.

If additional information or clarification is required, please do not hesitate to contact me.

Thank you,

Jeremy Messer

Jeremy Messer
Project Manager
615-306-3019
jmesser@stansellelectric.com

April 24, 2023

Mr. Tom Rose, P.E.
Public Works Director
Town of Smyrna
315 South Lowry Street
Smyrna, TN 37167

REFERENCE: Construction Engineering and Inspection Services
Intelligent Transportation System Phases III, IV & V
CM-9315(11), 75LPLM-F3-066; PIN 125507.00

Dear Tom:

We are pleased to submit this Letter Agreement for Neel-Schaffer, Inc. to provide construction engineering and inspection services for the referenced project. The Town of Smyrna desires to retain Neel-Schaffer to provide these services related to the implementation of the Town's ITS Phase 3, 4 and 5 project.

Neel-Schaffer's services will include construction observation (CEI), inspection and administrative tasks generally following TDOT standard guidelines for similar projects. A detailed scope of services is attached as Exhibit A.

We propose to provide these services under an hourly not-to-exceed plus direct costs fee agreement based on a 10 month construction schedule. An estimated project fee budget including hourly rates by classification is attached as Exhibit B. Direct costs will follow current TDOT reimbursement schedules. We will submit invoices to your attention no more frequently than once per month based on hours of work performed. Services proposed in this Letter Agreement will be provided in accordance with Exhibit C, General Terms and Conditions, which is attached to and made a part of this Letter Agreement.

This Letter Agreement allows Neel-Schaffer, Inc. to provide other optional related, yet to be determined, services to the Town of Smyrna for the necessary completion of the subject project in accordance with Exhibit C. Prior to proceeding with future requests or additional services, we will provide written notification referencing this Letter Agreement, specifying the scope of services and the estimated fee for your prior approval. Upon your acceptance, we will proceed with the identified services.

NEEL-SCHAFFER
engineers | planners | surveyors | environmental scientists | landscape architects
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Murfreesboro, TN 37130
www.neel-schaffer.com

This Letter, consisting of two pages; Exhibit A – Scope of Work; Exhibit B – Fee Estimate of Engineering Services; and Exhibit C – General Terms & Conditions; represent the entire agreement between Neel-Schaffer, Inc. and the Town of Smyrna. This Letter Agreement may only be modified or amended by a duly executed written document. If the terms and conditions of this Letter Agreement are acceptable, please execute the original and return a copy to us at your convenience. Please call if you have any questions.

We certianly appreciate the opportunity to provide these services to the Town and look forward to working with everyone there.

Sincerely,
NEEL-SCHAFFER, INC.

Gregory Judy, P.E., PTOE
Engineer Manager/Vice President

Attachments

ACCEPTED: Town of Smyrna, TN **DATE:**

Honorable Mary Esther Reed, Mayor 6/6/2023

ACCEPTED: Neel-Schaffer, Inc. **DATE:**

04/24/2023

EXHIBIT A

Exhibit A

Scope of Work for Construction Inspection and Administration Services for the Intelligent Transportation System / Traffic Management System – Phases III, IV & V – CM-9315(11), 75LPLM-F3-066; PIN 125507.00

Project Description

The proposed project provides for the construction and expansion of the Town of Smyrna's traffic signal communication and monitoring system. The signal system infrastructure includes, but is not limited to, CCTV surveillance cameras, traffic signal controllers, traffic signal cabinets, conduit, wireless communications, fiber optic cable network and field network hardware necessary to complete a fully functioning system. The project area consists of the following corridors: along Lee Victory Pkwy, Nissan Dr, S Lowry St, N Lowry St, Sam Ridley Pkwy, Old Nashville Highway, and other locally classified roadways. The project will be administered as a TDOT locally managed contract.

Project Understanding

Based on our discussions with the Town of Smyrna, Neel-Schaffer, Inc. (NSI) has the following project understandings:

- The ROW and/or easements required for project construction are or will be in place by the time of the issuance of the Contractor's Notice to Proceed for construction.
- Full-time construction inspection and administrative duties will be active for an estimated (10) month duration. The current construction contract indicates a completion date of September 30, 2024.
- All utility make-ready work required in advance of installation of fiber optic cable will be completed prior to issuance of contractor notice-to-proceed. All make ready heights should be accepted by the Town of Smyrna prior to installation of fiber/wire/equipment required on this project. The Town of Smyrna will obtain any necessary permits for installation.
- All permits and authorization from railroad owner(s) will be approved and active prior to construction adjacent to and crossing railroad property.
- Utility adjustments will be performed by the affected utility owners and not included in the construction contract or performed as part of the CEI contract.
- Construction, Engineering & Inspection (CEI) tasks will follow the requirements of the Tennessee Department of Transportation.

Construction Administration

Based on our discussions with the Town of Smyrna, Neel-Schaffer, Inc. will provide the following services:

- Pre-Construction Meeting:
  NSI will assist with scheduling a Pre-Construction meeting, prepare an agenda, and document meeting minutes. The following shall be provided by the contractor at the Pre-Construction Meeting:
    - Detailed Plan of Operation to include major items of work and anticipated date for beginning each item of work

- Contact information including name, home phone number, and mobile phone number of the prime contractor's responsible-in-charge, project supervisor, traffic control supervisor, erosion control supervisor, employee safety supervisor, and Equal Employment Officer (EEO)/contract compliance officer
- Traffic Control Plan and certification letter stating all traffic control devices meet the requirements of the Manual on Uniform Traffic Control Devices (MUTCD)
- Material Suppliers list including name and address of each
- List of subcontractors including name and address of each
- Asphalt Process Control Plan, if required: (Subsection 407.03.D of the TDOT Standard Specifications)
- Concrete Process Control Plan, if required: (Subsection 501.03.B of the TDOT Standard Specifications)

- Construction Progress Meetings (not to exceed one per month):

  The NSI CEI Project Manager (PM), NSI Inspector (Inspector), Prime Contractor, and Town Representative will attend monthly progress meetings. Construction items completed and adherence to schedule will be discussed. Work to be completed and any anticipated issues will be discussed. Monthly progress meetings will be documented.

- Respond to Requests for Information (RFIs), review of material submittals, and shop drawing approvals:

  NSI will respond to RFIs and provide information to the Contractor in a timely manner so as to not delay construction. NSI will review Shop Drawings, samples, and other data which Contractor is required to submit, but only for conformance with the design concept of the project as a functioning whole as indicated in the Contract Documents and compliance with the information given in the Contract Documents. The Contractor is expected to submit shop drawings, certifications and all other product and material information for all items and in the format required by TDOT guidelines. Any items submitted improperly or incomplete will be rejected without further review; the submitter will be requested to re-submit item information in the appropriate format before it is reviewed for technical suitability. Approvals, clarifications, rejections, or requests for additional information will be issued and submitted to the Contractor. NSI will document the results of all material submittal reviews. The Town will be provided with copies of this documentation. NSI will communicate questions and points-of-clarifications to Town staff for discussion and final determinations.

- Project Site Inspections:

  A full-time NSI Inspector will provide construction inspections to assess construction activities are in general accordance with project plans and specifications.

  NSI staff will be present at project locations at regular intervals in order to observe the progress and conformance of the various aspects of the Contractor's work. Based on information obtained during such visits and resulting from such observations, NSI will endeavor to determine in general if such work is proceeding in accordance with the Contract Documents and shall keep the Town informed of the progress of the work. NSI

shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct or have control over Contractor's work; nor shall NSI have authority over or responsibility for the means, methods, techniques, sequences or procedures of construction selected by Contractor; for safety precautions and programs incident to the work of Contractor; or for any failure of Contractor to comply with laws, rules, regulations, ordinances, codes or orders applicable to Contractor's furnishing and performing the work.

- Contractor Pay Request and Monthly Estimates:

  The CEI Project Manager will review pay requests, assess quantities, and certifications for approval. At a rate of no more than once per month, the contractor may submit for progress payments based on the latest work performed. Contractor pay requests and logs will be reviewed by CEI Consultant staff; then, forwarded with recommendations to Town staff for final approval and processing.

- Certified Payroll and Labor Compliance

  NSI will review and monitor contractor payroll activities as required by TDOT guidelines. Services will be provided in general conformance with TDOT Circular letter 1273-02 that documents the requirements of federal-aid contracts. Information to be reviewed includes required certified payroll data: pay period dates, employee names and classifications, wage rate and payment issued. A "Statement of Compliance" provided and prepared by the Contractor will be required for each payroll submission. Per TDOT guidelines, the prime contractor will be responsible for ensuring its subcontractors submit proper and timely certified payroll lists. NSI will notify the Town of any discrepancies and help coordinate resolution between the parties. Late payments and resulting withholding of progress payments, if required, will be coordinated with Town staff per TDOT guidelines with direction from the Town.

  A random employee interview (per TDOT Circular letter 1273-03) will be undertaken by NSI every month that work is performed by the contractor. The interview is used to verify an employee's name, job certification and wage rate. Information provided by the interviewee (either a prime contractor or subcontractor employee) will be compared to the contractor's certified payroll for the respective time period. Completion of this task will follow TDOT Circular letter 1273-02.01. Employees declining to be interviewed will be so documented.

- Substantial Completion:

  Following notice from the Contractor that the project is substantially complete and ready for its intended use, the CEI Project Manager and Town Representative, accompanied by the Contractor, will conduct an inspection to determine if the work is substantially complete. When, after any objections of the Town have been addressed, the CEI Project Manager considers the work substantially complete, the CEI Project Manager will deliver a certificate of substantial completion to the Town and Contractor.

- Final Notice of Acceptability of the Work:

  The CEI Project Manager will conduct a final inspection to determine if the completed work of the Contractor is acceptable so that the CEI Project Manager may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, the CEI Project Manager will also provide a notice that the work is acceptable to the best of the CEI Project Manager's knowledge, information and belief and based on the extent of the services performed and furnished by the CEI Project Manager under this Agreement.

Services not included in this Scope of Work

- Wetland and/or Stream permitting
- Surveying / Construction Staking
- Design services
- Public Involvement
- Title search, Appraisal, negotiation, relocation assistance, and other services as needed for Right-of-Way acquisition
- Permit/Application fees
- Mitigation Plans (if required)
- Utility Inspections/Utility Coordination
- Establishing Lines and Grades
- Geotechnical Investigation
- Roadway, drainage, utility, or structural design
- Material Testing / Lab Tests/Lab Fees
- Verifying previous make ready attachments heights are correct

EXHIBIT B

EXHIBIT B

N-S FEE ESTIMATE FOR ENGINEERING SERVICES
CONSTRUCTION ENGINEERING AND INSPECTION SCOPE OF SERVICES
Intelligent Transportation System / Traffic Management System – Phases III, IV, V – CM-9315(11), 75LPLM-F3-066; PIN 125507.00
Town of Smyrna, Tennessee

Task	*Labor in Hours*				
	Engineer Manager	Project Manager	Senior ITS Engineer	Engineer	Technician/ Inspector
Construction Engineering and Inspection Services					
1. Project Management and Administration	32	120	0	0	0
2. Pre-construction, Material Submittals, RFIs	4	20	8	60	4
3. Observation, Inspection, Pay Requests, Labor Compliance	16	42	76	28	1661
4. Documentation and Reporting	0	80	8	8	24
5. Final Inspection and Acceptance, Contigency	4	32	0	4	36
Total CEI Hours	56	294	92	100	1725
Hourly Rate	$230.00	$210.00	$215.00	$130.00	$110.00
Subtotal CEI Labor	*$12,880*	*$61,740*	*$19,780*	*$13,000*	*$189,724*
Subtotal CEI Services Labor (A)					$297,123.60
Subtotal CEI Subconsultant Fees (B)					$0.00
					$0.00
Subtotal CEI Direct Expenses (C)					$ 2,604.00
				Mileage	$ 1,054.00
				Printing	$ 800.00
				Miscellaneous	$ 750.00
Total CEI Fee (A + B + C)					**$299,727.60**

EXHIBIT C

EXHIBIT C
GENERAL TERMS AND CONDITIONS
PROFESSIONAL SERVICES

1. **Relationship between Consultant and Client**. Neel-Schaffer, Inc. ("Consultant") shall serve as the Client's professional consultant in those phases of the Project to which this Agreement applies. The relationship is that of a buyer and seller of professional services and it is understood that the parties have not entered into any joint venture or partnership with the other. Consultant shall not be considered to be the agent or fiduciary of the Client.

2. **Responsibility of Consultant**. Consultant will perform services under this Agreement in a manner consistent with that standard of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions (the "Standard of Care"). No other representation, warranty or guarantee, express or implied, is included or intended in this Agreement or in any report, opinion, document, or otherwise.

3. **Responsibility of the Client**. Client shall provide all information and criteria as to its requirements for the Project, including budgetary limitations. Client shall arrange for Consultant to enter upon public and private property and obtain all necessary approvals required from all governmental authorities having jurisdiction over the Project. Client shall give prompt written notice to Consultant whenever Client observes or otherwise becomes aware of any development that affects the scope or timing of Consultant's services.

   The Client shall promptly report to the Consultant any defects or suspected defects in the Consultant's services of which the Client becomes aware, so that Consultant may take measures to minimize the consequences of such a defect. Should legal liability for the defects exist, failure by the Client to notify the Consultant shall relieve the Consultant of any liability for costs of remedying the defects above the sum such remedy would have cost had prompt notification been given when such defects were first discovered.

4. **Construction Phase Services**. If Consultant's scope of services includes the observation and monitoring of work performed by Client's separate contractors, Consultant shall provide personnel to observe and monitor the work in accordance with the Standard of Care in order to ascertain that it is being performed, in general, in accordance with the plans and specifications. Consultant shall not supervise, direct, or have control over the contractor's work. Consultant shall not have authority over or responsibility for construction means, methods, techniques, sequences or procedures or for safety precautions and programs in connection with the work of the contractor. Consultant does not guarantee the performance of the construction contract by the contractor and does not assume responsibility for the contractor's failure to furnish and perform its work in accordance with the plans and specifications.

   In the event Consultant's scope of services does not include the observation and monitoring of work performed by Client's separate contractors, the Client assumes all responsibility for construction observation, and Client waives any claims against Consultant arising therefrom.

5. **Designation of Authorized Representatives**. Each party shall designate one or more persons to act with authority on its behalf with respect to appropriate aspects of the Project. The persons designated shall review and respond promptly to all communications received from the party.

6. **Ownership of Documents**. All reports, notes, drawings, specifications, data, calculations, and other documents, including those in electronic form prepared by Consultant are instruments of Consultant's service that shall remain Consultant's property. The Client agrees not to use Consultant generated documents for projects other than the project for which the documents were prepared by Consultant, or for future modifications to the Project, without Consultant's express written permission. Any reuse or distribution to third parties without such express written permission or project-specific adaptation by Consultant will be at the Client's sole risk and without liability to Consultant or its employees, subsidiaries, and subconsultants.

7. **Opinion of Costs**. When required as a part of its scope of services, Consultant will furnish opinions or estimates of construction cost on the basis of Consultant's experience and qualifications, but Consultant does not guarantee the accuracy of such estimates. The parties recognize that Consultant has no control over the cost of labor, material, equipment, or services furnished by others or over market conditions or contractors' methods of determining prices.

8. **Changes or Delays**. In the event new developments or circumstances beyond the control of Consultant require a change in the scope of services or schedule, Consultant shall be entitled to an equitable adjustment to the fee and/or schedule. Such events include, but are not limited to, unreasonable delays caused by Client's failure to provide specified direction or information, delays caused by Client's other contractors or consultants, or if Consultant's failure to perform is due to any act of God, labor shortage, fire, inclement weather, act of governmental authority, failure of transportation, accident, power failure, or interruption or any other cause beyond the reasonable control of Consultant.

EXHIBIT C
GENERAL TERMS AND CONDITIONS
PROFESSIONAL SERVICES

9. **Suspension of Services**. Client may, at any time, by written notice, suspend further services by Consultant. Upon receipt of such notice, Consultant shall take all reasonable steps to mitigate costs allocable to the suspended services. Client, however, shall pay all reasonable and necessary costs associated with such suspension including the cost of assembling documents, personnel and equipment, rescheduling or reassignment costs necessary to maintain continuity and the staff required to resume the services upon expiration of the suspension. Consultant will not be obligated to provide the same personnel in the event the period of any suspension exceeds 30 days.

10. **Termination**. This Agreement may be terminated by either party upon 30 days' written to the other party. Upon such termination, Client shall pay Consultant for all services performed up to the date of termination. If Client is the terminating party, Client shall pay Consultant all reasonable cost and expenses incurred by Consultant in effecting the termination, including but not limited to non-cancellable commitments and demobilization costs, if any.

11. **Indemnification**. Consultant shall indemnify and hold harmless Client from and against those damages and costs (including reasonable attorneys' fees) that Client incurs as a result of third party claims for personal injury or property damage to the extent caused by the negligent acts, errors or omissions of Consultant.

    To the fullest extent permitted by law, Client shall indemnify and hold harmless Consultant from and against those damages and costs (including reasonable attorneys' fees) that Consultant incurs as a result of third party claims for personal injury or property damage to the extent caused by the negligent acts, errors or omissions of Client.

12. **Legal Proceedings**. In the event Consultant or its employees are required by Client to provide testimony, answer interrogatories, produce documents or otherwise provide information in relation to any litigation, arbitration, proceeding or other inquiry arising out of Consultant's services, where Consultant is not a party to such proceeding, Client will compensate Consultant for its services and reimburse Consultant for all related direct costs incurred in connection with providing such testimony or information. This provision shall not apply in the event Client engages Consultant to provide expert testimony or litigation support, which services shall be the subject of a separate agreement or an amendment to this Agreement.

13. **Successors and Assigns**. The terms of this Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns; provided however, that neither party shall assign this Agreement in whole or in part without the prior written consent of the other party.

14. **Insurance**. Consultant agrees to maintain the following insurance coverage with the following limits of insurance during the performance of Consultant's work hereunder:

    (a) Commercial General Liability insurance with standard ISO coverage and available limits of $1,000,000 per occurrence and $2,000,000 general aggregate;
    (b) Automobile Liability insurance with standard ISO coverage and available combined single limits of $1,000,000 per accident;
    (c) Worker's Compensation insurance with limits as required by statute and Employer's Liability insurance with limits of $1,000,000 per employee for bodily injury by accident/$1,000,000 per employee for bodily injury by disease/$1,000,000 policy limit for disease; and
    (d) Professional Liability insurance covering Consultant's negligent acts, errors, or omissions in the performance of professional services with available limits of $1,000,000 per claim and annual aggregate.

    Consultant shall provide evidence of procuring the above insurance coverages by delivering a certificate of insurance to Client prior to the start of Consultant's work and annually upon renewal of coverage. Consultant shall cause Client to be named as an additional insured on Consultant's commercial general liability policy, which shall be primary and noncontributory.

15. **Information Provided by the Client.** Consultant shall be entitled to rely upon, without liability, the accuracy and completeness of any and all information provided by Client, without the obligation of independent verification.

16. **Consequential Damages**. Neither Client nor Consultant shall be liable to the other or shall make any claim for any special, incidental, indirect or consequential damages arising out of, or connected in any way to the Project or this Agreement. This mutual waiver includes, but is not limited to, damages related to loss of use, loss of profits, loss of income, loss of reputation, loss of business or diminution of property value and shall apply regardless of legal theory such damages are alleged including negligence, strict liability, breach of contract and breach of warranty.

17. **Payment.** Unless agreed to otherwise, Consultant shall submit monthly invoices to the Client. Payment in full

shall be due upon receipt of the invoice. Payment of any invoices by the Client shall be taken to mean that the Client is satisfied with the Consultant's services to the date of the payment and is not aware of any deficiencies in those services. If payments are delinquent after 30 days from invoice date, the Client agrees to pay interest on the unpaid balance at the rate of one percent (1%) per month. If the Client fails to make payments; then Consultant, after giving seven (7) days written notice to the Client, may suspend services until the Client has paid in full all amounts due for services, expenses, and other related charges without recourse to the Client for loss or damage caused by such suspension. The Client waives any and all claims against the Consultant for any such suspension. Payment for Consultant's services is not contingent on any factor, except the Consultant's ability to provide services in a manner consistent with that Standard of Care. Payment of invoices shall not be subject to any discounts, set-offs or back-charges unless agreed to in writing by both parties. If the Client contests an invoice, the Client may withhold only that portion so contested and shall pay the undisputed portion, after the Client has notified Consultant in writing within 30 days of receiving the invoice and shall identify the specific cause of the disagreement and the amount in dispute.

18. **Force Majeure**. Neither Client nor Consultant shall be liable for any fault or delay caused by any contingency beyond their control, including but not limited to, acts of God, wars, strikes, walkouts, fires, natural calamities, or demands or requirements of governmental agencies.

19. **Compliance with Laws**. To the extent they apply to its employees or its services, Consultant shall exercise due professional care to comply with all applicable laws, including ordinances of any political subdivisions or governing agencies.

20. **Invalid Terms**. If any provisions of this Agreement are held to be invalid or unenforceable, the remaining provisions shall be valid and binding as if the unenforceable provisions were never included in the Agreement.

21. **Governing Law**. This Agreement shall be governed by and construed in accordance with the laws of the state where the services are performed.

22. **Dispute Resolution.** All disputes, controversies or claims, of whatever kind or character, between the Parties, their agents and/or principals, arising out of or in connection with the subject matter of this Agreement shall be litigated in a court of competent jurisdiction.

23. **Additional Services.** Consultant shall be entitled to an equitable adjustment of its fee for services resulting from significant changes in the general scope, extent or character of the Project or its design including, but not limited to, changes in size, complexity, Client's schedule, construction schedule, character of construction or method of financing; and revising previously accepted studies, reports, design documents or other documents when such revisions are required by changes in laws, rules, regulations, ordinances, codes or orders enacted subsequent to the preparation of such studies, reports or documents, or are due to any other causes beyond Consultant's control.

24. **Amendment**. This Agreement may only be amended in writing and where such amendment is executed by a duly authorized representatives of each party.

25. **Entire Understanding of Agreement**. This Agreement represents and incorporates the entire understanding of the parties hereto, and each party acknowledges that there are no warranties, representations, covenants or understandings of any kind, matter or description whatsoever, made by either party to the other except as expressly set forth herein. Client and Consultant hereby agree that any purchase orders, invoices, confirmations, acknowledgments or other similar documents executed or delivered with respect to the subject matter hereof that conflict with the terms of this Agreement shall be null, void and without effect to the extent they conflict with the terms of this Agreement.

26. **Survival of Provisions.** The provisions of this Agreement shall continue to be binding upon the parties hereto notwithstanding termination of this Agreement for any reason.

27. **Nonwaiver**. No waiver by a party of any provision of this Agreement shall be deemed to have been made unless in writing and signed by such party.

28. **Identity of Project Owner**. Within ten (10) days of the entry of this Agreement, Client, if Client is not the Project Owner, shall provide to Consultant the Project Owner's full legal name; Project Owner's physical address; Project Owner's mailing address; and the name, physical address and mailing address of the Client's point of contact with the Owner for the Project.

29. **Conflicting Terms**. In the event that there are multiple agreements with varying or conflicting terms and conditions between Client and Consultant, the terms and conditions contained in this Agreement shall supersede and have precedence over any other conflicting terms and conditions contained in any other written or oral agreement.

30. **Course of Dealing**. Client and Consultant agree that these General Terms and Conditions establish a course of dealing between them and shall apply to this and all

other services, projects, agreements or dealings between the them, unless Client or Consultant gives the other written notice of objection to any term or condition before commencement of performance in connection with any other provision of services or projects involving the two of them.

31. ~~**Professional services in Florida**. In the event any professional services are provided within the state of Florida, it is expressly agreed by the parties that an individual design professional who is an agent or employee of consultant may not be held personally or individually liable for any damages resulting from negligence arising out of consultant's performance of this agreement, as provided in Florida statutes section 558.0035, as amended~~.

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STANDARD ADDENDUM TO AGREEMENT

This standard contract addendum is executed on the 16th day of June, 2023 by and between **THE TOWN OF SMYRNA, TENNESSEE,** a municipal corporation in the State of Tennessee, herein further referenced and identified as ("The Town") and **NEEL-SCHAFFER, INC.**, herein further referenced and identified as ("Vendor") in order to amend the terms of the Agreement, including all attachments, exhibits, or any actual or virtual documents or writing, including, but not limited to, all any "clickwrap," "clickthrough" or "click and accept" agreement or other Terms of Service scheduled for presentation to the Town Council for approval on the 16th day of June, 2023.

WITNESSETH

WHEREAS, the parties wish to execute this addendum to the Agreement for the purposes of substituting, clarifying or inserting certain terms of or into their original Agreement executed on the 16th day of June, 2023; and,

WHEREAS, the terms of this addendum to the Agreement shall take precedence over all other terms, conditions or language to the contrary or in conflict with the language contained in the Agreement; however, any term or clause not modified by the provisions herein shall be governed by the original agreement. The parties agree that this addendum shall not be construed to create any ambiguity, it being the expressed intent of the parties that this addendum shall control;

THEREFORE, In consideration of using Vendor's form Agreement, the mutual promises set out herein, and other good and valuable consideration, the sufficiency of which is hereby acknowledged by Vendor the parties hereto agree to the following:

1. VENUE: The parties agree that venue for any legal or other dispute arising under the terms of the original agreement or this addendum to agreement shall lie exclusively in the courts of Rutherford County, Tennessee or the United States District Court, for the Middle District of Tennessee. The parties hereby waive their right to a jury trial;

2. CHOICE OF LAW: The Agreement shall be deemed to be entered into under Tennessee law, and the rights and obligation of the parties are governed by the laws of the State of Tennessee, without regard to its conflict of laws principles, and all obligations of the parties are performable in Smyrna, Tennessee.

3. INDEMNIFICATION: The parties hereto agree that Vendor shall indemnify The Town for any and all claims of negligence, tortious conduct or otherwise unlawful acts committed by Vendor in the performance of their obligations under the terms of the original agreement or this addendum to agreement and Vendor agrees to pay any and all costs associated with the enforcement of the terms of this indemnity agreement by The Town, including but not limited to, court costs, civil judgments, assessments or any other reasonable fees associated therewith. In addition, Article II, Section 29 of the Tennessee Constitution prohibits municipalities from lending their credit to private or public entities and, therefore, prohibits an agreement by the Town to indemnify a third party or agree to a limitation of liability provision. Any indemnity or hold harmless provision contained in the Agreement requiring the Town to indemnify or hold harmless Vendor or any other person or entity or any limitation of liability in favor of Vendor shall be deemed null, void and unenforceable against the Town under any and all circumstances.

4. NON-APPROPRIATION: Vendor acknowledges that the Town is a governmental entity, and the validity of the Agreement is based upon the availability of public funding under its authority. In the event the Town fails to appropriate funds or make monies available for any fiscal year covered by the term of the Agreement for services to be provided, the Agreement shall be terminated on the last day of the fiscal year for which funds were appropriated or monies made available for such purposes without liability to the Town, and such termination shall not be a breach of the Agreement, and any unused payment made to Vendor shall be returned to the Town.

5. TAX EXEMPTION: As a tax-exempt entity, the Town shall not be responsible for sales or use taxes incurred for products or services. The Town shall supply Vendor with its Sales and Use Tax Exemption Certificate upon Vendor's request. Vendor shall bear the burden of providing its suppliers with a copy of the Town's tax exemption certificate and Vendor shall assume all liability for such taxes, if any, that should be incurred.

6. NO ATTORNEY'S FEES: The parties hereto agree that The Town shall be in no event liable for any attorney's fees which Vendor may incur due to breach of the original agreement or this addendum agreement by either party; and further, The Town shall not acquiesce to any term of the original contract/agreement that indicates or infers The Town may or shall be responsible for the fees of another party or the Vendor's attorney fees.

7. MEDIATION; NO ARBITRATION: The Town may, at its option, require the attempted resolution of any dispute arising under the original contract or this addendum to agreement by mediation prior to the filing of any lawsuit or other claim. Should any dispute arise, Vendor shall provide the Town notice of any intent to file suit by certified mail. The Town shall notify the Vendor of its intent to exercise its right to mediation within thirty (30) days of receiving such notice. If the Town does not exercise its right to mediation, Vendor may file suit. Any mediator selected under this clause shall be agreed upon by the parties and the costs of such mediation shall be divided and paid equally between the parties. The parties hereby further agree that, except as provided for in this addendum or by applicable law, the parties shall not be required to participate in any alternative dispute resolution process or procedure, including but not limited to arbitration and med-arb, relating to disputes that arise between the parties to the Agreement.

8. FAILURE TO PERFORM: The parties agree, in the event Vendor fails to perform any obligation, set out in the Agreement/Contract, the Town shall be reimbursed by Vendor for any and all expenses associated with having to obtain a new provider to finish out the contracted term, including, but in no way limited to, any charges/fees, which are above and beyond the amount the Town would have paid to Vendor to complete the same task; provided, however, that if the failure, by its nature, is one that can be

cured, the Vendor shall have fifteen (15) business days after receipt of written notice from the Town to cure said failure to perform.

9. USE OF TOWN's LOGO OR NAME: Vendor shall not use the Town's name or any logo in marketing or publicity materials or for marketing or publicity purposes without the prior written authorization from the Town. Vendor shall not issue, publish, or divulge any materials developed or used in the performance of this Agreement or make any statement to the media relating to this Agreement without the prior written consent of the Town.

10. WARRANTY: If applicable to the Agreement, Vendor warrants that the product(s) herein, when used in accordance with the documentation, shall operate and conform in all material respects in conformity with this Agreement and the written representations of Vendor, including applicable user manuals and guides supplied by Vendor or with Vendor's Software. If it does not perform as warranted, Vendor shall use all commercially reasonable efforts to correct the product(s) so that it operates in all material respects in conformity with the written representations of Vendor. If Vendor cannot correct the product(s) within a reasonable period of time, Vendor shall refund the purchase price of the product(s).

11. SOFTWARE DEADLINE, TESTING AND ACCEPTANCE: If applicable to the Agreement, software provided by Vendor shall be installed for the purposes of testing, as stated herein below, no later than one hundred twenty (120) days from the effective date of the Agreement and this Addendum thereto, unless the Agreement states a specific date which is before or after said deadline. In Addition, software provided by Vendor to the Town is subject to inspection and testing to verify that the software conforms to its written specifications and to ensure it meets the Town's needs. The Town shall have seven (7) business days after the software is installed to perform testing of the software using the Town's data. The Town shall provide Vendor with written notice of acceptance or rejection of the software five (5) business days or less after the end of the testing period. If the Town does not provide timely written notice of acceptance or rejection to Vendor, the software shall be deemed to be accepted by the Town. If the software is rejected, the Town may, at its sole discretion, either (1) return the software

and receive a refund of all fees paid with respect thereto, or (2) allow Vendor to repair or replace the software, without charge, in a timely manner. In the event the Town elects to allow the Vendor to repair or replace the software, the Town shall have an additional (7) business days in which to accept or reject the software as laid out hereinabove.

12. NO AUTOMATIC RENEWAL: The term of the Agreement shall not be renewed or extended beyond the initial term and any provision providing for automatic or continuing renewal of the Agreement is not applicable.

13. UNILATERAL MODIFICATION OF AGREEMENT NOT PERMITTED: Vendor may make unilateral changes to its Privacy Policy, provided any such changes are subject to the provisions of this Addendum, shall not alter this Addendum, and shall not materially alter the use of the service or reduce the level of protection provided to the Town at the time of the execution of this Agreement. Except as provided in the preceding sentence, notwithstanding anything in the Agreement to the contrary, any change to the Agreement made by Vendor that is not in writing and that is not properly executed by the signatures of authorized representatives of the parties hereto, including attestation by the Town's Clerk and approved as to form by the Town Attorney are subject to the terms and conditions of this Addendum, and shall not alter this Addendum and shall not materially alter the use of the service or reduce the level of protection provided to the Town at the time of the execution of this Agreement.

14. CHANGES TO TERMS. Except as provided in Paragraph No. 13 above pertaining to Vendor's Privacy Policy, Vendor shall provide the Town written notice, sent in care of Town Attorney's Office, Smyrna, Tennessee, 315 South Lowry Street, Tennessee 37167, of any proposed change to the Agreement at least ninety (90) days prior to being effective to the Town. The Town shall have thirty (30) days after receiving the written notice to terminate this Agreement, and such cancellation shall not be a breach of this Agreement. If applicable to the Agreement, Vendor will refund to the Town any payment made by the Town to Vendor equal to the difference between the number of months the payment was intended for and the number of months remaining on Agreement that the fee was intended to cover.

15. PRICE ASSURANCE: Unless specifically stated in the Agreement, the price shall be valid for the full term of the Agreement. If Vendor, specifically states, in the Agreement that he, she or it cannot honor the price for the full term of the Agreement; the Agreement is voidable at the sole discretion of the Town, if at any time during the full term of the Agreement, Vendor requests to raise the contract price. If the Town elects to void the Agreement, at its sole discretion, it shall not be deemed to be a breach of the contract by either party.

16. CONFIDENTIALITY: The Town, as a Tennessee Municipal Corporation is subject to the Tennessee Open Records Act, set out in T.C.A. §10-7-503 et seq; therefore, this Addendum, the Agreement and all documents or materials, in any format, including, but not limited to paper, electronic or virtual, that are public records pursuant to law, are not confidential and are subject to disclosure, without regard to any provision contained in the Agreement declaring information confidential. The Town will respond to all proper Open Records Requests in the time allowed by law, without any requirement to disclose such request to Vendor or provide Vendor with notice or the time to obtain a protective order. The Town does not have the burden of establishing that information is not confidential information or that its release is authorized to release the records. This section 16 serves to meet such burden and authorization of disclosure.

17. BOYCOTT OF ISRAEL: The Vendor certifies that it is not currently engaged in, and covenants that it will not, for the duration of the Contract, engage in a Boycott of Israel, as that term is defined in Tenn. Code Ann. § 12-4-119.

18. NO PRESUMPTION AGAINST DRAFTER: The parties are both business entities having substantial experience with the subject matter of this addendum, and each has fully participated in the negotiation and drafting of this addendum. Accordingly, this addendum shall be construed without regard to the rule that ambiguities in a document are to be construed against the draftsman. No inferences shall be drawn from the fact that the final, duly executed addendum differs in any respect from any previous draft hereof.

19. SURVIVAL: This entire addendum shall survive the completion of or any termination of the Agreement or other document which may accompany the Agreement

or be incorporated by reference and shall remain in full force and effect until the expiration of any applicable statute of limitation.

20. EFFECTIVE DATE: This addendum shall be deemed to have the same effective date of the Agreement.

(execution page follows)

IN WITNESS WHEREOF, the parties hereto warrant and represent that the individual who has signed this addendum on behalf of such party is duly authorized by all necessary and appropriate corporate action to sign this addendum.

VENDOR OR AGENT

VENDOR OR AGENT

MAYOR OF SMYRNA, TENNESSEE

Town of Smyrna
Town Council Meeting
Agenda Summary

Agenda Item Number 2.
Department: Public Works
Date: March 26, 2026

Subject:
Approval of the terms of, and authorization for the Mayor to execute, addendum 2 with Kimley Horn for the Old Nashville Highway Sidewalk project.

Fiscal Impact:
This fiscal year we have $220,000 in CIP under GL Account 320-43101-905. Currently, we have spent $36,310 and are awaiting grant reimbursement. This fiscal year we plan to continue working through Design Phase. When we get NTP to ROW Phase, next fiscal year's funds are slated to be used for ROW Acquisition.

Contract Type:
Contract Change Order /Amendment

Contract Term (if applicable):
This addendum is for ROW Phase and will not be activated until we receive Notice To Proceed to ROW Phase from TDOT.

Background:
We received NTP to NEPA on 6/2022 then Notice To Proceed (NTP) to Design on 11/2025. The Consultant is completing Design Plans and will be submitted in the next couple months for approval. Once NTP to ROW Phase is provided, we will be ready to begin preparing boundary surveys and exhibits with this contract.

Summary:
This agreement is for $19,500 and includes boundary survey for 8 tracts where we will need to acquire easements for construction.

Recommended Council Action:
Staff recommends Town Concil approve the Mayor to sign the addendum.

Attachments:
1. Old Nashville Sidewalks - Amendment 02-2026-02-20
2. PIN 132615.00 - Old Nashville Sidewalks - Scope of Services

AMENDMENT NUMBER 02 TO THE AGREEMENT BETWEEN CLIENT AND KIMLEY-HORN AND ASSOCIATES, INC.

This is Amendment number 02 dated February 20, 2026 to the agreement between Town of Smyrna ("Client") and Kimley-Horn and Associates, Inc. ("Consultant") dated September 2, 2022 ("the Agreement") concerning Old Nashville Highway Sidewalks (the "Project").

The Consultant has entered into the Agreement with Client for the furnishing of professional services, and the parties now desire to amend the Agreement.

The Agreement is amended to include services to be performed by Consultant for compensation as set forth below in accordance with the terms of the Agreement, which are incorporated by reference.

The services currently authorized to be performed by Consultant in accordance with the Agreement and previous amendments, if any, shall be modified as followed:

Task 2 – Field Survey and Data Collection

Task 2.3 – Boundary Survey
During the preliminary design, eight (8) tracts were identified needing right-of-way, slope easement, or construction easement acquisition. Consultant will search for property corners and collect property deed information in order to develop property boundaries for the impacted tracts. A right-of-way acquisition table will be developed for the 8 tracts which will detail the total tract area, right-of-way and easements to be acquired, and remaining tract areas.

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For the services set forth above, Client shall pay Consultant the following compensation:

Kimley-Horn will perform the services in the tasks above on a lump sum basis as summarized below.

Task	**Original Fee**	**Amendment 01**	**Amendment 02**	**Revised Fee**
Task 1 – Project Management	$22,600	$0	**$0**	$22,600
Task 2 – Existing Conditions Survey	$98,300	$0	**$19,500**	$117,800
Task 3 – NEPA Documentation	$37,900	$0	**$0**	$37,900
Task 4 – Preliminary Design Services	$46,800	$0	**$0**	$46,800
Task 5 – Right-of-Way Design Services	$38,800	$0	**$0**	$38,800
Task 6 – Utility Coordination	$9,700	$0	**$0**	$9,700
Task 7 – NEPA Additional Studies	$0	$4,700	**$0**	$4,700
Task 8 – Environmental Technical Studies - Ecology	$0	$14,500	**$0**	$14,500
Task 9 – Environmental Technical Studies - Archaeology	$0	$13,300	**$0**	$13,300
Total Lump Sum Fee:	$254,100	$32,500	**$19,500**	$306,100

Kimley-Horn will not exceed the total lump sum fee shown without authorization from the Town of Smyrna. Individual task amounts are provided for budgeting purposes only. Kimley-Horn reserves the right to reallocate amounts among tasks as necessary.

CLIENT:

TOWN OF SMYRNA, TENNESSEE

_____

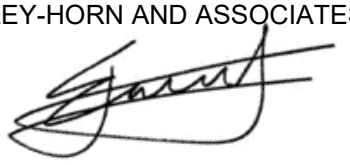
By: _____

Title: _____

Date: _____

CONSULTANT:

KIMLEY-HORN AND ASSOCIATES, INC.



_____

By: Leo Espelet

Title: Vice President

Date: February 20, 2026

September 2, 2022

Mr. Tom Rose, PE
Town of Smyrna
315 South Lowry Street
Smyrna, Tennessee 37167

Re: Professional Services Agreement
Old Nashville Highway
Sidewalk Improvement Project
Smyrna, Tennessee

Dear Mr. Rose:

Kimley-Horn and Associates, Inc. ("Kimley-Horn" or "Consultant") is pleased to submit this letter agreement (the "Agreement") to the Town of Smyrna ("Client") for providing professional design services for the reference project. A detailed description of our Scope of Services is as follows:

PROJECT UNDERSTANDING

The project will consist of design services for the rehabilitation and addition of sidewalks, landscaping, and crosswalks along Old Nashville Highway from Enon Springs to Rock Springs Road in Smyrna, Tennessee. Existing sidewalks, curb ramps, and pedestrian crossings will be upgraded to achieve Americans with Disabilities Act (ADA) and Public Right-of-Way Accessibility Guidelines (PROWAG) compliance. The Town of Smyrna's ADA Self-Evaluation and Transition Plan, in addition to field survey data, will be utilized to identify non-compliant pedestrian facilities along the corridor. It is assumed that no new right-of-way will be required for this project. Funding for the project will be provided by the Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) and a local match.

It is assumed this project will not include profile adjustments, and associated roadway improvements on side roads of Old Nashville Highway to correct non-compliant crosswalk slopes. These roadway improvements are beyond the scope of work for this sidewalk improvement project.

SCOPE OF SERVICES

Task 1 – Project Management

This task will consist of the following project management activities:

- Project Coordination – coordination with the Town and TDOT to provide updates, coordinate project reviews, and other activities to help the Town and TDOT be generally informed of the progress of the project. Up to three (3) hours of Kimley-Horn staff per months are assumed as part of the scope of services to provide this on-going coordination.
- Project Review Meetings – consists of scheduling, setting the agenda, and producing meeting minutes for up to two (2) review meetings at project milestones (preliminary and right-of-way). It is assumed that up to two (2) Kimley-Horn staff will be attending each meeting. Up to five (5) hours of Kimley-Horn staff are assumed for the preparation, travel, and attendance of each meeting. These project meetings are to be in person, unless otherwise determined prior to the meeting.

- Project Meetings – consists of scheduling, setting the agenda, and producing meeting minutes for up to ten (10) project meetings as needed throughout the project. It is assumed that up to two (2) Kimley-Horn staff will be attending each meeting. Up to three (3) hours of Kimley-Horn staff are assumed for the preparation and attendance of each meeting. These project meetings are to be virtual, unless otherwise determined prior to the meeting.
- Project Administration – administrative and accounting activities related to the day-to-day management of the project. Up to one (1) hour of Kimley-Horn staff per months are assumed as part of the scope of services to provide this on-going coordination.

The budget for this task was developed with an assumed schedule of up to 24 months. A total of one hundred thirty (130) Kimley-Horn staff hours are provided in this task. If additional effort is needed and/or the project schedule is extended, these efforts will be considered additional services beyond the scope of this contract.

Task 1 Kimley-Horn Deliverables:

1. Meeting agendas and minutes outlined above (electronic copy of each, Adobe PDF format) to the Town and all meeting attendees.

Task 2 – Field Survey and Data Collection

Task 2.1 - Data Collection

Kimley-Horn will perform a site visit to review the existing conditions along the corridor and to collect digital photography to assist with the NEPA Documentation, public involvement, and design efforts in later tasks.

Task 2.2 - Field Survey

Through the use of a surveying subconsultant, a field survey will be performed using Mobile LiDAR and then supplemented RTK, Total Station, and terrestrial laser scanning to determine assets missed by the Mobile LiDAR. Survey information gathered for the project will adhere to the TDOT Survey Manual, be performed in MicroStation and Geopak V8i file format, and shall be tied to the State Plane Coordinate System using the Tennessee Geodetic Reference Network (TGRN) and referencing local benchmarks

The survey limits are defined as follows:

- Old Nashville Highway – beginning at the intersection of Rock Springs Road and continuing south to the intersection of Enon Springs Road. The survey corridor will be from the centerline to 10 feet beyond the edge of the existing sidewalk or 25 ft beyond the back of curb, whichever is greater.

The topographic field survey will consist of the following elements:

- Roadway Assets (Curb & Gutter, Striping, etc.)
  - Roadway Topography
- Existing Sidewalks
- Existing topography within the survey boundary
- Existing sidewalk ramps and sidewalk curb cuts sufficient to verify ADA compliance.
- Existing Right of Way boundaries

Task 2 Kimley-Horn Deliverables:

1. Microstation file with topographic survey of project corridor (one (1) electronic copy, Microstation v8i DGN format) to the Client.
2. Existing topographic surface TIN file.

Task 3 – National Environmental Policy Act (NEPA) Documentation

Given the nature of the proposed project, the NEPA document is a likely candidate for classification as a D-List Categorical Exclusion (D-List CE). This determination can only be made; however, by the Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration (FHWA). If another level of NEPA document is required by TDOT and/or FHWA other than the preparation of a D-List CE, this effort will be considered Additional Services beyond this scope of services.

One Build Alternative and the No-Build Alternative will be studied. The NEPA document will be based on functional plans or on preliminary plans (20-30 percent complete) as defined on Page 4-5 of the TDOT's *Local Government Guidelines for the Management of Federal and State-Funded Transportation Projects* (March 2018).

Task 3.1 – TDOT Environmental Division Coordination

Kimley-Horn will maintain direct contact and function as a liaison with the designated representative of the TDOT Environmental Division.

Task 3.2 – Development of Purpose and Need

Kimley-Horn will prepare a "Purpose and Need" statement for the environmental document.

Task 3.3 – Agency Coordination

Kimley-Horn will prepare and send initial coordination letters as well as associated project mapping and plans to TDOT for coordination with the following federal and state agencies:

- U.S. Fish and Wildlife Service (USFWS)
- Tennessee Wildlife Resource Agency (TWRA)
- Tennessee Department of Environment and Conservation (TDEC)

Task 3.4 – Public Involvement

It is assumed that no public involvement activities will be required for the proposed project. If any public involvement activities are deemed necessary, this effort will be considered Additional Services beyond this scope of services.

Task 3.5 – Environmental Technical Studies

Kimley-Horn, in coordination with TDOT, will prepare the environmental technical studies listed below and the results of these studies will be incorporated directly into the NEPA document.

Ecology – Environmental Boundaries Survey

Kimley-Horn's subconsultant, Civil & Environmental Consultants, Inc. (CEC), will provide an Environmental Boundaries Survey in accordance with Tennessee Department of Transportation (TDOT) standards. As part of the preparation of the Environmental Boundaries Survey, CEC will perform the following tasks:

- Jurisdictional Waters Determination
  - CEC will provide a Waters of the U.S. Determination (i.e. streams and wetlands) for the project area. In performing the jurisdictional determinations, the 1987 *Corps of Engineers Wetlands Delineation Manual* and the *2012 Regional Supplement: Eastern Mountains and Piedmont Region*, Version 2.0, will be closely followed to establish a description of the soils, plants and hydrologic conditions of the project area. CEC will perform the following tasks:

1. Using the 1987 *Corps of Engineers Wetland Delineation Manual* and the 2012 *Regional Supplement: Eastern Mountains and Piedmont Region*, Version 2.0 delineate potential wetlands located in the proposed area.
2. Complete the Corps of Engineers Wetland Data Forms for each wetland/upland sampling site.
3. Using a Trimble® GeoXT GPS Unit, map the wetland boundaries (if present) to determine area, and log lat/long of each soil pit along with hue, value and chroma of the soil using a standard Munsell® Color Chart.
4. Submit wet weather conveyance and stream determinations as a Qualified Hydrologic Professional to TDEC.
5. Prepare a summary report describing the findings that contains water resources form, the routine wetland determination data forms, Hydrologic Determination forms, Habitat Assessment forms, Tennessee rapid assessment methodology forms, a photo summary, and delineation map.

Once the Environmental Boundaries Survey and the jurisdictional waters determination as described above, is complete, the report will be submitted to TDOT for review and comment. The results of the Environmental Boundaries Survey will be incorporated directly into the NEPA document.

Assumptions: It is assumed that no individual plant or animal species survey will be conducted as part of this proposed scope of services and cost estimate. If the Client, TDOT, or another state and/or federal agency requests a species survey, these services can be provided, but will be considered Additional Services beyond this scope of services.

Floodplains

Floodplains and floodways in the project area will be identified only, through the review of National Flood Insurance Rate Maps (FIRMs). All FIRMs specific to the project area will be compiled and the relevant floodplains and floodways information will be provided as part of the NEPA document.

Section 4(f) – Recreational Resources

One Section 4(f) resource (existing Sidewalk Bikeway path along Rock Springs Road) has been identified within the project area. Kimley-Horn will prepare, in letter format, a “Notice of Intent to Pursue an Exception Under Section 4(f)” for potential impacts to the path in the project area. Kimley-Horn will prepare the letter for the project and submit it to the Client for initial review. Once the initial review has been completed by the Client, the letter will be sent to the Official with Jurisdiction (OWJ), the Town of Smyrna, for signature. Kimley-Horn will then incorporate the information documented in the “Notice of Intent to Pursue an Exception Under Section 4(f)” into the NEPA document.

Assumptions: If TDOT, FHWA, or the OWJ request the preparation of a Section 4(f) De Minimis Determination, Programmatic Section 4(f) Evaluation, or an Individual Section 4(f) Evaluation, this effort will be considered Additional Services beyond this scope of services

Cultural Resources – Historic/Architectural (above-ground) Resources

Given the proposed project follows the alignment of the Dixie Highway and the Trail of Tears National Historic Trail, Kimley-Horn's subconsultant, Richard Grubb and Associates, Inc. (RGA), will be responsible for preparing a Historic Architecture Resources Survey to document and evaluate potential project effects to all National Register of Historic Places (NRHP)-listed and NRHP-eligible historic architecture resources in the area of potential effect (APE) per the criteria of adverse effects set forth in Section 106 regulations. Additionally, measures to avoid, minimize, or mitigate unavoidable adverse effects will be evaluated.

Once the Historic Architecture Resources Survey is complete, the draft report will be submitted to TDOT for review and comment. TDOT will submit the draft report to the TN-SHPO for review. Following the receipt of comments, RGA will finalize the Historic Architecture Resources Survey and the results will be incorporated directly into the NEPA document.
Assumptions: If additional coordination with TDOT and/or the Tennessee State Historic Preservation Office (TN-SHPO) is required or if additional historic architecture documentation is needed past the preparation of the Historic Architecture Resources Survey previously mentioned, this work can be completed by RGA, but will be considered Additional Services beyond this scope of services.

Cultural Resources – Historic/Architectural (below-ground) Resources

It is assumed that a Phase I Archaeological Survey will not be required. It is important to note that the proposed project follows the alignment of the Dixie Highway and the Trail of Tears National Historic Trail; however, it is assumed that the proposed project would not impact the Trail of Tears National Historic Trail due to no right-of-way or easements being required for construction. Based on this assumption, Kimley-Horn will complete a Section 106 Assessment report utilizing the TDOT Environmental Division's standard template, which will review and research the general project area through a desktop review only. As part of the Section 106 Assessment, Kimley-Horn will submit the following items to TDOT:

- USGS topographic mapping of the project area;
- Photographs of all historic properties along the project area, along with a key map; and
- Dates of construction for buildings in the project area, as available.

Kimley-Horn will submit the Section 106 Assessment to TDOT for review. TDOT will then submit the Section 106 Assessment to the Tennessee State Historic Preservation Office (TN-SHPO) requesting a Section 106 review of the proposed project area. The results of both the Section 106 review as well as a copy of the TN-SHPO letter will be incorporated directly into the NEPA document.

Assumptions: It is assumed that a Phase I Archaeological Survey will not be conducted as part of this proposed scope of services and cost estimate. If a Phase I Archaeological Survey is deemed necessary by TDOT, FHWA and/or the TN-SHPO past the preparation of the Section 106 Assessment previously mentioned, these services can be provided, but will be considered Additional Services beyond this scope of services.

Hazardous Materials

Kimley-Horn will complete a desktop review of available hazardous materials databases available through TDEC and the Environmental Protection Agency (EPA) to determine whether the proposed project area has the potential to contain hazardous materials that may be impacted by the project. This information along with all relevant TDEC and EPA database mapping for the project area will be incorporated into the Agency Coordination documentation for the TDOT Hazardous Materials Section to review and provide further recommendations as to whether additional studies may be necessary.

Assumptions: It is assumed that no Phase I Environmental Site Assessment (ESA), Phase II ESA, or Asbestos Containing Materials (ACM) surveys will be conducted as part of this proposed scope of services and cost estimate. If the Client, TDOT, or another state and/or federal agency requests additional hazardous materials studies, these services can be provided, but will be considered Additional Services beyond this scope of services.

Environmental Justice

Kimley-Horn will complete an Environmental Justice (EJ) analysis, in conformance with Executive Order 12898 and FHWA Order 6640.23 (December 2, 1998). The analysis will consider the composition of the affected area, to determine whether minority and low-income populations are present in the area affected by the proposed project, and if so whether there may be disproportionately high and adverse human health or environmental effects on minority and low-income populations.

Baseline data will be collected for minority and low-income populations using U.S. Census data. The data will consist of race, color, national origin, and level of income of overall population, as well as the existence of any minority or low-income populations or communities. Potential areas of EJ populations will be displayed using Geographic Information System (GIS) mapping.

The EJ analysis will be limited to desktop research only and will be documented in an EJ Memorandum. No fieldwork will be completed. If a disproportionately high and adverse effect on a minority population or a low-income population is revealed, the analysis will show how the effects are distributed within the affected project area. If potential mitigation measures or potential community outreach efforts are identified by TDOT or FHWA, these services can be provided, but will be considered Additional Services beyond this scope of services.

Assumptions: No fieldwork will be required.

Environmental Technical Information to be provided by TDOT

The TDOT Environmental Division will be responsible for providing the following environmental technical information:

- Air Quality
- Noise
- Native American Consultation

Following receipt of the above listed environmental technical information from the TDOT Environmental Division, Kimley-Horn will review and incorporate the information/data into the NEPA document.

Additional Services – Environmental Technical Studies

The following environmental technical studies can be completed but will be considered Additional Services beyond this scope of services:

- Conceptual Stage Relocation Plan
- Ecology – Threatened and Endangered Species Surveys (included but no limited to Bat Presence of Absence Surveys)
- Detailed Floodplain Analysis
- Air Quality Analysis
- Noise Technical Report
- Farmland Coordination and Farmland Analysis
- Section 4(f) De Minimis Determination, Programmatic Section 4(f) Evaluation, and/or Individual Section 4(f) Evaluation
- Section 6(f) Documentation
- Phase I or Phase II Archaeological Survey and Phase III Testing
- Phase I or Phase II Environmental Site Assessments and Asbestos Containing Materials Surveys
- Detailed Environmental Justice Analysis

Task 3.6 – Document Preparation and Approval

The purpose of this task is to develop the NEPA documentation, consistent with the requirements of the FHWA guidance as outlined in FHWA Technical Advisory T6640.8A, *Guidance for Preparing and Processing Environmental and Section 4(f) Documents* as well as the *Tennessee Environmental Procedures Manual* (June 2011 edition) and TDOT's *Local Government Guidelines for the Management of Federal and State-Funded Transportation Projects* (March 2018).

Following completion of the NEPA document by Kimley-Horn, the document will be submitted to the Client for review and comment. Kimley-Horn will then revise the NEPA document based on the Client's comments. Once the Client approves the NEPA document, the document will be submitted to the TDOT Environmental Division/FHWA for initial review and subsequent approval.

Task 3 Kimley-Horn Deliverables:

1. Agency Coordination Package (electronic copy in Adobe PDF format)
2. Environmental Boundaries Report (electronic copy in Adobe PDF format)
3. Notice of Intent to Pursue an Exception Under Section 4(f) (electronic copy in Adobe PDF format)
4. Historic Architecture Resources Survey (electronic copy in Adobe PDF format)
5. Environmental Justice Memorandum (electronic copy in Adobe PDF format)
6. Draft NEPA document for the Client's review (electronic copy in Adobe PDF format)
7. Draft NEPA document for TDOT/FHWA review (electronic copy in Adobe PDF format)
8. Final NEPA document for TDOT/FHWA review and approval (electronic copy in Adobe PDF format)

Task 4 – Preliminary Design

Task 4.1 – Preliminary Design

Upon receiving notice to proceed with the PE-NEPA Phase from TDOT, Kimley-Horn will prepare a preliminary design in accordance with TDOT's Roadway Design Guidelines and current Town of Smyrna design standards. The preliminary plans will be prepared to conform to TDOT's current MicroStation and Geopak CAD standards. The plans will consist of the following sheets:

- Title Sheet with index
- Typical Sections
- Present Layout
- Proposed Layout
- Mainline Profile
- Driveway Profiles
- Preliminary Signing and Marking
- Roadway Cross Sections

Task 4.2 – Preliminary Design Submittal and Review

Kimley-Horn will submit preliminary plans to TDOT and the Town of Smyrna for review and comment. Kimley-Horn will meet with the Town to discuss the Town's comments. Following this review meeting, Kimley-Horn will revise the plans based on the Town's comments and comments from TDOT.

Task 4.3 – Preliminary Engineer's Opinion of Probable Construction Cost

Kimley-Horn will prepare an opinion of the probable construction cost of the proposed improvements. Kimley-Horn will utilize the current version of the Cost Estimate Tool provided by TDOT's Strategic Transportation Investments Division to prepare preliminary cost estimate.

Because Kimley-Horn does not control the cost of labor, materials, equipment or services furnished by others, methods of determining prices, or competitive bidding or market conditions, any opinions rendered as to costs, including but not limited to opinions as to the costs of construction and materials, shall be made on the basis of its experience and represent its judgment as an experienced and qualified professional, familiar with the industry. Kimley-Horn cannot and does not guarantee that proposals, bids or actual costs will not vary from its opinions of cost. If the Town wishes greater assurance as to the amount of any cost, it shall employ an independent cost estimator. Kimley-Horn's services required to bring costs within any limitation established by the Town will be paid for as Additional Services.

Task 4 Kimley-Horn Deliverables:

1. Preliminary Plans package (electronic copy, Adobe PDF format)
2. Preliminary Engineer's Opinion of Probable Construction Cost (one electronic copy, Adobe PDF format)

Task 5 – Right-of-Way Design Services

Task 5.1 – Right-of-Way Plans

Upon receiving notice to proceed with the ROW Phase from TDOT, Kimley-Horn will prepare right-of-way design plans in accordance with TDOT's Roadway Design Guidelines and current Town of Smyrna design standards. The plans will consist of the following sheets:

- Title Sheet
- Index with Standard Drawings
- Estimated Roadway Quantities
- Typical Sections
- Detail Sheets
- Right-of-Way Notes, Utility Notes and Utility Owners
- Present Layout
- Proposed Layout
- Mainline Profile
- Driveway Profiles
- Traffic Control Plan
- Signing and Marking
- Roadway Cross Sections

Task 5.2 – Right-of-Way Plans Submittal and Review

Kimley-Horn will submit right-of-way plans to TDOT and the Town for review and comment. Kimley-Horn will meet with the Town to discuss the Town's comments. Following this review meeting, Kimley-Horn will revise the plans based on the Town's comments and comments from TDOT.

Task 5.3 – Acquisition Plats (Additional Service)

Kimley-Horn will prepare exhibits for the required right-of-way and easements on the project for the impacted properties. Legal Descriptions will be provided for each property anticipated to require easement or right-of-way acquisitions.

This task and its associated scope and fee will be further refined after completion of the Right-of-Way plans. At that time the number of properties where right-of-way and easement acquisition is acquired will be determined and a more accurate scope and fee can be composed.

Task 5 Kimley-Horn Deliverables:

1. Right-of-Way Plans package (electronic copy, Adobe PDF format)

Task 6 – Utility Coordination

Task 6.1 – Preliminary Utility Coordination

Upon completion of Task 4 above, Kimley-Horn will provide early notification to the potentially affected utility owners along the project corridor. Kimley-Horn will request utility owner information from the TDOT Regional Utility Coordinator. Each utility owner will be provided the project location, project limits, project description, and federal and state project identifiers and given two (2) sixty-day notices and one (1) ten-day notice to indicate if they own facilities within the project area. Kimley-Horn will submit preliminary plans to utility companies known to have facilities within the project limits. The submittal to each utility owner will

consist of an electronic set of plan drawings (PDF format) and a letter requesting that the utility company review the potential impacts of the proposed project to their facilities. The letter will request a written response from each utility.

Kimley-Horn will prepare for and host a utility coordination meeting as part of this task. Known impacted utility companies will be invited to attend a coordination meeting to discuss potential utility relocations within the project limits. Kimley-Horn will document the discussions and decisions made during the meeting and distribute to the meeting attendees. Utility Owners will be responsible for identifying utility conflicts within the project limits and the design and relocation of their utilities.

Task 6.2 – Right-of-Way Phase Utility Coordination

Upon completion of Task 5, Kimley-Horn will submit the approved Right-of-Way plans to utility owners identified in Task 6.1. The submittal to each utility owner will consist of an electronic set of plan drawings (PDF format), information detailing any design changes made during Right-of-Way design, and a letter requesting that the utility company review the potential impacts of the proposed project to their facilities and prepare more detailed utility relocation plans. Kimley-Horn will coordinate with utility owners during this phase to help facilitate the development of the relocation plans.

Kimley-Horn will prepare for and host a second utility coordination meeting as part of this task. Known impacted utility companies will be invited to attend a coordination meeting to discuss utility relocations within the project limits. Kimley-Horn will document the discussions and decisions made during the meeting and distribute to the meeting attendees.

Kimley-Horn will not perform any utility relocation design services as part of this task. It is assumed that each utility owner will design, provide plans for, and construct their utility relocations.

Task 6 Kimley-Horn Deliverables:

1. Utility Coordination Notification Letter with Project Map (electronic copy, Adobe PDF format) to each known Utility Owner within the project corridor
2. Utility Coordination Request Letter with Preliminary Plans (electronic copy, Adobe PDF format) to each known Utility Owner within the project corridor
3. Utility Coordination Request Letter with approved Right-of-Way Plans (electronic copy, Adobe PDF format) to each known Utility Owner within the project corridor

Additional Services

Any services not specifically provided for in the above scope, as well as any changes in the scope the Town requests, will be considered Additional Services and will be performed at our then-current hourly rates or an agreed upon lump sum value. Additional Services Kimley-Horn can provide consist of, but are not limited to, the following:

- Final Design Services
- NEPA Document Re-Evaluation
- Traffic Signal design
- Landscape/Streetscape design
- Environmental Permitting
- Right-of-Way Acquisition Services
- Bid phase and/or Pre-construction services
- Construction Phase Services
- Design services should the Project Understanding be modified from the assumptions documented in this Scope of Services

- Professional services should the project scope exceed those documented in this Scope of Services
- Attendance at meetings outside of those scoped above
- Others as requested by the Client

INFORMATION PROVIDED BY CLIENT

Kimley-Horn shall be entitled to rely on the completeness and accuracy of all information provided by the Client or the Client's consultants or representatives.

SCHEDULE

Kimley-Horn will provide our services as expeditiously as practicable with the goal of meeting a mutually agreed upon schedule.

Please note that Kimley-Horn has no control over internal FHWA and TDOT review processes as they relate to environmental approvals and the issuances of notices to proceed from the Local Programs office.

FEE AND EXPENSES

Kimley-Horn will perform the services in Tasks 1 - 6 for the total lump sum fee below. Individual task amounts are informational only. All permitting, application, and similar project fees will be paid directly by the Client.

Task 1 – Project Management	$22,800
Task 2 – Existing Conditions Survey	$98,300
Task 3 – NEPA Documentation	$37,900
Task 4 – Preliminary Design Services	$46,800
Task 5 – Right-of-Way Design Services	$38,800
Task 6 – Utility Coordination	$9,700
Tasks 1 – 6, Total Lump Sum Fee:	**$254,100**

Lump sum fees will be invoiced monthly based upon the overall percentage of services performed. Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.

Kimley-Horn will perform the services described in Additional Services on a lump sum basis, dependent upon the type of Additional Services requested. Effort associated with Additional Services will not be performed without authorization from the Town.

CLOSURE

In addition to the matters set forth herein, our Agreement shall include and be subject to, and only to, the attached Standard Provisions, which are incorporated by reference. As used in the Standard Provisions, "Consultant" shall refer to Kimley-Horn and Associates, Inc., and "Client" shall refer to Town of Smyrna.

Kimley-Horn, in an effort to expedite invoices and reduce paper waste, submits invoices via email in an Adobe PDF format. We can also provide a paper copy via regular mail if requested. Please include the invoice number and Kimley-Horn project number with all payments. Please provide the following information:

____ Please email all invoices to _____

____ Please copy _____

If you want us to proceed with the services, please have an authorized person sign this Agreement below and return to us. We will commence services only after we have received a fully-executed agreement. Fees and times stated in this Agreement are valid for sixty (60) days after the date of this letter.

To ensure proper set up of your projects so that we can get started, please complete and return with the signed copy of this Agreement. Failure to supply this information could result in delay in starting work on your project.

We appreciate the opportunity to provide these services to you. Please contact me if you have any questions.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

ACCEPTED:

TOWN OF SMYRNA	KIMLEY-HORN AND ASSOCIATES, INC.
	
BY: _____	BY: Zachary J. Dufour, P.E.
TITLE: _____	TITLE: Vice President
DATE: _____	DATE: September 2, 2022

Town of Smyrna
Town Council Meeting
Agenda Summary

Agenda Item Number 3.
Department: Grants
Date: March 26, 2026

Subject:
Approval of the terms of, and authorization for the Mayor to execute, a contract from the Tennessee Commission for the United States Semiquincentennial for the Smyrna Greenway Historical Signage Revitalization project in the amount of $23,482.

Fiscal Impact:
The $23,482 from this grant will help subsidize the greenway project that was allocated in the CIP on FY27 for $30,000. No match is involved in this grant.

Contract Type:
Original Contract

Contract Term (if applicable):

Background:
The Town of Smyrna's greenway system features historical interpretive signs that were installed 25 years ago. Over time, these 34 interpretive signs and 19 vertical information panels have become cracked, sun-bleached, and largely illegible, obscuring important educational information about Smyrna's local history. To address this deteriorating infrastructure and to participate in the upcoming 250th anniversary of the United States, Town staff identified a funding opportunity through the Tennessee Commission for the United States Semiquincentennial (TN250). The Town proposed the "Smyrna Greenway Historical Signage Revitalization" project to restore these community assets and create a permanent educational legacy.

Summary:
This contract secures $23,482 in TN250 grant funding to purchase materials for the comprehensive revitalization of the greenway's historical markers. The project includes replacing 53 deteriorating panels (34 standard and 19 vertical) and installing 6 new trailhead markers (utilizing 12 double-sided signs). The new signage will organize Smyrna's local history, spanning from early agrarian settlement and Civil War events to the establishment of Sewart Air Force Base and modern industrialization, into a cohesive, chronological outdoor museum. All 65 signs will feature the official TN250 logo. Installation and long-term maintenance will be absorbed into standard Town of Smyrna Parks and Recreation operations.

Recommended Council Action:

Staff recommends approval of the terms of, and authorization for the Mayor to execute, a contract from the Tennessee Commission for the United States Semiquincentennial for the Smyrna Greenway Historical Signage Revitalization project in the amount of $23,482.00.

Attachments:

1. TN250 Contract - Grant March 26
2. TN250_Guidelines
3. Signage Photos

ENDOWMENT GRANT CONTRACT

Begin Date	End Date	Agency Tracking #	Edison ID
7/1/25	6/30/26	31627-250	89231

Public Chapter	Bill #	Section	Item
530	HB1409	36	30

Grantee Legal Entity Name: Town of Smyrna

Edison Vendor ID:

Service Caption (one line only): Semi Quincentennial Celebration

Funding —

FY	State	Federal	Interdepartmental	Other	TOTAL Contract Amount
2026	$23,482.00	0	0	0	$23,482.00
TOTAL:	**$23,482.00**	0	0	0	**$23,482.00**

Grantee Selection Process Summary

☒ Competitive selection	Grantee organizations applied for funding via a competitive process requiring submission of applications during a specific cycle. Each application included project descriptions, supporting project budget and agency operating budgets. Applications were reviewed by TSM staff and assessed by other subject matter experts. The members of the Tennessee Commission for the U.S. Semiquincentennial reviewed and provided the final approval.
☐ Non-competitive selection	

Budget Officer Confirmation: There is a balance in the appropriation from which obligations hereunder are required to be paid that is not already encumbered to pay other obligations.

CPO USE - EG

Speed Chart (optional)	Account Code (optional)
SM39	

GRANT CONTRACT
BETWEEN THE STATE OF TENNESSEE,
TENNESSEE STATE MUSEUM
AND
TOWN OF SMYRNA

This Grant Contract, by and between the State of Tennessee, Tennessee State Museum, hereinafter referred to as the "State" or the "Grantor State Agency" and Town of Smyrna hereinafter referred to as the "Grantee," is for the provision of Semi Quincentennial Celebration , as further defined in the "SCOPE OF SERVICES AND DELIVERABLES."

The Grantee is a Tennessee Government Entity.
Grantee Place of Incorporation or Organization: Smyrna, TN
Grantee Edison Vendor ID #

Scope 1:

A. SCOPE OF SERVICES AND DELIVERABLES:

A.1. The Grantee shall provide the scope of services and deliverables ("Scope") as required, described, and detailed in this Grant Contract.

A.2 To support the TN Semiquincentennial Celebration (America250 or TN250) – Funding was included in the Governor's budget to the State Museum to support Tennessee's participation in the United States Semiquincentennial Celebration. The TN Semiquincentennial Commission developed a grant program for organizations across the state to apply for funding to promote and market the celebration in their respective areas.

A.3 The Tennessee Commission for the United States Semiquincentennial offers two grant opportunities for organizations and communities centered around Tennessee's unique stories.

A.4. Service Description. To utilize funding in preparation and celebration for the TN Semiquincentennial.

A.5. Archival Support

a. Collection Maintenance. It is acceptable to replace or purchase archival supplies to improve the storage conditions, operations, or public accessibility of archival collections, particularly those related to TN Semiquincentennial and Tennessee's role leading to that event. Such as the following:
    1) Archival shelving units
    2) Acid-free, lignin-free folders and boxes
    3) Other necessary archival supplies or environmental monitoring devices
    4) Contracted conservation treatments
    5) Hiring part-time workers to process collections or to plan digitization projects
    6) Improving online access to collections through digitization

b. Collection Preservation and Professional Development. It is acceptable to improve preservation of and access to Tennessee's historical records (including digitization), especially those that highlight Tennessee's contributions to TN Semiquincentennial and the founding of the United States. This includes educating and training records custodians and supporting archival program development and enhancement. Such as for the following:

1) Technology: This sub-category provides funding for hardware, software, peripherals, and other technology items used/needed to create online digital collections, especially those related to Tennessee's role in the founding of the United States.
2) Training: This sub-category provides funding for registration costs for webinars or workshops related to conservation, digitization, and digital project planning for archivists and museum personnel.
3) Contracted Services: This sub-category provides funding to hire a vendor or independent contractor for digitization or conservation services, particularly for work on collections that highlight Tennessee's contributions to America's founding. Include a vendor quote for these services with your application.
4) Contract/Part-Time Archivist: This sub-category provides funding to hire a contract or part-time archivist for the duration of the grant period to scan documents and create corresponding metadata for collections related to Tennessee's history and America 250.

A.6. Historic Preservation. It is acceptable to support historic preservation projects that focus on interpreting and preserving Tennessee's unique stories, objects, landmarks, and places across our diverse state that defined who we are as Tennesseans and Americans. Such as for the following:

a. Historic Structure Restoration and Repair
b. Historic Cemetery Restoration

A.7. Exhibition and Programs. It is acceptable to support exhibitions and programs that focus on interpreting and preserving Tennessee's unique stories, objects, landmarks, and places across our diverse state that defined who we are as Tennesseans and Americans. SA.6 such as the following:

a. Public exhibitions, both long-standing and temporary, that support the themes of the nation's anniversary
b. Educational lectures or symposia related to the Semiquincentennial
    1) Community history projects, including oral histories
    2) Conferences and symposia
    3) Festivals and performances
    4) Lectures and lecture series

A.8. Media Programs. It is acceptable to support media programs that focus on marketing, interpreting and preserving Tennessee's unique stories, objects, landmarks, and places across our diverse state that defined who we are as Tennesseans and Americans. Such as the following:

a. production support of films
b. videos,
c. television,
d. radio,
e. podcasts,
f. websites, or
g. digital media

A.9. Incorporation of Additional Documents. Each of the following documents is included as a part of this Grant Contract by reference or attachment. In the event of a discrepancy or ambiguity regarding the Grantee's duties, responsibilities, and performance hereunder, these items shall govern in order of precedence below.

a. this Grant Contract document with any attachments or exhibits (excluding the items listed at subsections b. and c., below);
b. the State grant proposal solicitation as may be amended, if any;
c. the Grantee's proposal (Grantee Application) incorporated to elaborate supplementary scope of services specifications.

Scope 2:

A. SCOPE OF SERVICE AND DELIVERABLES:

A.1. The Grantee shall provide the scope of services and deliverables ("Scope") as required, described, and detailed in this Grant Contract.

A.2 To support the TN Semiquincentennial Celebration (America250 or TN250) – Funding was included in the Governor's budget to the State Museum to support Tennessee's participation in the United States Semiquincentennial Celebration. The TN Semiquincentennial Commission developed a grant program for organizations across the state to apply for funding to promote and market the celebration in their respective areas.

A.3 The Tennessee Commission for the United States Semiquincentennial offers two grant opportunities for organizations and communities centered around Tennessee's unique stories.

A.4. Service Description. To utilize funding in preparation and celebration for the TN Semiquincentennial.

A.5. Community Support Groups. To assist with two or more collaborating in their TN Semiquincentennial activities, such as:

a. county/ municipality organizations
b. non-profit 501(c) and 501(a) organizations
c. local historical societies,
d. libraries,
e. museums
f. other applicable organizations

A.6. Incorporation of Additional Documents. Each of the following documents is included as a part of this Grant Contract by reference or attachment. In the event of a discrepancy or ambiguity regarding the Grantee's duties, responsibilities, and performance hereunder, these items shall govern in order of precedence below.

a. this Grant Contract document with any attachments or exhibits (excluding the items listed at subsections b. and c., below);
b. the State grant proposal solicitation as may be amended, if any;
c. the Grantee's proposal (Grantee Application) incorporated to elaborate supplementary scope of services specifications.

B. TERM OF CONTRACT:

This Grant Contract shall be effective on July 1, 2025 ("Effective Date") and extend for a period of twelve (12) months after the Effective Date ("Term"). The State shall have no obligation to the Grantee for fulfillment of the Scope outside the Term.

C. PAYMENT TERMS AND CONDITIONS:

C.1. Maximum Liability. In no event shall the maximum liability of the State under this Grant Contract exceed twenty three thousand four hundred eighty two dollars ($23,482.00) ("Maximum Liability").

C.2. Compensation Firm. The Maximum Liability of the State is not subject to escalation for any reason unless amended.

C.3. Payment Methodology – Total Advance Payment. The Grantee shall be reimbursed for actual, reasonable, and necessary costs, not to exceed the maximum liability established in section C.1. Payment to the Grantee shall be a lump sum made in advance upon approval of this Grant Contract.

C.4. Expenditures and Accounting. The expenditure of funds made available through this Grant Contract shall adhere to the Scope of Services. Said expenditures shall be made during the Grant Contract period and shall not be carried forward. The Grantee shall submit an Expenditures and Accounting report within sixty (60) days following the end of the Grant Contract. Said report shall demonstrate compliance with the Scope of Services and shall be in form and substance acceptable to the State.

C.5. State's Right to Set Off. The State reserves the right to set off or deduct from amounts that are or shall become due and payable to the Grantee under this Grant Contract or under any other agreement between the Grantee and the State of Tennessee under which the Grantee has a right to receive payment from the State.

C.6. Prerequisite Documentation. The Grantee shall not receive the funds under the endowment grant until the State has received the following:

a. A Grantee completed and signed State provided W-9 form. The taxpayer identification number on the W-9 form must be the same as the Grantee's Federal Employer Identification Number or Social Security Number referenced in the Grantee's Edison registration information.

D. STANDARD TERMS AND CONDITIONS:

D.1. Required Approvals. The State is not bound by this Grant Contract until it is signed by the parties and approved by appropriate officials in accordance with applicable Tennessee laws and regulations (depending upon the specifics of this contract, the officials may include, but are not limited to, the Commissioner of Finance and Administration, the Commissioner of Human Resources, and the Comptroller of the Treasury).

D.2. Modification and Amendment. This Grant Contract may be modified only by a written amendment signed by all parties and approved by the officials who approved the Grant Contract and, depending upon the specifics of the Grant Contract as amended, any additional officials required by Tennessee laws and regulations (the officials may include, but are not limited to, the Commissioner of Finance and Administration, the Commissioner of Human Resources, and the Comptroller of the Treasury).

D.3. Termination for Convenience. The State may terminate this Grant Contract without cause for any reason. A termination for convenience shall not be a breach of this Grant Contract by the State. The State shall give the Grantee at least thirty (30) days written notice before the effective

termination date. The Grantee shall be entitled to compensation for authorized expenditures and satisfactory services completed as of the termination date, but in no event shall the State be liable to the Grantee for compensation for any service that has not been rendered. The final decision as to the amount for which the State is liable shall be determined by the State. The Grantee shall not have any right to any actual general, special, incidental, consequential, or any other damages whatsoever of any description or amount for the State's exercise of its right to terminate for convenience.

D.4. Termination for Cause. If the Grantee fails to properly perform its obligations under this Grant Contract in a timely or proper manner, or if the Grantee violates any terms of this Grant Contract, the State shall have the right to immediately terminate the Grant Contract and withhold payments in excess of fair compensation for completed services. Notwithstanding the exercise of the State's right to terminate this Grant Contract for cause, the Grantee shall not be relieved of liability to the State for damages sustained by virtue of any breach of this Grant Contract by the Grantee.

D.5. Subcontracting. The Grantee shall not assign this Grant Contract or enter into a subcontract for any of the services performed under this Grant Contract without obtaining the prior written approval of the State. If such subcontracts are approved by the State, each shall contain, at a minimum, sections of this contract pertaining to "Conflicts of Interest," "Nondiscrimination," "Public Accountability," "Public Notice," and "Records" (as identified by the section headings). Notwithstanding any use of approved subcontractors, the Grantee shall remain responsible for all work performed.

D.6. Conflicts of Interest. The Grantee warrants that no part of the total Grant Contract Amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Grantee in connection with any work contemplated or performed relative to this Grant Contract.

D.7. Communications and Contacts. All instructions, notices, consents, demands, or other communications required or contemplated by this Grant Contract shall be emailed to the respective party as set out below:
The State:

Carrie Tipton, America 250 Coordinator
Tennessee State Museum
TN250@tn.gov
Telephone # (615) 712-1371

The Grantee:

Dennis Molina, Project Director
Town of Smyrna
315 S Lowry St
Smyrna,TN 37167
dennis.molina@townofsmyrna.org
Telephone # 6152675409

A change to the above contact information requires written notice to the person designated by the other party to receive notice.

All instructions, notices, consents, demands, or other communications shall be considered effectively given upon receipt or recipient confirmation as may be required.

D.8. Subject to Funds Availability. This Grant Contract is subject to the appropriation and availability of State funds. In the event that the funds are not appropriated or are otherwise unavailable, the State reserves the right to terminate this Grant Contract upon written notice to the Grantee. The State's right to terminate this Grant Contract due to lack of funds is not a breach of this Grant Contract by the State. Upon receipt of the written notice, the Grantee shall cease all work associated with the Grant Contract. Should such an event occur, the Grantee shall be entitled to compensation for all satisfactory and authorized services completed as of the termination date. Upon such termination, the Grantee shall have no right to recover from the State any actual, general, special, incidental, consequential, or any other damages whatsoever of any description or amount.

D.9. Nondiscrimination. The Grantee hereby agrees, warrants, and assures that no person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of this Grant Contract or in the employment practices of the Grantee on the grounds of handicap or disability, age, race, color, religion, sex, national origin, or any other classification protected by Federal, Tennessee State constitutional, or statutory law. The Grantee shall, upon request, show proof of such nondiscrimination and shall post in conspicuous places, available to all employees and applicants, notices of nondiscrimination.

D.10. Public Accountability. If the Grantee is subject to Tenn. Code Ann. § 8-4-401 *et seq*., or if this Grant Contract involves the provision of services to citizens by the Grantee on behalf of the State, the Grantee agrees to establish a system through which recipients of services may present grievances about the operation of the service program, and the Grantee shall display in a prominent place, located near the passageway through which the public enters in order to receive Grant supported services, a sign at least eleven inches (11") in height and seventeen inches (17") in width stating:

NOTICE: THIS AGENCY IS A RECIPIENT OF TAXPAYER FUNDING. IF YOU OBSERVE AN AGENCY DIRECTOR OR EMPLOYEE ENGAGING IN ANY ACTIVITY WHICH YOU CONSIDER TO BE ILLEGAL, IMPROPER, OR WASTEFUL, PLEASE CALL THE STATE COMPTROLLER'S TOLL-FREE HOTLINE: 1-800-232-5454

The sign shall be on the form prescribed by the Comptroller of the Treasury. The Grantor State Agency shall obtain copies of the sign from the Comptroller of the Treasury, and upon request from the Grantee, provide Grantee with any necessary signs.

D.11. Public Notice. All notices, informational pamphlets, press releases, research reports, signs, and similar public notices prepared and released by the Grantee shall include the statement, "This project is funded under an agreement with the State of Tennessee administered by the Tennessee Commission for the United States Semiquincentennial." "

All notices by the Grantee in relation to this Grant Contract shall be approved by the State.

D.12. Records. The Grantee and any approved subcontractor shall maintain documentation for all charges under this Grant Contract. The books, records, and documents of the Grantee and any approved subcontractor, insofar as they relate to work performed or money received under this Grant Contract, shall be maintained in accordance with applicable Tennessee law. In no case shall the records be maintained for a period of less than five (5) full years from the date of the final payment. The Grantee's records shall be subject to audit at any reasonable time and upon reasonable notice by the Grantor State Agency, the Comptroller of the Treasury, or their duly appointed representatives.

The records shall be maintained in accordance with Governmental Accounting Standards Board (GASB) Accounting Standards or the Financial Accounting Standards Board (FASB) Accounting

Standards Codification, as applicable, and any related AICPA Industry Audit and Accounting guides.

In addition, documentation of grant applications, budgets, reports, awards, and expenditures will be maintained in accordance with U.S. Office of Management and Budget's *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*.

Grant expenditures shall be made in accordance with local government purchasing policies and procedures and purchasing procedures for local governments authorized under state law.

The Grantee shall also comply with any recordkeeping and reporting requirements prescribed by the Tennessee Comptroller of the Treasury.

The Grantee shall establish a system of internal controls that utilize the COSO Internal Control - Integrated Framework model as the basic foundation for the internal control system. The Grantee shall incorporate any additional Comptroller of the Treasury directives into its internal control system.

Any other required records or reports which are not contemplated in the above standards shall follow the format designated by the head of the Grantor State Agency, the Central Procurement Office, or the Commissioner of Finance and Administration of the State of Tennessee.

D.13. Monitoring. The Grantee's activities conducted and records maintained pursuant to this Grant Contract shall be subject to monitoring and evaluation by the State, the Comptroller of the Treasury, or their duly appointed representatives.

D.14. Progress Reports. The Grantee shall submit brief, periodic, progress reports to the State as requested.

D.15. Annual and Final Reports. As a prerequisite to the receipt of grant funds, the Grantee shall agree to provide to the State agency head, within sixty (60) days of the close of the project, an accounting of the actual expenditure of such funds including a notarized statement that the report is true and correct in all material respects; provided, however, that the head of the State agency through which such disbursement is being made may require, in lieu of the accounting as provided above, an audited financial statement of the non-governmental agency or entity. A copy of such accounting or audit, as the case may be, also shall be filed with the office of the Comptroller of the Treasury

D.16. Strict Performance. Failure by any party to this Grant Contract to insist in any one or more cases upon the strict performance of any of the terms, covenants, conditions, or provisions of this agreement shall not be construed as a waiver or relinquishment of any such term, covenant, condition, or provision. No term or condition of this Grant Contract shall be held to be waived, modified, or deleted except by a written amendment signed by the parties.

D.17. Independent Contractor. The parties shall not act as employees, partners, joint venturers, or associates of one another in the performance of this Grant Contract. The parties acknowledge that they are independent contracting entities and that nothing in this Grant Contract shall be construed to create a principal/agent relationship or to allow either to exercise control or direction over the manner or method by which the other transacts its business affairs or provides its usual services. The employees or agents of one party shall not be deemed or construed to be the employees or agents of the other party for any purpose whatsoever.

The Grantee, being an independent contractor and not an employee of the State, agrees to carry adequate public liability and other appropriate forms of insurance, including adequate public liability and other appropriate forms of insurance on the Grantee's employees, and to pay all applicable taxes incident to this Grant Contract.

D.18. State Liability. The State shall have no liability except as specifically provided in this Grant Contract.

D.19. Force Majeure. "Force Majeure Event" means fire, flood, earthquake, elements of nature or acts of God, wars, riots, civil disorders, rebellions or revolutions, acts of terrorism or any other similar cause beyond the reasonable control of the party except to the extent that the non-performing party is at fault in failing to prevent or causing the default or delay, and provided that the default or delay cannot reasonably be circumvented by the non-performing party through the use of alternate sources, workaround plans or other means. A strike, lockout or labor dispute shall not excuse either party from its obligations under this Grant Contract. Except as set forth in this Section, any failure or delay by a party in the performance of its obligations under this Grant Contract arising from a Force Majeure Event is not a default under this Grant Contract or grounds for termination. The non-performing party will be excused from performing those obligations directly affected by the Force Majeure Event, and only for as long as the Force Majeure Event continues, provided that the party continues to use diligent, good faith efforts to resume performance without delay. The occurrence of a Force Majeure Event affecting Grantee's representatives, suppliers, subcontractors, customers or business apart from this Grant Contract is not a Force Majeure Event under this Grant Contract. Grantee will promptly notify the State of any delay caused by a Force Majeure Event (to be confirmed in a written notice to the State within one (1) day of the inception of the delay) that a Force Majeure Event has occurred, and will describe in reasonable detail the nature of the Force Majeure Event. If any Force Majeure Event results in a delay in Grantee's performance longer than forty-eight (48) hours, the State may, upon notice to Grantee: (a) cease payment of the fees until Grantee resumes performance of the affected obligations; or (b) immediately terminate this Grant Contract or any purchase order, in whole or in part, without further payment except for fees then due and payable. Grantee will not increase its charges under this Grant Contract or charge the State any fees other than those provided for in this Grant Contract as the result of a Force Majeure Event.

D. 20. State and Federal Compliance. The Grantee shall comply with all applicable state and federal laws and regulations in the performance of this Grant Contract. The U.S. Office of Management and Budget's Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards is available here: http://www.ecfr.gov/cgi-bin/text-idx?SID=c6b2f053952359ba94470ad3a7c1a975&tpl=/ecfrbrowse/Title02/2cfr200_main_02.tpl

D.21. Governing Law. This Grant Contract shall be governed by and construed in accordance with the laws of the State of Tennessee, without regard to its conflict or choice of law rules. The Grantee agrees that it will be subject to the exclusive jurisdiction of the courts of the State of Tennessee in actions that may arise under this Grant Contract. The Grantee acknowledges and agrees that any rights or claims against the State of Tennessee or its employees hereunder, and any remedies arising there from, shall be subject to and limited to those rights and remedies, if any, available under Tenn. Code Ann. §§ 9-8-101 through 9-8-408.

D.22. Completeness. This Grant Contract is complete and contains the entire understanding between the parties relating to the subject matter contained herein, including all the terms and conditions of the parties' agreement. This Grant Contract supersedes any and all prior understandings, representations, negotiations, and agreements between the parties relating hereto, whether written or oral.

D.23. Severability. If any terms and conditions of this Grant Contract are held to be invalid or unenforceable as a matter of law, the other terms and conditions hereof shall not be affected thereby and shall remain in full force and effect. To this end, the terms and conditions of this Grant Contract are declared severable.

D.24. Headings. Section headings are for reference purposes only and shall not be construed as part of this Grant Contract.

D.25. Debarment and Suspension. The Grantee certifies, to the best of its knowledge and belief, that it, its current and future principals, its current and future subcontractors and their principals:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal or state department or agency;

b. have not within a three (3) year period preceding this Grant Contract been convicted of, or had a civil judgment rendered against them from commission of fraud, or a criminal offence in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or grant under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

c. are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) with commission of any of the offenses detailed in section b. of this certification; and

d. have not within a three (3) year period preceding this Grant Contract had one or more public transactions (federal, state, or local) terminated for cause or default.

The Grantee shall provide immediate written notice to the State if at any time it learns that there was an earlier failure to disclose information or that due to changed circumstances, its principals or the principals of its subcontractors are excluded or disqualified, or presently fall under any of the prohibitions of sections a-d.

D.26. Confidentiality of Records. Strict standards of confidentiality of records and information shall be maintained in accordance with applicable state and federal law. All material and information, regardless of form, medium or method of communication, provided to the Grantee by the State or acquired by the Grantee on behalf of the State that is regarded as confidential under state or federal law shall be regarded as "Confidential Information." Nothing in this Section shall permit Grantee to disclose any Confidential Information, regardless of whether it has been disclosed or made available to the Grantee due to intentional or negligent actions or inactions of agents of the State or third parties. Confidential Information shall not be disclosed except as required or permitted under state or federal law. Grantee shall take all necessary steps to safeguard the confidentiality of such material or information in conformance with applicable state and federal law.

The obligations set forth in this Section shall survive the termination of this Grant Contract.

E. SPECIAL TERMS AND CONDITIONS:

E.1. Conflicting Terms and Conditions. Should any of these special terms and conditions conflict with any other terms and conditions of this Grant Contract, the special terms and conditions shall be subordinate to the Grant Contract's other terms and conditions.

IN WITNESS WHEREOF,

TOWN OF SMYRNA:

GRANTEE SIGNATURE **DATE**

PRINTED NAME AND TITLE OF GRANTEE SIGNATORY (above)

TENNESSEE STATE MUSEUM:

Ashley Howell, Executive Director **DATE**

TENNESSEE AMERICA 250

VOICES & VOLUNTEERS

Brand Identity Guidelines | Winter 2025

Prepared by Delevante

This is the full Tennessee America 250 logo including the official tagline: **“Voices & Volunteers”**



Acceptable versions of the logo

Official 2 color logo with tagline



Official 2 color logo without tagline



1 color logo (black)



Logo reversed (on black)



Clearspace



Grey indicates Safe Zone.

Magenta indicates type and element alignment and boundaries

Blue indicates Clear Space**.** The area within the blue line must be kept free of other elements**.**

The minimum required Clear Space is defined by the measurement ‘x’ (equal to the height of the word: “TENNESSEE”)

Primary

PANTONE 281C

Old Glory Blue
Pantone: 282C
RGB: 0,33,71
CMYK: 100,87,37,51
HEX: #002147

PANTONE 193C

Old Glory Red
Pantone: 193C
RGB: 179, 25, 66
CMYK: 0, 100, 66, 13
HEX: #B31942

Secondary

PALE BLACK

10% BLACK
HEX: #E6E7E8

PALE YELLOW

Pale Yellow
C:0 M:0 Y:7 K:4
HEX #0E2346

PALE BLUE

Pale Blue
C:10 M:0 Y:0 K:4
HEX #5BCBF5

Primary colors make up the primary logo.

Secondary colors are to be used as background colors or highlight colors.



These font families are recommended for other marketing uses.

Some elements of the logo were hand drawn. Some of these fonts were used as inspiration and some directly in the logo.

Knockout 50
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

Knockout 53
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

Knockout 73
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

Eames Century Modern Regular
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890



Acceptable logo uses

Primary logo on white or light bkgd

2 colors on Pantone 282

1 Color - Pantone 193

Reversed on red

1 color - Pantone 282

Primary logo on light photo

1 color - black

White on dark photo

Reversed on black

Unacceptable logo uses

Do not change colors in the logo

Do not reverse colors in the logo

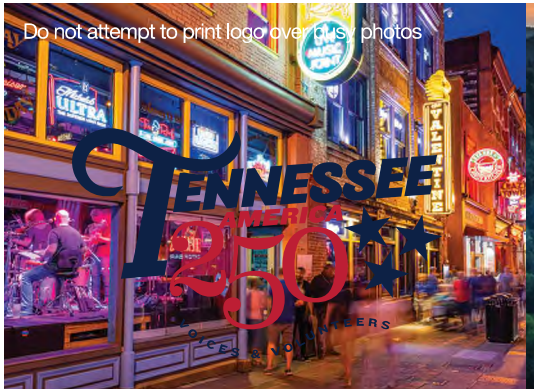
Do not condense, expand or distort the logo in any way

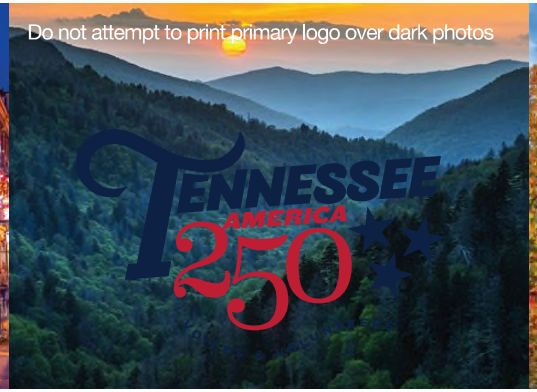
Do not tilt or rotate the logo.

Do not add borders, boxes or any elements to the logo.

Do not change or reset any elements within the logo. Only use the supplied final versions with all elements included.

Voices and Volunteers







SMYRNA GREENWAY

GREENWAY AND BIKEWAY PLAN



Greenway Rules

Operating Hours: Daylight to Dark
All pets must be on a leash.
Please put litter in receptacles.
Pay attention to trail signage.
No motorized vehicles on greenway.
Bikers stay to the right.
Respect other greenway users.
No drugs or alcohol in Smyrna Parks system.

EMERGENCY NUMBERS:
Smyrna Parks Department 459-9710
Smyrna Police Department – 459-6644

We want to thank all the many individuals and groups who make the Smyrna Greenway possible.

U.S. Congressman Bart Gordon and staff
Town Mayor, Bob Spivey
Vice Town Mayor, Paul Johns
Smyrna Town Council, Tony Dover, Mary Esther Bell, Ed Garner, Jerry Oxsher, James Yates
Town Manager, Mark O'Neal
Smyrna Parks and Recreation Advisory Board
Former Parks Director and Greenway Designer, Tom Sage
General Contractors, Thomas & Associates, Inc.
Civil Engineer, Huddleston-Steele, Inc.
Environmental Graphic Design, Ashworth Environmental Design
Middle Tennessee State University Al Gore Center staff
County Historian, Ernie Johns
Tennessee Wildlife Resource Agency
Tennessee Department of Transportation
Rutherford County Government
Tennessee Rehabilitation Center
Smyrna/Rutherford County Airport Authority
Tennessee National Guard
United States Army Corps of Engineers
Greater Nashville Regional Council
All Town of Smyrna Employees and Citizens

©Copyright Town of Smyrna Parks and Recreation Department



Complex mourning customs were observed during the 19th century that dictated dress, socializing, remarrying and more

accept attending church. Full mourning required women to wear black clothes and use a silky material called crepe to

Mourning requirements were much less stringent for men, who generally wore a black armband, hatband or suit and

PERCY PRIEST LAKE



Views of J. Percy Priest Dam



J. Percy Priest Dam shows the powerhouse during periods of generation

Millions of visitors flock each year to the U.S. Army Corps of Engineers' lake, which in addition to providing recreation, controls the flooding of the Cumberland River and generates power for area homes and businesses.

J. Percy Priest Lake is managed by the U.S. Army Corps of Engineers and draws [illegible] million visitors each year who swim, fish, hunt, boat, canoe, hike, horseback ride and more. [illegible] recreation areas, 463 picnic sites, [illegible] campgrounds, eight swimming areas, 41 trails, [illegible] docks, 31 boat ramps, five marinas and [illegible] houseboats. The Corps estimates that Percy Priest visitors contribute over $95 million to the local economy every year.

Percy Priest covers over 19,0[illegible] acres and over 11,000 water [illegible] 3 miles [illegible] and nearly 2,000 acres of [illegible]d. The [illegible] average depth is 28.7 feet and it [illegible] 5,100 feet upstream [illegible] dam.

The C[illegible] the [illegible] reservoir at mile [illegible] on the Sta[illegible] [illegible] Cumberland Riv[illegible] over four [illegible] 19[illegible] approved [illegible]53 million [illegible] [illegible] are sele[illegible]d provides rec[illegible] [illegible] [illegible] high, and [illegible]6 feet [illegible] [illegible] construction req[illegible] cubic yards of concrete, [illegible],600 cubic yards rock excavation and 1,75[illegible]0 cubic yards rockfill.

Land for the [illegible] purchased [illegible] project was [illegible] the dam

S M Y R N A G O R E N W A Y


SHARP SPRINGS NATURAL AREA
TOWN OF SMYRNA TENNESSEE
SMYRNA PARKS & GREENWAY SYSTEM
SMYRNA PARKS & RECREATION
GREENWAY AND BIKEWAY PLAN
Greenway Rules
Operating Hours: Daylight to Dark
All pets must be on a leash.
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Respect other greenway users.
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We want to thank all the many individuals and groups who make the Smyrna Greenway possible.
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Smyrna Parks and Recreation Advisory Board
Former Parks Director and Greenway Designer, Tom Sage
General Contractors, Thomas & Associates, Inc.
Civil Engineer, Huddleston-Steele, Inc.
Environmental Graphic Design, Ashworth Environmental Design
Middle Tennessee State University Al Gore Center staff
County Historian, Ernie Johns
Tennessee Wildlife Resource Agency



Town of Smyrna
Town Council Meeting
Agenda Summary

Agenda Item Number 4.
Department: Finance
Date: March 26, 2026

Subject:
Consideration and authorization of a list of items to be auctioned through online surplus sale with GovDeals.

Fiscal Impact:

Contract Type:

Contract Term (if applicable):

Background:
Consideration and authorization of a list of items to be auctioned through online surplus sale with GovDeals.

Summary:
A list is attached of surplus items that need to be sold at auction. The list includes town vehicles, computer equipment and various items no longer needed. The Town seeks permission to conduct an online auction to sell surplus items. The auction will be advertised in the Murfreesboro Post, on the town's website and Channel 3. All surplus items will be sold through GovDeals online auction company.

Recommended Council Action:
Staff seeks authorization to conduct an auction of approved items.

Attachments:
1. List of items for surplus form

List of items for surplus

Department	Items
Admin	Wood Desk with glass top
Codes	4 Shelf Bookcase
	Small round table with glass top
	Keyboard & Mouse Under Desk Mount
Event Center	8 Sinks
	8 Ceiling Fans
Finance	Cannon Camera Rebel 2000
	AIWA Radio with speakers multi disk
Fire Department	Vehicle Consoles and Laptop Mounts
	Sand Blaster
	3 Wood Bunk Beds
	2 Samsung Tvs
	Fire Hose - 3500 of 2.5" and 4200 3" Vinyl Hose
	5 Fire Service Ground Ladders
	Misc Fire Service Appliances-Water Distribution appliances, ground monitors, inlets
	3 Backpack Water Tanks
	Large dry erase board
	Hand landscape tools-spades, shovels, pitch forks, loppers
	BlackHawk Porto-Power Hydraulic lifting tool
	Table Chairs
	Color Printer
	3 Electric Smoke Ejectors
	2 Extension cord reels
	Wall mount garden hose reel and hose
	3 seats from 2018 F350 & 1 seat from F250
Gas	2008 Ford Escape XLT Vin# 1FMCU93198KD39510 / 75,841 Miles
Info Services	Metal AV Cart
	See additional list of items
Legal	Office Décor and Bags
Police	Wall Cabinets
Public Works	L shaped desk with glass top
	Paintings
SOAC	2 ReptoFilter decorative water filters for terrariums
Storm Water	Coxreels Sprayer
	American Signal Message Sign
	Barber Litter Picker
	2009 Dodge Dakota Vin# 1D7HW32K898783576 / 121,738 Miles
Streets	2004 Chevy 1500 Vin# 1GCEC14V84Z261659 / 157,203 Miles
	2006 Volvo Mini Excavator Vin# GL2259 / 2878 Hours
Treasury	Office Supplies (Binders, receipt paper, corkboards, plastic trays)
WSM	2008 Ford F150 Vin# 1FTRX12W79KA75936 / 154,622 Miles
	2004 Chevy Silverado Vin# 1GCHK24U14E295771 / 197,438 Miles
	2009 Chevy Silverado Vin# 1GCEK190X9Z262304 / 144,022 Miles

Manufacturer	Model	Serial/Service Tag			
Dell	OptiPlex 7060 Micro	B1STYQ2			
Dell	OptiPlex 7060 Micro	B23TYQ2			
Dell	OptiPlex 7060 Micro	B24YYQ2			
Dell	OptiPlex 7060 Micro	B24VYQ2			
Dell	OptiPlex 7060 Micro	B1Y0ZQ2			
Dell	OptiPlex 7060 Micro	B25YYQ2			
Dell	OptiPlex 7060 Micro	B250ZQ2			
Dell	Precision	DHKW7X2			
Dell	Optiplex 7020	769SPX2			
Dell	Optiplex 7020	76973Y2			
Dell	OptiPlex 7060 Micro	B20WYQ2			
Dell	OptiPlex 7060 Micro	76883Y2			
Dell	OptiPlex 7060 Micro	B2XZYQ2			
Dell	OptiPlex 7060 Micro	B3Q0ZQ2			
Dell	OptiPlex 7060 Micro	768SPX2			
Dell	OptiPlex 7060 Micro	B1RXYQ2			
Dell	Optiplex 7060	B1YYYQ2			
Dell	Precision Tower 3620	JF0LFX2			
Dell	OptiPlex 7060 Micro	769VPX2			
Dell	OptiPlex 7060 Micro	768PPX2			
Dell	OptiPlex 7060 Micro	76brpx2			
Dell	OptiPlex 7060 Micro	b3f2zq2			
Dell	Precision 3430	HJX5PX2			
Dell	OptiPlex 7060 Micro	B1WXYQ2			
Dell	OptiPlex 7060 Micro	76BSPX2			
Dell	Precision 3630 Tower	HLC9PX2			
Dell	OptiPlex 7060 Micro	B3WXYQ2			
Dell	Optiplex7080 Micro	76993Y2			
Dell	OptiPlex 7090	9TPXQJ3			
Dell	Precision Tower 3620	JF0KFX2			
Dell	Optiplex 7090	F0XPQJ3			
Dell	Optiplex 7060	769QPX2			
Dell	Optiplex 7060	76b93y2			
Dell	Optiplex 7060	76873y2			
Dell	Optiplex 7060	B202ZQ2			
Dell	Optiplex 7040	68YC082			
Dell	Optiplex 7060	B3B2ZQ2			
Dell	Optiplex 7060	76BQPX2			
Dell	Optiplex 7060	76BPPX2			
Dell	Optiplex 7060	768TPX2			
Dell	Optiplex 7060	769tpx2			
Dell	Optiplex 7060	768RPX2			
Dell	Optiplex 7060	B3VSYQ2			
Dell	Optiplex 7060	769RPX2			
Dell	Optiplex 7060	76B73Y2			
Dell	Optiplex 7060	B242ZQ2			
Dell	OptiPlex 7060	B3RWYQ2			
Dell	OptiPlex 7060	B3dtyq2			
Dell	Optiplex 7060	768QPX2			
Dell	OptiPlex 7060	76983Y2			
Dell	OptiPlex 7060	769PPX2			
Dell	Optiplex 7060	B35VYQ2			
Dell	Optiplex 7060	B3KTYQ2			
Dell	Optiplex 7060	768VPX2			

Manufacturer	Model	Serial/Service Tag	
Dell	Latitude 5401	93140Z2	
Dell	Latitude 5491	BDY2ZW2	
Dell	Latitude 5491	D6FXYW2	
Dell	Latitude 5491	54R2ZW2	
Dell	Latitude 5491	J9S0ZW2	
Dell	Latitude 5491	9p1xyw2	
Dell	Latitude 5491	2GS0ZW2	
Dell	Latitude 7200 2-in-1	HF0FK13	
Dell	Latitude 7200 2-in-1	BZHW6Y2	

Manufacturer	Model	Serial/Service Tag
Dell	Rugged Laptop	GMZGTG2
Dell	Rugged Laptop	CMZGTG2
Dell	Rugged Laptop	JMZGTG2
Dell	Rugged Laptop	BMZGTG2
Dell	Latitude 5414	433WNY1
Dell	Latitude 5414	JWFVNY1
Dell	Latitude 5414	533WNY1
Dell	Latitude 5414	D0JZSG2
Dell	Latitude 5414	JCYPSG2
Dell	Latitude 7220	8FSCDD3
Dell	Latitude 7221	6CYGTG2
Dell	Latitude 7222	c8ygtg2
Dell	Latitude 7212	9gygtg2
Dell	Latitude 7220	b9nhyx2
Dell	Latitude 7220	hgscdd3
Dell	Latitude 7220	bdscdd3
Dell	Latitude 7212	78ygtg2
Dell	Latitude 7212	dbygtg2
Dell	Latitude 7220	1dscdd3
Dell	Latitude 7212	f6ygtg2
Dell	Latitude 7220	ddscdd3
Dell	Latitude 7220	G8PMYX2
Dell	Latitude 7212	D7YGTG2
Dell	Latitude 7212	1BPMYX2
Dell	Latitude 7212	1198TG2
Dell	Latitude 7212	89pmyx2
Dell	Latitude 7212	46YGTG2
Dell	Latitude 7212	2BPMYX2
Dell	Latitude 7212	28YGTG2
Dell	Latitude 7212	9CSCDD3
Dell	Latitude 5420	3MZGTG2
Dell	Latitude 5420	8NZGTG2
Dell	Latitude 5420	3NZGTG2
Dell	Latitude 5420	1NZGTG2
Dell	Latitude 5420	6MZGTG2
Dell	Latitude 5420	6NZGTG2
Dell	Latitude 5414	4BYPSG2
Dell	Latitude 5414	CBYPSG2

Model	Serial Number/ Service Tag	Remarks	
Sonicwall	SMA410		Storage RM
Sonicwall	NSa 3650		Storage RM
Sonicwall	TZ 270		Storage RM
Sonicwall	APL41-0BA/SOHO W	Home Firewall/Router	Storage RM
Dell	IAP 225	WAP	Storage RM
Cradlepoint	IBR1100LPE	Cellular router	Storage RM
APC	20kVA	4 APC Symmetra PX 20kVA 3-phase 208-volt UPS units	Salleyport

Manufacturer	Description	Serial #	Qty
Havis	USB in care keyboard	11822001570	21
LIND DE2045-3274-FD	Auto Power Adapter	HW-EL-0035	10

Town of Smyrna
Town Council Meeting
Agenda Summary

Agenda Item Number 5.
Department: Administration
Date: March 26, 2026

Subject:
Consideration of a Resolution revising the updated Town of Smyrna logo.

Fiscal Impact:

Contract Type:

Contract Term (if applicable):

Background:
Last fall, the Town Council approved the Town of Smyrna logo that features a more square design. In 2026, the Town introduced the Town of Smyrna commemorative logo celebrating America's 250th. This design used a more flowing wordmark and introduced the color change in “my,” which helped highlight the center of the town’s name.

Summary:
The updated version builds on the recently approved logo by maintaining the same overall concept while incorporating elements from the commemorative design. The different color used in the “my” helps the name Smyrna stands out more clearly and makes the logo easier to recognize.

Recommended Council Action:
Staff recommends approval.

Attachments:
1. Resolution #26-10- Updated Logo
2. Proposed Revised Logo

TOWN OF SMYRNA, TENNESSEE
RESOLUTION 26-

A RESOLUTION to formally adopt a revision to the Town of Smyrna logo.

WHEREAS, T.C.A.§6-54-137 authorizes municipalities to use any Seal or logo that has been formally adopted by the municipality; and

WHEREAS, by way of Resolution #25-24, the Town resolved that it is in the best interest of the Town of Smyrna to adopt an official Town Logo; and

WHEREAS, this revision to the Town of Smyrna Logo design uses a more flowing wordmark and introduces the color change in "my," which helps highlight the center of the town's name; and

WHEREAS, the Town recognizes the Town Logo should be utilized only for designated purposes with proper authorization; and

WHEREAS, the Official Logo of the Town shall be the Town's identifying symbol attached hereto as Exhibit "A". This Logo represents the Town of Smyrna's branding serving as a unified symbol of our heritage, progress, and identity. Each element in the design illustrates a part of our story: the locomotive reflects Smyrna's historic tie to the railroad; the aircraft honors the town's military legacy at Sewart Air Force Base; and the tire wheel represents Smyrna's strength in automotive manufacturing. At the center, the three stars enclosed in a circle pay tribute to the Tennessee state flag, reinforcing our deep connection to the Volunteer State; and;

WHEREAS, the Logo will serve as the Town Logo, a graphic identifier that distinguishes the Town from other entities; and

WHEREAS, the Logo may appear on, including, but not limited to: printed materials, general communications, letters, memos, and press releases, as well as staff email signatures. The Logo should appear on the Town's website, social media platforms, and other community-facing materials such as flyers, brochures, posters, and newsletters. It is also appropriate for event programs, signage, presentations, and other items that represent the Town's brand and identity. In addition, the Logo should be used on employee uniforms, promotional merchandise, PowerPoint presentations, internal reports, and informal policy documents; and

NOW, THEREFORE, BE IT RESOLVED that the Town Council of the Town of Smyrna hereby formally adopts the proposed revision to the Town Logo by way of this resolution.

ADOPTED by the Town Council the _____ day of _____, 2026.

TOWN OF SMYRNA, TENNESSEE

_____

MAYOR

ATTEST: _____

AMBER HOBBS, Town Clerk

Current Logo:

America 250th Commemorative Logo:

Proposed Revised Logo:

Town of Smyrna
Town Council Meeting
Agenda Summary

Agenda Item Number 6.
Department: Planning
Date: March 26, 2026

Subject:
Consideration of an Ordinance relative to the annexation and PRD zoning of property located on Tax Map 54, Parcels 20.00, 20.01, and 3.04 requested by Catalyst Design Group on behalf of the property owners containing 102 acres. The properties are located at 7025 Del Thomas Road.

Fiscal Impact:

Contract Type:

Contract Term (if applicable):

Background:
The properties that are the subject of this request are located at 7025 Del Thomas Road beginning approximately 100 feet from the intersection with Rocky Fork Almaville Road. The Land Use Plan would support Medium Density Single Family Residential development in this area. The surrounding zoning is PRD (The Courtyards at Stewart Creek) in Town and RM in Rutherford County. The Town would be providing all services to this area upon annexation except for water, which would be provided by Consolidated Utility District.

Summary:
The proposed PRD is for 162 single family lots and 40 townhomes. This translates to a density of 1.98 dwellings/acre. If the common open space of approximately 45.5 acres is removed from the calculation, it is 202 houses on 56.5 acres for a density of 3.58 dwellings/acre. Annexation of this tract would include the annexation of 660' of the existing right-of-way of Rocky Fork Almaville Road and approximately 450' of the right-of-way of Del Thomas Road. The proposed PRD would be accessed from Del Thomas Road with a connection to Du Bois Avenue in the Courtyards at Stewart Creek development to the east required before the 100th house could be built. There are significant upgrades required to provide sewer for this project. Sewer is required and shown to be extended from Bankside along Rocky Fork Creek to the site. The necessary offsite easements would be required to be obtained and the line installed

prior to issuance of any building permits. This would all be completed by the developer. An ARAP will be required for each road, trail, and utility crossing of any stream. The improvements as recommended by the traffic study would be required to be completed by the developer. These improvements include a realignment of the intersection of Del Thomas Road and Rocky Fork Almaville Road, widening Del Thomas Road to create a left and right turn lane at the intersection, and adding a left turn lane into Restoration Drive. A right-turn deceleration lane is recommended from Rocky Fork Almaville Road into Del Thomas Road but would involve widening the existing bridge. This bridge is not proposed to be annexed and this improvement would be overseen by Rutherford County. Any right-of-way to make these improvements would be required to be obtained prior to submittal of the preliminary plat.

The PRD as proposed would meet the revised requirements in the Zoning Ordinance. These include a 20' landscape buffer abutting RM zoned properties, more than the 12 required building elevations, lot size variation, and open space requirements. Staff has a concern regarding the four lots at the entrance which are separated from the rest of the neighborhood and don't seem to make sense with the overall layout. These are proposed to be model home lots during development, but after completion of the development these four homes would be separated from the rest of the neighborhood. We would recommend relocating these lots within the neighborhood and creating some sort of amenity in that space instead.

As of 3/20, Town staff has had no communications from the applicant or received any additional information as requested by the Town Council at the February Council workshop.

The Planning Commission reviewed this request and recommended approval 6 for, 0 against.

Recommended Council Action:
Staff recommends approval.

Attachments:

1. Ordinance #26-15
2. Goodall Homes - Del Thomas Rd - Annexation Request Application
3. Goodall Homes - Del Thomas Rd - Owner Authorization Letter - Ronald Patterson
4. Goodall Homes - Del Thomas Rd - Owner Authorization Letter - 7019 Del Thomas S Collins
5. Del Thomas Map 1
6. Del Thomas Map 2
7. Del Thomas Map 3
8. Goodall Homes - Del Thomas Rd - Concept Plan
9. Goodall Homes - Del Thomas Rd - PRD Booklet
10. Goodall Homes - Del Thomas Rd - 15 in. SSWR Extension Plan
11. Goodall Homes - Del Thomas Rd - Sanitary Sewer Easement Exhibits
12. Goodall Homes - Del Thomas Rd - Updated Traffic Impact Study

13. Goodall Homes - Del Thomas Rd - ROW Improvements Exhibit
14. Goodall Homes - Del Thomas Rd - ROW Improvements Exhibit - Rocky Fork Road
15. Goodall Homes - Del Thomas Rd - Will Serve Letter
16. Catalyst Design Group February 2026 Annexation Description
17. TIS Recommendations
18. Bridge Report - 2024

TOWN OF SMYRNA, TENNESSEE
ORDINANCE NO. 26-15

AN ORDINANCE relative to the annexation and PRD zoning of property located on Tax Map 54, Parcels 20.00, 20.01, and 3.04 requested by Catalyst Design Group on behalf of the property owners containing 102 acres. The properties are located at 7025 Del Thomas Road.

WHEREAS, the Town Council has determined that it would be in the best interests of its existing residents to annex the above-described property, which borders the current Town limits, and that the failure to annex said property will impede the prosperity of the Town and/or endanger the health, safety and welfare of its inhabitants;

WHEREAS, the Planning Commission has reviewed the proposed annexation and has recommended to the Town Council the proposed annexation; and

WHEREAS, the annexation is in agreement with the general plan for the Town; and

WHEREAS, it has been determined that the legal purposes for which zoning exists are not breached by the annexation and zoning; and

WHEREAS, it has been determined that there will not be an adverse effect upon any specific adjoining property owners and/or any such adverse effect would be justified by the overwhelming public good or welfare; and

WHEREAS, it has been determined that no one property owner or small group of property owners will benefit materially from the change to the detriment of the general public.

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF SMYRNA:

Section 1. That the property located on Tax Map 54, Parcels 20.00, 20.01, and 3.04 containing 102 acres as shown on Appendix I attached hereto and incorporated herein by reference as if set forth at length verbatim, be, and hereby is annexed with PRD zoning, annexed into the corporate limits of the Town of Smyrna, the health and welfare of the Town of Smyrna requiring it.

Section 2. That the property located on Tax Map 54, Parcels 20.00, 20.01, and 3.04 containing 102 acres as shown on Appendix I attached hereto and incorporated herein by reference as if set forth at length verbatim, be, and hereby is, zoned PRD, the health and welfare of the Town of Smyrna requiring it.

Section 3. This ordinance shall take effect and become operative thirty (30) days after its adoption on second and final reading, the public health and welfare of the Town of Smyrna requiring it.

PASSED on first reading by the Town Council the _____ day of _____, 2026.

PASSED on second reading by the Town Council the _____ day of _____, 2026.

TOWN OF SMYRNA, TENNESSEE

_____
MARY ESTHER REED, Mayor

ATTEST:

_____
AMBER HOBBS, Town Clerk

Town of Smyrna

Annexation Request Application

APPLICANT INFORMATION:		
Name/Company: Catalyst Design Group		
Street Address: 1524 Williams Drive, Suite 201		
City: Murfreesboro	State: TN	ZIP: 37129
Email: wblissard@catalyst-dg.com	Phone: 615-622-7200	
CONTRACTOR/DEVELOPER INFORMATION: CHECK BOX IF SAME AS APPLICANT ☐		
Name/Company: Danny Hieronimus - Goodall Homes		
Street Address: 393 Maple Street #100		
City: Gallatin	State: TN	ZIP: 37066
Email: danny.hieronimus@goodallhomes.com	Phone: 615-703-5883	
PROPERTY INFORMATION		
Street Address/Intersecting Streets: 7025 DEL THOMAS RD		
Tax Map: 054	Group: 020 & 003	Parcel: 054-020.00, 054-020.01, & 054-003.04
Requested Lot Area (Square feet/Acres): +/- 102 acres		
Existing Zoning: RM	Requested Smyrna Zoning: PRD	
*Current Property Owner (See Note Below): Ronald Patterson		
APPLICANT AUTHORIZATION		
Applicant Signature:		Date: 1/9/2026
OFFICE USE ONLY		
Staff Initials:	Review Fee:	Date:

- ***If the applicant is not the current property owner, authorization must be provided by the current property owner for the request of annexation as mandated by State law.***
- Applications are to be submitted no later than 12:00 PM noon on the initial deadline date unless otherwise noted.
- All meetings are held at Smyrna Town Hall - 315 South Lowry Street - at 5:00 PM in the Town Council Chambers.
- All supporting documents must be submitted at the time of application.

June 9, 2025

Catalyst Design Group
1524 Williams Drive, Suite 201
Murfreesboro, TN 37129

RE: 7025 Del Thomas Road, Smyrna, TN 37167
Annexation Request (Parcels 054 02000 & 054 02001)

To Whom It May Concern:

I am authorizing Catalyst Design Group, along with Goodall Homes, to act as our agent/representative to communicate and submit all required information as necessary in obtaining all approvals and permits for the annexation and construction of the above referenced project.

Sincerely,

Ronald Patterson

STATE OF TENNESSEE
COUNTY OF RUTHERFORD

Sworn to (or affirmed) and subscribed before me this 2 day of June 2025, by Ronald Patterson.

Personally Known _____ OR Produced Identification ✓
Type of Identification Produced TN DL

Signed before me the 2nd of June, 2025

Sandra L Mason

Commissionexp 01/24/2026

SANDRA L MASON
STATE OF TENNESSEE
NOTARY PUBLIC
BEDFORD COUNTY

January 15, 2026

Catalyst Design Group
1524 Williams Drive, Suite 201
Murfreesboro, TN 37129

RE: 7019 Del Thomas Road, Smyrna, TN 37167
Annexation Request (Parcels 054 00304)

To Whom It May Concern:

I am authorizing Catalyst Design Group, along with Goodall Homes, to act as our agent/representative to communicate and submit all required information as necessary in obtaining all approvals and permits for the annexation and construction of the above referenced project.

Sincerely,

Shawn Collins
SCollins2 Properties LLC

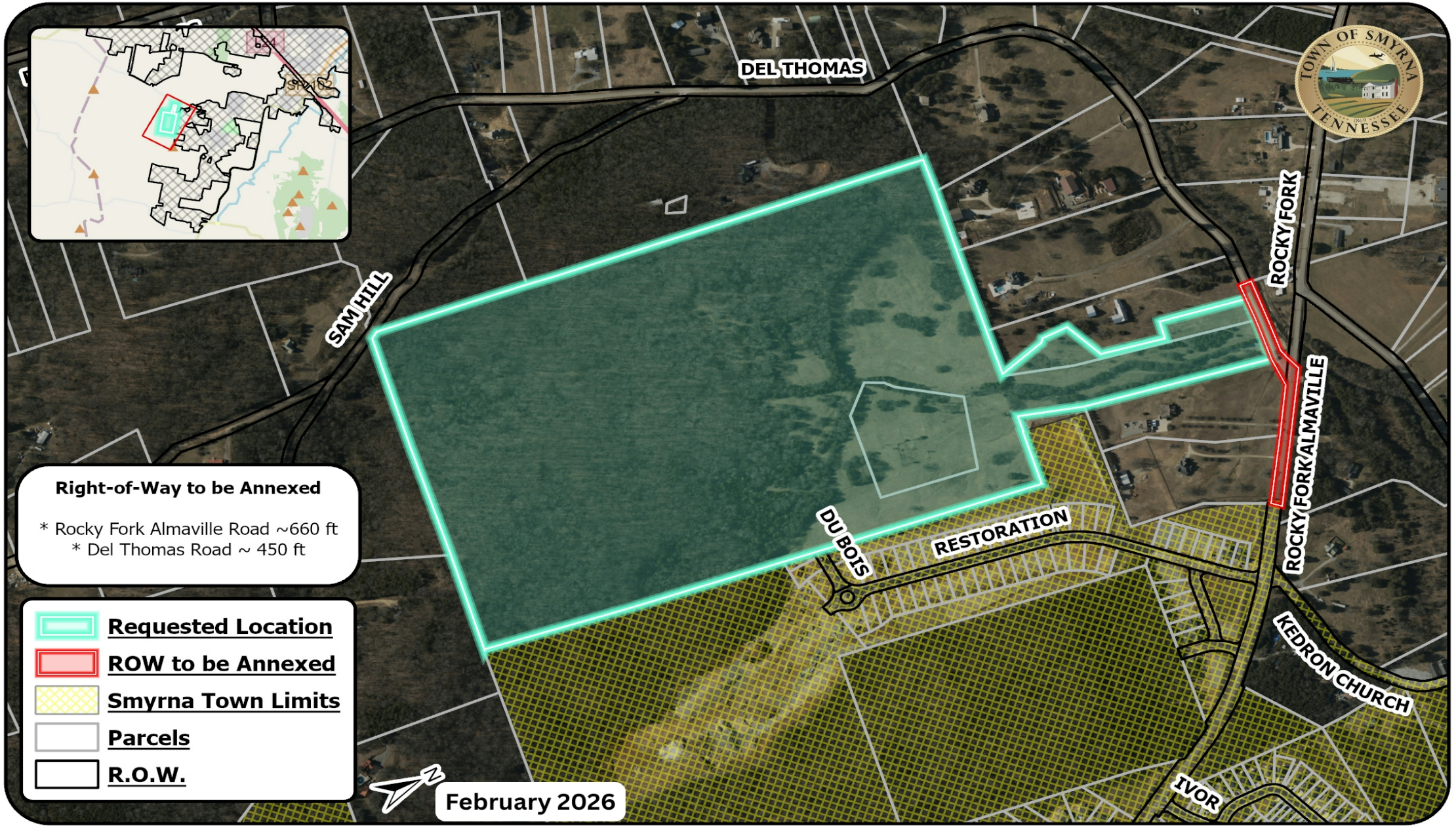
STATE OF TENNESSEE
COUNTY OF ~~RUTHERFORD~~ Sumner

Sworn to (or affirmed) and subscribed before me this 15th day of January 2026, by Mary Webb Nolan.

Mary Webb Nolan - Notary Public
My commission expires: 6/20/2028

Personally Known _____ OR Produced Identification _____
Type of Identification Produced _____

MARY WEBB NOLAN
STATE OF TENNESSEE
NOTARY PUBLIC
SUMNER COUNTY



0 425 850 Feet

0 0.1 0.2 Miles

Coordinate System: NAD 1983 StatePlane Tennessee FIPS 4100 Feet

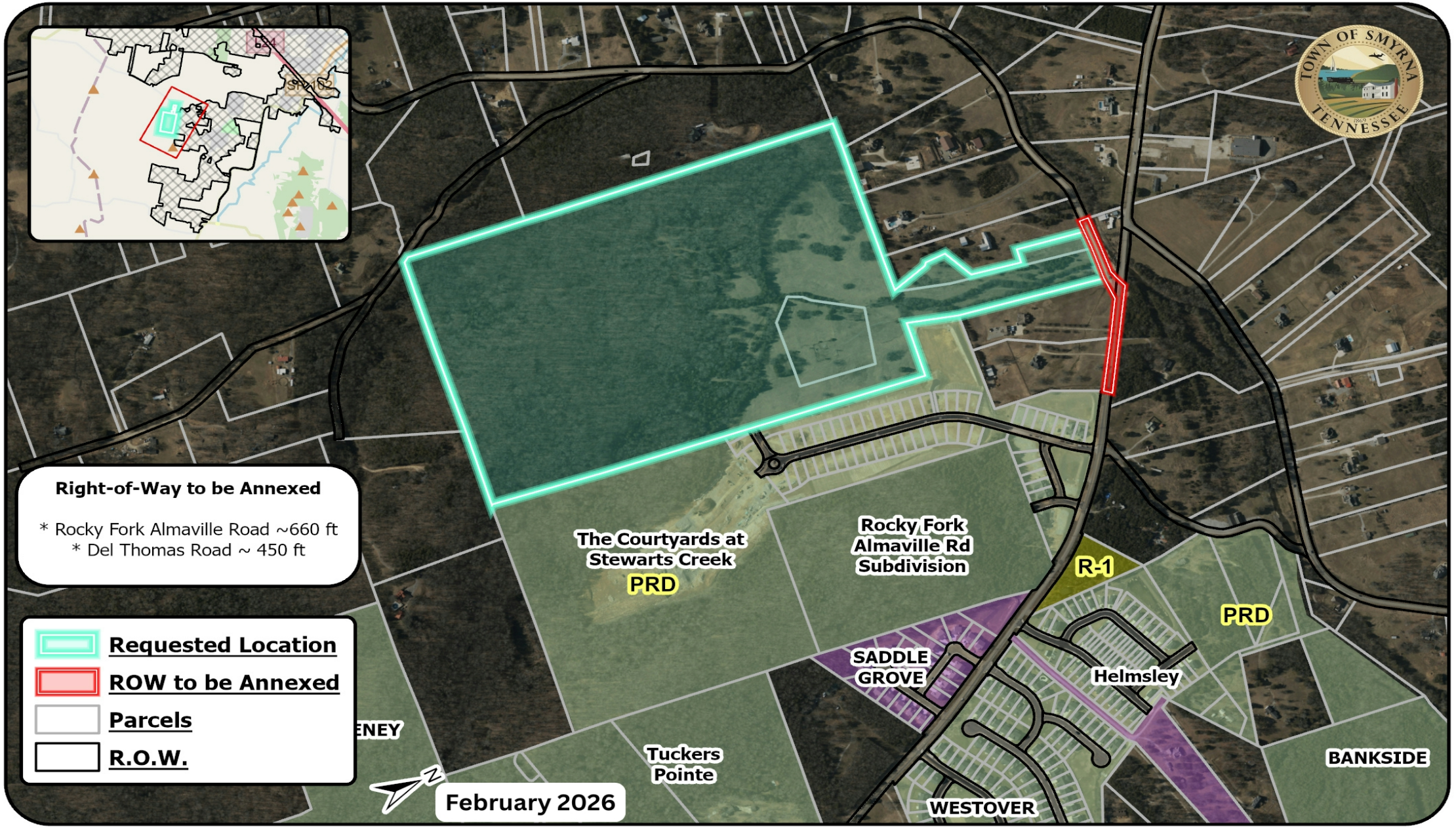
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Catalyst Design Group - Request

Annexation & PRD Zoning

Owners: Ronald Patterson, Lou Ann Zelenik

Tax Map: 54
Parcel: 20.00, 20.01, 3.04
Acres: +/- 102



0 550 1,100 Feet

0 0.13 0.25 Miles

Coordinate System: NAD 1983 StatePlane Tennessee FIPS 4100 Feet

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Catalyst Design Group - Request

Annexation & PRD Zoning

Owners: Ronald Patterson, Lou Ann Zelenik

Tax Map: 54
Parcel: 20.00, 20.01, 3.04
Acres: +/- 102



Catalyst Design Group - Request

Annexation & PRD Zoning

Owners: Ronald Patterson, Lou Ann Zelenik

Tax Map: 54
Parcel: 20.00, 20.01, 3.04
Acres: +/- 102

SITE DATA

ACREAGE	± 102.0 AC
PROPOSED DENSITY	1.98 DU/AC
DENSITY WITHOUT 45.5 AC OPEN SPACE	3.58 DU/AC
TOWNHOMES (24’ X 52’)	40 UNITS
SINGLE FAMILY	162 TOTAL LOTS
11,000+ SF BUFFER LOTS	17 LOTS
INTERIOR LOTS (DO NOT ABUT RUTHERFORD COUNTY)	145 LOTS
	202 TOTAL UNITS
TOTAL OPEN SPACE	45.5 ACRES
PRESERVED OPEN SPACE	30.0 ACRES
COMMON OPEN SPACE	
REQUIRED	15.3 ACRES (15%)
PROVIDED	15.5 ACRES (15%)
IMPROVED OPEN SPACE (AS PART OF COMMON OPEN SPACE)	
REQUIRED	4.6 ACRES (30%)
PROVIDED	4.6 ACRES (30%)

APPROX. 3,700 LINEAR FEET OF 5’ WIDE NATURAL TRAIL. ALL COMMON OPEN SPACE TO BE MAINTAINED BY A THIRD PARTY MANAGEMENT COMPANY UNDER CONTRACT WITH THE HOA.

PARKING

TOWNHOMES	182 TOTAL SPACES (4.55 SP/UNIT) 23 SURFACE SPACES 159 DRIVEWAY SPACES
SINGLE FAMILY	4 DRIVEWAY SPACES PER RESIDENCE
AMENITY	24 SURFACE SPACES

PLANTINGS SHOWN ARE CONCEPTUAL IN NATURE; ALL LANDSCAPE TO COMPLY WITH TOWN OF SMYRNA REQUIREMENTS

LEGEND

	BUILDING ENVELOPE	LOT SF	MINIMUM DIMENSIONS	NUMBER OF LOTS
00	40’± X 75’±	7,000 SF +	56’ X 130’	38 (19%) + 40 TOWNHOME LOTS (20%)
00	40’± X 95’±	9,000 SF +	60’ X 150’	47 (23%)
00	40’± X 130’± (LOTS 12-20 AND 33-39 ACCOMMODATE A 52’ X 75’ BUILDING ENVELOPE)	11,000 SF +	56’ X 197’	77 (38%)

DEL THOMAS RD

ROCKY FORK ALMAVILLE RD

CONNECT TO EXISTING CUD WATER MAIN

ENTRY MONUMENT SIGNAGE

REFER TO EXHIBITS FOR IMPROVEMENTS TO DEL THOMAS ROAD & RESTORATION DRIVE INTERSECTIONS

CONNECT TO PROPOSED 15” SANITARY SEWER EXTENSION, REFER TO OFFSITE IMRPOVEMENTS PLAN

APPROXIMATE LOCATION OF NEW BUFFER PLANTINGS, TYP.

20’ LANDSCAPE BUFFER CONSISTING OF PRESERVED EXISTING TREES, WHERE POSSIBLE, AND SUPPLEMENTED WITH NEW PLANTINGS. NEW PLANTINGS SHALL CONSIST OF:

EVERGREEN TREES - MIN. 6’ HT. WHEN PLANTED, MIN. 15’ MATURE HEIGHT (SPECIES TO INCLUDE PINES, EASTERN AND JAPANESE CEDARS, ETC.)
SHRUBS (MIN. 50% EVERGREEN) - MIN. 4’ MATURE HEIGHT (SPECIES TO INCLUDE JUNIPERS, HOLLIES, YEWS, ETC.)

ADJACENT PROPERTY OWNER: ZELENIK LOU ANN

NEIGHBORHOOD AMENITY CENTER WITH RESTROOMS AND MAIL KIOSK, COMMUNITY POOL, AND PLAY AREA

APPROXIMATE LOCATION OF ZELENIK PROPERTY FIELD LINES, TO REMAIN UNDISTURBED

APPROXIMATE LOCATION OF NEW BUFFER PLANTINGS, TYP.

STREAM

20’ LANDSCAPE BUFFER CONSISTING OF PRESERVED EXISTING TREES

POOL

PHASE 1

PHASE 2

PHASE 3

A

B

C

D

E

F

G

H

I

OPEN SPACE

THE COURTYARDS AT STEWARTS CREEK

PRESERVED TREE COVER IN OPEN SPACE (TYP.)

OPEN SPACE MAINTAINED ALONG STREAM TO PRESERVE TREE COVER AND ACCOMMODATE WALKING TRAIL

STORMWATER TREATMENT, TYP.

30’ STREAM BUFFER, TYP.

APPROXIMATE LOCATION OF NEW BUFFER PLANTINGS, TYP.

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PRESERVED TREE COVER IN OPEN SPACE (TYP.)

20’ LANDSCAPE BUFFER CONSISTING OF PRESERVED EXISTING TREES

30’ STREAM BUFFER, TYP.

DUBOSE AVENUE (50’ ROW)

CONNECT TO EXISTING CUD WATER MAIN

STORMWATER TREATMENT, TYP.

30’ STREAM BUFFER, TYP.

760 ELEVATION LINE - LIMITS OF WATER SERVICE

EXISTING TREES TO BE PRESERVED (TYP.)

20’ LANDSCAPE BUFFER CONSISTING OF PRESERVED EXISTING TREES

0 100’ 200’

GOODALL PATTERSON PROPERTY | conceptual site plan

SMYRNA, TN | FEBRUARY 2026



Planned Residential Development

GOODALL HOMES PATTERSON PROPERTY

Submitted: June 09, 2025
Resubmitted: June 18, 2025
Resubmitted: July 23, 2025
Resubmitted: September 17, 2025
Resubmitted: January 21, 2026
Resubmitted: February 04, 2026

Client:

Goodall Homes
393 Maple St #100
Gallatin, TN 37066
Contact: Danny Hieronimus
Phone: 615.645.3903
danny.hieronimus@goodallhomes.com

Prepared By:

Catalyst Design Group
5100 Tennessee Avenue
Nashville, TN 37209
Contact: Jeff Heinze
Phone: 615.622.7200
jheinze@catalyst-dg.com



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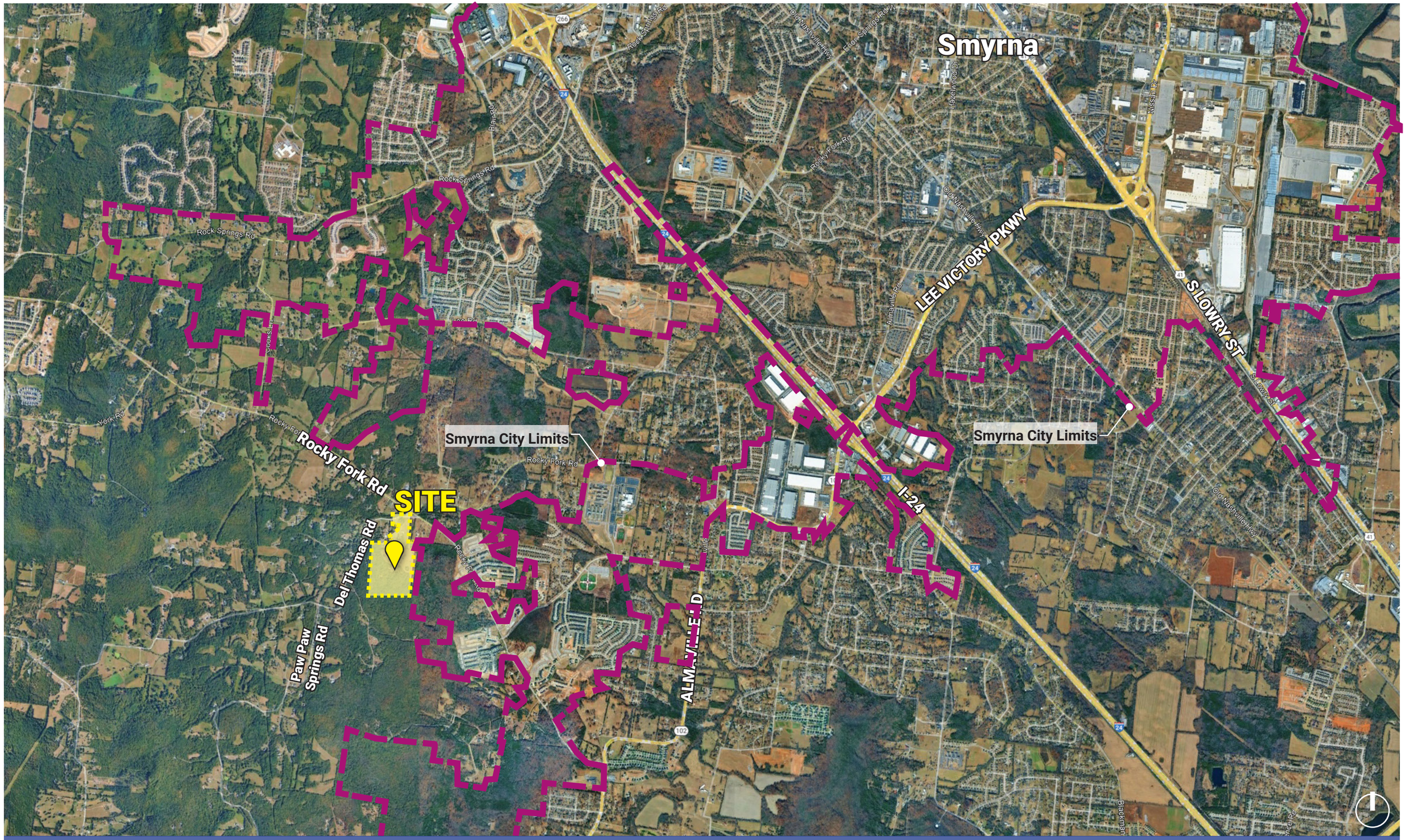
10 Additional Regulations + Notes

VISIONING

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The primary goal of this development is to create a diverse and integrated residential community with activated parks and amenity areas. The proposed development intends to maintain the existing character of the area, while improving pedestrian connectivity by providing a pedestrian friendly community. This development will be designed and operated in accordance with the applicable regulations set forth in the zoning ordinance to ensure the current policies and plans of the town are observed.

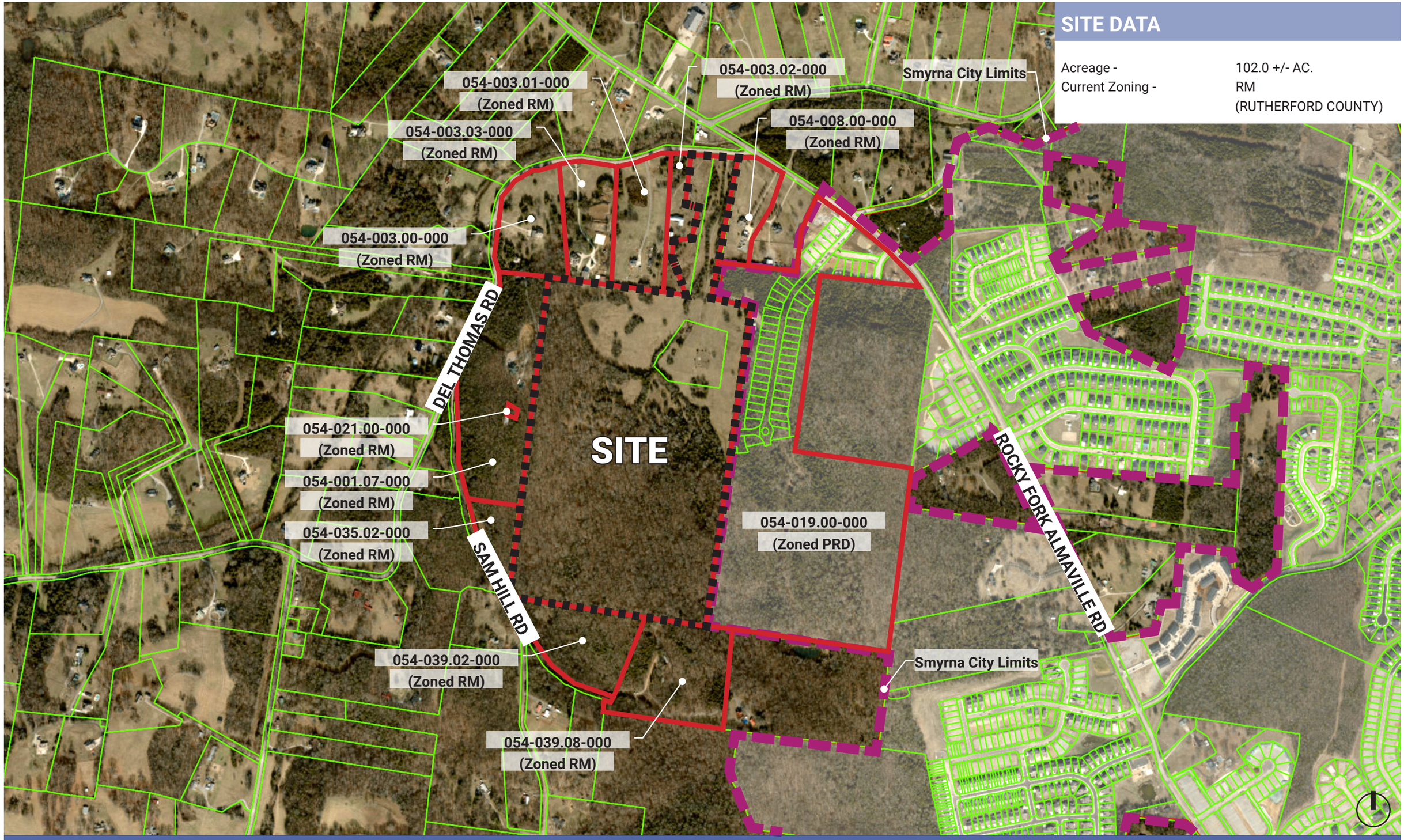
The proposed PRD provides 202 units on a +/- 102 acre property. This zoning would set the regulations under which the planned development is proposed. Additionally, it is proposed that the continued maintenance of common spaces and other common elements of the development be addressed with a long-term maintenance plan to be approved by the pertaining agency prior to construction, ensuring that proposed features of the site are maintained after construction.



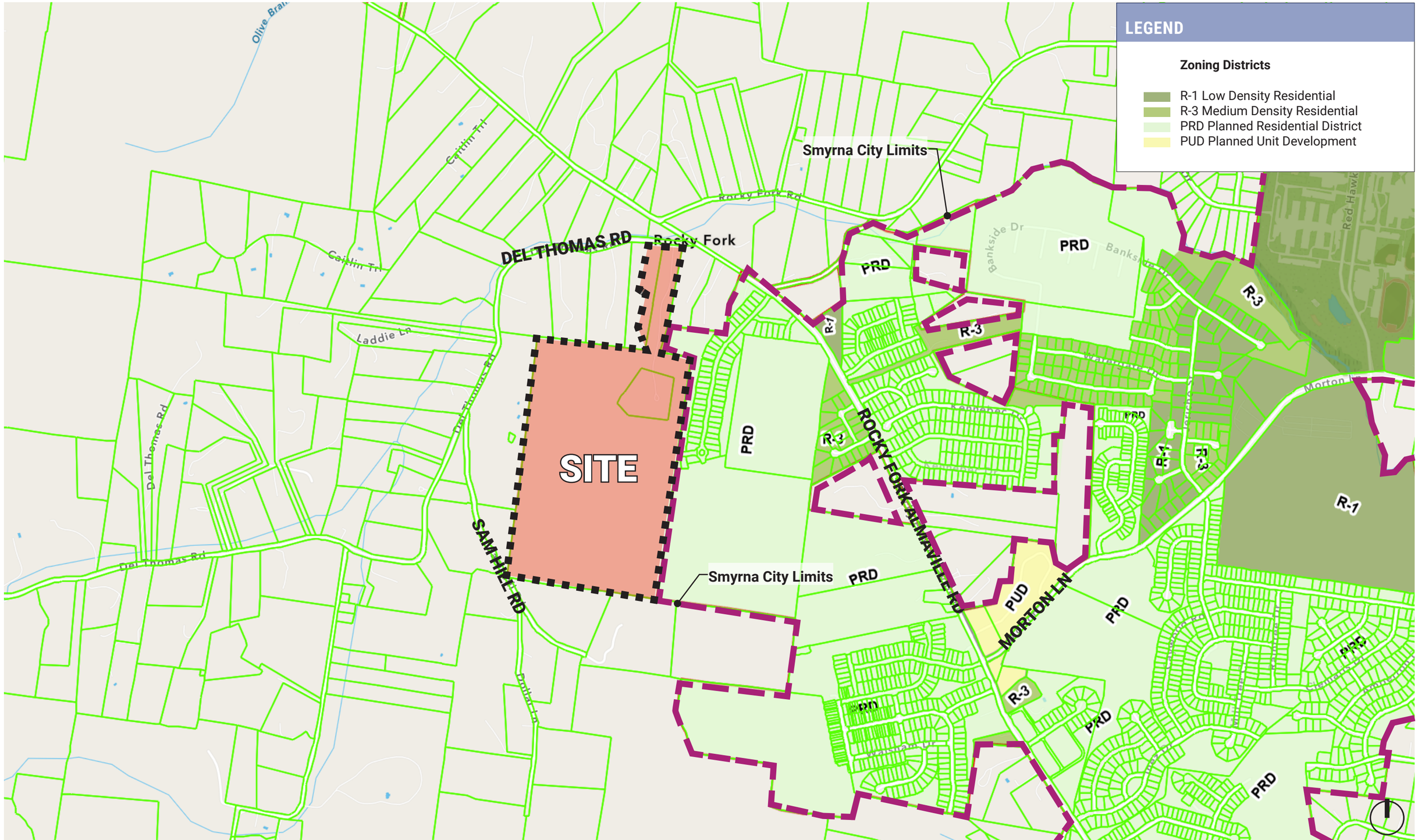
VICINITY MAP

SITE DATA

Acreage -	102.0 +/- AC.
Current Zoning -	RM (RUTHERFORD COUNTY)



EXISTING CONDITIONS



LAND USE CONTEXT

20' LANDSCAPE BUFFER CONSISTING OF PRESERVED EXISTING TREES

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(SPECIES TO INCLUDE JUNIPERS, HOLLIES, YEWS, ETC.)

TRAILS SYSTEM (+/- 1.51 AC)

CENTRAL COMONS OPEN SPACE (OPEN PLAY TRAILS, SEATING, ETC.) (+/- 1.46 AC)

TRAILS SYSTEM (+/- 0.22 AC)

COMMONS OPEN SPACE (+/-0.43 Ac)

NEIGHBORHOOD AMENITY CENTER WITH RESTROOMS AND MAIL KIOSK, COMMUNITY POOL, AND PLAY AREA (+/- 0.95 AC)

20' LANDSCAPE BUFFER CONSISTING OF PRESERVED EXISTING TREES

ENTRY MONUMENT SIGNAGE

SEE CONCEPT PLAN PROVIDED WITH SUBMITTAL FOR MORE INFORMATION

SITE DATA

ACREAGE	± 102.0 AC
PROPOSED DENSITY	1.98 DU/AC
DENSITY WITHOUT 45.5 AC OPEN SPACE	3.58 DU/AC
TOWNHOMES (24' X 52')	40 UNITS
SINGLE FAMILY	162 TOTAL LOTS
11,000+ SF BUFFER LOTS	17 LOTS
INTERIOR LOTS (DO NOT ABUT RUTHERFORD COUNTY)	145 LOTS
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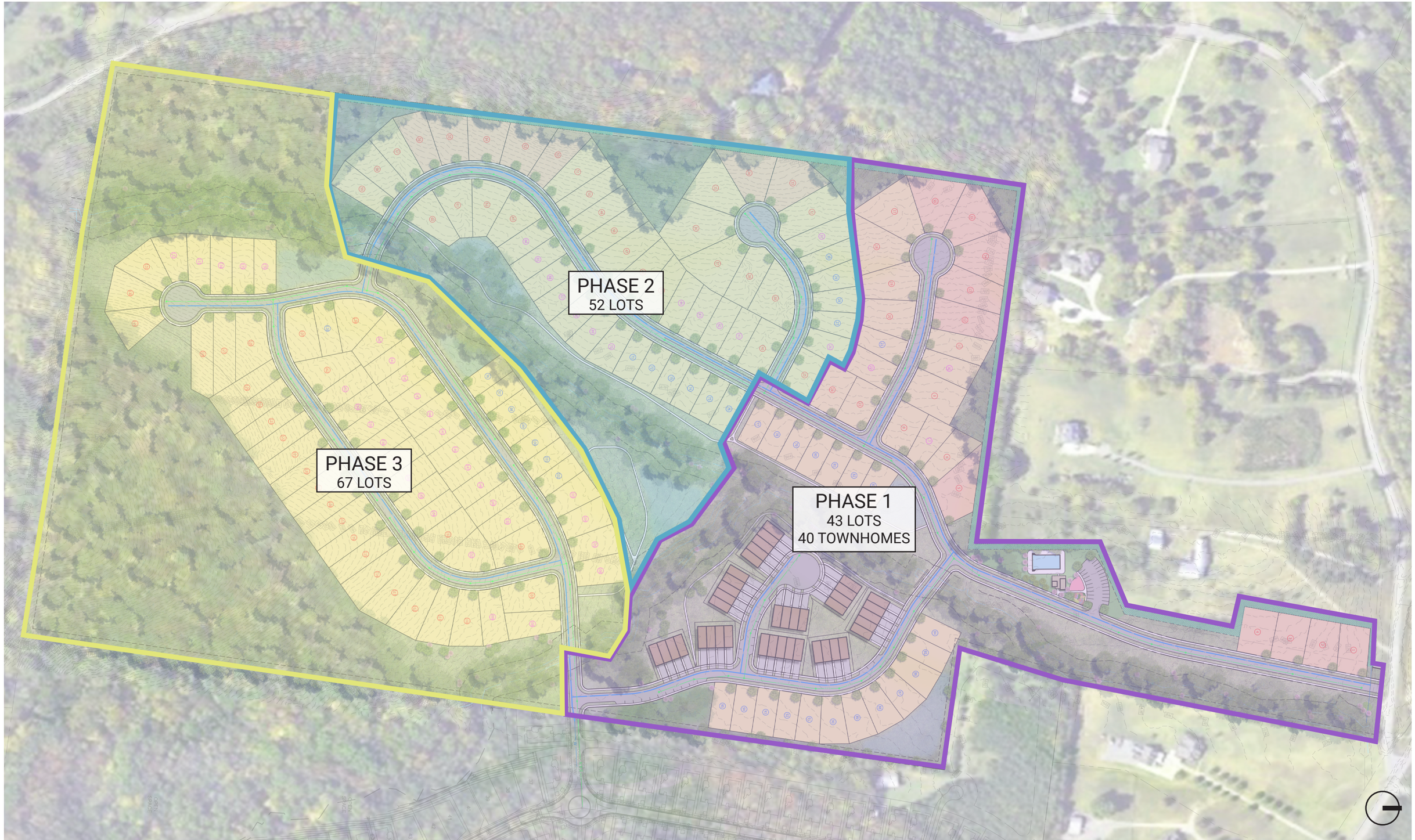
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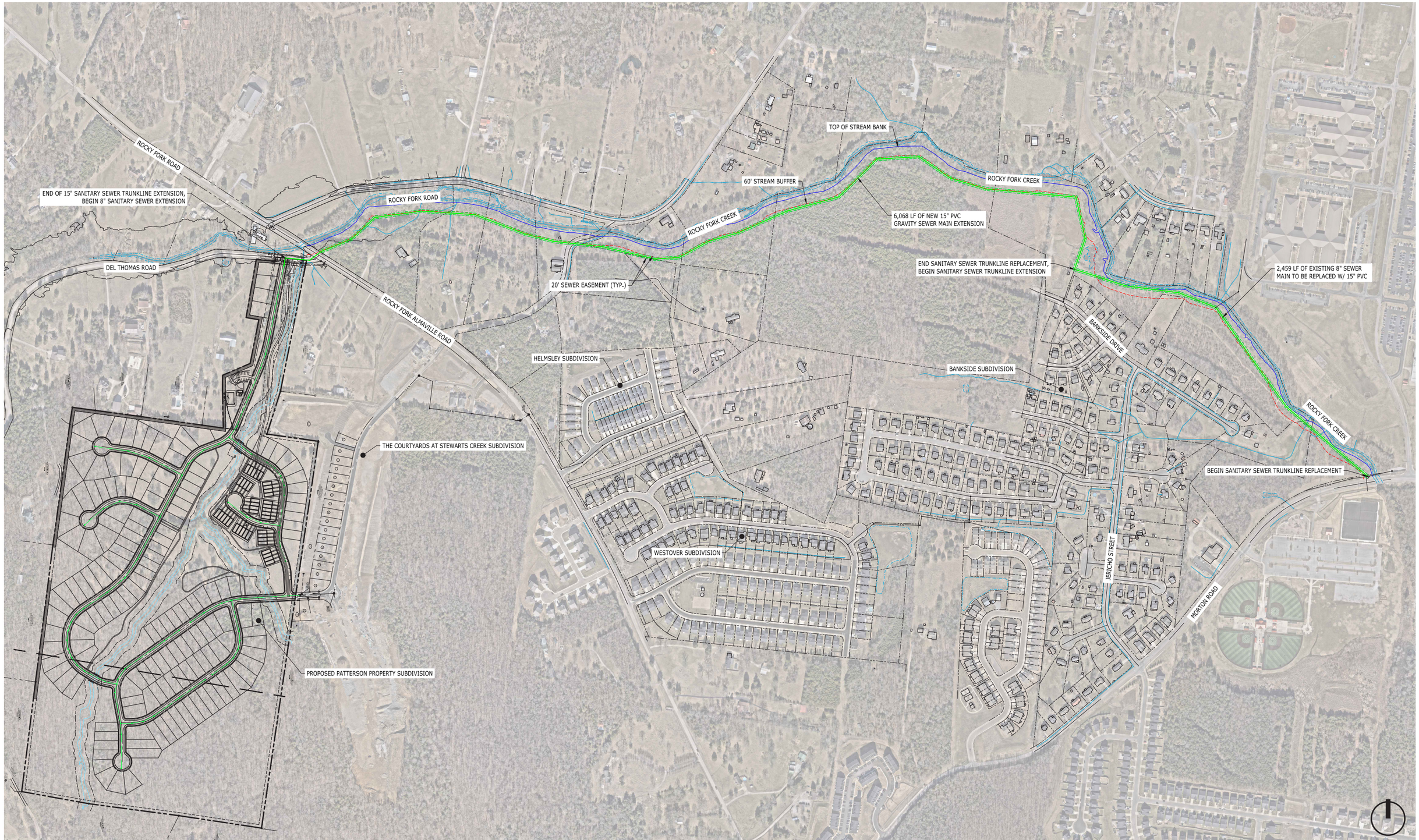
LEGEND

	BUILDING ENVELOPE	LOT SF	AVG. MINIMUM DIMENSIONS	NUMBER OF LOTS
00	40'± X 75'±	7,000 SF +	56' X 130'	38 (19%) + 40 TOWNHOME LOTS (20%)
00	40'± X 95'±	9,000 SF +	60' X 150'	47 (23%)
00	40'± X 130'± (LOTS 12-20 AND 33-39 ACCOMMODATE A 52' X 75' BUILDING ENVELOPE)	11,000 SF +	56' X 197'	77 (38%)

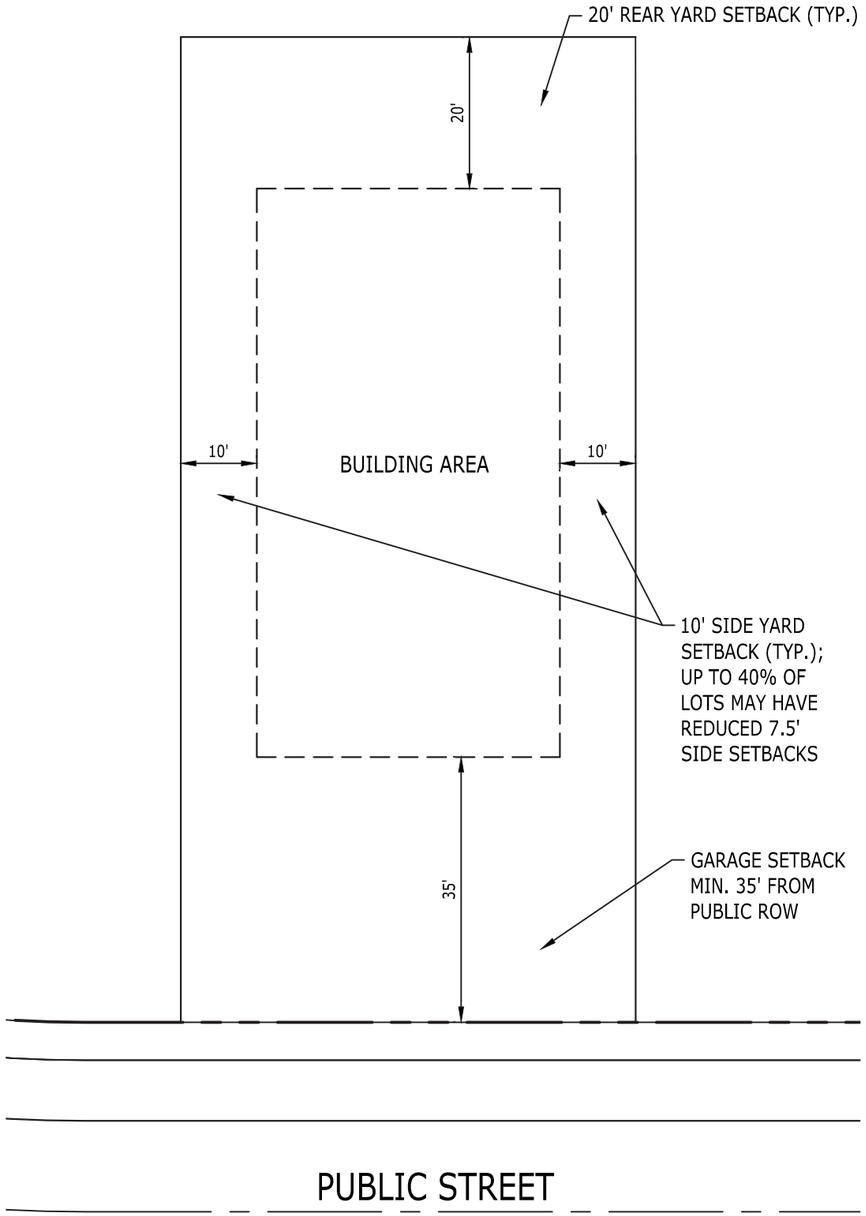
SITE PLAN



PHASING PLAN

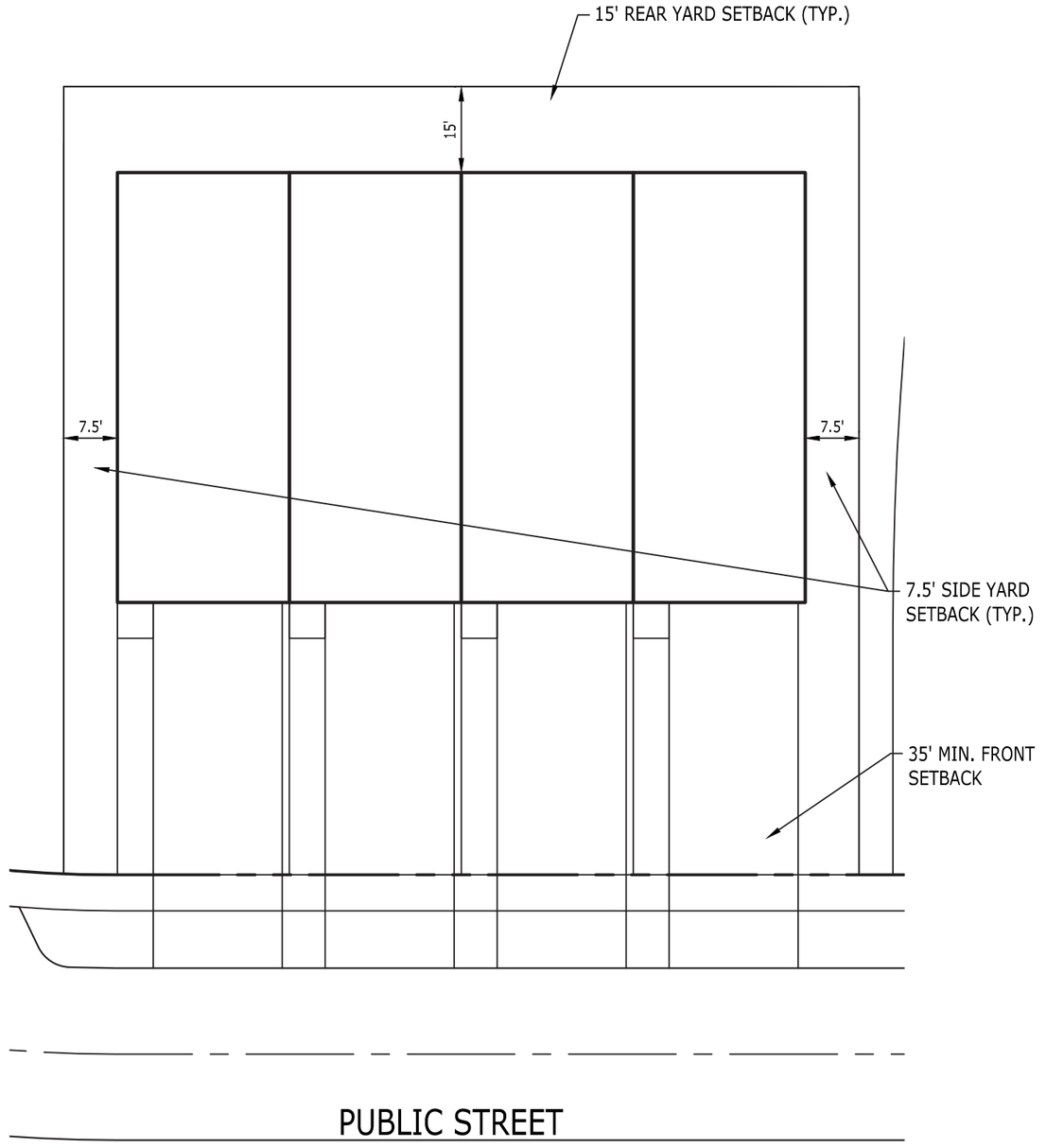


OVERALL CONCEPTUAL LAYOUT WITH OFFSITE SEWER IMPROVEMENTS



TYPICAL SINGLE FAMILY LOT

SCALE: 1" = 20'



TYPICAL TOWNHOME LOT

SCALE: 1" = 20'

TYPICAL LOT SETBACK DETAILS

ADDITIONAL REGULATIONS + NOTES

Architectural Standards

1. Residential structures shall be oriented to a public street.
2. The following design standards shall apply:
   a. Any garages shall not be situated in front of the plane created by the edge of the front extension on the street facing facade plane of the front of the house.
   b. All garage doors to have windows.
   c. Building facades shall be constructed of brick, brick veneer, stone, cast stone, cementitious siding, glass or materials substantially similar in form and function, unless otherwise approved on detailed building elevations included with the development plan.
   d. A minimum of 1 step from lead walk to front porch is required for all residential structures fronting a public street at the elevation facing the street.
3. Refuse collection and recycling facilities shall be screened from views from the public way through the combined use of fences, walls and landscaping in accordance with Smryna Code standards. Refuse collection will be contracted through a private hauler.
4. Maximum height allowance is based upon pitched roofs.
5. Mail delivery shall occur at shared facility located in the common amenity space.

Access & Parking

6. All parking regulations to meet Town of Smyrna ordinance requirements.

Landscape Standards

7. Landscape plans shall meet the Town of Smyrna zoning ordinance requirements.

Site Plan Notes:

8. Development standards, regulations and specific building requirements shall be governed by the approved PRD. All development shall continue to be governed by the building code and other code requirements of the Town of Smyrna.
9. Minor modifications to the PRD plan may be approved by the Planning Commission or Planning Department staff based upon final architectural, engineering, or site design and actual site conditions. All modifications shall be consistent with the principles and further the objectives of the approved plan. Major modifications shall not be permitted, except through an ordinance approved by Smyrna Town Council that increases the permitted density or floor area, adds uses not otherwise permitted, eliminates specific conditions or requirements contained in the plan as adopted through this enacting ordinance.

FEMA Note:

10. No portion of this property lies in a flood zone area as designated in the Federal Emergency Management Agency Flood Insurance Rate Map Panel Number 47149C0115K effective May 9, 2023.

Transportation Notes:

11. The final site plan/building permit shall depict the required public sidewalks, any required grass strip, and the location of all existing and proposed vertical obstructions within the required sidewalk and grass strip. Prior to the issuance of Use and Occupancy Permits, existing vertical obstructions shall be relocated outside of the required sidewalk.
12. The developer's final construction drawings shall comply with the design regulations established by the Town of Smyrna and the Town of Smyrna Subdivision Regulations, in effect at the time of the approval of the PRD or building permit, as applicable. Final design may vary based on field conditions.
13. All construction within the right of way shall comply with ADA and Town of Smyrna Public Works Standards and Specifications.
14. There shall be no vertical obstructions (signs, power poles, fire hydrants, etc.) within the proposed sidewalks. Where feasible, vertical obstructions shall be relocated out of the proposed sidewalks, where applicable.
15. Development is to have either a dumpster and/or other collection method serviced by a private hauler.

Fire Marshal Notes:

16. No part of any building shall be more than 500ft. from a fire hydrant via a hard surface road.
17. All dead-end private drives over 150 ft. in length require a turnaround, this includes temporary turnarounds.
18. Fire hydrants shall be in-service before any combustible material is brought on site.
19. One-hour rated fire walls to be constructed between townhome units.

Electrical Service Notes:

20. Where feasible, this development will be served with underground power and pad-mounted transformers.

Stormwater Notes:

21. Any excavation, fill, or disturbance of the existing ground elevation must be done in accordance with the Town of Smyrna Regulations.

Development Notes:

22. Private collection or privately serviced dumpsters will be required for the residential units.
23. All units are to be for sale.

VISIONING IMAGERY



TOWNHOME ELEVATION

MATERIAL %
Cement Lap Siding = 5% - 50%
Cement Board & Batten = 15% - 65%
Cement Shake = 25% - 50%
Brick = 35% - 90%



LEFT SIDE TOWNHOME ELEVATION

MATERIAL %
Cement Lap Siding = 100%

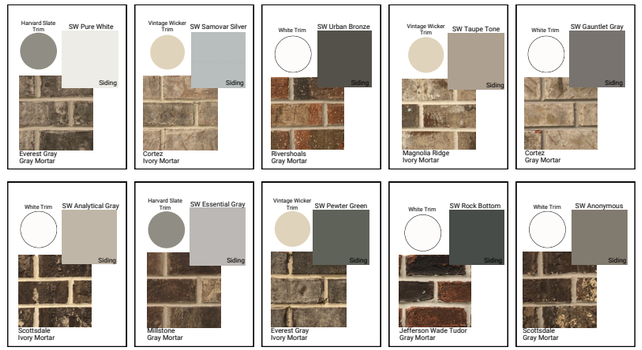


RIGHT SIDE TOWNHOME ELEVATION

MATERIAL %
Cement Lap Siding = 100%



COMMUNITY POOL AND CABANA AMENITY



MATERIALS TO BE USED ON FRONT, SIDE, AND REAR OF ALL HOMES



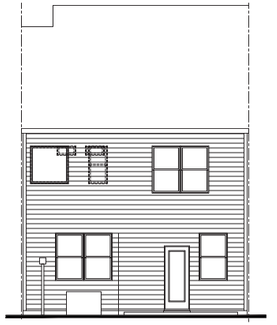
REAR TOWNHOME ELEVATION A

MATERIAL %
Cement Lap Siding = 100%



REAR TOWNHOME ELEVATION B

MATERIAL %
Cement Lap Siding = 100%



REAR TOWNHOME ELEVATION C

MATERIAL %
Cement Lap Siding = 100%



TOT LOT



CONNECTING TRAILS



40’ WIDTH HOME MODEL A ELEVATION



40’ WIDTH HOME MODEL B ELEVATION

VISIONING IMAGERY



40’ WIDTH HOME MODEL C ELEVATION



40’ WIDTH HOME MODEL D ELEVATION



40’ WIDTH HOME MODEL E ELEVATION



40’ WIDTH HOME MODEL F ELEVATION



40’ WIDTH HOME MODEL G ELEVATION



40’ WIDTH HOME MODEL H ELEVATION



40’ WIDTH HOME MODEL I ELEVATION



40’ WIDTH HOME MODEL J ELEVATION



40’ WIDTH HOME MODEL K ELEVATION



40’ WIDTH HOME MODEL L ELEVATION



40’ WIDTH HOME MODEL M ELEVATION



40’ WIDTH HOME MODEL N ELEVATION



52’ WIDTH HOME MODEL A ELEVATION



52’ WIDTH HOME MODEL B ELEVATION



52’ WIDTH HOME MODEL C ELEVATION



52’ WIDTH HOME MODEL D ELEVATION

VISIONING IMAGERY



CORNER LOT MODEL A ELEVATION



CORNER LOT MODEL B ELEVATION



CORNER LOT MODEL C ELEVATION



CORNER LOT MODEL D ELEVATION



CORNER LOT MODEL E ELEVATION



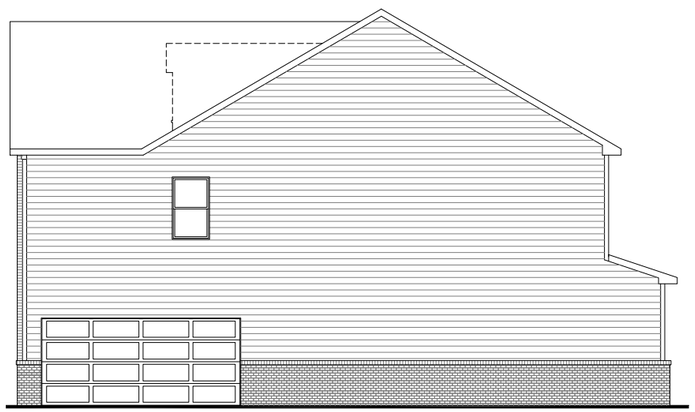
CORNER LOT MODEL F ELEVATION



CORNER LOT MODEL G ELEVATION



CORNER LOT MODEL H ELEVATION



CORNER LOT SIDE ELEVATION



CORNER LOT SIDE ELEVATION



ALL GARAGE DOORS TO HAVE WINDOWS AS ILLUSTRATED ABOVE

February 4, 2026

Smyrna Planning & Zoning Department
315 S Lowry Street
Smyrna, TN, 37167

Re: 7025 Del Thomas Road - Annexation & PRD Zoning
Tax Map: 54 Parcels: 20.00, 20.01, and 3.04
Comment Response Letter

To Whom it may concern,

Below is a summary of your comments received on January 28, 2026, and our responses for the above-referenced project.

1. The surrounding zoning is PRD (The Courtyards at Stewarts Creek) in Town and RM in Rutherford County.
   CDG Response: Acknowledged.

2. The Land Use Plan would support Medium Density Single Family Residential development in this area.
   CDG Response: Acknowledged.

3. The Major Thoroughfare Plan designates Rocky Fork Almaville Road as a minor arterial. This property has no frontage on this road.
   CDG Response: Acknowledged.

4. The requested PRD is for 162 single family lots and 40 townhomes. This translates to an overall density of 1.98 dwellings/acre. If the common open space of approximately 45.5 acres is removed from the calculation, it is 202 houses on 56.5 acres for a density of 3.58 dwellings/acre.
   CDG Response: Acknowledged.

5. Annexation of this tract would require the annexation of approximately 660' of the existing right-of-way of Rocky Fork Almaville Road and approximately 450' of the existing right-of-way of Del Thomas Road.
   CDG Response: Acknowledged.

6. The required minimum fire flow is 1,000 GPM @ 20 PSI. Any house construction over 3,600 sq. ft. under roof will require additional fire flow. The letter from the Rutherford County Fire Marshall regarding the fire flow requirements for the cabana will not be applicable if the property is annexed into the Town of Smyrna.
   CDG Response: Please refer to the included email correspondence with James Lawrence of the Town of Smyrna Fire Department where he confirms a 1,000 gpm fire flow is required for the cabana/amenity.

7. A second entrance must be in place before the 100th house is built.
   CDG Response: Acknowledged, a second entrance will be provided to the sub-division before the 100th house is built.

8. There are significant upgrades required to provide sewer for this project. Sewer is required to be extended from Bankside along Rocky Fork Creek to the site. The town would participate in the cost difference if the line is required to be upsized. The necessary offsite easements will be required to be obtained and the line installed prior to issuance of any building permits.
   CDG Response: Acknowledged, the attached plan in this submittal has been reviewed by staff in a meeting on 1/16/2026. Improvements will be completed and easements obtained as agreed upon with the Town of Smyrna.

9. An ARAP will be required for each road, trail, and utility crossing of any stream.
   CDG Response: Acknowledged, all required environmental permits will be obtained.

10. The improvements as recommended by the traffic study must be completed by the developer.
    CDG Response: The attached ROW Exhibits include improvements to R.O.W. that the Town has already annexed or has agreed to annex, as discussed in prior meetings held on 8/18/2025, 9/16/2025, and 11/7/2025. Please see the attached exhibits for improvements to the Del Thomas Road intersection and Restoration Drive intersection as presented and agreed upon with Town Staff.

11. The Fire Dept. must be able to get within 150' of all townhomes with a handline.
    CDG Response: Agreed, the required fire access will be provided.

12. All corner lots within the development are required to have side entry garages.
    CDG Response: Acknowledged, all corner lots will have side entry garages as required by the Town of Smyrna.

13. All street facing facades including the side elevations on corner lots are required to have architectural details such as shutter, windows, wrap around porch, bay windows, arches, or dormers. None of the submitted architectural elevations addresses this requirement for the side elevations.

CDG Response: Updated side elevations are currently in design. The side elevations will match the front elevations to meet the Town of Smyrna's Architectural Requirements.

14. Please ensure all dwellings on corner lots are oriented to face the more prominent roadway. The lot layout appears to show them facing cul-de-sac streets.
    CDG Response: This comment was addressed in the previous 01/21/2026 resubmittal. The included concept plan include the same revised lots that front the more prominent roadway.

15. HVAC units are required to be at the rear of each house.
    CDG Response: Acknowledged, HVAC units will be located at the rear of each home.

16. Right-of-way must be obtained to make the planned improvements to Del Thomas Road. Provide documentation that this right-of-way has been obtained prior to submittal of the preliminary plat.
    CDG Response: Acknowledged, the required documentation for the obtained right-of-way will be provided at the future preliminary plat submittal.

17. The electrical service for the townhomes must be a monument or pedestal service.
    CDG Response: Acknowledged, all townhomes will have a monument or pedestal electric service.

18. The four lots at the entrance are separated from the rest of the neighborhood and don't seem to make sense with the overall layout. Could this area be used as an amenity like a water feature and the lots relocated to the rest of the development?
    CDG Response: These four lots will be utilized for our future model homes and establish our gateway to the community along Del Thomas & Rocky Fork Road.

19. Show offsite sewer alignment on the concept plan.
    CDG Response: An Overall Concept Plan showing the offsite sewer alignment is now included in the PRD Booklet.

20. The stream buffer must be 30' wide on each side of all streams. No averaging is allowed. The entrance road is placed in violation of the minimum buffer width requirement from the stream.
    CDG Response: Please refer to the updated Concept Plan where the entrance road has been revised to remain outside of the 30' stream buffer. No buffer averaging is proposed as agreed with Town of Smyrna Staff (Bradly Jordan) so that no additional water quality buffer zone width adjustments will be required.

21. The existing field lines for the house on the property to the west appear to be located on Parcel 3.04. The amenities are shown in that area. Verify field line location and if the amenities are on the field lines, relocate the amenities.
    CDG Response: This has been clarified with Town Staff that the Zelenik property septic tank and soils area are outside the project boundaries and will not be disturbed as part of the proposed development. Refer to the included Zelenik property septic tank permit and Field Line Exhibit. A callout noting the existing field lines has been added to the Concept Plan for clarification.

22. See CUD Will Serve letters issued 8/1/2025 for more detailed information regarding the off-site improvements and the level of service that can be provided to the site.
    CDG Response: Acknowledged, please note that no off-site improvements are required per the CUD Will Serve Letter.

23. Once available, submit full set of plans directly to CUDengineering@cudrc.com for further review and comment.
    CDG Response: Acknowledged, full plans will be provided to CUD during the Site Plan / Construction Documents approval process.

24. Submit at least one hard copy of all submitted documents, and 10 hard copies of the concept plan and PRD booklet.
    CDG Response: Hard copies have been provided as requested.

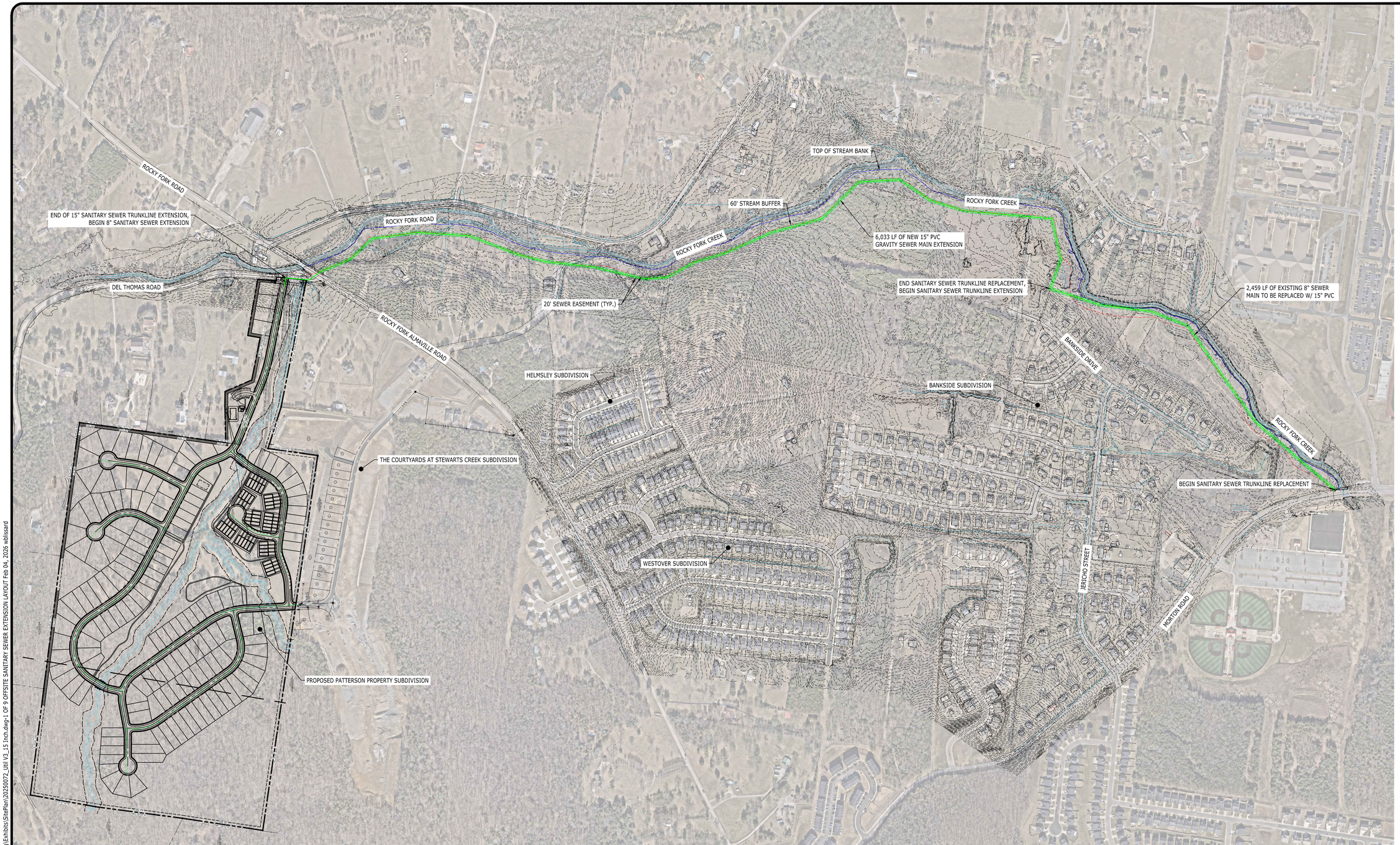
25. **Please submit revised plans by noon on Wednesday, October 1, 2025. One digital copy emailed to mark.crosslin@townofsmyrna.org and ten physical paper copies, sized 24x36 inches**
    CDG Response: Acknowledged, resubmitted plans will be delivered as instructed.

Regards,

Catalyst Design Group



Wesley Blissard, PE
Design Engineer



NOTES:

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4. VENTS SHALL BE PROVIDED EVERY 1,000'.
5. SANITARY SEWER PIPE WITH MORE THAN 14' OF DEPTH SHALL BE DR18 PIPE.

N

0' 150' 300' 600' 900'

DRAWING SCALE (1"=300')

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GOODALL HOMES
PATTERSON PROPERTY
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SMYRNA, TN 37167
RUTHERFORD COUNTY

NO.	DATE	DESCRIPTION

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OFFSITE SANITARY SEWER EXTENSION LAYOUT

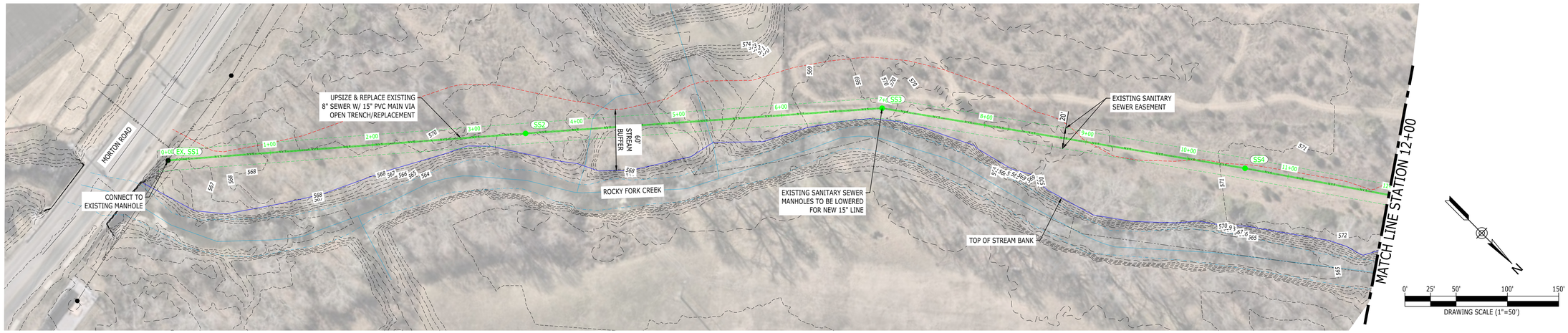
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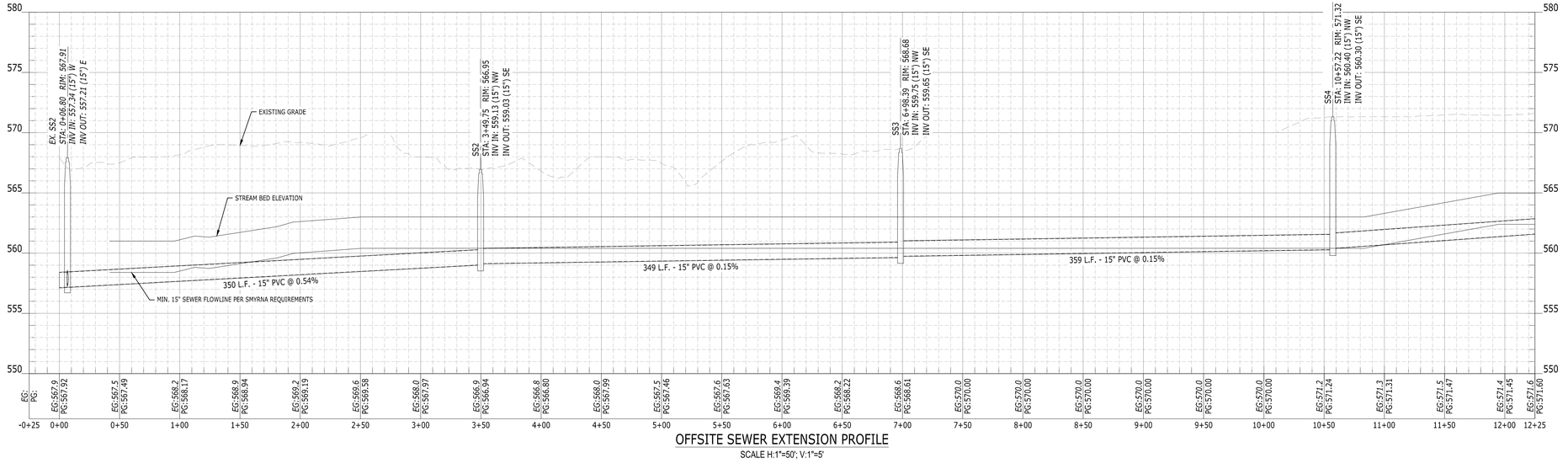
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P:\2025\20250072_Goodall - Patterson Property\dwg\Exhibits\SitePlan\20250072_UNI V3_15 Inch.dwg-1 OF 9 OFFSITE SANITARY SEWER EXTENSION LAYOUT Feb 04, 2026 wallisard

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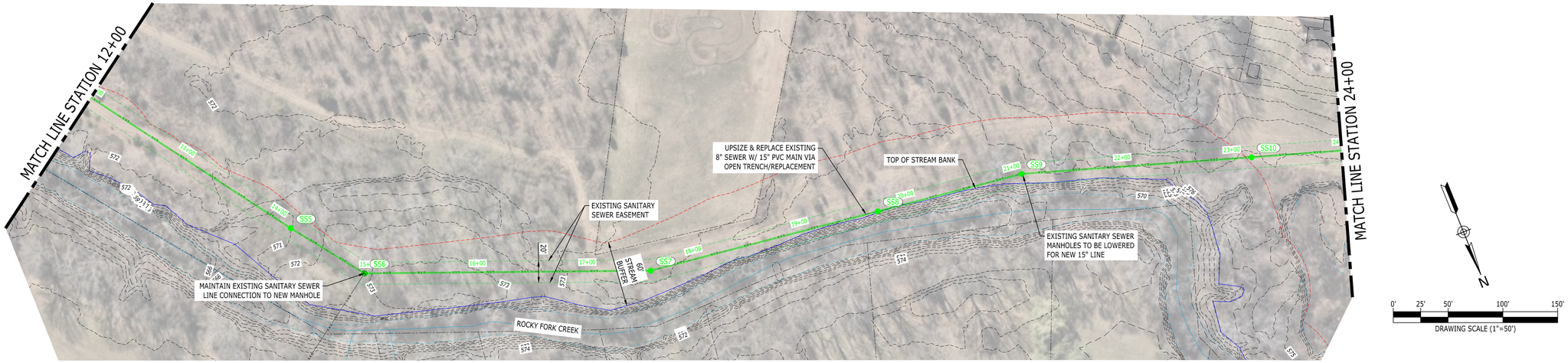
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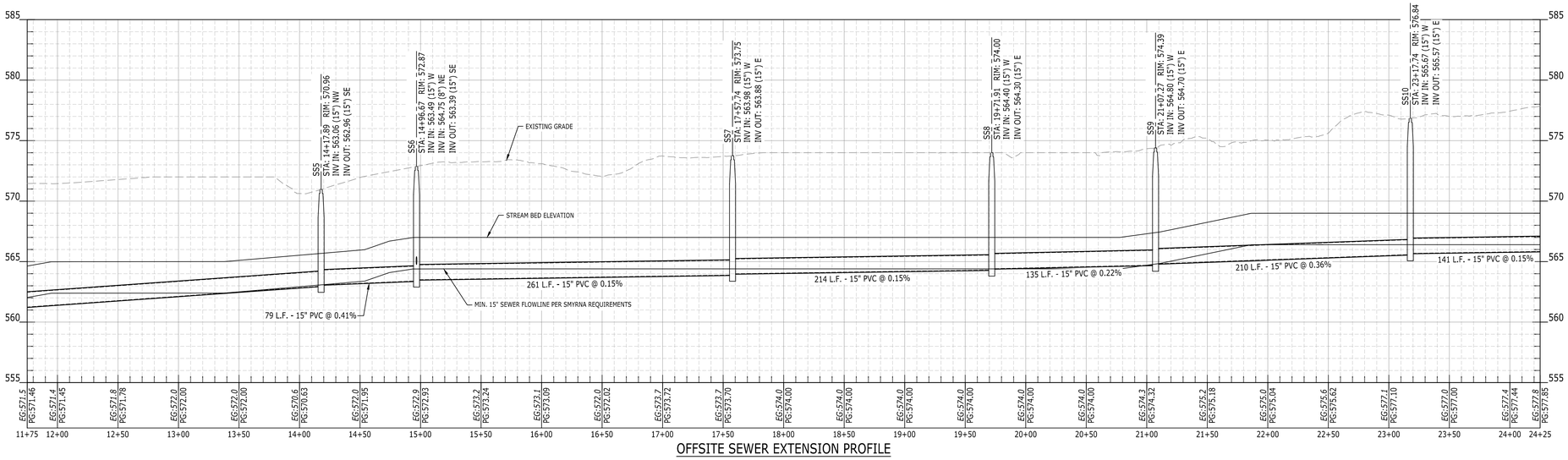
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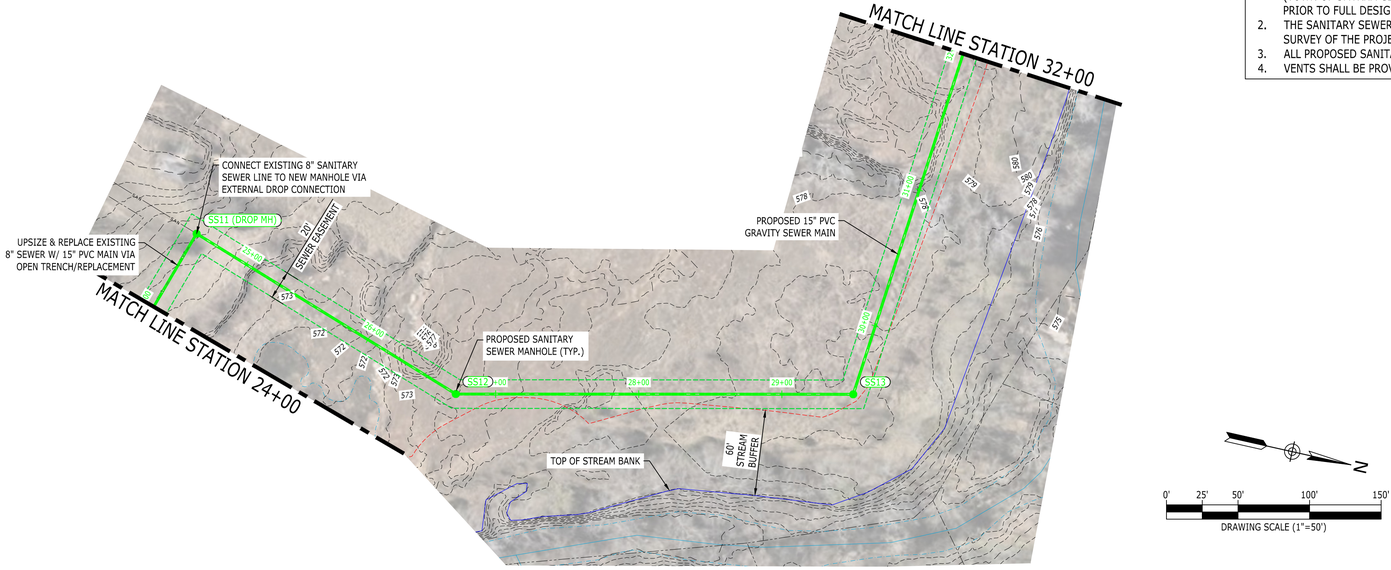
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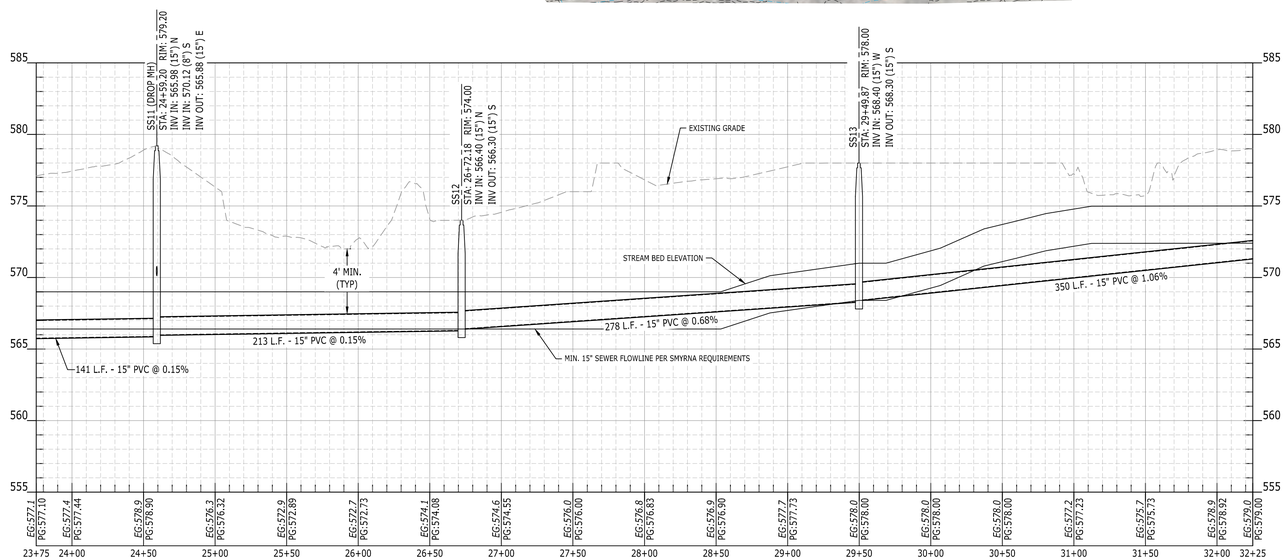
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P:\2025\20250072_Goodall – Patterson Property\dwg\Exhibits\SitePlan\20250072_UtilV3_15 1inch.dwg-3 OF 9 OFFSITE SANITARY SEWER EXTENSION PLAN & PROFILE Feb 04, 2026 wbissard

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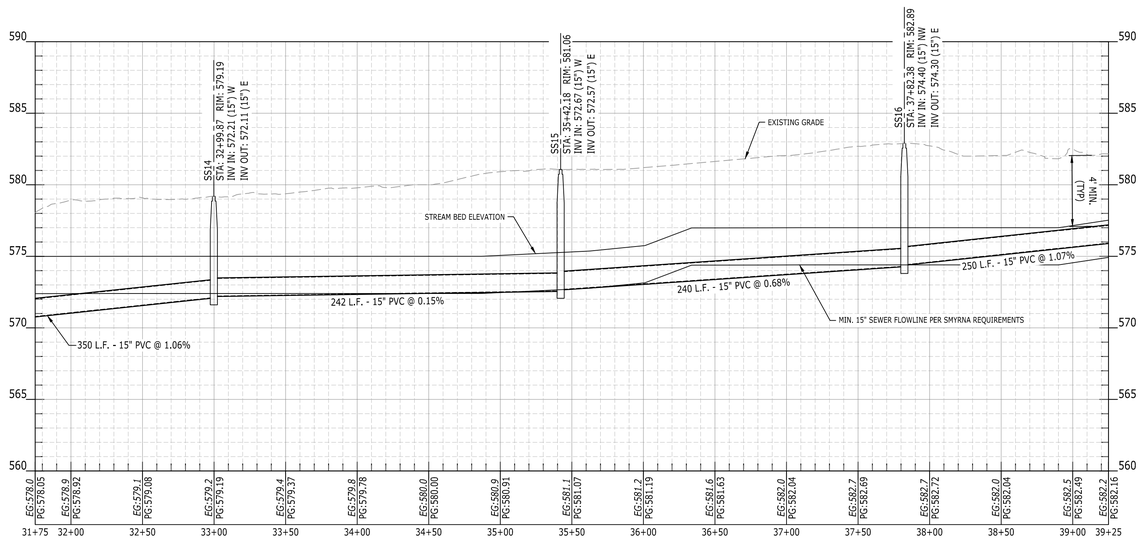
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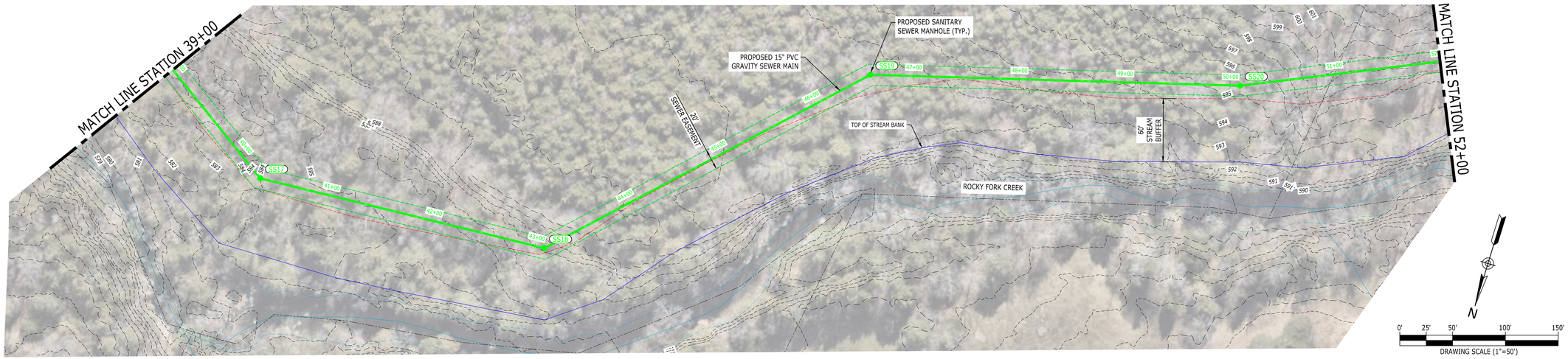
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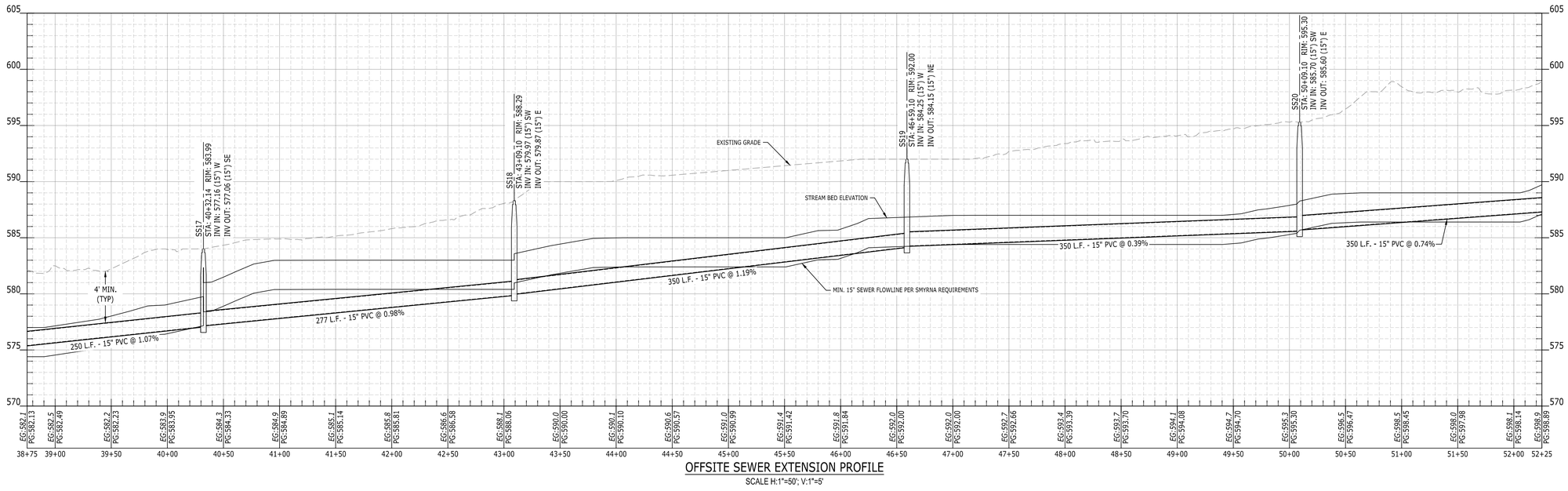
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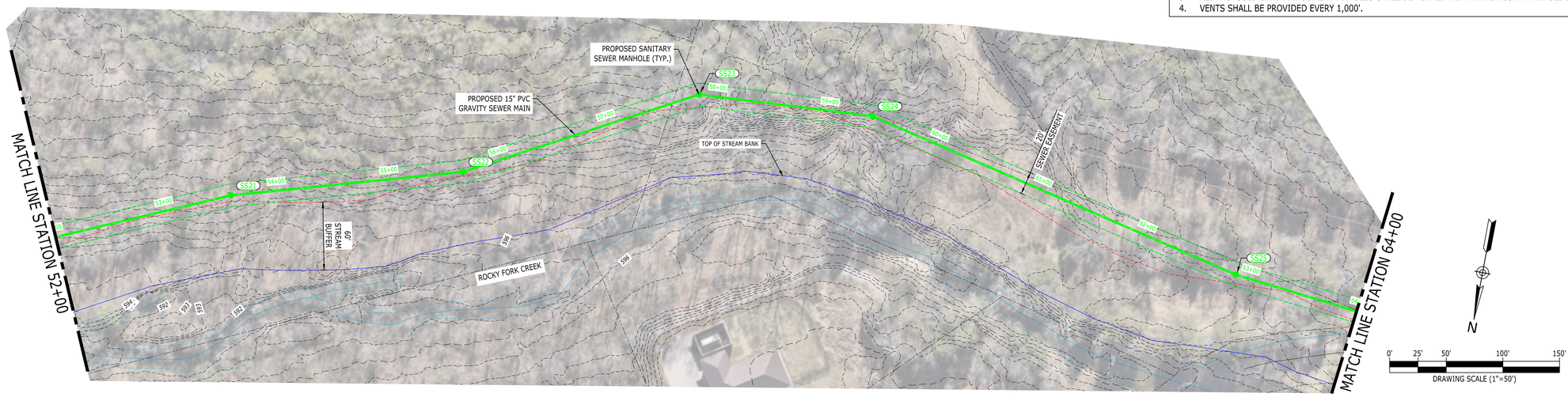
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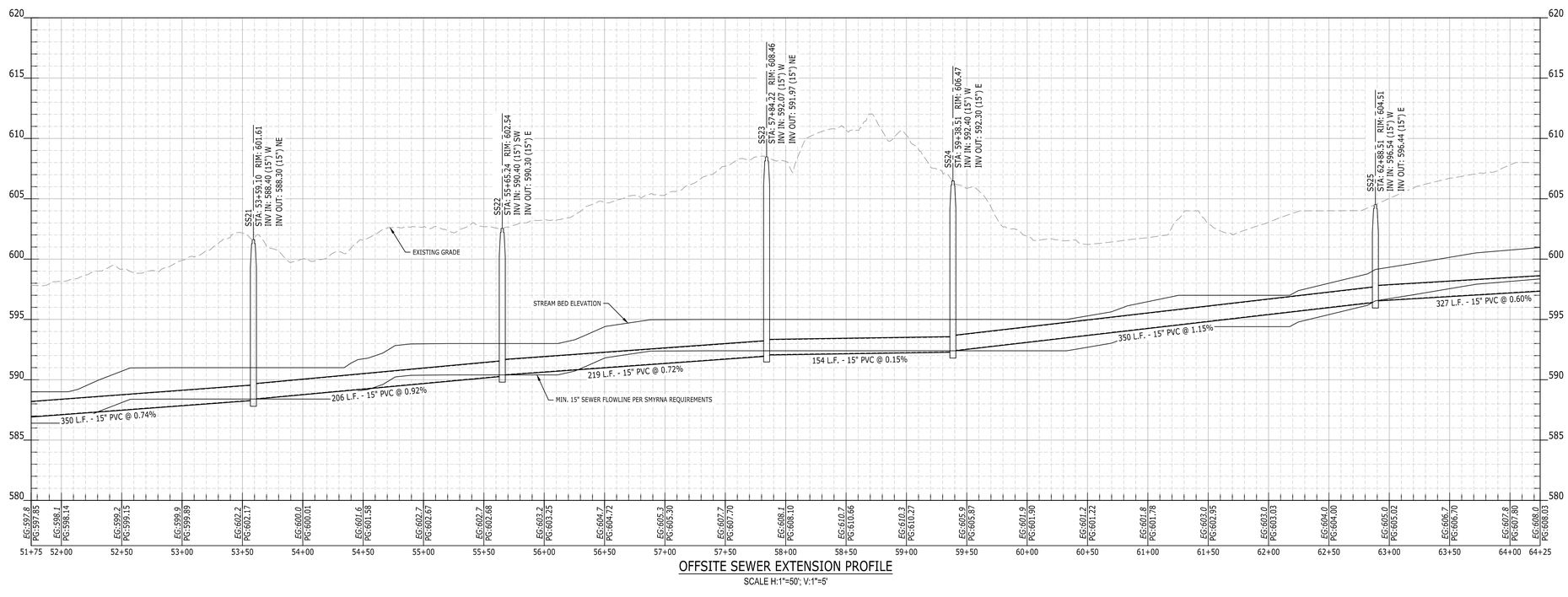
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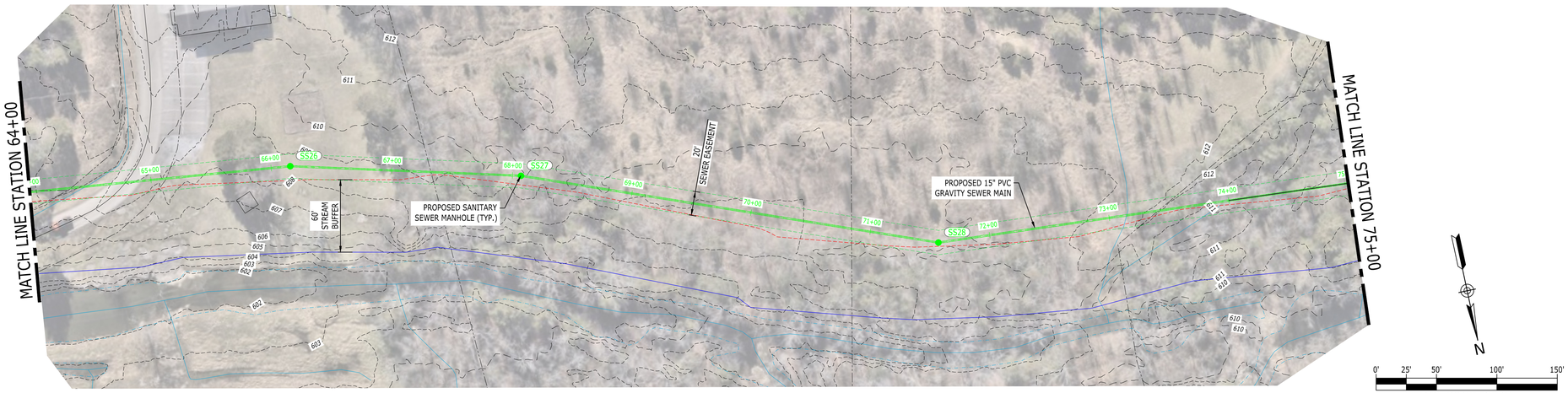
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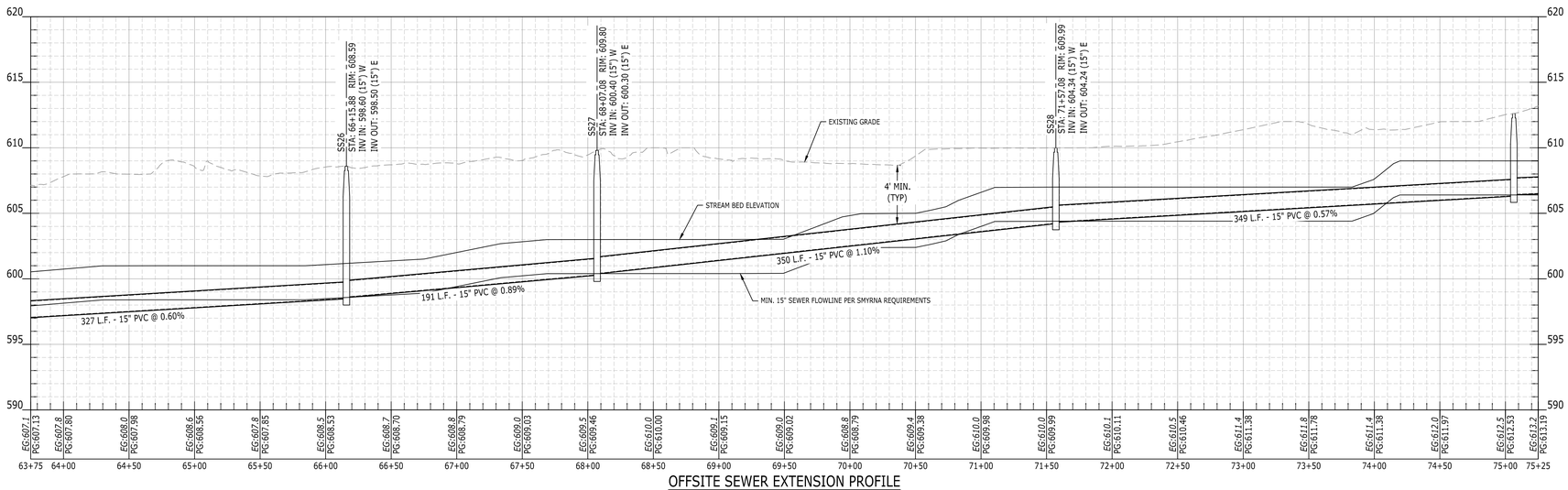
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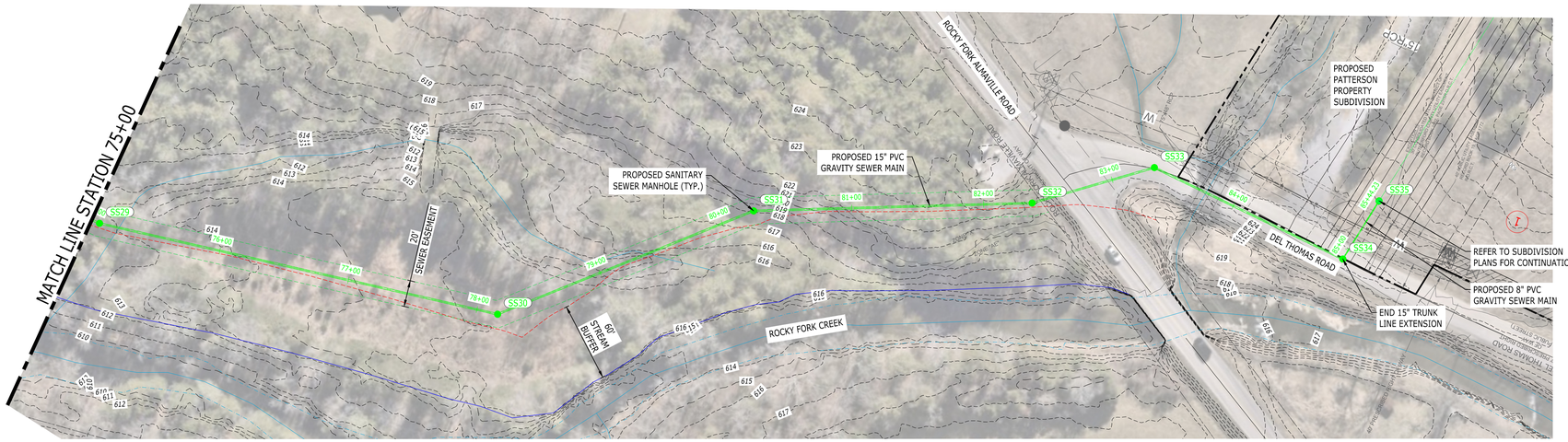
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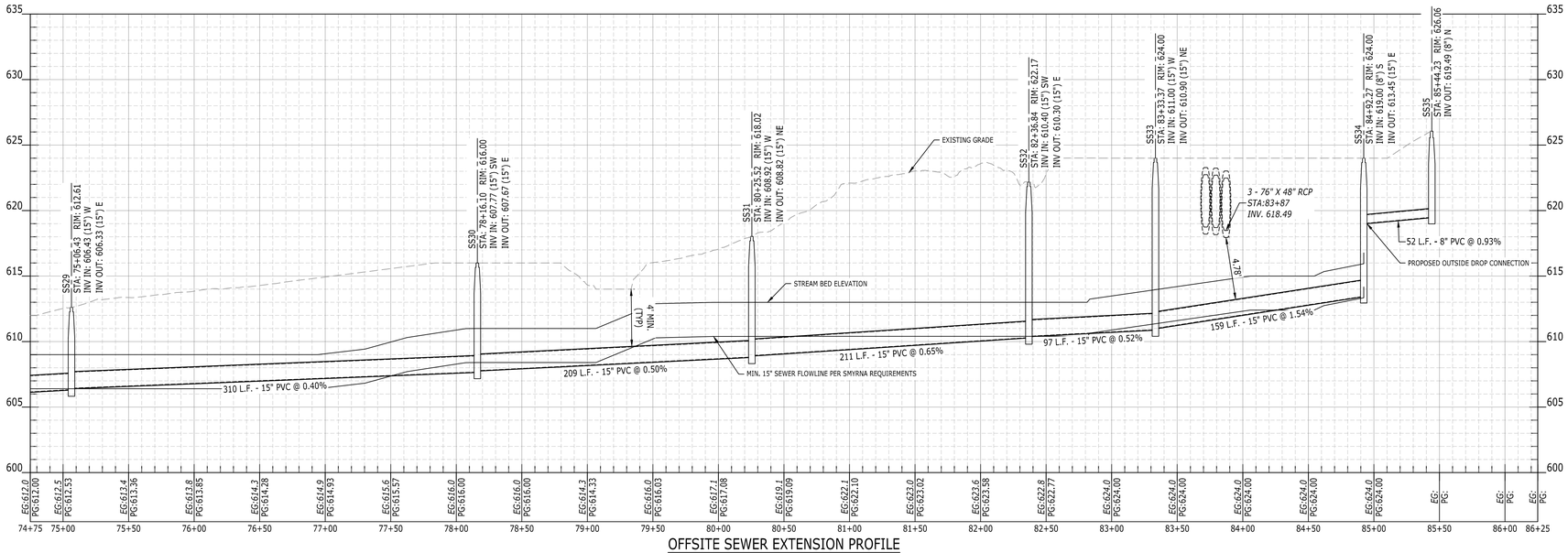
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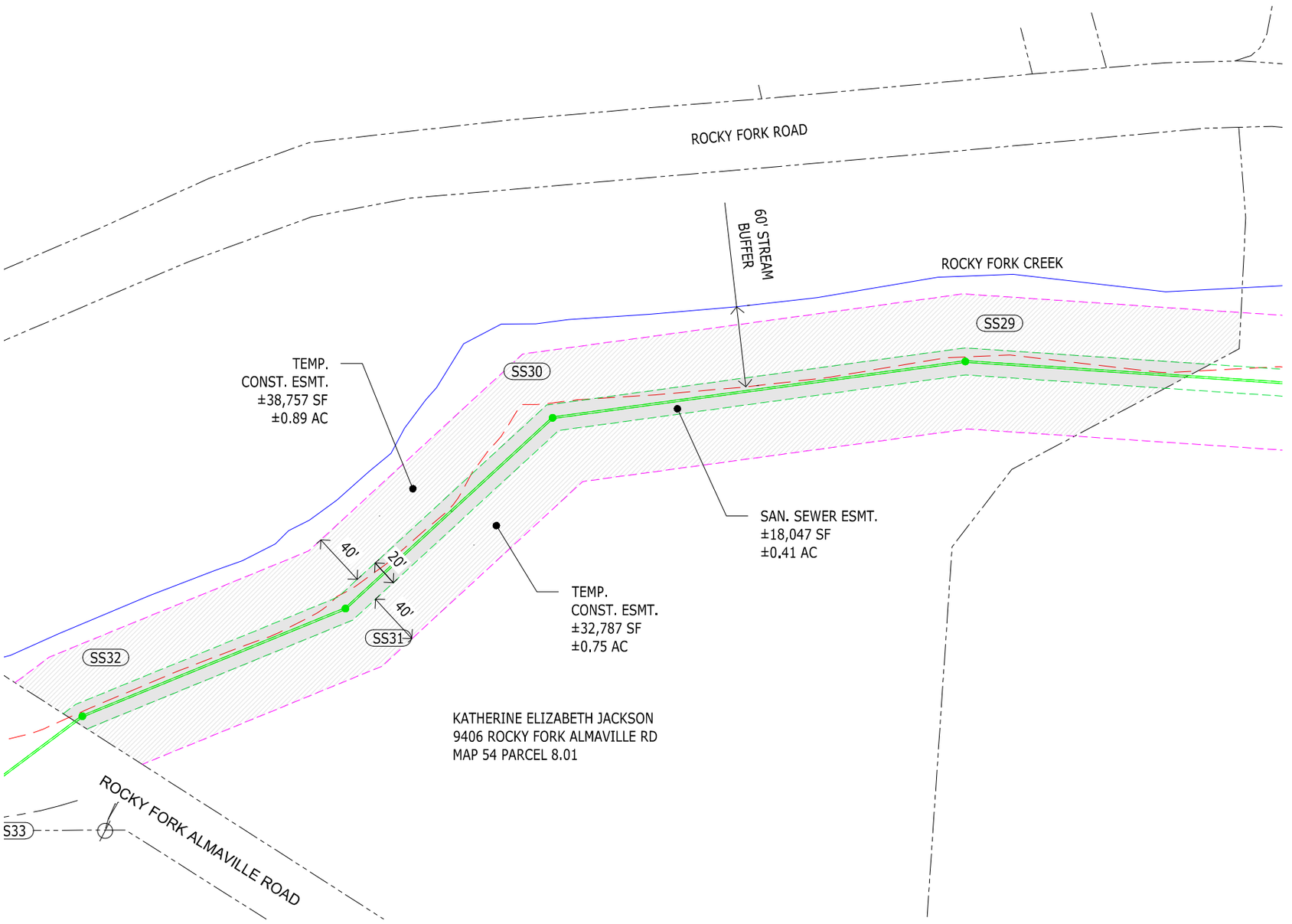
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LEGEND

- PROPERTY LINE
- TEMP. CONST. ESMT.
- PERMANENT SANITARY SEWER ESMT.
- STREAM BUFFER
- TOP OF STREAM BANK
- SAN. SEWER LINE

N

0' 25' 50' 100' 150'

DRAWING SCALE (1"=100')

PRELIMINARY SANITARY SEWER EASEMENT EXHIBIT

DWG. NO. 1 OF 13

PROJ # 20250072

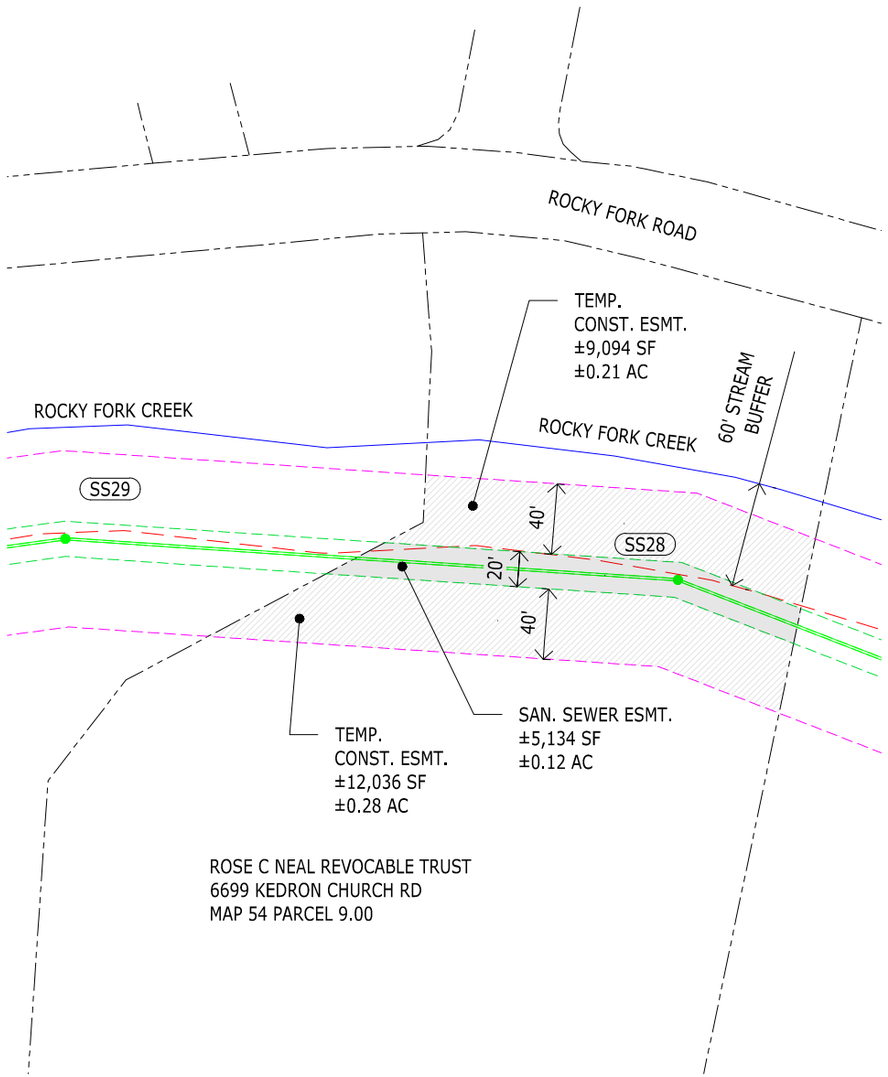
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ROCKY FORK CREEK SANITARY SEWER EXTENTION

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LEGEND	
PROPERTY LINE	
TEMP. CONST. ESMT.	
PERMANENT SANITARY SEWER ESMT.	
STREAM BUFFER	
TOP OF STREAM BANK	
SAN. SEWER LINE	

N

0' 25' 50' 100' 150'

DRAWING SCALE (1"=100')

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DWG. NO. 2 OF 13

PROJ # 20250072

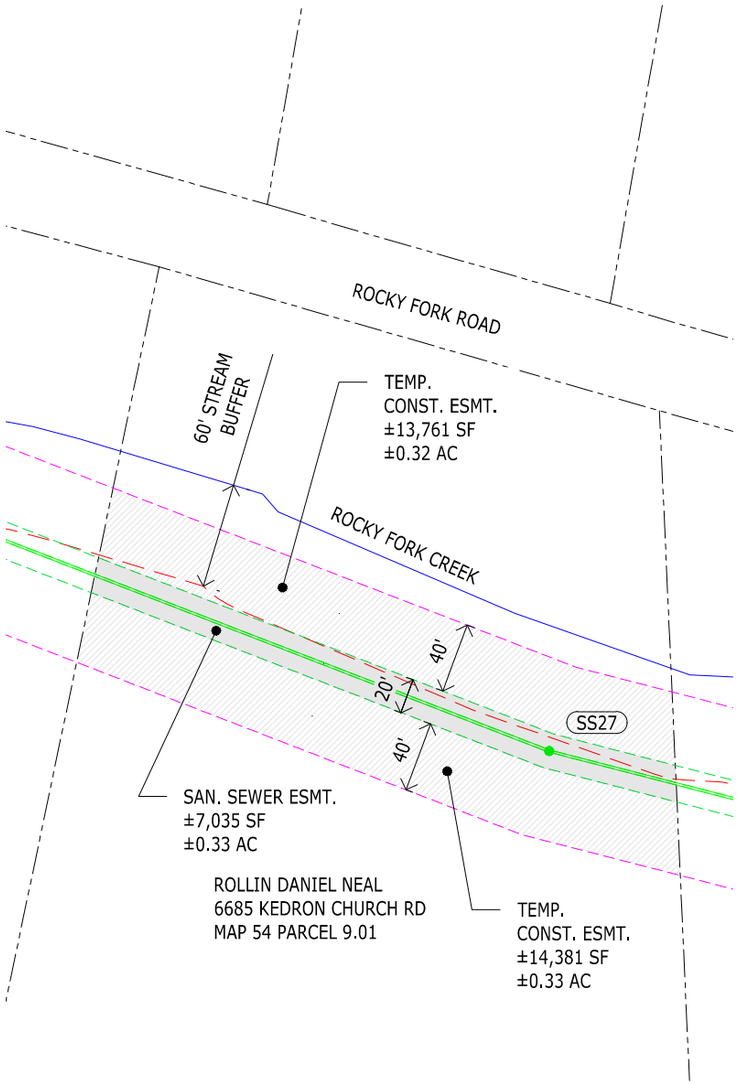
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LEGEND
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TEMP. CONST. ESMT.
PERMANENT SANITARY SEWER ESMT.
STREAM BUFFER
TOP OF STREAM BANK
SAN. SEWER LINE

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DRAWING SCALE (1"=100')

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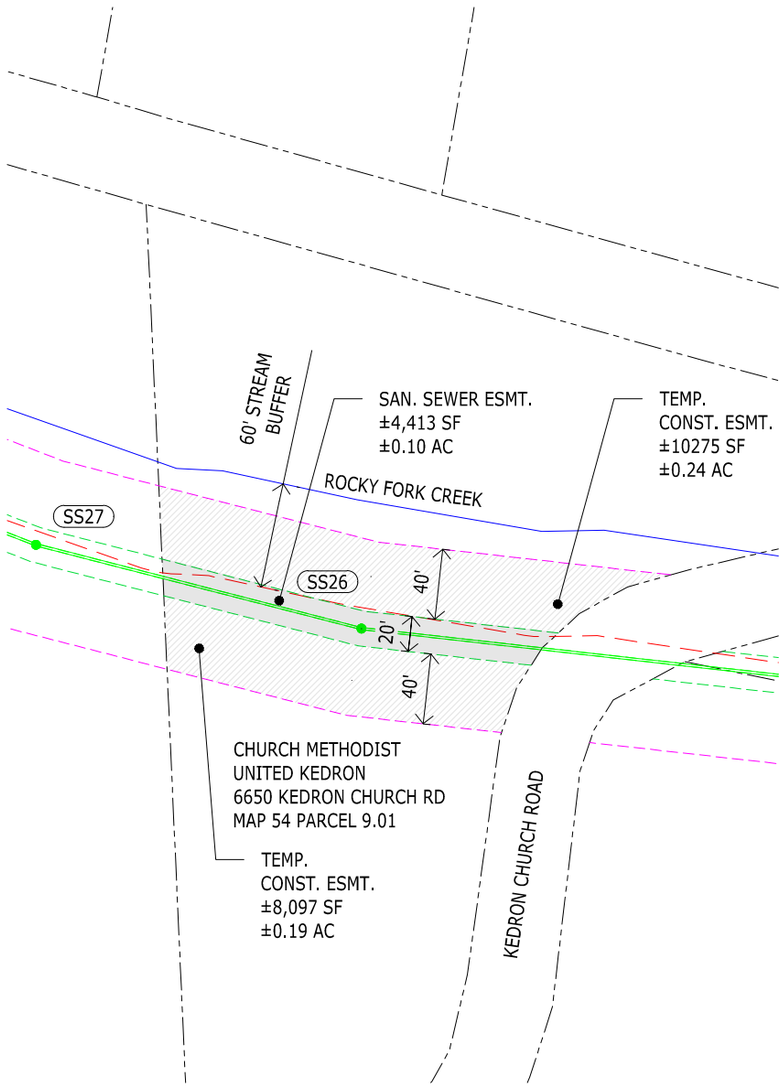
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LEGEND
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TEMP. CONST. ESMT.
PERMANENT SANITARY SEWER ESMT.
STREAM BUFFER
TOP OF STREAM BANK
SAN. SEWER LINE

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DRAWING SCALE (1"=100')

PRELIMINARY SANITARY SEWER EASEMENT EXHIBIT

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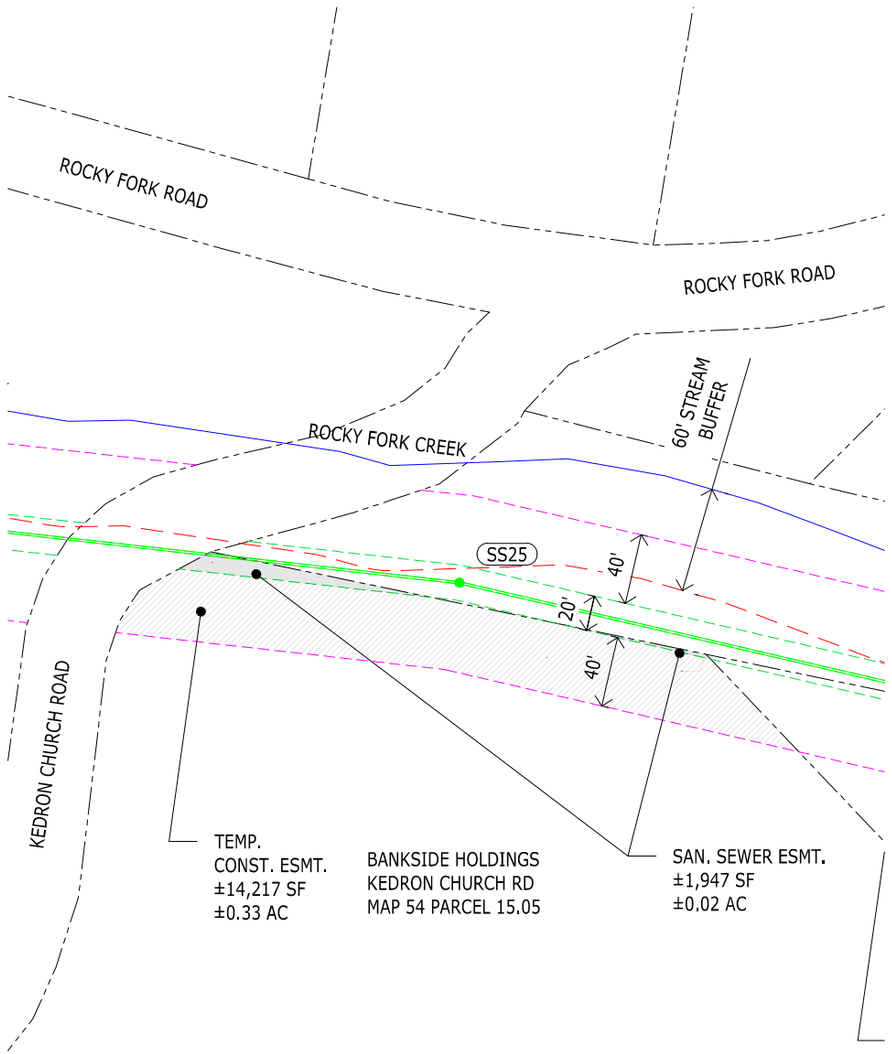
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LEGEND

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- TEMP. CONST. ESMT.
- PERMANENT SANITARY SEWER ESMT.
- STREAM BUFFER
- TOP OF STREAM BANK
- SAN. SEWER LINE

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DRAWING SCALE (1"=100')

PRELIMINARY SANITARY SEWER EASEMENT EXHIBIT

DWG. NO. 5 OF 13

PROJ # 20250072

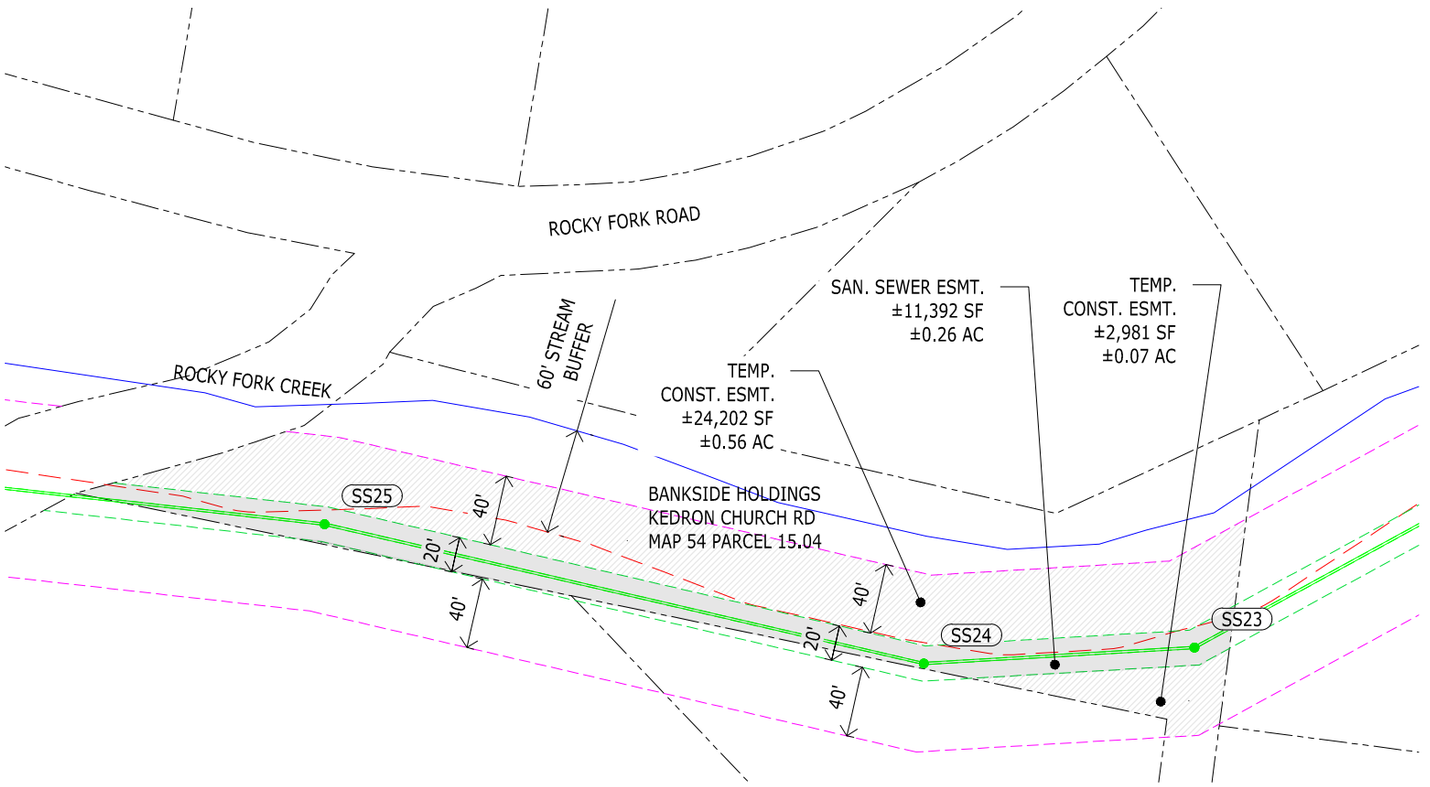
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LEGEND

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- PERMANENT SANITARY SEWER ESMT.
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- TOP OF STREAM BANK
- SAN. SEWER LINE

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DRAWING SCALE (1"=100')

PRELIMINARY SANITARY SEWER EASEMENT EXHIBIT

DWG. NO. 6 OF 13

PROJ # 20250072

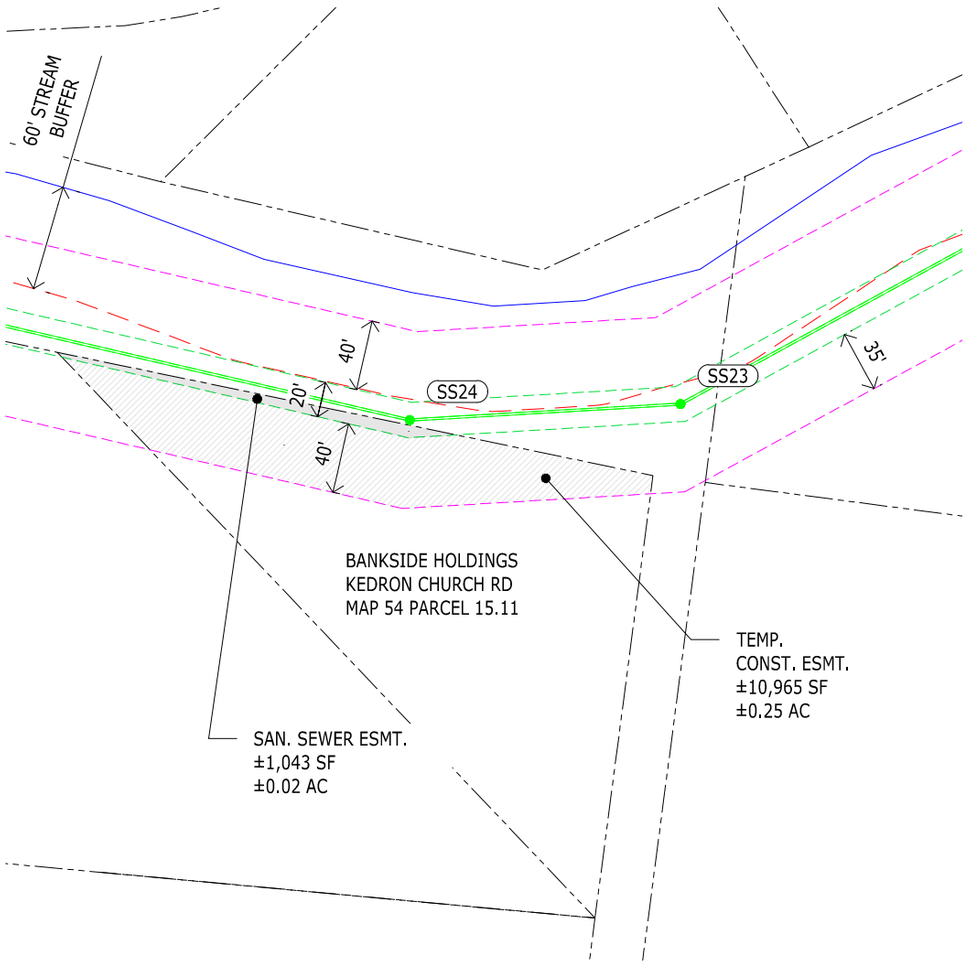
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TEMP. CONST. ESMT.
PERMANENT SANITARY SEWER ESMT.
STREAM BUFFER
TOP OF STREAM BANK
SAN. SEWER LINE

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DRAWING SCALE (1"=100')

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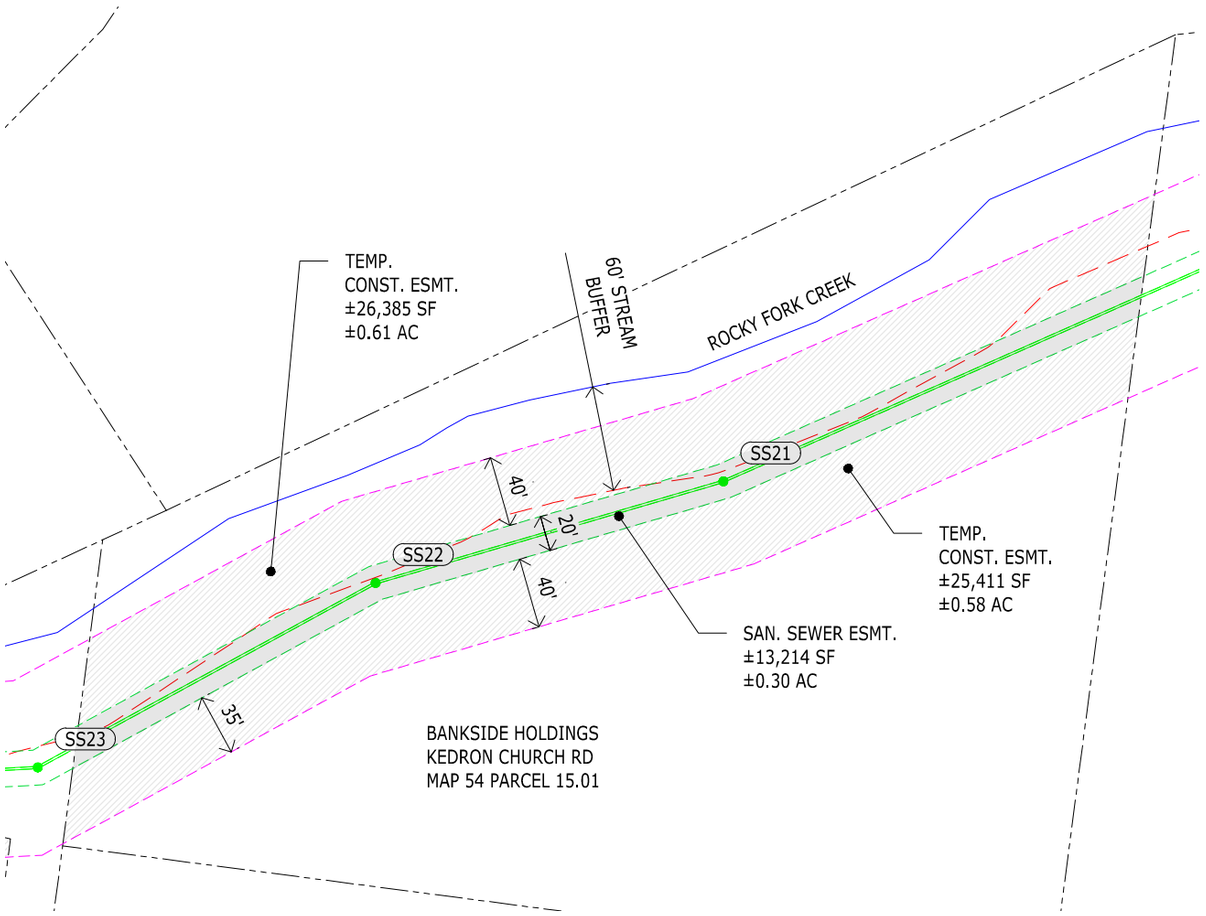
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LEGEND

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- PERMANENT SANITARY SEWER ESMT.
- STREAM BUFFER
- TOP OF STREAM BANK
- SAN. SEWER LINE

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DRAWING SCALE (1"=100')

PRELIMINARY SANITARY SEWER EASEMENT EXHIBIT

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PROJ # 20250072

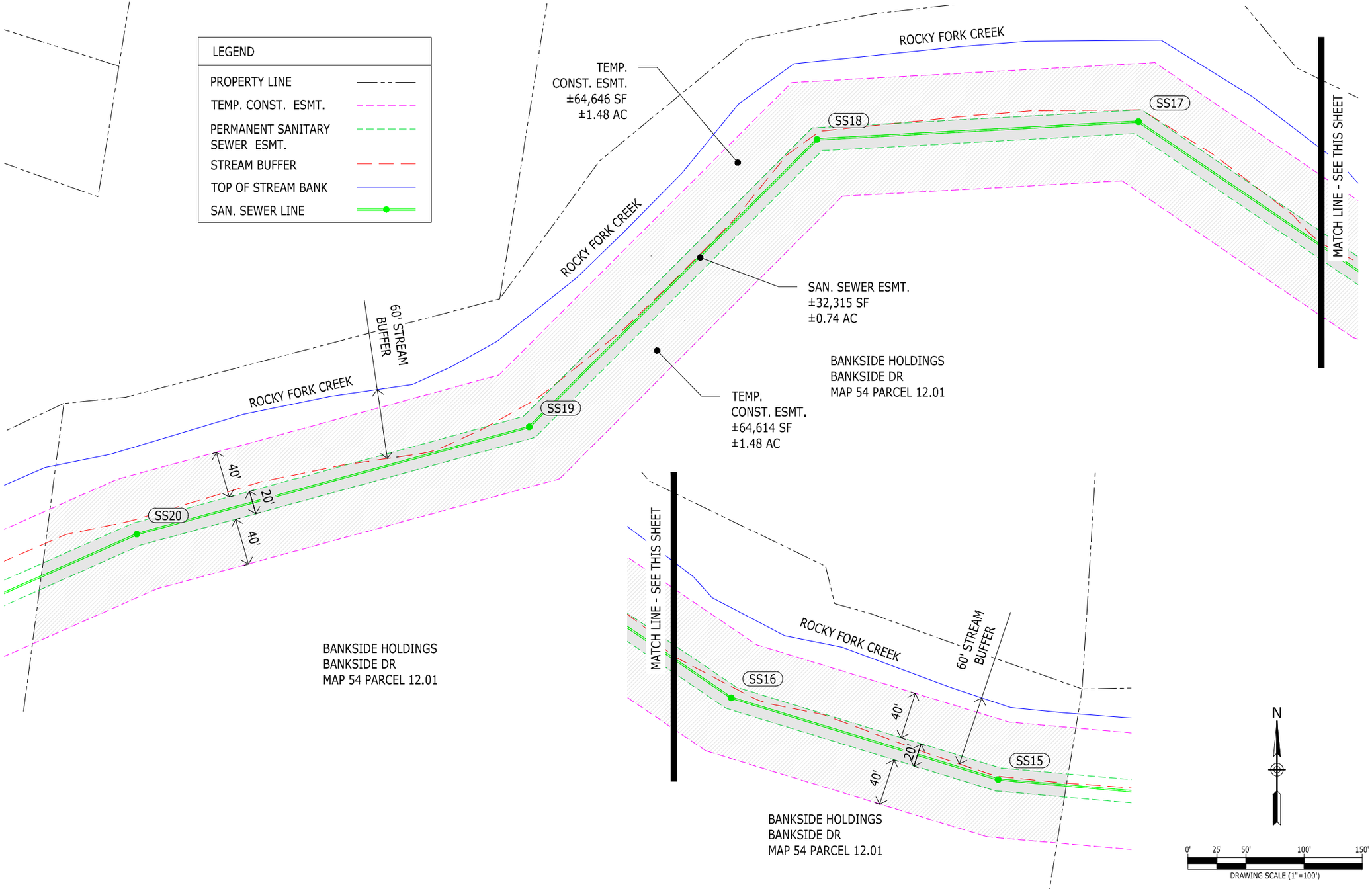
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PROJ # 20250072

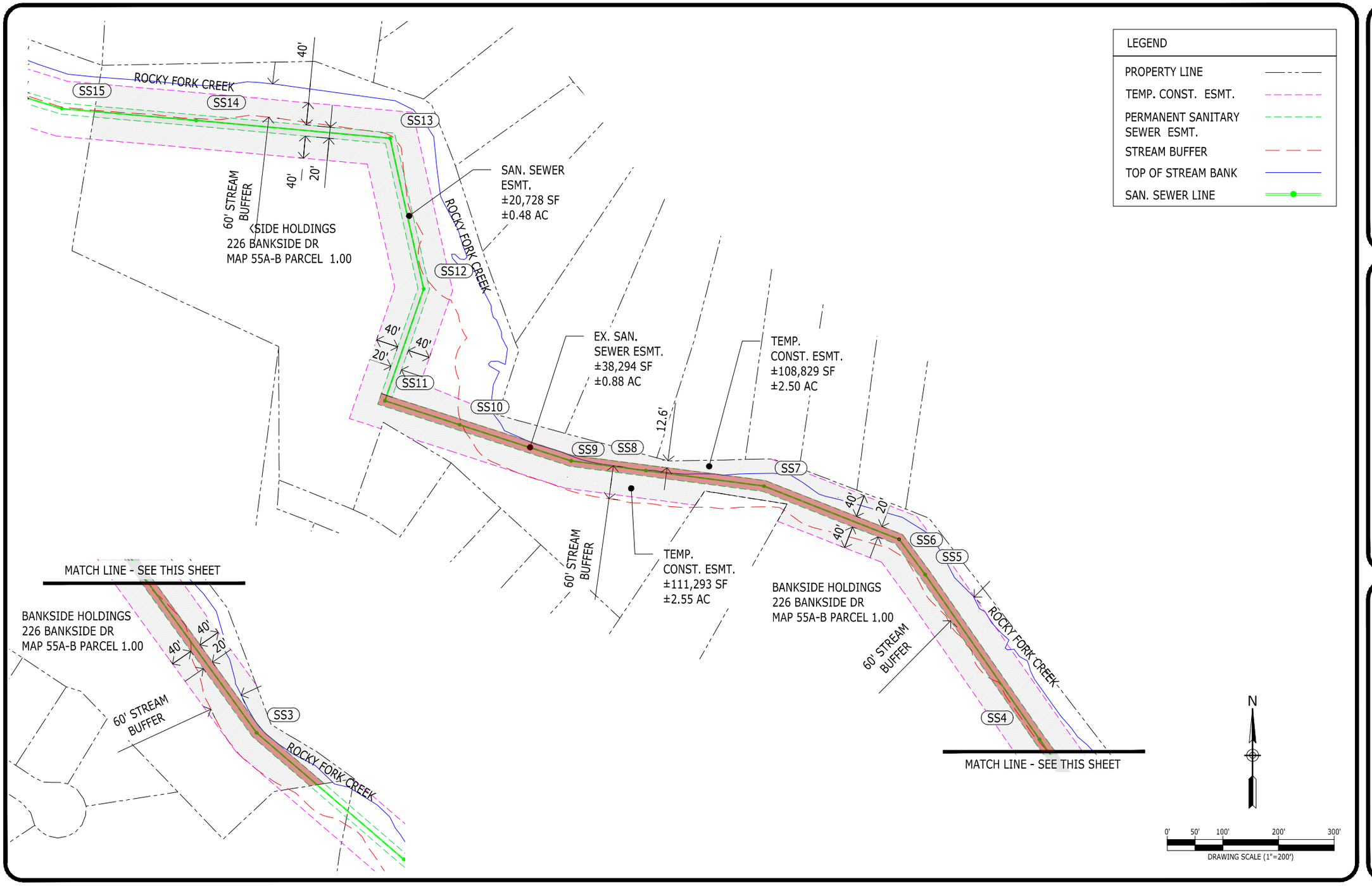
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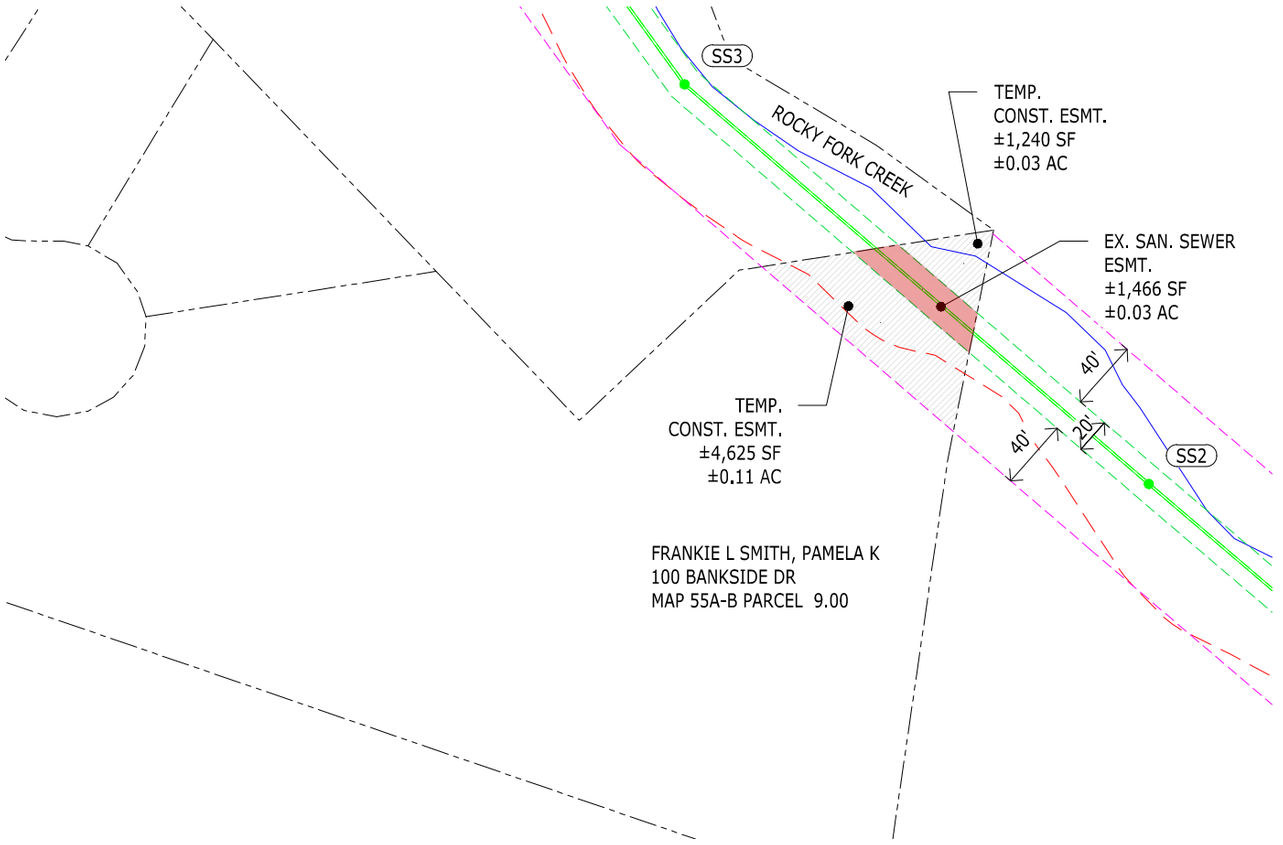
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LEGEND

- PROPERTY LINE
- TEMP. CONST. ESMT.
- PERMANENT SANITARY SEWER ESMT.
- STREAM BUFFER
- TOP OF STREAM BANK
- SAN. SEWER LINE

N

0' 25' 50' 100' 150'

DRAWING SCALE (1"=100')

PRELIMINARY SANITARY SEWER EASEMENT EXHIBIT

DWG. NO. 11 OF 13

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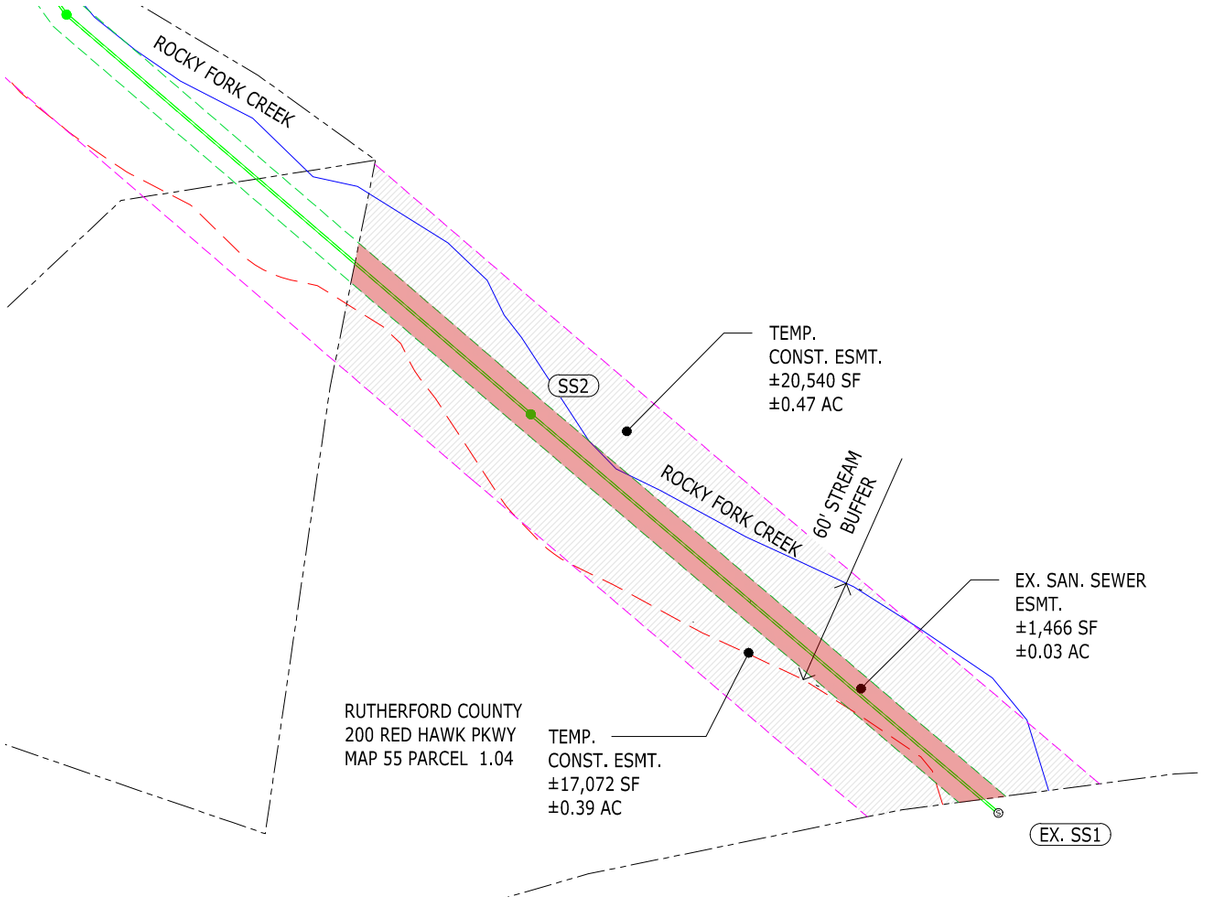
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LEGEND

- PROPERTY LINE
- TEMP. CONST. ESMT.
- PERMANENT SANITARY SEWER ESMT.
- STREAM BUFFER
- TOP OF STREAM BANK
- SAN. SEWER LINE

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0' 25' 50' 100' 150'

DRAWING SCALE (1"=100')

PRELIMINARY SANITARY SEWER EASEMENT EXHIBIT

DWG. NO. 12 OF 13

PROJ # 20250072

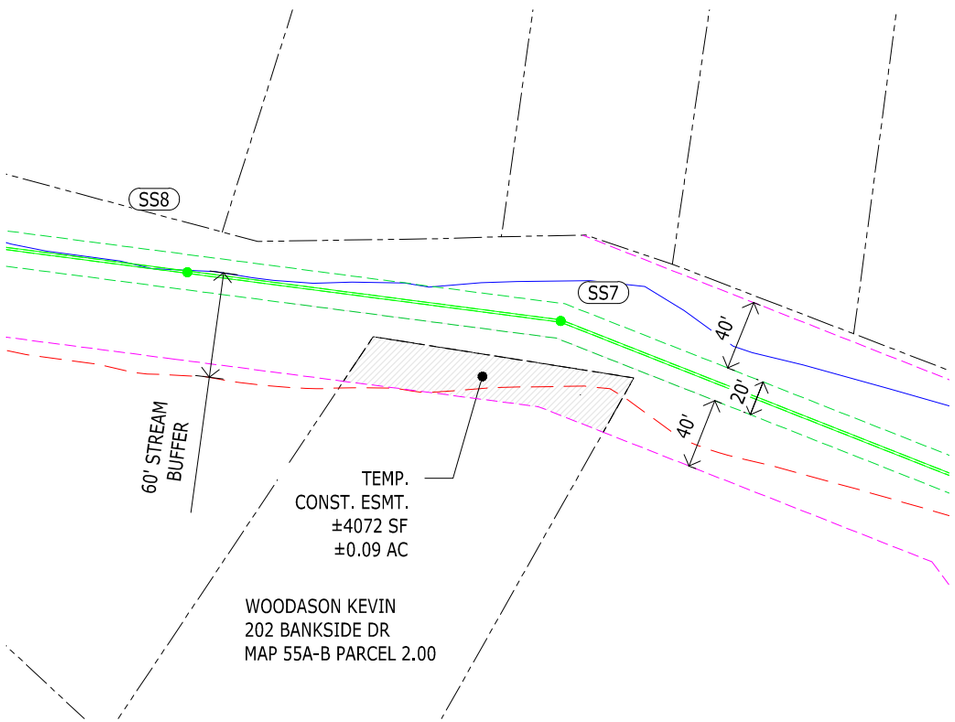
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LEGEND	
PROPERTY LINE	
TEMP. CONST. ESMT.	
PERMANENT SANITARY SEWER ESMT.	
STREAM BUFFER	
TOP OF STREAM BANK	
SAN. SEWER LINE	

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0' 25' 50' 100' 150'

DRAWING SCALE (1"=100')

PRELIMINARY SANITARY SEWER EASEMENT EXHIBIT

DWG. NO. 13 OF 13

PROJ # 20250072

DATE: 01/13/2026

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TRAFFIC IMPACT STUDY

for

PATTERSON SMYRNA

TOWN OF SMYRNA, TENNESSEE

May 27, 2025
Revised September 5, 2025
Revised September 10, 2025
Revise September 30, 2025

Prepared for:

GOODALL HOMES
393 Maple Street, Suite 100
Gallatin, Tennessee 37066

Prepared by:



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a Pape-Dawson company

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Nashville, Tennessee 37206-0070
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23-0162

PATTERSON SMYRNA
TRAFFIC IMPACT STUDY

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EXECUTIVE SUMMARY

INTRODUCTION

The proposed Patterson Smyrna development will be located south of Del Thomas Road and between Sam Hill Road and Rocky Fork Almaville Road in the Town of Smyrna, Tennessee. The site will consist of 162 detached single family units and 40 townhome units.

SITE TRAFFIC

The traffic impact of the Patterson Smyrna development is based upon a calculation of the number of vehicle trips that will enter and/or exit the site. An estimate of future traffic was generated according to the *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers (ITE). The trip generation for the Patterson Smyrna development is shown in the table below.

PATTERSON SMYRNA									
TRIP GENERATION									
Land Use	Land Use Code	Total Units	Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
Single Family Detached	210	162 Units	1,573	27	89	116	98	58	156
Multifamily (Low-Rise)	220	40 Units	332	8	27	35	24	14	38
Total Trip Generation			**1,905**	**35**	**116**	**151**	**122**	**72**	**194**

TRAFFIC ANALYSIS

The following public intersections were analyzed for capacity deficiencies and improvement needs:

- Rocky Fork Almaville Road at Del Thomas Road
- Rocky Fork Road at Rocky Fork Almaville Road
- Del Thomas Road at Project Access
- Rocky Fork Almaville Road at Courtyard Access / Kedron Church Road

For these intersections, the following traffic scenarios were analyzed, where applicable:

- 2025 Existing Traffic
- 2029 Background Traffic
- 2029 Total Traffic with all traffic projected in the study area, including Patterson Smyrna

CONCLUSIONS AND RECOMMENDATIONS

Rocky Fork Almaville Road at Del Thomas Road

- Traffic operations at this intersection will be characterized by level of service B during the a.m. peak hour and level of service C during the p.m. peak hour during background traffic conditions.

- No intersection control changes are recommended at this intersection due to the impact of the Patterson Smyrna development. It should be noted that this portion of Rocky Fork Almaville Road is not currently in the Town of Smyrna limits.

- Traffic operations at this intersection will be characterized by level of service C during the a.m. peak hour and the p.m. peak hour after full build-out of the Patterson Smyrna development.

- Traffic volume-based left turn lane warrant analysis were conducted for a northbound left turn lane on Rocky Fork Almaville Road at Del Thomas Road and it was determined a left turn lane is not expected to be warranted at this intersection.

- Traffic volume-based right turn lane warrant analysis were conducted for a southbound right turn lane on Rocky Fork Almaville Road at Del Thomas Road. It was determined a right turn lane is expected to be warranted at this intersection during the p.m. peak hour during total traffic conditions, which includes the traffic from background developments as well as the Patterson Smyrna development. The right turn lane warrant is expected to be met when approximately 50% of the Patterson Smyrna development is complete. The right turn lane would require the annexation of this portion of Rocky Fork Almaville Road and Del Thomas Road intersection to improve the intersection to Town standards. Additionally, the existing bridge that spans Rocky Fork Creek should be widened as part of a regional improvement to include the improvements at Rocky Fork Almaville Road and Rocky Fork Road.

Rocky Fork Road at Rocky Fork Almaville Road

- Traffic operations at this intersection will be characterized by level of service E during the a.m. peak hour and level of service F during the p.m. peak hour during background traffic conditions.

- No intersection control changes or additional laneage are recommended at this intersection due to the impact of the Patterson Smyrna development. It should be noted that this portion of Rocky Fork Almaville Road and Rocky Fork Road is not currently in the Town of Smyrna limits.

- Traffic operations at this intersection will be characterized by level of service F during the a.m. and p.m. peak hour after full build-out of the Patterson Smyrna development.

- Traffic volume-based left turn lane warrant analysis were conducted for a southbound left turn lane on Rocky Fork Almaville Road at Rocky Fork Road during background traffic conditions, and it was determined a left turn lane would be warranted at this intersection without the addition of the Patterson Smyrna development traffic. This is an indication that the Town of Smyrna should construct a southbound left turn lane on Rocky Fork Almaville Road at Rocky Fork Road.

- Traffic volume-based right turn lane warrant analysis were conducted for a northbound right turn lane on Rocky Fork Almaville Road at Rocky Fork Road and it was determined a right turn lane is not expected to be warranted at this intersection.

Del Thomas Road at Project Access

- Traffic operations at this intersection will be characterized by level of service A during the a.m. and p.m. peak hour after full build-out of the Patterson Smyrna development.

- The south leg of the intersection and portion of Del Thomas Road should be designed to meet the Town of Smyrna standards, with a minimum of one lane exiting and one lane entering.

- Traffic volume-based right turn lane warrant analysis was completed for an eastbound right turn lane on Del Thomas Road at the Project Access and it was determined a right turn lane is not expected to be warranted at this intersection.

- Traffic volume-based left turn lane warrant analysis was completed for a westbound left turn lane on Del Thomas Road at the Project Access and it was determined a left turn lane is not expected to be warranted at this intersection.

- During the design of the project access, it should be confirmed that there is the minimum sight distance available. Landscaping, monuments, and signage for the Patterson Smyrna Road development should be placed outside the right-of-way of Del Thomas Road and a minimum of 20 feet from the nearest edge of pavement on Del Thomas Road to preserve intersection sight lines.

Rocky Fork Almaville Road at Courtyard Access / Kedron Church Road

- Traffic operations at this intersection will be characterized by level of service C during the a.m. and p.m. peak hour during background traffic conditions.

- No intersection control changes are recommended at this intersection due to the impact of the Patterson Smyrna development. It should be noted that this portion of Rocky Fork Almaville Road is not currently in the Town of Smyrna limits.

- Traffic operations at this intersection will be characterized by level of service C during the a.m. p.m. peak hour after full build-out of the Patterson Smyrna development.

- Traffic volume-based right turn lane warrant analysis were conducted for a southbound right turn lane on Rocky Fork Almaville Road at Courtyard Access and it was determined a right turn lane is not expected to be warranted at this intersection.

- Traffic volume-based left turn lane warrant analysis were conducted for a northbound left turn lane on Rocky Fork Almaville Road at Courtyard Access. It was determined a left turn lane is expected to be warranted at this intersection during the p.m. peak hour during total traffic conditions, which includes the traffic from background developments as well as the Patterson Smyrna development. The left turn lane warrant is expected to be met when approximately 80% of the Patterson Smyrna development is complete.

I. INTRODUCTION

The purpose of this study is to analyze the transportation-related impacts due to the proposed Patterson Smyrna development located in the Town of Smyrna, Tennessee. This report has been requested by the Town of Smyrna staff in order to address transportation impacts and mitigating measures.

In order to evaluate and quantify the impacts of this development, an inventory of the existing roadway was carried out, along with an assessment of its adequacy. Based on the project schedule, a design year was established and system-wide growth rates were applied to existing traffic volumes. Site traffic was generated, distributed, and assigned to the roadway to quantify the site impact. Transportation analyses were performed in order to assess any site or non-site related impacts on the roadway. Finally, recommendations for roadway improvements and/or transportation system improvements were offered.

II. PROPOSED DEVELOPMENT

A. Project Description

As shown in Figure 1, the proposed Patterson Smyrna site is approximately 90.01 acres and located south of Del Thomas Road and between Sam Hill Road and Rocky Fork Almaville Road in the Town of Smyrna, Tennessee. The site is located on Parcels 020.00 and 020.01 of the Rutherford County Map 054. The proposed Patterson Smyrna site will consist of detached single-family units and townhomes. At the time of this report, the following land uses are proposed:

- 162 Detached Single Family Units
- 40 Townhomes

The property is bound by Del Thomas Road to the north, residential homes and Sam Hill Road to the west, residential homes and Rocky Fork Almaville Road to the east, and vacant land to the south.

Figure 2 shows the Patterson Smyrna Conceptual Layout.

B. Site Access

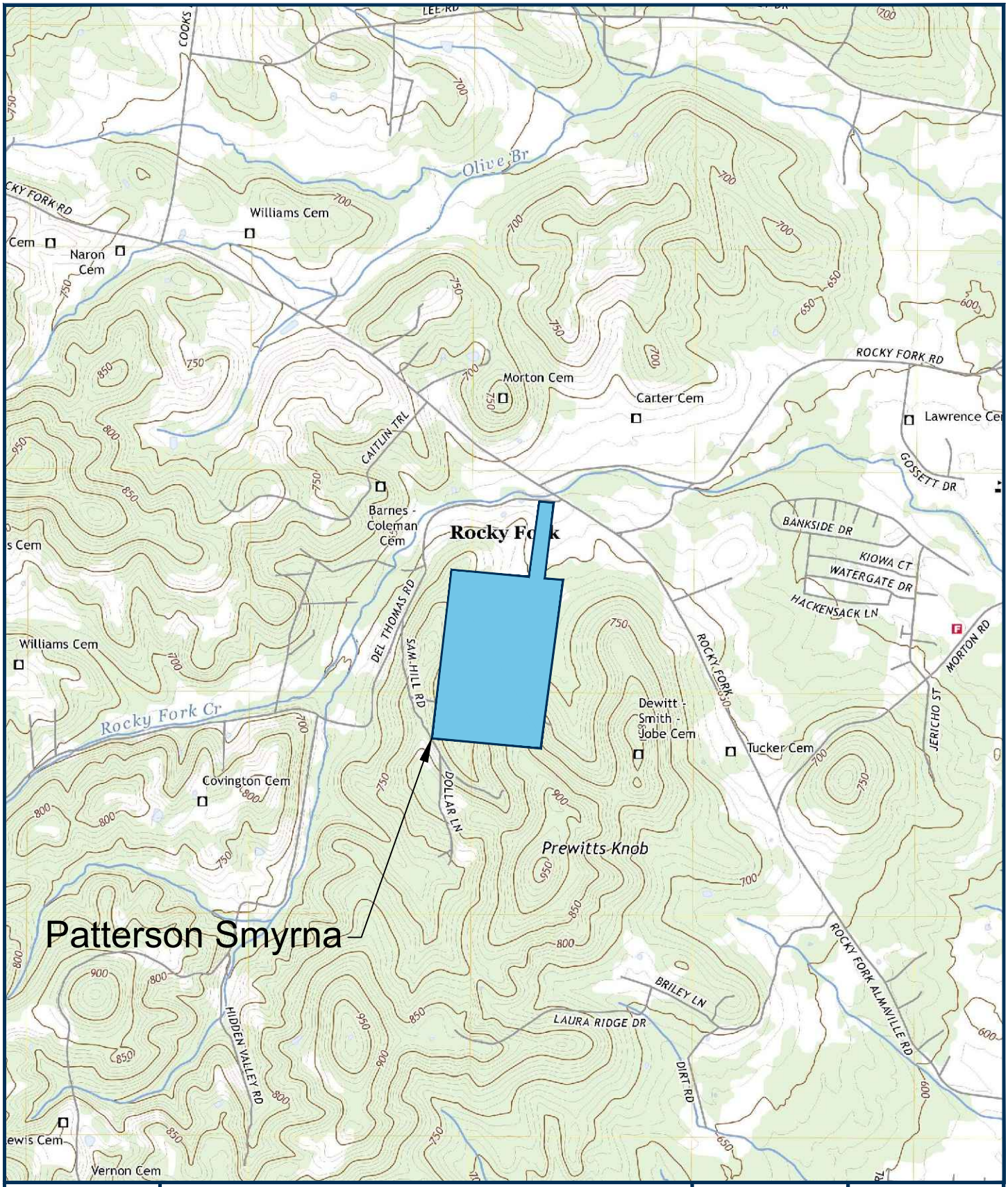
The conceptual layout shows that access to the Patterson Smyrna site will be provided at the following locations:

- Del Thomas Road Project Access: The proposed project access will be located on Del Thomas Road approximately 200 feet west of the Rocky Fork Almaville Road at Del Thomas Road intersection.

- Courtyards at Stewarts Creek Stub-Out: A secondary access will be provided via a proposed stub-out connection to the Courtyards at Stewarts Creek development. The Courtyards at Stewarts Creek development has access to Rocky Fork Almaville Road.

C. Phasing and Timing

For the analysis of this report, the full build-out of the Patterson Smyrna development has been assumed to occur in the year 2029. The year 2029 is established as the horizon year for this study.



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Patterson Smyrna

Location Map

Figure
1

SITE DATA

ACREAGE	± 102.0 AC
PROPOSED DENSITY	1.98 DU/AC
DENSITY WITHOUT 45.5 AC OPEN SPACE	3.58 DU/AC
TOWNHOMES (24’ X 52’)	40 UNITS
SINGLE FAMILY	162 TOTAL LOTS
11,000+ SF BUFFER LOTS	17 LOTS
INTERIOR LOTS (DO NOT ABUT RUTHERFORD COUNTY)	145 LOTS
	202 TOTAL UNITS
TOTAL OPEN SPACE	45.5 ACRES
PRESERVED OPEN SPACE	30.0 ACRES
COMMON OPEN SPACE	
REQUIRED	15.3 ACRES (15%)
PROVIDED	15.5 ACRES (15%)
IMPROVED OPEN SPACE (AS PART OF COMMON OPEN SPACE)	
REQUIRED	4.6 ACRES (30%)
PROVIDED	4.6 ACRES (30%)
OPEN SPACES TO BE MAINTAINED BY AN HOA	
PARKING	
TOWNHOMES	180 TOTAL SPACES (4.5 SP/UNIT)
	23 SURFACE SPACES
	157 DRIVEWAY SPACES
SINGLE FAMILY	4 DRIVEWAY SPACES PER RESIDENCE
AMENITY	24 SURFACE SPACES

PLANTINGS SHOWN ARE CONCEPTUAL IN NATURE; ALL LANDSCAPE TO COMPLY WITH TOWN OF SMYRNA REQUIREMENTS

LEGEND

	BUILDING ENVELOPE	LOT SF	MINIMUM DIMENSIONS	NUMBER OF LOTS
00	40’± X 75’±	7,000 SF +	56’ X 130’	40 (20%) + 40 TOWNHOME LOTS (20%)
00	40’± X 95’±	9,000 SF +	60’ X 150’	47 (23%)
00	40’± X 130’± (LOTS 12-20 AND 33-39 ACCOMMODATE A 52’ X 75’ BUILDING ENVELOPE)	11,000 SF +	56’ X 197’	75 (37%)

DEL THOMAS RD

ROCKY FORK ALMAVILLE RD

ENTRY MONUMENT SIGNAGE

REFER TO THE R.O.W. IMPROVEMENTS EXHIBIT FOR PUBLIC ROADWAY IMPROVEMENTS PLAN

ADJACENT PROPERTY OWNER: ZELENIK LOU ANN

STREAM

CABANA BUILDING WITH RESTROOMS AND MAIL CENTER. VIEW FROM ENTRY DRIVE

NEIGHBORHOOD AMENITY, INCLUSIVE OF POOL AND TOT LOT

POOL

PHASE 1

PHASE 2

PHASE 3

A

B

C

D

E

F

G

H

THE COURTYARDS AT STEWARTS CREEK

OPEN SPACE

20’ LANDSCAPE BUFFER

DU BOIS AVENUE (50’ ROW)

PRESERVED TREE COVER IN OPEN SPACE (TYP.)

OPEN SPACE MAINTAINED ALONG STREAM TO PRESERVE TREE COVER AND ACCOMMODATE WALKING TRAIL

STORMWATER TREATMENT, TYP.

AVG. 30’ STREAM BUFFER, TYP.

760 ELEVATION LINE - LIMITS OF WATER SERVICE

EXISTING TREES TO BE PRESERVED (TYP.)

0 100’ 200’

GOODALL PATTERSON PROPERTY | conceptual site plan

SMYRNA, TN | JULY 2025

III. EXISTING CONDITIONS

A. Transportation System

The existing transportation system in the area is made up of arterial and local roadways which will provide regional and local access to the site. The roadways shown in Table 1 will comprise the study area for consideration of the traffic impact of the Patterson Smyrna development.

TABLE 1

EXISTING ROADWAY CHARACTERISTICS

Roadway Name	Designation	Classification[(1)]	Speed Limit	Lanes	Multimodal
Rocky Fork Almaville Road	Town Street	Minor Arterial	35	2	None
Rocky Fork Road	Town Street	Minor Arterial / Future Principal Arterial	35	2	None
Del Thomas Road	Town Street	Local Street	35	2	None

(1) Based on 2023 Major Thoroughfare Plan from the Town of Smyrna, Tennessee

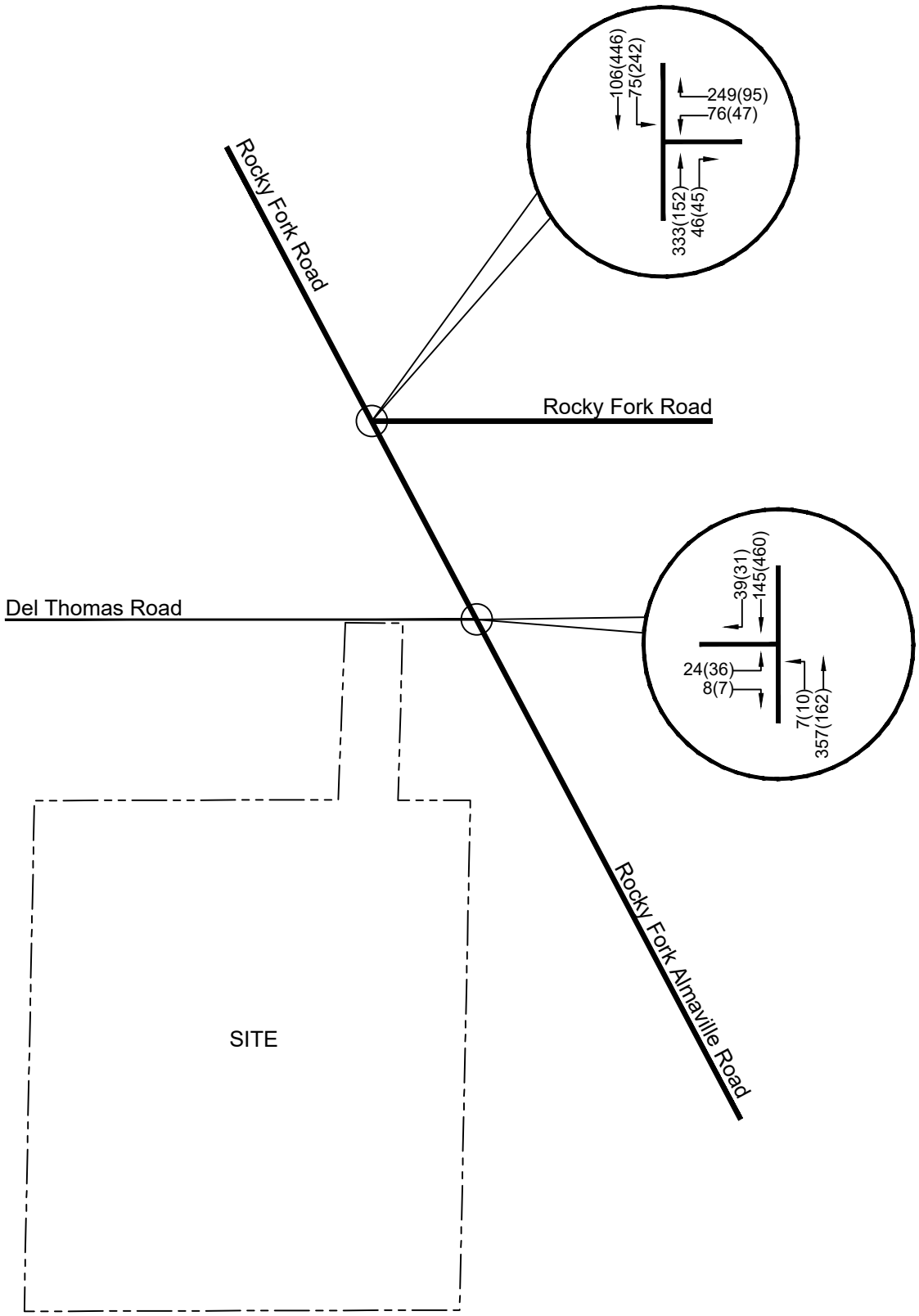
B. Traffic Volumes

The peak hour of the adjacent street traffic was used to determine the impact of the Patterson Smyrna development on the existing transportation system. Hourly traffic data was collected in April 2025 to identify the peak periods for analysis.

Turning movement traffic counts were collected at the following intersections:

- Rocky Fork Almaville Road at Del Thomas Road
- Rocky Fork Road at Rocky Fork Almaville Road

Existing peak hour traffic volumes are shown in Figure 3.



Peak Hours
AM (PM)

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Patterson Smyrna

2025 Existing Traffic Volumes

Figure
3

IV. FORECASTED BACKGROUND TRAFFIC

A. Introduction

Before any impacts to the study area could be addressed, some estimate of background traffic volumes for the horizon years had to be established. Background traffic volumes were established by segregating potential growth into two categories:

- Specific development traffic growth within the immediate study area
- Growth due to small scale development and/or general population growth

B. Specific Development Growth

Based on discussions with the Town of Smyrna staff and reviewing the Development Tracker GIS Map from the Town of Smyrna, there are three (3) specific developments in the general study area that will contribute new traffic to the system prior to the completion of the Patterson Smyrna development in 2029. The trip generation for the background projects are shown in Table 2. Additional information about the background developments can be found in the appendix of this report.

TABLE 2

TRIP GENERATION: BACKGROUND DEVELOPMENTS

Development [1]	Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
The Courtyards at Stewarts Creek	944	16	54	70	58	35	93
Rocky Fork Almaville Road Annexation	869	15	49	64	53	32	85
Tuckers Pointe	901	19	60	79	59	36	95
Total Trip Generation	**2,714**	**50**	**163**	**213**	**170**	**103**	**273**

[1] Source: Town of Smyrna's Development Tracker

C. Annual Growth

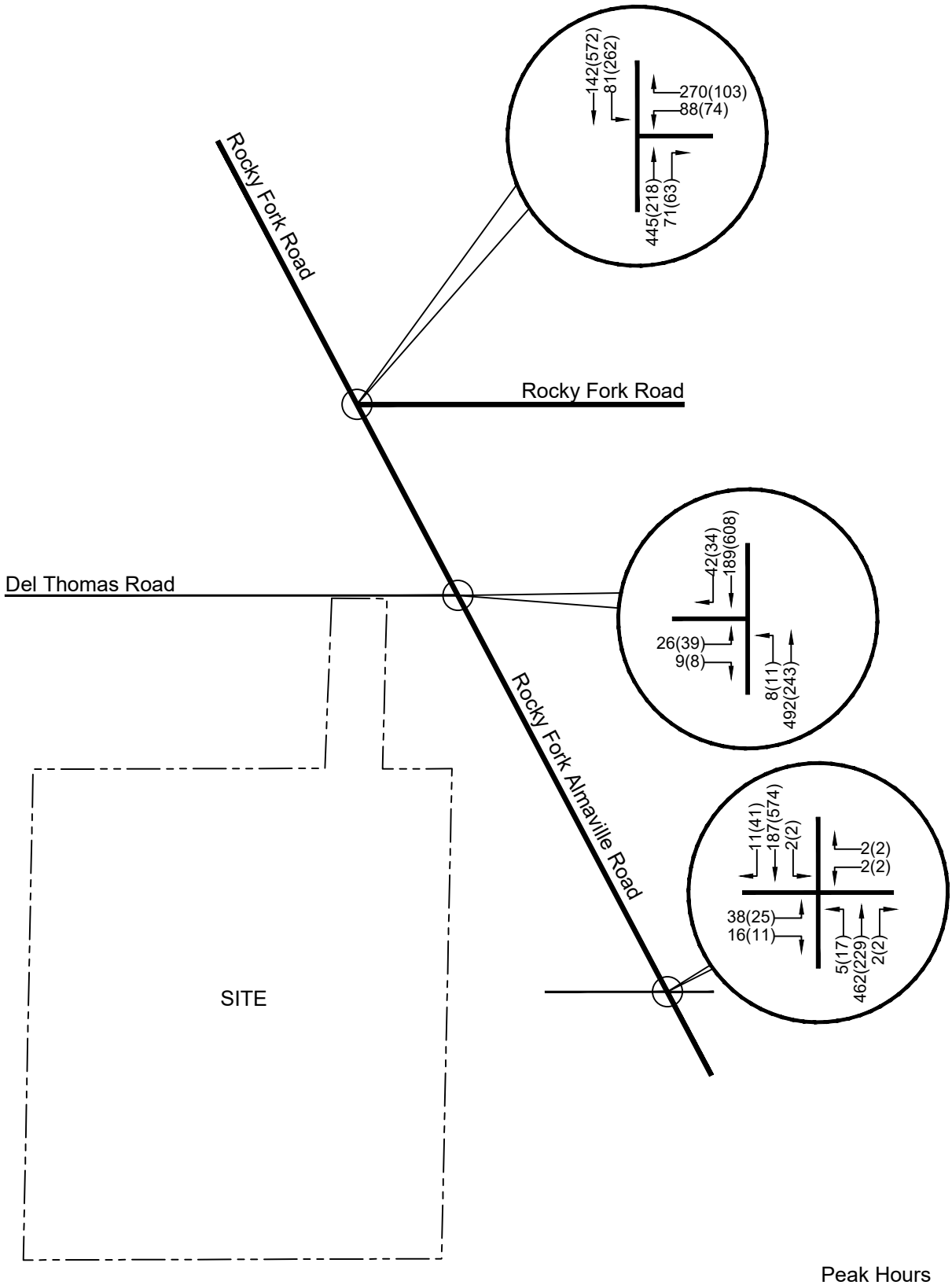
To establish background traffic volumes, TDOT historical traffic was obtained in the study area along Rocky Fork Almaville Road. Based upon linear regression analysis of the historical traffic data, the annual growth rate in the area is approximately 7 percent. However, due to the background development's daily traffic of approximately 2,500 trips being added to the study area with existing 3,251 daily trips, a conservative ***2 percent annual growth rate*** will be used as the base growth for the existing traffic volumes.

D. Background Traffic Summary

Background traffic for the future traffic forecasts was compiled based on the following:

- Existing traffic count data
- Specific background developments: The Courtyards at Stewarts Creek, Rocky Fork Almaville Road Annexation, and Tuckers Pointe
- 2% annual increase of traffic volumes for the period from 2025 to 2029

Background traffic volumes on the study area roadways, representing existing traffic volumes plus background growth, for the year 2029 are shown in Figure 4.



Peak Hours
AM (PM)

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a Pape-Dawson company

Patterson Smyrna

2029 Background Traffic Volumes

Figure
4

V. PROPOSED SITE TRAFFIC

A. Site Trip Generation

In order to quantify site-related impacts within the study area, some estimates of site trip generation and traffic assignment had to be established. Trip generation rates for the development were established using information for the weekday a.m. and p.m. peak hour of the adjacent street as shown in the ITE *Trip Generation Manual, 11th Edition*.

The trip generation for the Patterson Smyrna development is shown in Table 3.

TABLE 3

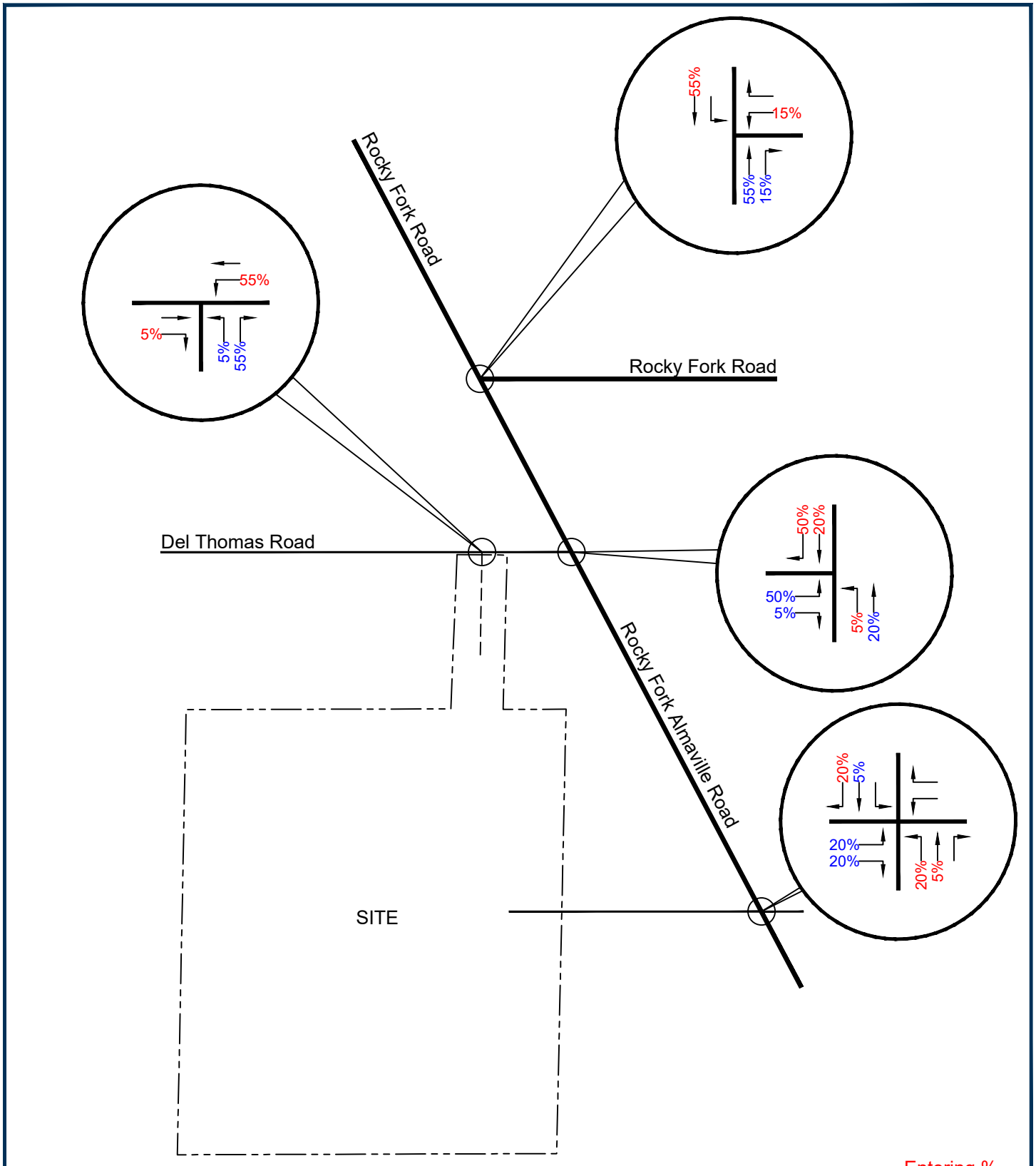
TRIP GENERATION

Land Use	Land Use Code	Total Units	Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
Single Family Detached	210	162 Units	1,573	27	89	116	98	58	156
Multifamily (Low-Rise)	220	40 Units	332	8	27	35	24	14	38
Total Trip Generation			**1,905**	**35**	**116**	**151**	**122**	**72**	**194**

B. Site Trip Distribution and Assignment

Site trips were distributed based primarily upon the prevalent commuter traffic patterns in the area and the proximity and routes to major transportation facilities. Figure 5 shows the distribution of the site trips for the Patterson Smyrna development.

Site traffic volumes generated by the Patterson Smyrna development in the horizon year 2029 are shown in Figure 6. The accumulation of existing, background growth, and site-generated traffic for the horizon year 2029 is shown in Figure 7.

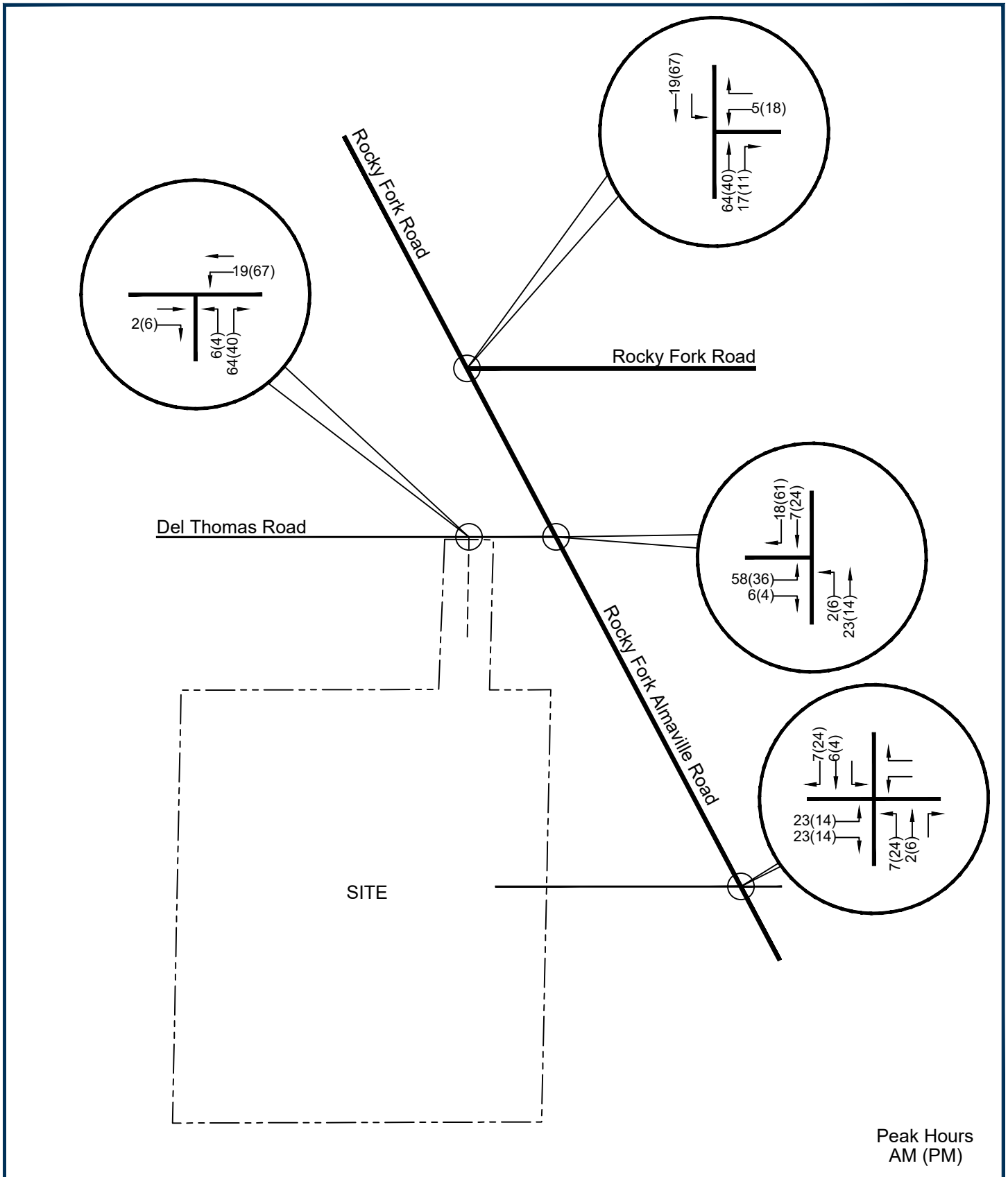


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Patterson Smyrna

Site Trip Distribution

Figure
5

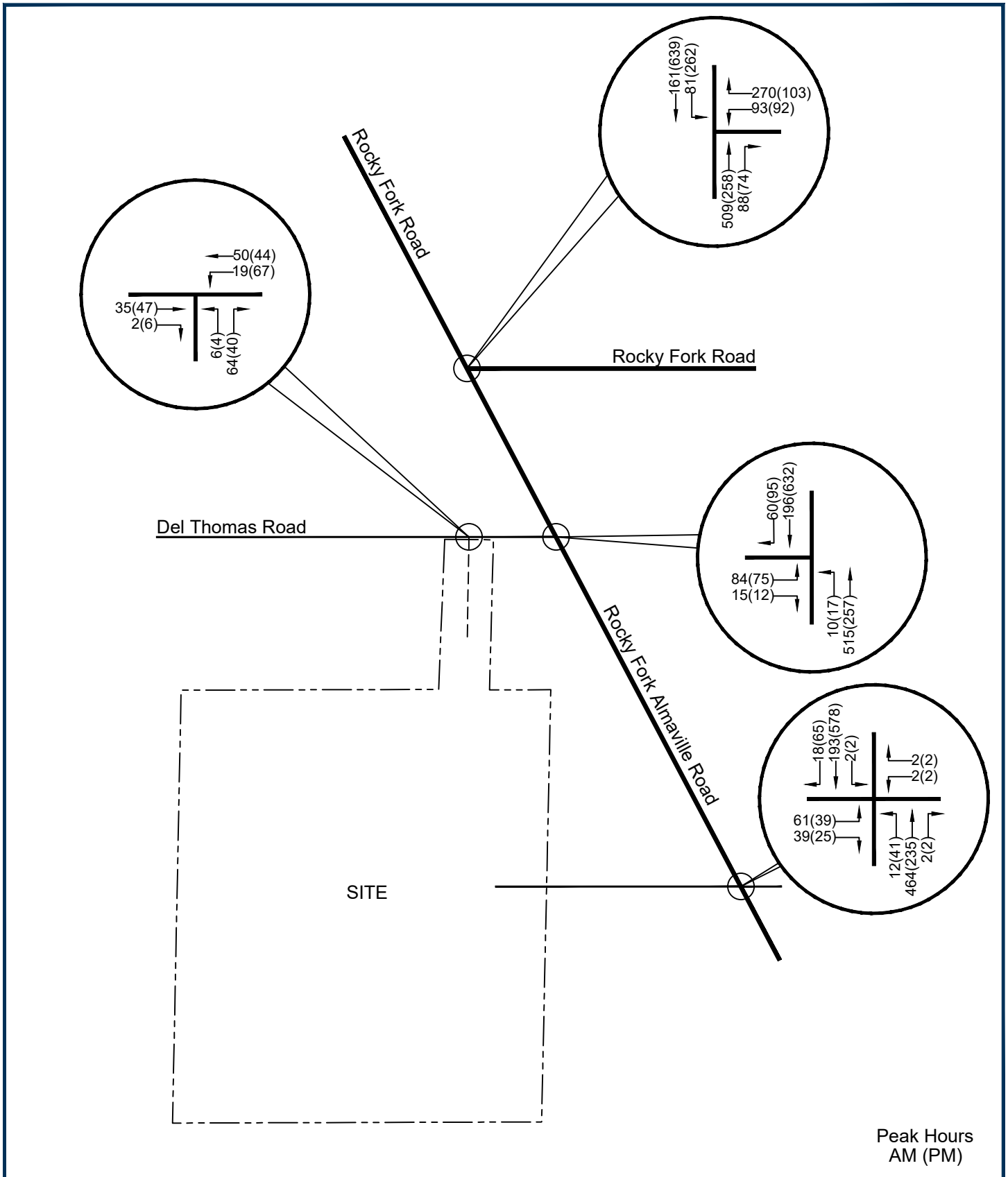


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Patterson Smyrna

Site Traffic Volumes

Figure
6



RaganSmith
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Patterson Smyrna

2029 Total Traffic Volumes

Figure
7

VI. TRANSPORTATION ANALYSIS

A. Intersection Capacity Analysis

In order to gauge the site impact and identify capacity deficiencies, intersection capacity analyses were conducted at the proposed Patterson Smyrna development study area intersections. Capacity analyses were conducted according to the methodology and procedures outlined in the *Highway Capacity Manual*, HCM 7th Edition, published by Transportation Research Board. Intersections were analyzed for capacity deficiencies and geometric improvement needs during the a.m. and p.m. peak hours for existing, background and total traffic conditions.

Level of service (LOS) criteria for unsignalized intersections is shown in Table 4 below.

TABLE 4

LEVEL OF SERVICE DESCRIPTIONS FOR UNSIGNALIZED INTERSECTIONS

Level of Service	Description	Control Delay (sec. /veh.)
A	Usually no conflicting traffic	0 - 10
B	Occasionally some delay due to conflicting traffic	> 10 - 15
C	Delay is noticeable but not inconveniencing	> 15 - 25
D	Delay is noticeable and irritating, increased risk taking	> 25 - 35
E	Delay approaches tolerance level, risk taking likely	> 35 - 50
F	Delay exceeds tolerance level, high likelihood of risk taking	> 50

Source: Highway Capacity Manual, HCM 7th Edition

Capacity analysis results for the a.m. peak hour are shown in Table 5.

TABLE 5

INTERSECTION CAPACITY RESULTS – A.M. PEAK HOUR

Intersection	Condition(1)	Level of Service (avg. delay/vehicle – sec.)		
		2025 Existing	2029 Background	2029 Total
Rocky Fork Almaville Road at Del Thomas Road	NB Left	A (7.7)	A (7.8)	A (7.9)
	TWSC EB	B (12.51)	B (14.93)	C (19.99)
Rocky Fork Road at Rocky Fork Almaville Road	SB Left	A (8.3)	A (8.8)	A (9.1)
	TWSC WB	C (19.61)	E (36.70)	F (57.40)
Rocky Fork Almaville Road at Courtyard Access / Kedron Church Road	SB Left	-	A (8.4)	A (8.4)
	TWSC WB	-	B (13.67)	B (14.12)
	NB Left	-	A (7.7)	A (7.7)
	TWSC EB	-	C (15.31)	C (16.58)
Del Thomas Road at Project Access	WB Left	-	-	A (7.3)
	TWSC NB	-	-	A (8.87)

(1) TWSC = Two-way Stop Control

Capacity analysis results for the p.m. peak hour are shown in Table 6.

TABLE 6

INTERSECTION CAPACITY RESULTS – P.M. PEAK HOUR

Intersection	Condition[1]	Level of Service (avg. delay/vehicle – sec.)		
		2025 Existing	**2029** Background	**2029 Total**
Rocky Fork Almaville Road at Del Thomas Road	NB Left	A (8.4)	A (8.9)	A (9.3)
	TWSC EB	B (14.25)	C (18.37)	C (23.97)
Rocky Fork Road at Rocky Fork Almaville Road	SB Left	A (8.3)	A (8.7)	A (8.9)
	TWSC WB	C (23.88)	F (108.28)	F (297.47)
Rocky Fork Almaville Road at Courtyard Access / Kedron Church Road	SB Left	-	A (7.7)	A (7.8)
	TWSC WB	-	B (14.87)	C (16.31)
	NB Left	-	A (9.0)	A (9.2)
	TWSC EB	-	C (19.89)	C (23.75)
Del Thomas Road at Project Access	WB Left	-	-	A (7.4)
	TWSC NB	-	-	A (8.85)

[1] TWSC = Two-way Stop Control

B. Turn Lane Warrants

The National Cooperative Highway Research Program (NCHRP) Report 467 provides guidance for evaluating intersection improvements at unsignalized intersections. Specific volume-based warrants have been checked to evaluate the need for right turn and left turn deceleration and storage lanes.

Table 7 below details pertinent right turn lane warrant information for applicable intersections in the study area during 2029 Background Traffic Conditions.

TABLE 7

RIGHT TURN LANE WARRANT ANALYSIS – 2029 BACKGROUND TRAFFIC CONDITIONS

Location	Peak Hour	Advancing Volume	Right Turn Volume	Speed (mph)	Right Turn Lane Warranted[1]
Rocky Fork Almaville Road (SB) at Del Thomas Road	A.M.	231	42	35	No
	P.M.	642	34		No
Rocky Fork Road at Rocky Fork Almaville Road (NB)	A.M.	516	71	35	No
	P.M.	281	63		No
Rocky Fork Almaville Road (SB) at Courtyard Access / Kedron Church Road	A.M.	198	11	35	No
	P.M.	615	41		No

[1] Evaluating Intersection Improvements: An Engineering Study Guide, NCHRP Report 467 Transportation Research Board, pg. 22-23

Table 8 below details pertinent right turn lane warrant information for applicable intersections in the study area during 2029 Total Traffic Conditions.

TABLE 8

RIGHT TURN LANE WARRANT ANALYSIS – 2029 TOTAL TRAFFIC CONDITIONS

Location	Peak Hour	Advancing Volume	Right Turn Volume	Speed (mph)	Right Turn Lane Warranted[1]
Rocky Fork Almaville Road (SB) at Del Thomas Road	A.M.	256	60	35	No
	P.M.	727	95		Yes
Rocky Fork Road at Rocky Fork Almaville Road (NB)	A.M.	597	88	35	No
	P.M.	332	74		No
Rocky Fork Almaville Road (NB) at Courtyard Access / Kedron Church Road	A.M.	211	18	35	No
	P.M.	643	65		No
Del Thomas Road (EB) at Project Access	A.M.	37	2	35	No
	P.M.	53	6		No

[1] Evaluating Intersection Improvements: An Engineering Study Guide, NCHRP Report 467 Transportation Research Board, pg. 22-23

Table 9 below details pertinent left turn lane warrant information for applicable intersections in the study area during 2029 Background Traffic Conditions.

TABLE 9

LEFT TURN LANE WARRANT ANALYSIS – 2029 BACKGROUND TRAFFIC CONDITIONS

Location	Peak Hour	Advancing Volume	Opposing Volume	L%	Speed (mph)	Left Turn Lane Warranted[1]
Rocky Fork Almaville Road (NB) at Del Thomas Road	A.M.	500	231	1.6%	35	No
	P.M.	254	642	4.3%		No
Rocky Fork Road (SB) at Rocky Fork Almaville Road	A.M.	223	516	36.3%	35	Yes
	P.M.	834	281	31.4%		Yes
Rocky Fork Almaville Road (NB) at Courtyard Access	A.M.	469	198	1.1%	35	No
	P.M.	248	615	6.9%		No

[1] Evaluating Intersection Improvements: An Engineering Study Guide, NCHRP Report 457 Transportation Research Board, pg. 21-22

Table 10 below details pertinent left turn lane warrant information for applicable intersections in the study area during 2029 Total Traffic Conditions.

TABLE 10

LEFT TURN LANE WARRANT ANALYSIS – 2029 TOTAL TRAFFIC CONDITIONS

Location	Peak Hour	Advancing Volume	Opposing Volume	L%	Speed (mph)	Left Turn Lane Warranted[(1)]
Rocky Fork Almaville Road (NB) at Del Thomas Road	A.M.	525	256	1.9%	35	No
	P.M.	274	727	6.2%		No
Rocky Fork Road (SB) at Rocky Fork Almaville Road	A.M.	242	597	33.5%	35	Yes
	P.M.	901	332	29.1%		Yes
Rocky Fork Almaville Road (NB) at Courtyard Access	A.M.	478	211	2.5%	35	No
	P.M.	278	643	14.9%		Yes
Del Thomas Road (WB) at Project Access	A.M.	69	37	27.5%	35	No
	P.M.	111	53	60.4%		No

(1) Evaluating Intersection Improvements: An Engineering Study Guide, NCHRP Report 457 Transportation Research Board, pg. 21-22

VII. CONCLUSIONS AND RECOMMENDATIONS

A. Rocky Fork Almaville Road at Del Thomas Road

- Traffic operations at this intersection will be characterized by level of service B during the a.m. peak hour and level of service C during the p.m. peak hour during background traffic conditions.

- No intersection control changes are recommended at this intersection due to the impact of the Patterson Smyrna development. It should be noted that this portion of Rocky Fork Almaville Road is not currently in the Town of Smyrna limits.

- Traffic operations at this intersection will be characterized by level of service C during the a.m. peak hour and the p.m. peak hour after full build-out of the Patterson Smyrna development.

- Traffic volume-based left turn lane warrant analysis were conducted for a northbound left turn lane on Rocky Fork Almaville Road at Del Thomas Road and it was determined a left turn lane is not expected to be warranted at this intersection.

- Traffic volume-based right turn lane warrant analysis were conducted for a southbound right turn lane on Rocky Fork Almaville Road at Del Thomas Road. It was determined a right turn lane is expected to be warranted at this intersection during the p.m. peak hour during total traffic conditions, which includes the traffic from background developments as well as the Patterson Smyrna development. The right turn lane warrant is expected to be met when approximately 50% of the Patterson Smyrna development is complete. The right turn lane would require the annexation of this portion of Rocky Fork Almaville Road and Del Thomas Road intersection to improve the intersection to Town standards. Additionally, the existing bridge that spans Rocky Fork Creek should be widened as part of a regional improvement to include the improvements at Rocky Fork Almaville Road and Rocky Fork Road.

B. Rocky Fork Road at Rocky Fork Almaville Road

- Traffic operations at this intersection will be characterized by level of service E during the a.m. peak hour and level of service F during the p.m. peak hour during background traffic conditions.

- No intersection control changes or additional laneage are recommended at this intersection due to the impact of the Patterson Smyrna development. It should be noted that this portion of Rocky Fork Almaville Road and Rocky Fork Road is not currently in the Town of Smyrna limits.

- Traffic operations at this intersection will be characterized by level of service F during the a.m. and p.m. peak hour after full build-out of the Patterson Smyrna development.

- Traffic volume-based left turn lane warrant analysis were conducted for a southbound left turn lane on Rocky Fork Almaville Road at Rocky Fork Road during background traffic conditions, and it was determined a left turn lane would be warranted at this intersection without the addition of the Patterson Smyrna development traffic. This is an indication that the Town of Smyrna should construct a southbound left turn lane on Rocky Fork Almaville Road at Rocky Fork Road.

- Traffic volume-based right turn lane warrant analysis were conducted for a northbound right turn lane on Rocky Fork Almaville Road at Rocky Fork Road and it was determined a right turn lane is not expected to be warranted at this intersection.

C. Del Thomas Road at Project Access

- Traffic operations at this intersection will be characterized by level of service A during the a.m. and p.m. peak hour after full build-out of the Patterson Smyrna development.

- The south leg of the intersection and portion of Del Thomas Road should be designed to meet the Town of Smyrna standards, with a minimum of one lane exiting and one lane entering.

- Traffic volume-based right turn lane warrant analysis was completed for an eastbound right turn lane on Del Thomas Road at the Project Access and it was determined a right turn lane is not expected to be warranted at this intersection.

- Traffic volume-based left turn lane warrant analysis was completed for a westbound left turn lane on Del Thomas Road at the Project Access and it was determined a left turn lane is not expected to be warranted at this intersection.

- During the design of the project access, it should be confirmed that there is the minimum sight distance available. Landscaping, monuments, and signage for the Patterson Smyrna Road development should be placed outside the right-of-way of Del Thomas Road and a minimum of 20 feet from the nearest edge of pavement on Del Thomas Road to preserve intersection sight lines.

D. Rocky Fork Almaville Road at Courtyard Access / Kedron Church Road

- Traffic operations at this intersection will be characterized by level of service C during the a.m. and p.m. peak hour during background traffic conditions.

- No intersection control changes are recommended at this intersection due to the impact of the Patterson Smyrna development. It should be noted that this portion of Rocky Fork Almaville Road is not currently in the Town of Smyrna limits.

- Traffic operations at this intersection will be characterized by level of service C during the a.m. p.m. peak hour after full build-out of the Patterson Smyrna development.

- Traffic volume-based right turn lane warrant analysis were conducted for a southbound right turn lane on Rocky Fork Almaville Road at Courtyard Access and it was determined a right turn lane is not expected to be warranted at this intersection.

- Traffic volume-based left turn lane warrant analysis were conducted for a northbound left turn lane on Rocky Fork Almaville Road at Courtyard Access. It was determined a left turn lane is expected to be warranted at this intersection during the p.m. peak hour during total traffic conditions, which includes the traffic from background developments as well as the Patterson Smyrna development. The left turn lane warrant is expected to be met when approximately 80% of the Patterson Smyrna development is complete.

APPENDIX

A. TRAFFIC COUNTS

B. TRIP GENERATION & TRAFFIC DERIVATION WORKSHEETS

C. CAPACITY ANALYSIS WORKSHEETS – EXISTING TRAFFIC

D. CAPACITY ANALYSIS WORKSHEETS – BACKGROUND TRAFFIC

E. CAPACITY ANALYSIS WORKSHEETS – TOTAL TRAFFIC

APPENDIX A

TRAFFIC COUNTS

Peak Hour Turning Movement Count

Click here for Map

Smyrna, TN

Marr Traffic DATA COLLECTION

www.marrtraffic.com



All vehicles

	Northbound						Southbound						Eastbound												
	Rocky Fork Almaville Rd (South)						Rocky Fork Almaville Rd (North)						Del Thomas Rd												
	Left	Thru			U-Turn	App		Thru	Right		U-Turn	App	Left		Right		U-Turn	App						App	Int
Time	1.1	1.2			1.3	Total		1.4	1.5		1.6	Total	1.7		1.8		1.9	Total						Total	Total
0700 - 0715	2	96	-	-	0	98	-	29	6	-	0	35	11	-	1	-	0	12	-	-	-	-	-	0	145
0715 - 0730	3	84	-	-	0	87	-	38	9	-	0	47	5	-	4	-	0	9	-	-	-	-	-	0	143
0730 - 0745	2	96	-	-	0	98	-	45	14	-	0	59	5	-	2	-	0	7	-	-	-	-	-	0	164
0745 - 0800	0	81	-	-	0	81	-	33	10	-	0	43	3	-	1	-	0	4	-	-	-	-	-	0	128
Total	7	357	0	0	0	364	0	145	39	0	0	184	24	0	8	0	0	32	0	0	0	0	0	0	580
Approach %	1.92	98.08	0.00	0.00	0.00	-	0.00	78.80	21.20	0.00	0.00	-	75.00	0.00	25.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.58	0.93	0.00	0.00	0.00	**0.93**	0.00	0.81	0.70	0.00	0.00	**0.78**	0.55	0.00	0.50	0.00	0.00	**0.67**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.88**

Passenger Vehicles (1-3)

	Northbound						Southbound						Eastbound												
	Rocky Fork Almaville Rd (South)						Rocky Fork Almaville Rd (North)						Del Thomas Rd												
	Left	Thru			U-Turn	App		Thru	Right		U-Turn	App	Left		Right		U-Turn	App						App	Int
Time	1.1	1.2			1.3	Total		1.4	1.5		1.6	Total	1.7		1.8		1.9	Total						Total	Total
0700 - 0715	1	95	-	-	0	96	-	26	6	-	0	32	11	-	0	-	0	11	-	-	-	-	-	0	139
0715 - 0730	3	81	-	-	0	84	-	36	9	-	0	45	5	-	4	-	0	9	-	-	-	-	-	0	138
0730 - 0745	2	89	-	-	0	91	-	44	14	-	0	58	5	-	2	-	0	7	-	-	-	-	-	0	156
0745 - 0800	0	78	-	-	0	78	-	32	10	-	0	42	3	-	1	-	0	4	-	-	-	-	-	0	124
Total	6	343	0	0	0	349	0	138	39	0	0	177	24	0	7	0	0	31	0	0	0	0	0	0	557
Approach %	1.72	98.28	0.00	0.00	0.00	-	0.00	77.97	22.03	0.00	0.00	-	77.42	0.00	22.58	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.50	0.90	0.00	0.00	0.00	**0.91**	0.00	0.78	0.70	0.00	0.00	**0.76**	0.55	0.00	0.44	0.00	0.00	**0.70**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.89**

Single Unit Trucks (4-7)

	Northbound						Southbound						Eastbound												
	Rocky Fork Almaville Rd (South)						Rocky Fork Almaville Rd (North)						Del Thomas Rd												
	Left	Thru			U-Turn	App		Thru	Right		U-Turn	App	Left		Right		U-Turn	App						App	Int
Time	1.1	1.2			1.3	Total		1.4	1.5		1.6	Total	1.7		1.8		1.9	Total						Total	Total
0700 - 0715	1	1	-	-	0	2	-	3	0	-	0	3	0	-	1	-	0	1	-	-	-	-	-	0	6
0715 - 0730	0	3	-	-	0	3	-	2	0	-	0	2	0	-	0	-	0	0	-	-	-	-	-	0	5
0730 - 0745	0	7	-	-	0	7	-	1	0	-	0	1	0	-	0	-	0	0	-	-	-	-	-	0	8
0745 - 0800	0	3	-	-	0	3	-	1	0	-	0	1	0	-	0	-	0	0	-	-	-	-	-	0	4
Total	1	14	0	0	0	15	0	7	0	0	0	7	0	0	1	0	0	1	0	0	0	0	0	0	23
Approach %	6.67	93.33	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	0.00	-	0.00	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.25	0.50	0.00	0.00	0.00	**0.54**	0.00	0.58	0.00	0.00	0.00	**0.58**	0.00	0.00	0.25	0.00	0.00	**0.25**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.72**

Combination Trucks (8-13)

	Northbound						Southbound						Eastbound												
	Rocky Fork Almaville Rd (South)						Rocky Fork Almaville Rd (North)						Del Thomas Rd												
	Left	Thru			U-Turn	App		Thru	Right		U-Turn	App	Left		Right		U-Turn	App						App	Int
Time	1.1	1.2			1.3	Total		1.4	1.5		1.6	Total	1.7		1.8		1.9	Total						Total	Total
0700 - 0715	0	0	-	-	0	0	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	0
0715 - 0730	0	0	-	-	0	0	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	0
0730 - 0745	0	0	-	-	0	0	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	0
0745 - 0800	0	0	-	-	0	0	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Bicycles

	Northbound						Southbound						Eastbound												
	Rocky Fork Almaville Rd (South)						Rocky Fork Almaville Rd (North)						Del Thomas Rd												
	Left	Thru			U-Turn	App		Thru	Right		U-Turn	App	Left		Right		U-Turn	App						App	Int
Time	1.1	1.2			1.3	Total		1.4	1.5		1.6	Total	1.7		1.8		1.9	Total						Total	Total
0700 - 0715	0	0	-	-	0	0	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	0
0715 - 0730	0	0	-	-	0	0	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	0
0730 - 0745	0	0	-	-	0	0	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	0
0745 - 0800	0	0	-	-	0	0	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Peak Hour Turning Movement Count

Click here for Map

Smyrna, TN

Marr Traffic DATA COLLECTION

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Thursday, April 24, 2025		
Mostly Cloudy		68°F
Period	1600 - 1800	APPLY
Peak Hour	1630 - 1730	APPLY
Global PH	1630 - 1730	APPLY

* the Peak Hour Diagram does not include bicycles

Session Parameters

(Drop Down Menu)

Peak Hour

Volume



All vehicles

	Northbound						Southbound						Eastbound												
	Rocky Fork Almaville Rd (South)						Rocky Fork Almaville Rd (North)						Del Thomas Rd												
	Left	Thru			U-Turn	App		Thru	Right		U-Turn	App	Left		Right		U-Turn	App						App	Int
Time	1.1	1.2			1.3	Total		1.4	1.5		1.6	Total	1.7		1.8		1.9	Total						Total	Total
1630 - 1645	4	47	-	-	0	51	-	99	10	-	0	109	10	-	2	-	0	12	-	-	-	-	-	0	172
1645 - 1700	0	30	-	-	0	30	-	129	4	-	0	133	12	-	4	-	0	16	-	-	-	-	-	0	179
1700 - 1715	3	48	-	-	0	51	-	109	7	-	0	116	6	-	0	-	0	6	-	-	-	-	-	0	173
1715 - 1730	3	37	-	-	0	40	-	123	10	-	0	133	9	-	1	-	0	10	-	-	-	-	-	0	183
Total	10	162	0	0	0	172	0	460	31	0	0	491	37	0	7	0	0	44	0	0	0	0	0	0	707
Approach %	5.81	94.19	0.00	0.00	0.00	-	0.00	93.69	6.31	0.00	0.00	-	84.09	0.00	15.91	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.63	0.84	0.00	0.00	0.00	**0.84**	0.00	0.89	0.78	0.00	0.00	**0.92**	0.77	0.00	0.44	0.00	0.00	**0.69**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.97**

Passenger Vehicles (1-3)

	Northbound						Southbound						Eastbound												
	Rocky Fork Almaville Rd (South)						Rocky Fork Almaville Rd (North)						Del Thomas Rd												
	Left	Thru			U-Turn	App		Thru	Right		U-Turn	App	Left		Right		U-Turn	App						App	Int
Time	1.1	1.2			1.3	Total		1.4	1.5		1.6	Total	1.7		1.8		1.9	Total						Total	Total
1630 - 1645	3	46	-	-	0	49	-	97	10	-	0	107	9	-	2	-	0	11	-	-	-	-	-	0	167
1645 - 1700	0	30	-	-	0	30	-	126	4	-	0	130	12	-	4	-	0	16	-	-	-	-	-	0	176
1700 - 1715	3	44	-	-	0	47	-	109	7	-	0	116	6	-	0	-	0	6	-	-	-	-	-	0	169
1715 - 1730	2	36	-	-	0	38	-	123	10	-	0	133	8	-	1	-	0	9	-	-	-	-	-	0	180
Total	8	156	0	0	0	164	0	455	31	0	0	486	35	0	7	0	0	42	0	0	0	0	0	0	692
Approach %	4.88	95.12	0.00	0.00	0.00	-	0.00	93.62	6.38	0.00	0.00	-	83.33	0.00	16.67	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.67	0.85	0.00	0.00	0.00	**0.84**	0.00	0.90	0.78	0.00	0.00	**0.91**	0.73	0.00	0.44	0.00	0.00	**0.66**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.96**

Single Unit Trucks (4-7)

	Northbound						Southbound						Eastbound												
	Rocky Fork Almaville Rd (South)						Rocky Fork Almaville Rd (North)						Del Thomas Rd												
	Left	Thru			U-Turn	App		Thru	Right		U-Turn	App	Left		Right		U-Turn	App						App	Int
Time	1.1	1.2			1.3	Total		1.4	1.5		1.6	Total	1.7		1.8		1.9	Total						Total	Total
1630 - 1645	1	1	-	-	0	2	-	1	0	-	0	1	1	-	0	-	0	1	-	-	-	-	-	0	4
1645 - 1700	0	0	-	-	0	0	-	2	0	-	0	2	0	-	0	-	0	0	-	-	-	-	-	0	2
1700 - 1715	0	4	-	-	0	4	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	4
1715 - 1730	1	1	-	-	0	2	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	2
Total	2	6	0	0	0	8	0	3	0	0	0	3	1	0	0	0	0	1	0	0	0	0	0	0	12
Approach %	25.00	75.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	0.00	-	100.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.50	0.38	0.00	0.00	0.00	**0.50**	0.00	0.38	0.00	0.00	0.00	**0.38**	0.25	0.00	0.00	0.00	0.00	**0.25**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.75**

Combination Trucks (8-13)

	Northbound						Southbound						Eastbound												
	Rocky Fork Almaville Rd (South)						Rocky Fork Almaville Rd (North)						Del Thomas Rd												
	Left	Thru			U-Turn	App		Thru	Right		U-Turn	App	Left		Right		U-Turn	App						App	Int
Time	1.1	1.2			1.3	Total		1.4	1.5		1.6	Total	1.7		1.8		1.9	Total						Total	Total
1630 - 1645	0	0	-	-	0	0	-	1	0	-	0	1	0	-	0	-	0	0	-	-	-	-	-	0	1
1645 - 1700	0	0	-	-	0	0	-	1	0	-	0	1	0	-	0	-	0	0	-	-	-	-	-	0	1
1700 - 1715	0	0	-	-	0	0	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	0
1715 - 1730	0	0	-	-	0	0	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	0
Total	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.50	0.00	0.00	0.00	**0.50**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.50**

Bicycles

	Northbound						Southbound						Eastbound												
	Rocky Fork Almaville Rd (South)						Rocky Fork Almaville Rd (North)						Del Thomas Rd												
	Left	Thru			U-Turn	App		Thru	Right		U-Turn	App	Left		Right		U-Turn	App						App	Int
Time	1.1	1.2			1.3	Total		1.4	1.5		1.6	Total	1.7		1.8		1.9	Total						Total	Total
1630 - 1645	0	0	-	-	0	0	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	0
1645 - 1700	0	0	-	-	0	0	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	0
1700 - 1715	0	0	-	-	0	0	-	0	0	-	0	0	0	-	0	-	0	0	-	-	-	-	-	0	0
1715 - 1730	0	0	-	-	0	0	-	0	0	-	0	0	1	-	0	-	0	1	-	-	-	-	-	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	100.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.25	0.00	0.00	0.00	0.00	**0.25**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.25**

Classified Turn Movement Count || All vehicles

Smyrna, TN

Marr Traffic DATA COLLECTION
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Site 1
Rocky Fork Almaville Rd (South)
Rocky Fork Almaville Rd (North)
Del Thomas Rd

Date
Thursday, April 24, 2025

Lat/Long
35.926463°, -86.585369°
Click here for Map

Weather
Mostly Cloudy
68°F
Click here for Detailed Weather

0600 - 0900 (Weekday 3h Session) (04-24-2025)
All vehicles

	Northbound				Southbound				Eastbound				
	Rocky Fork Almaville Rd (South)				Rocky Fork Almaville Rd (North)				Del Thomas Rd				
TIME	Left 1.1	Thru 1.2	U-Turn 1.3	App Total	Thru 1.4	Right 1.5	U-Turn 1.6	App Total	Left 1.7	Right 1.8	U-Turn 1.9	App Total	Int Total
0600 - 0615	1	43	0	44	5	1	0	6	4	2	0	6	56
0615 - 0630	0	69	0	69	12	3	0	15	4	1	0	5	89
0630 - 0645	1	92	0	93	7	2	0	9	8	2	0	10	112
0645 - 0700	3	94	0	97	17	4	0	21	5	3	0	8	126
Hourly Total	5	298	0	**303**	41	10	0	**51**	21	8	0	**29**	**383**
0700 - 0715	2	96	0	98	29	6	0	35	11	1	0	12	145
0715 - 0730	3	84	0	87	38	9	0	47	5	4	0	9	143
0730 - 0745	2	96	0	98	45	14	0	59	5	2	0	7	164
0745 - 0800	0	81	0	81	33	10	0	43	3	1	0	4	128
Hourly Total	7	357	0	**364**	145	39	0	**184**	24	8	0	**32**	**580**
0800 - 0815	5	73	0	78	47	8	0	55	3	3	0	6	139
0815 - 0830	1	56	0	57	29	2	0	31	3	2	0	5	93
0830 - 0845	0	55	0	55	22	4	0	26	1	0	0	1	82
0845 - 0900	0	39	0	39	23	4	0	27	3	0	0	3	69
Hourly Total	6	223	0	**229**	121	18	0	**139**	10	5	0	**15**	**383**
Grand Total	18	878	0	**896**	307	67	0	**374**	55	21	0	**76**	**1346**
Approach %	2.01	97.99	0.00	-	82.09	17.91	0.00	-	72.37	27.63	0.00	-	
Intersection %	1.34	65.23	0.00	66.57	22.81	4.98	0.00	27.79	4.09	1.56	0.00	5.65	
Heavy Vehicle %	6	3	-	**3**	7	1	-	**6**	2	10	-	**4**	**4**
PHF	0.58	0.93	0.00	**0.93**	0.81	0.70	0.00	**0.78**	0.55	0.50	0.00	**0.67**	**0.88**
Peak Hour Total	7	357	0	**364**	145	39	0	**184**	24	8	0	**32**	**580**
Peak Hour HV %	14	4	0	**4**	5	0	0	**4**	0	13	0	**3**	**4**

1600 - 1800 (Weekday 2h Session) (04-24-2025)
All vehicles

	Northbound				Southbound				Eastbound				
	Rocky Fork Almaville Rd (South)				Rocky Fork Almaville Rd (North)				Del Thomas Rd				
TIME	Left 1.1	Thru 1.2	U-Turn 1.3	App Total	Thru 1.4	Right 1.5	U-Turn 1.6	App Total	Left 1.7	Right 1.8	U-Turn 1.9	App Total	Int Total
1600 - 1615	1	31	0	32	58	11	0	69	5	1	0	6	107
1615 - 1630	1	26	0	27	89	6	0	95	8	1	0	9	131
1630 - 1645	4	47	0	51	99	10	0	109	10	2	0	12	172
1645 - 1700	0	30	0	30	129	4	0	133	12	4	0	16	179
Hourly Total	6	134	0	**140**	375	31	0	**406**	35	8	0	**43**	**589**
1700 - 1715	3	48	0	51	109	7	0	116	6	0	0	6	173
1715 - 1730	3	37	0	40	123	10	0	133	9	1	0	10	183
1730 - 1745	4	26	0	30	84	11	0	95	6	3	0	9	134
1745 - 1800	4	28	0	32	66	5	0	71	9	4	0	13	116
Hourly Total	14	139	0	**153**	382	33	0	**415**	30	8	0	**38**	**606**
Grand Total	20	273	0	**293**	757	64	0	**821**	65	16	0	**81**	**1195**
Approach %	6.83	93.17	0.00	-	92.20	7.80	0.00	-	80.25	19.75	0.00	-	
Intersection %	1.67	22.85	0.00	24.52	63.35	5.36	0.00	68.70	5.44	1.34	0.00	6.78	
Heavy Vehicle %	15	3	-	**4**	1	0	-	**1**	3	6	-	**4**	**2**
PHF	0.63	0.84	0.00	**0.84**	0.89	0.78	0.00	**0.92**	0.77	0.44	0.00	**0.69**	**0.97**
Peak Hour Total	10	162	0	**172**	460	31	0	**491**	37	7	0	**44**	**707**
Peak Hour HV %	20	4	0	**5**	1	0	0	**1**	3	0	0	**2**	**2**

Peak Hour Turning Movement Count

Smyrna, TN

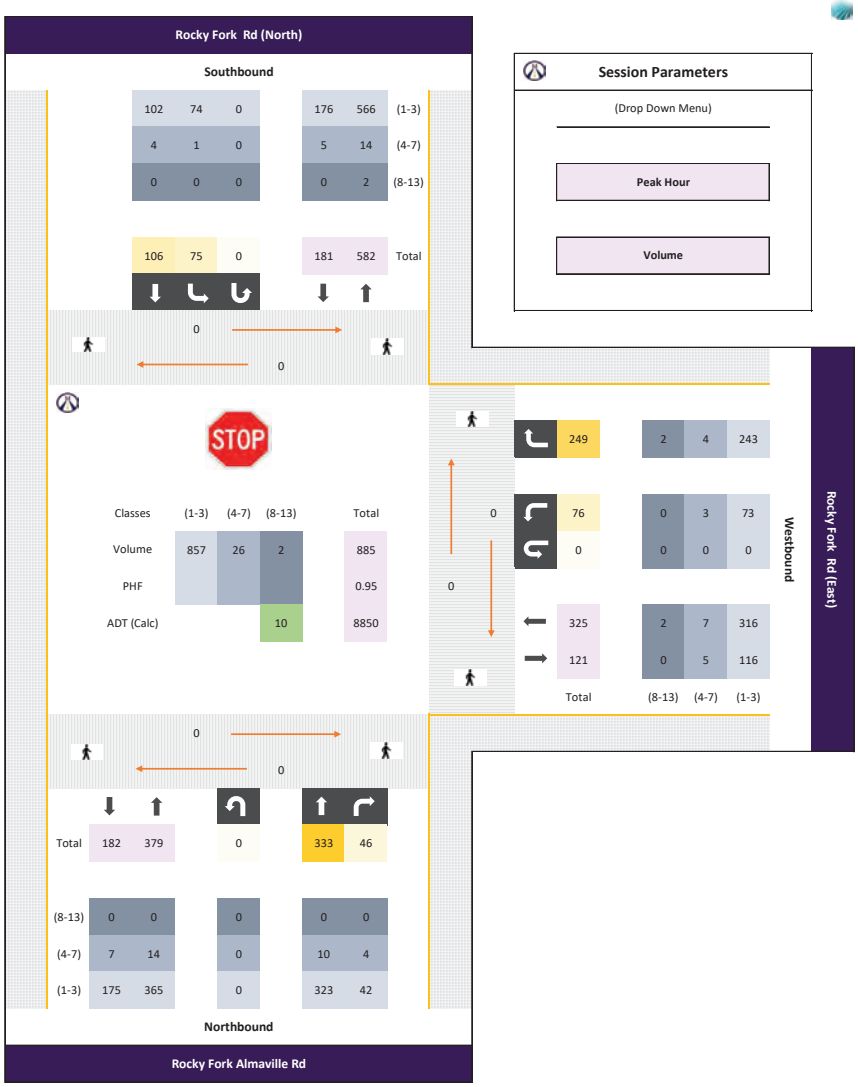
Click here for Map

Marr Traffic DATA COLLECTION

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Thursday, April 24, 2025		
Mostly Cloudy		68°F
Period	0600 - 0900	APPLY
Peak Hour	0700 - 0800	APPLY
Global PH	0700 - 0800	APPLY

* the Peak Hour Diagram does not include bicycles



All vehicles

	Northbound						Southbound												Westbound						
	Rocky Fork Almaville Rd						Rocky Fork Rd (North)												Rocky Fork Rd (East)						
Time		Thru 2.1	Right 2.2		U-Turn 2.3	App Total	Left 2.4	Thru 2.5			U-Turn 2.6	App Total						App Total	Left 2.7		Right 2.8		U-Turn 2.9	App Total	Int Total
0700 - 0715	-	89	19	-	0	108	20	19	-	-	0	39	-	-	-	-	-	0	15	-	70	-	0	85	232
0715 - 0730	-	75	12	-	0	87	11	25	-	-	0	36	-	-	-	-	-	0	24	-	76	-	0	100	223
0730 - 0745	-	93	8	-	0	101	21	34	-	-	0	55	-	-	-	-	-	0	22	-	43	-	0	65	221
0745 - 0800	-	76	7	-	0	83	23	28	-	-	0	51	-	-	-	-	-	0	15	-	60	-	0	75	209
Total	0	333	46	0	0	379	75	106	0	0	0	181	0	0	0	0	0	0	76	0	249	0	0	325	885
Approach %	0.00	87.86	12.14	0.00	0.00	-	41.44	58.56	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	23.38	0.00	76.62	0.00	0.00	-	
PHF	0.00	0.90	0.61	0.00	0.00	**0.88**	0.82	0.78	0.00	0.00	0.00	**0.82**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.79	0.00	0.82	0.00	0.00	**0.81**	**0.95**

Passenger Vehicles (1-3)

	Northbound						Southbound												Westbound						
	Rocky Fork Almaville Rd						Rocky Fork Rd (North)												Rocky Fork Rd (East)						
Time		Thru 2.1	Right 2.2		U-Turn 2.3	App Total	Left 2.4	Thru 2.5			U-Turn 2.6	App Total						App Total	Left 2.7		Right 2.8		U-Turn 2.9	App Total	Int Total
0700 - 0715	-	89	18	-	0	107	20	18	-	-	0	38	-	-	-	-	-	0	13	-	70	-	0	83	228
0715 - 0730	-	74	10	-	0	84	11	24	-	-	0	35	-	-	-	-	-	0	23	-	76	-	0	99	218
0730 - 0745	-	87	7	-	0	94	21	33	-	-	0	54	-	-	-	-	-	0	22	-	41	-	0	63	211
0745 - 0800	-	73	7	-	0	80	22	27	-	-	0	49	-	-	-	-	-	0	15	-	56	-	0	71	200
Total	0	323	42	0	0	365	74	102	0	0	0	176	0	0	0	0	0	0	73	0	243	0	0	316	857
Approach %	0.00	88.49	11.51	0.00	0.00	-	42.05	57.95	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	23.10	0.00	76.90	0.00	0.00	-	
PHF	0.00	0.91	0.58	0.00	0.00	**0.85**	0.84	0.77	0.00	0.00	0.00	**0.81**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.79	0.00	0.80	0.00	0.00	**0.80**	**0.94**

Single Unit Trucks (4-7)

	Northbound						Southbound												Westbound						
	Rocky Fork Almaville Rd						Rocky Fork Rd (North)												Rocky Fork Rd (East)						
Time		Thru 2.1	Right 2.2		U-Turn 2.3	App Total	Left 2.4	Thru 2.5			U-Turn 2.6	App Total						App Total	Left 2.7		Right 2.8		U-Turn 2.9	App Total	Int Total
0700 - 0715	-	0	1	-	0	1	0	1	-	-	0	1	-	-	-	-	-	0	2	-	0	-	0	2	4
0715 - 0730	-	1	2	-	0	3	0	1	-	-	0	1	-	-	-	-	-	0	1	-	0	-	0	1	5
0730 - 0745	-	6	1	-	0	7	0	1	-	-	0	1	-	-	-	-	-	0	0	-	2	-	0	2	10
0745 - 0800	-	3	0	-	0	3	1	1	-	-	0	2	-	-	-	-	-	0	0	-	2	-	0	2	7
Total	0	10	4	0	0	14	1	4	0	0	0	5	0	0	0	0	0	0	3	0	4	0	0	7	26
Approach %	0.00	71.43	28.57	0.00	0.00	-	20.00	80.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	42.86	0.00	57.14	0.00	0.00	-	
PHF	0.00	0.42	0.50	0.00	0.00	**0.50**	0.25	1.00	0.00	0.00	0.00	**0.63**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.38	0.00	0.50	0.00	0.00	**0.88**	**0.65**

Combination Trucks (8-13)

	Northbound						Southbound												Westbound						
	Rocky Fork Almaville Rd						Rocky Fork Rd (North)												Rocky Fork Rd (East)						
Time		Thru 2.1	Right 2.2		U-Turn 2.3	App Total	Left 2.4	Thru 2.5			U-Turn 2.6	App Total						App Total	Left 2.7		Right 2.8		U-Turn 2.9	App Total	Int Total
0700 - 0715	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	0
0715 - 0730	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	0
0730 - 0745	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	0
0745 - 0800	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	2	-	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	100.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.25	0.00	0.00	**0.25**	**0.25**

Bicycles

	Northbound						Southbound												Westbound						
	Rocky Fork Almaville Rd						Rocky Fork Rd (North)												Rocky Fork Rd (East)						
Time		Thru 2.1	Right 2.2		U-Turn 2.3	App Total	Left 2.4	Thru 2.5			U-Turn 2.6	App Total						App Total	Left 2.7		Right 2.8		U-Turn 2.9	App Total	Int Total
0700 - 0715	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	0
0715 - 0730	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	0
0730 - 0745	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	0
0745 - 0800	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Peak Hour Turning Movement Count

Smyrna, TN

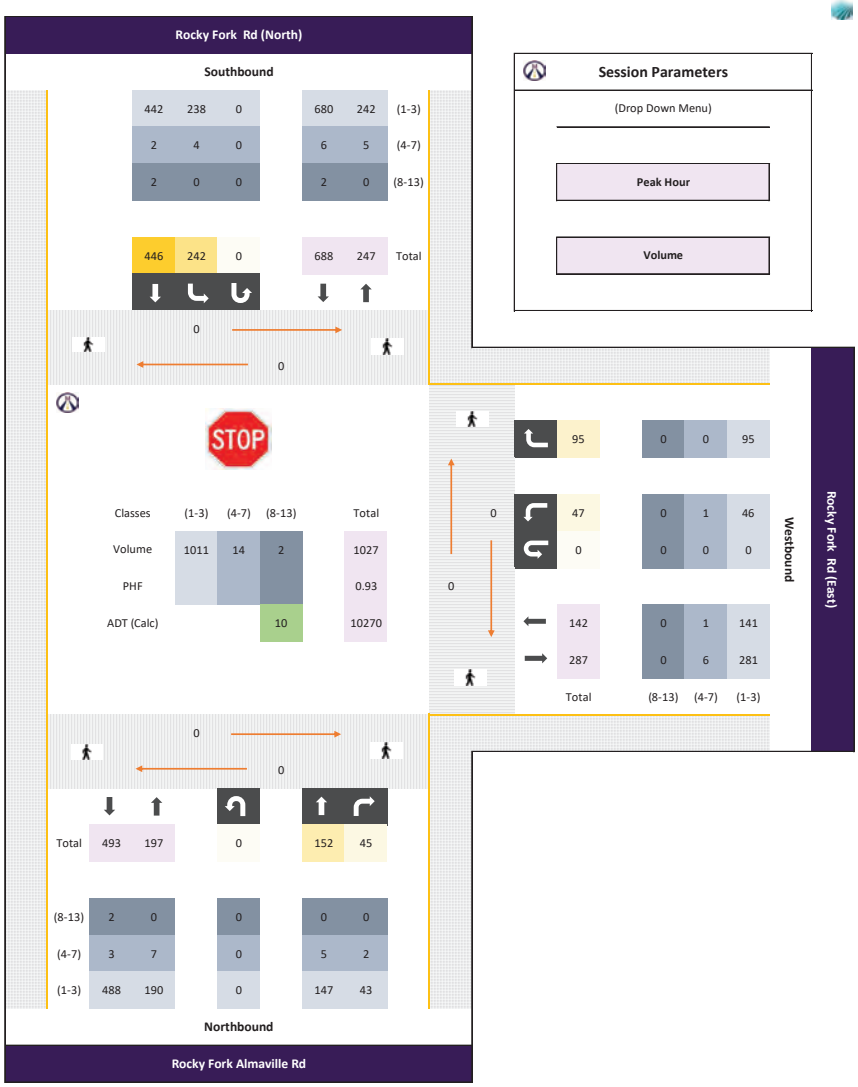
Click here for Map

Marr Traffic DATA COLLECTION

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Thursday, April 24, 2025		
Mostly Cloudy		68°F
Period	1600 - 1800	APPLY
Peak Hour	1630 - 1730	APPLY
Global PH	1630 - 1730	APPLY

* the Peak Hour Diagram does not include bicycles



Session Parameters

(Drop Down Menu)

Peak Hour

Volume

All vehicles

	Northbound						Southbound												Westbound						
	Rocky Fork Almaville Rd						Rocky Fork Rd (North)												Rocky Fork Rd (East)						
		Thru	Right		U-Turn	App	Left	Thru			U-Turn	App						App	Left		Right		U-Turn	App	Int
Time		2.1	2.2		2.3	Total	2.4	2.5			2.6	Total						Total	2.7		2.8		2.9	Total	Total
1630 - 1645	-	44	13	-	0	57	47	98	-	-	0	145	-	-	-	-	-	0	14	-	22	-	0	36	238
1645 - 1700	-	33	8	-	0	41	56	120	-	-	0	176	-	-	-	-	-	0	10	-	26	-	0	36	253
1700 - 1715	-	40	12	-	0	52	83	109	-	-	0	192	-	-	-	-	-	0	9	-	23	-	0	32	276
1715 - 1730	-	35	12	-	0	47	56	119	-	-	0	175	-	-	-	-	-	0	14	-	24	-	0	38	260
Total	0	152	45	0	0	197	242	446	0	0	0	688	0	0	0	0	0	0	47	0	95	0	0	142	1027
Approach %	0.00	77.16	22.84	0.00	0.00	-	35.17	64.83	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	33.10	0.00	66.90	0.00	0.00	-	
PHF	0.00	0.86	0.87	0.00	0.00	**0.86**	0.73	0.93	0.00	0.00	0.00	**0.90**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.84	0.00	0.91	0.00	0.00	**0.93**	**0.93**

Passenger Vehicles (1-3)

	Northbound						Southbound												Westbound						
	Rocky Fork Almaville Rd						Rocky Fork Rd (North)												Rocky Fork Rd (East)						
		Thru	Right		U-Turn	App	Left	Thru			U-Turn	App						App	Left		Right		U-Turn	App	Int
Time		2.1	2.2		2.3	Total	2.4	2.5			2.6	Total						Total	2.7		2.8		2.9	Total	Total
1630 - 1645	-	44	11	-	0	55	46	96	-	-	0	142	-	-	-	-	-	0	14	-	22	-	0	36	233
1645 - 1700	-	33	8	-	0	41	54	118	-	-	0	172	-	-	-	-	-	0	9	-	26	-	0	35	248
1700 - 1715	-	36	12	-	0	48	82	109	-	-	0	191	-	-	-	-	-	0	9	-	23	-	0	32	271
1715 - 1730	-	34	12	-	0	46	56	119	-	-	0	175	-	-	-	-	-	0	14	-	24	-	0	38	259
Total	0	147	43	0	0	190	238	442	0	0	0	680	0	0	0	0	0	0	46	0	95	0	0	141	1011
Approach %	0.00	77.37	22.63	0.00	0.00	-	35.00	65.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	32.62	0.00	67.38	0.00	0.00	-	
PHF	0.00	0.84	0.90	0.00	0.00	**0.86**	0.73	0.93	0.00	0.00	0.00	**0.89**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.82	0.00	0.91	0.00	0.00	**0.93**	**0.93**

Single Unit Trucks (4-7)

	Northbound						Southbound												Westbound						
	Rocky Fork Almaville Rd						Rocky Fork Rd (North)												Rocky Fork Rd (East)						
		Thru	Right		U-Turn	App	Left	Thru			U-Turn	App						App	Left		Right		U-Turn	App	Int
Time		2.1	2.2		2.3	Total	2.4	2.5			2.6	Total						Total	2.7		2.8		2.9	Total	Total
1630 - 1645	-	0	2	-	0	2	1	1	-	-	0	2	-	-	-	-	-	0	0	-	0	-	0	0	4
1645 - 1700	-	0	0	-	0	0	2	1	-	-	0	3	-	-	-	-	-	0	1	-	0	-	0	1	4
1700 - 1715	-	4	0	-	0	4	1	0	-	-	0	1	-	-	-	-	-	0	0	-	0	-	0	0	5
1715 - 1730	-	1	0	-	0	1	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	1
Total	0	5	2	0	0	7	4	2	0	0	0	6	0	0	0	0	0	0	1	0	0	0	0	1	14
Approach %	0.00	71.43	28.57	0.00	0.00	-	66.67	33.33	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	100.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.31	0.25	0.00	0.00	**0.44**	0.50	0.50	0.00	0.00	0.00	**0.50**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.25	0.00	0.00	0.00	0.00	**0.25**	**0.70**

Combination Trucks (8-13)

	Northbound						Southbound												Westbound						
	Rocky Fork Almaville Rd						Rocky Fork Rd (North)												Rocky Fork Rd (East)						
		Thru	Right		U-Turn	App	Left	Thru			U-Turn	App						App	Left		Right		U-Turn	App	Int
Time		2.1	2.2		2.3	Total	2.4	2.5			2.6	Total						Total	2.7		2.8		2.9	Total	Total
1630 - 1645	-	0	0	-	0	0	0	1	-	-	0	1	-	-	-	-	-	0	0	-	0	-	0	0	1
1645 - 1700	-	0	0	-	0	0	0	1	-	-	0	1	-	-	-	-	-	0	0	-	0	-	0	0	1
1700 - 1715	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	0
1715 - 1730	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	0
Total	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.50	0.00	0.00	0.00	**0.50**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.50**

Bicycles

	Northbound						Southbound												Westbound						
	Rocky Fork Almaville Rd						Rocky Fork Rd (North)												Rocky Fork Rd (East)						
		Thru	Right		U-Turn	App	Left	Thru			U-Turn	App						App	Left		Right		U-Turn	App	Int
Time		2.1	2.2		2.3	Total	2.4	2.5			2.6	Total						Total	2.7		2.8		2.9	Total	Total
1630 - 1645	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	0
1645 - 1700	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	0
1700 - 1715	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	0
1715 - 1730	-	0	0	-	0	0	0	0	-	-	0	0	-	-	-	-	-	0	0	-	0	-	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Classified Turn Movement Count || All vehicles

Smyrna, TN

Marr Traffic DATA COLLECTION
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Site 2
Rocky Fork Almaville Rd
Rocky Fork Rd (North)

Rocky Fork Rd (East)

Date
Thursday, April 24, 2025

Lat/Long
35.927041°, -86.586484°
Click here for Map

Weather
Mostly Cloudy
68°F
Click here for Detailed Weather

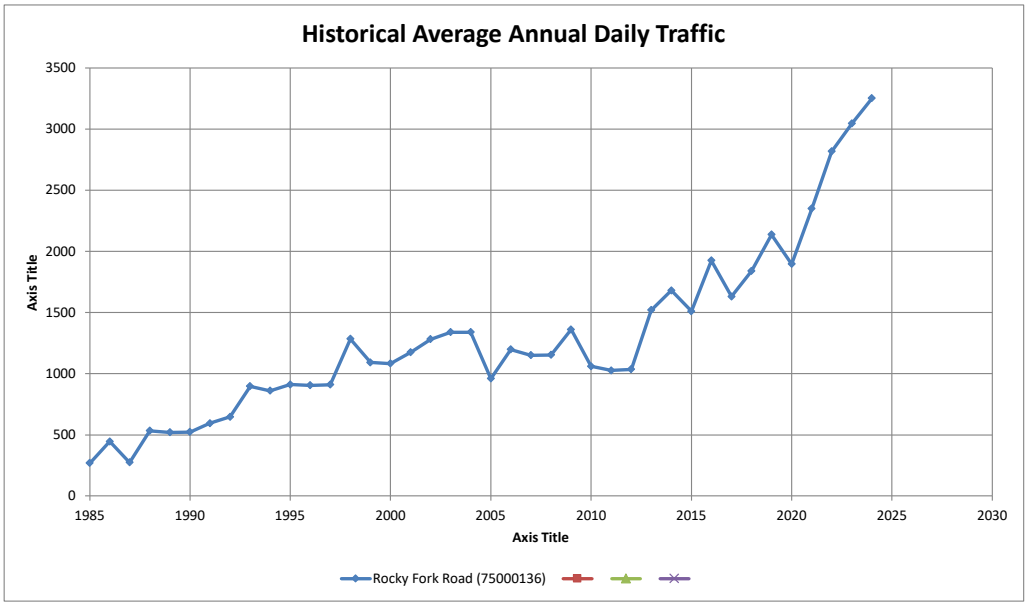
0600 - 0900 (Weekday 3h Session) (04-24-2025)
All vehicles

	Northbound (Rocky Fork Almaville Rd)				Southbound (Rocky Fork Rd (North))				Westbound (Rocky Fork Rd (East))				
TIME	Thru 2.1	Right 2.2	U-Turn 2.3	App Total	Left 2.4	Thru 2.5	U-Turn 2.6	App Total	Left 2.7	Right 2.8	U-Turn 2.9	App Total	Int Total
0600 - 0615	46	2	0	48	6	5	0	11	1	29	0	30	89
0615 - 0630	67	6	0	73	13	9	0	22	6	54	0	60	155
0630 - 0645	91	7	0	98	11	8	0	19	1	58	0	59	176
0645 - 0700	84	15	0	99	11	15	0	26	6	73	0	79	204
Hourly Total	288	30	0	**318**	41	37	0	**78**	14	214	0	**228**	**624**
0700 - 0715	89	19	0	108	20	19	0	39	15	70	0	85	232
0715 - 0730	75	12	0	87	11	25	0	36	24	76	0	100	223
0730 - 0745	93	8	0	101	21	34	0	55	22	43	0	65	221
0745 - 0800	76	7	0	83	23	28	0	51	15	60	0	75	209
Hourly Total	333	46	0	**379**	75	106	0	**181**	76	249	0	**325**	**885**
0800 - 0815	69	10	0	79	38	50	0	88	5	45	0	50	217
0815 - 0830	53	6	0	59	18	23	0	41	9	42	0	51	151
0830 - 0845	51	6	0	57	13	20	0	33	6	33	0	39	129
0845 - 0900	38	3	0	41	12	21	0	33	7	32	0	39	113
Hourly Total	211	25	0	**236**	81	114	0	**195**	27	152	0	**179**	**610**
Grand Total	832	101	0	**933**	197	257	0	**454**	117	615	0	**732**	**2119**
Approach %	89.17	10.83	0.00	-	43.39	56.61	0.00	-	15.98	84.02	0.00	-	
Intersection %	39.26	4.77	0.00	44.03	9.30	12.13	0.00	21.43	5.52	29.02	0.00	34.54	
Heavy Vehicle %	3	7	-	**3**	1	6	-	**4**	4	3	-	**3**	**3**
PHF	0.90	0.61	0.00	**0.88**	0.82	0.78	0.00	**0.82**	0.79	0.82	0.00	**0.81**	**0.95**
Peak Hour Total	333	46	0	**379**	75	106	0	**181**	76	249	0	**325**	**885**
Peak Hour HV %	3	9	0	**4**	1	4	0	**3**	4	2	0	**3**	**3**

1600 - 1800 (Weekday 2h Session) (04-24-2025)
All vehicles

	Northbound (Rocky Fork Almaville Rd)				Southbound (Rocky Fork Rd (North))				Westbound (Rocky Fork Rd (East))				
TIME	Thru 2.1	Right 2.2	U-Turn 2.3	App Total	Left 2.4	Thru 2.5	U-Turn 2.6	App Total	Left 2.7	Right 2.8	U-Turn 2.9	App Total	Int Total
1600 - 1615	31	4	0	35	25	58	0	83	13	22	0	35	153
1615 - 1630	24	14	0	38	40	80	0	120	13	23	0	36	194
1630 - 1645	44	13	0	57	47	98	0	145	14	22	0	36	238
1645 - 1700	33	8	0	41	56	120	0	176	10	26	0	36	253
Hourly Total	132	39	0	**171**	168	356	0	**524**	50	93	0	**143**	**838**
1700 - 1715	40	12	0	52	83	109	0	192	9	23	0	32	276
1715 - 1730	35	12	0	47	56	119	0	175	14	24	0	38	260
1730 - 1745	21	11	0	32	55	79	0	134	14	21	0	35	201
1745 - 1800	23	13	0	36	43	59	0	102	11	17	0	28	166
Hourly Total	119	48	0	**167**	237	366	0	**603**	48	85	0	**133**	**903**
Grand Total	251	87	0	**338**	405	722	0	**1127**	98	178	0	**276**	**1741**
Approach %	74.26	25.74	0.00	-	35.94	64.06	0.00	-	35.51	64.49	0.00	-	
Intersection %	14.42	5.00	0.00	19.41	23.26	41.47	0.00	64.73	5.63	10.22	0.00	15.85	
Heavy Vehicle %	3	3	-	**3**	1	1	-	**1**	1	1	-	**1**	**2**
PHF	0.86	0.87	0.00	**0.86**	0.73	0.93	0.00	**0.90**	0.84	0.91	0.00	**0.93**	**0.93**
Peak Hour Total	152	45	0	**197**	242	446	0	**688**	47	95	0	**142**	**1027**
Peak Hour HV %	3	4	0	**4**	2	1	0	**1**	2	0	0	**1**	**2**

HISTORICAL TRAFFIC COUNT DATA				
Year	**Rocky Fork Road (75000136)**			
1985	269			
1986	446			
1987	274			
1988	534			
1989	520			
1990	523			
1991	595			
1992	647			
1993	897			
1994	861			
1995	911			
1996	904			
1997	910			
1998	1284			
1999	1092			
2000	1082			
2001	1175			
2002	1281			
2003	1339			
2004	1339			
2005	960			
2006	1198			
2007	1150			
2008	1153			
2009	1361			
2010	1060			
2011	1026			
2012	1036			
2013	1519			
2014	1680			
2015	1510			
2016	1925			
2017	1631			
2018	1840			
2019	2137			
2020	1897			
2021	2349			
2022	2817			
2023	3044			
2024	3251			



		Rocky Fork Road (75000136)	-	-	-
Analysis Period	**Begin**	2019		-	-
	End	2024		-	-
Future Year		2029		-	-
Forecasted Traffic Volume		4614	-	-	-
Annual Growth Rate		7.25%	-	-	-
Growth Factor		1.419	-	-	-

APPENDIX B

TRIP GENERATION & TRAFFIC DERIVATION WORKSHEETS

TRAFFIC VOLUME WORKSHEET
SPECIFIC NON-SITE TRIP GENERATION &
PROPOSED DEVELOPMENT TRIP GENERATION

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SPECIFIC NON-SITE DEVELOPMENT TRIP GENERATION							
Development	Daily	A.M. Peak Hour			P.M. Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
The Courtyards at Stewarts Creek	944	16	54	70	58	35	93
Rocky Fork Almaville Road Annexation	869	15	49	64	53	32	85
Tuckers Pointe	901	19	60	79	59	36	95
				0			0
				0			0
TOTAL	**2,714**	**50**	**163**	**213**	**170**	**103**	**273**

PROPOSED DEVELOPMENT TRIP GENERATION 2029 HORIZON YEAR							
Development	Daily	A.M. Peak Hour			P.M. Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Patterson Smyrna	1,905	35	116	151	122	72	194
				0			0
				0			0
				0			0
				0			0
				0			0
TOTAL	**1,905**	**35**	**116**	**151**	**122**	**72**	**194**

TRIP GENERATION SUMMARY - PATTERSON SMYRNA									
Trip Generation Manual, 11th Edition, Institute of Transportation Engineers									
LUC	**Land Use**	**# of Units**	**Trip Generation**						
			Daily	**A.M. Peak Hour**			**P.M. Peak Hour**		
				Enter	**Exit**	**Total**	**Enter**	**Exit**	**Total**
210	Single-Family Detached Housing	162 Units	1,573	27	89	116	98	58	156
220	Multifamily (Low-Rise)	40 Units	332	8	27	35	24	14	38
UNADJUSTED TOTAL TRIP GENERATION:			**1,905**	**35**	**116**	**151**	**122**	**72**	**194**

TRIP GENERATION (11th Edition)

Single-Family Detached Housing - 162 Dwelling Units

Use ITE Land Use Code 210 (Single-Family Detached Housing) and associated trip generation rates for 24-hour total trips and peak hour trips.

Average Daily Traffic (Fitted Curve)

Ln(T) = 0.92 Ln(X) + 2.68
Ln(T) = 0.92 Ln(162) + 2.68
T = 1573

A.M. Peak Hour of Adjacent Street Traffic (Fitted Curve)

Ln(T) = 0.91 Ln(X) + 0.12
Ln(T) = 0.91 Ln(162) + 0.12
T = 116

Enter = 0.24(116) = 27
Exit = 0.76(116) = 89

P.M. Peak Hour of Adjacent Street Traffic (Fitted Curve)

Ln(T) = 0.94 Ln(X) + 0.27
Ln(T) = 0.94 Ln(162) + 0.27
T = 156

Enter = 0.63(156) = 98
Exit = 0.37(156) = 58

TRIP GENERATION (11th Edition)

Multifamily (Low-Rise) - 40 Dwelling Units

Use ITE Land Use Code 220 (Multifamily (Low-Rise)) and associated trip generation rates for 24-hour total trips and peak hour trips.

Average Daily Traffic (Fitted Curve)

T = 6.41(X) + 75.31
T = 6.41(40) + 75.31
T = 332

A.M. Peak Hour of Adjacent Street Traffic (Fitted Curve)

T = 0.31(X) + 22.85
T = 0.31(40) + 22.85
T = 35

Enter = 0.24(35) = 8
Exit = 0.76(35) = 27

P.M. Peak Hour of Adjacent Street Traffic (Fitted Curve)

T = 0.43(X) + 20.55
T = 0.43(40) + 20.55
T = 38

Enter = 0.63(38) = 24
Exit = 0.37(38) = 14

TRIP GENERATION SUMMARY - THE COURTYARDS AT STEWARTS CREEK									
Trip Generation Manual, 11th Edition, Institute of Transportation Engineers									
LUC	**Land Use**	**# of Units**	**Trip Generation**						
			Daily	**A.M. Peak Hour**			**P.M. Peak Hour**		
				Enter	**Exit**	**Total**	**Enter**	**Exit**	**Total**
210	Single-Family Detached Housing	93 Units	944	16	54	70	58	35	93
	UNADJUSTED TOTAL TRIP GENERATION:		**944**	**16**	**54**	**70**	**58**	**35**	**93**

TRIP GENERATION (11th Edition)

Single-Family Detached Housing - 93 Dwelling Units

Use ITE Land Use Code 210 (Single-Family Detached Housing) and associated trip generation rates for 24-hour total trips and peak hour trips.

Average Daily Traffic (Fitted Curve)

Ln(T) = 0.92 Ln(X) + 2.68
Ln(T) = 0.92 Ln(93) + 2.68
T = 944

A.M. Peak Hour of Adjacent Street Traffic (Fitted Curve)

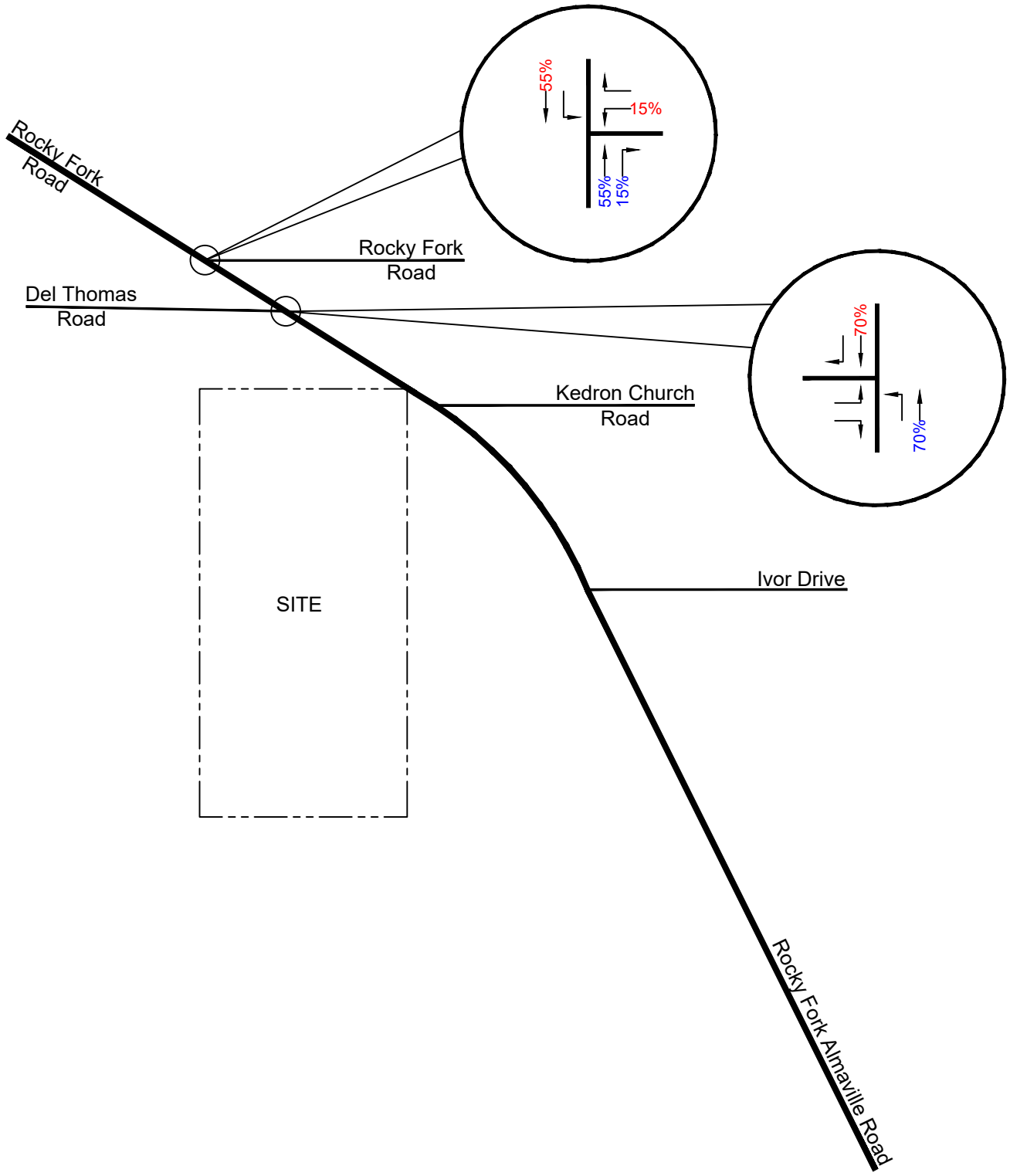
Ln(T) = 0.91 Ln(X) + 0.12
Ln(T) = 0.91 Ln(93) + 0.12
T = 70

Enter = 0.24(70) = 16
Exit = 0.76(70) = 54

P.M. Peak Hour of Adjacent Street Traffic (Fitted Curve)

Ln(T) = 0.94 Ln(X) + 0.27
Ln(T) = 0.94 Ln(93) + 0.27
T = 93

Enter = 0.63(93) = 58
Exit = 0.37(93) = 35



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The Courtyards at Stewarts Creek

Background Site Trip Distribution

Figure
B-1

TRIP GENERATION SUMMARY - ROCKY FORK ALMAVILLE ROAD ANNEXATION									
Trip Generation Manual, 11th Edition, Institute of Transportation Engineers									
LUC	**Land Use**	**# of Units**	**Trip Generation**						
			Daily	**A.M. Peak Hour**			**P.M. Peak Hour**		
				Enter	**Exit**	**Total**	**Enter**	**Exit**	**Total**
210	Single-Family Detached Housing	85 Units	869	15	49	64	53	32	85
	UNADJUSTED TOTAL TRIP GENERATION:		**869**	**15**	**49**	**64**	**53**	**32**	**85**

TRIP GENERATION (11th Edition)

Single-Family Detached Housing - 85 Dwelling Units

Use ITE Land Use Code 210 (Single-Family Detached Housing) and associated trip generation rates for 24-hour total trips and peak hour trips.

Average Daily Traffic (Fitted Curve)

Ln(T) = 0.92 Ln(X) + 2.68
Ln(T) = 0.92 Ln(85) + 2.68
T = 869

A.M. Peak Hour of Adjacent Street Traffic (Fitted Curve)

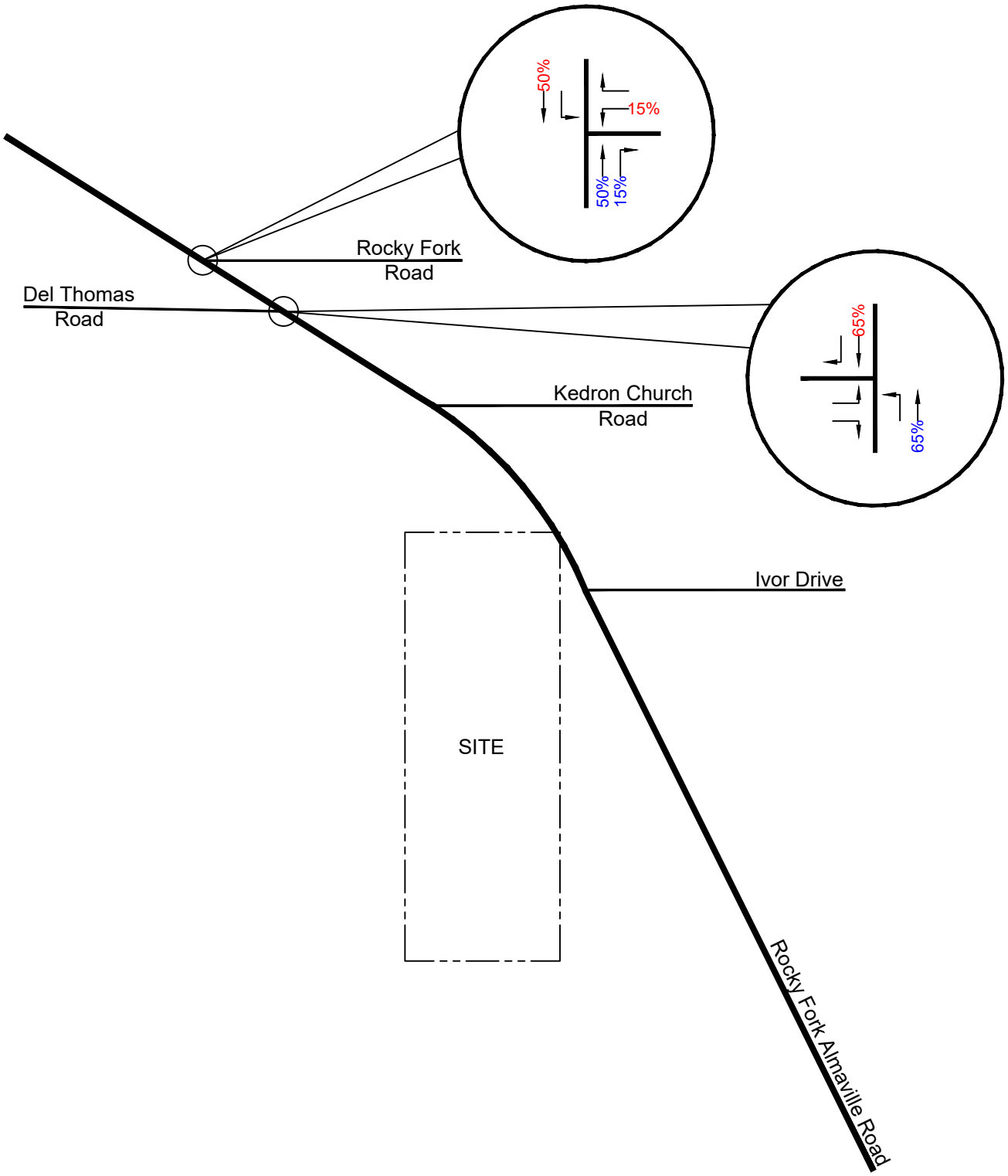
Ln(T) = 0.91 Ln(X) + 0.12
Ln(T) = 0.91 Ln(85) + 0.12
T = 64

Enter = 0.24(64) = 15
Exit = 0.76(64) = 49

P.M. Peak Hour of Adjacent Street Traffic (Fitted Curve)

Ln(T) = 0.94 Ln(X) + 0.27
Ln(T) = 0.94 Ln(85) + 0.27
T = 85

Enter = 0.63(85) = 53
Exit = 0.37(85) = 32



Entering %
Exiting %

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Rocky Fork Almaville Road Annexation

Background Site Trip Distribution

Figure
B-2

TRIP GENERATION SUMMARY - TUCKERS POINTE									
Trip Generation Manual, 11th Edition, Institute of Transportation Engineers									
LUC	**Land Use**	**# of Units**	**Trip Generation**						
			Daily	**A.M. Peak Hour**			**P.M. Peak Hour**		
				Enter	**Exit**	**Total**	**Enter**	**Exit**	**Total**
210	Single-Family Detached Housing	59 Units	621	11	35	46	38	23	61
220	Multifamily (Low-Rise)	32 Units	280	8	25	33	21	13	34
UNADJUSTED TOTAL TRIP GENERATION:			**901**	**19**	**60**	**79**	**59**	**36**	**95**

TRIP GENERATION (11th Edition)

Single-Family Detached Housing - 59 Dwelling Units

Use ITE Land Use Code 210 (Single-Family Detached Housing) and associated trip generation rates for 24-hour total trips and peak hour trips.

Average Daily Traffic (Fitted Curve)

Ln(T) = 0.92 Ln(X) + 2.68
Ln(T) = 0.92 Ln(59) + 2.68
T = 621

A.M. Peak Hour of Adjacent Street Traffic (Fitted Curve)

Ln(T) = 0.91 Ln(X) + 0.12
Ln(T) = 0.91 Ln(59) + 0.12
T = 46

Enter = 0.24(46) = 11
Exit = 0.76(46) = 35

P.M. Peak Hour of Adjacent Street Traffic (Fitted Curve)

Ln(T) = 0.94 Ln(X) + 0.27
Ln(T) = 0.94 Ln(59) + 0.27
T = 61

Enter = 0.63(61) = 38
Exit = 0.37(61) = 23

TRIP GENERATION (11th Edition)

Multifamily (Low-Rise) - 32 Dwelling Units

Use ITE Land Use Code 220 (Multifamily (Low-Rise)) and associated trip generation rates for 24-hour total trips and peak hour trips.

Average Daily Traffic (Fitted Curve)

T = 6.41(X) + 75.31
T = 6.41(32) + 75.31
T = 280

A.M. Peak Hour of Adjacent Street Traffic (Fitted Curve)

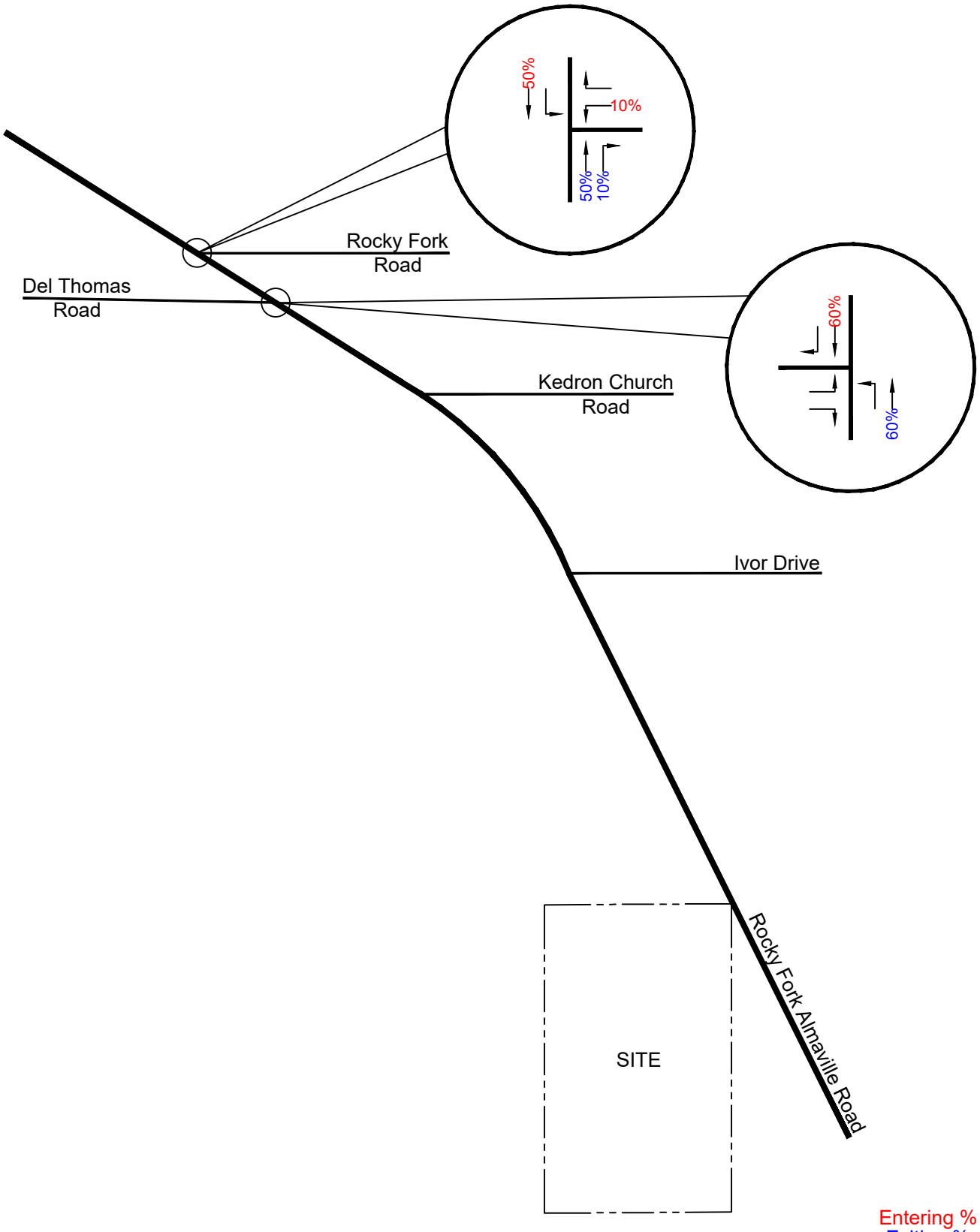
T = 0.31(X) + 22.85
T = 0.31(32) + 22.85
T = 33

Enter = 0.24(33) = 8
Exit = 0.76(33) = 25

P.M. Peak Hour of Adjacent Street Traffic (Fitted Curve)

T = 0.43(X) + 20.55
T = 0.43(32) + 20.55
T = 34

Enter = 0.63(34) = 21
Exit = 0.37(34) = 13



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Tuckers Pointe

Background Site Trip Distribution

Figure
B-3

TRAFFIC VOLUME WORKSHEET
ROCKY FORK ALMAVILLE ROAD AT DEL THOMAS ROAD
A.M. PEAK HOUR - 700AM TO 800AM

RaganSmith
a Pape - Dawson Company

Description	Northbound			Southbound			Eastbound			Westbound		
	Rocky Fork Almaville Road			**Rocky Fork Almaville Road**			**Del Thomas Road**					
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2025 EXISTING TRAFFIC VOLUMES	7	357			145	39	24		8			
2029 BACKGROUND TRAFFIC VOLUMES												
Annual Background Growth												
Growth Rate (%/year)	2.0	2.0			2.0	2.0	2.0		2.0			
Growth Factor	1.08	1.08	1.00	1.00	1.08	1.08	1.08	1.00	1.08	1.00	1.00	1.00
Annual Background Growth Trips	1	29	0	0	12	3	2	0	1	0	0	0
Specific Development Background Growth												
% In					70							
The Courtyards at Stewarts Creek % Out		70										
Trips	0	38	0	0	11	0	0	0	0	0	0	0
% In					65							
Rocky Fork Almaville Road Annexation % Out		65										
Trips	0	32	0	0	10	0	0	0	0	0	0	0
% In					60							
Tuckers Pointe % Out		60										
Trips	0	36	0	0	11	0	0	0	0	0	0	0
Specific Development Background Growth Trips	0	106	0	0	32	0	0	0	0	0	0	0
2029 Background Traffic Volumes	8	492	0	0	189	42	26	0	9	0	0	0
2029 SITE TRAFFIC VOLUMES												
% In	5				20	50						
Patterson Smyrna % Out		20					50		5			
Trips	2	23	0	0	7	18	58	0	6	0	0	0
2029 Site Traffic Volumes	2	23	0	0	7	18	58	0	6	0	0	0
2029 TOTAL TRAFFIC VOLUMES	10	515	0	0	196	60	84	0	15	0	0	0

TRAFFIC VOLUME WORKSHEET
ROCKY FORK ALMAVILLE ROAD AT DEL THOMAS ROAD
P.M. PEAK HOUR - 430PM TO 530PM

RaganSmith
a Pape - Dawson Company

Description	Northbound Rocky Fork Almaville Road			Southbound Rocky Fork Almaville Road			Eastbound Del Thomas Road			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2025 EXISTING TRAFFIC VOLUMES	10	162			460	31	36		7			
2029 BACKGROUND TRAFFIC VOLUMES												
Annual Background Growth												
Growth Rate (%/year)	2.0	2.0			2.0	2.0	2.0		2.0			
Growth Factor	1.08	1.08	1.00	1.00	1.08	1.08	1.08	1.00	1.08	1.00	1.00	1.00
Annual Background Growth Trips	1	13	0	0	38	3	3	0	1	0	0	0
Specific Development Background Growth												
% In					70							
The Courtyards at Stewarts Creek % Out		70										
Trips	0	25	0	0	41	0	0	0	0	0	0	0
% In					65							
Rocky Fork Almaville Road Annexation % Out		65										
Trips	0	21	0	0	34	0	0	0	0	0	0	0
% In					60							
Tuckers Pointe % Out		60										
Trips	0	22	0	0	35	0	0	0	0	0	0	0
Specific Development Background Growth Trips	0	68	0	0	110	0	0	0	0	0	0	0
2029 Background Traffic Volumes	11	243	0	0	608	34	39	0	8	0	0	0
2029 SITE TRAFFIC VOLUMES												
% In	5				20	50						
Patterson Smyrna % Out		20					50		5			
Trips	6	14	0	0	24	61	36	0	4	0	0	0
2029 Site Traffic Volumes	6	14	0	0	24	61	36	0	4	0	0	0
2029 TOTAL TRAFFIC VOLUMES	17	257	0	0	632	95	75	0	12	0	0	0

TRAFFIC VOLUME WORKSHEET
ROCKY FORK ROAD AT ROCKY FORK ALMAVILLE ROAD
A.M. PEAK HOUR - 700AM TO 800AM

RaganSmith
a Pape - Dawson Company

Description	Northbound Rocky Fork Almaville Road			Southbound Rocky Fork Road			Eastbound			Westbound Rocky Fork Road		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2025 EXISTING TRAFFIC VOLUMES		333	46	75	106					76		249
2029 BACKGROUND TRAFFIC VOLUMES												
Annual Background Growth												
Growth Rate (%/year)		2.0	2.0	2.0	2.0					2.0		2.0
Growth Factor	1.00	1.08	1.08	1.08	1.08	1.00	1.00	1.00	1.00	1.08	1.00	1.08
Annual Background Growth Trips	0	27	4	6	9	0	0	0	0	6	0	21
Specific Development Background Growth												
% In					55					15		
The Courtyards at Stewarts Creek % Out		55	15									
Trips	0	30	8	0	9	0	0	0	0	2	0	0
% In					50					15		
Rocky Fork Almaville Road Annexation % Out		50	15									
Trips	0	25	7	0	8	0	0	0	0	2	0	0
% In					50					10		
Tuckers Pointe % Out		50	10									
Trips	0	30	6	0	10	0	0	0	0	2	0	0
Specific Development Background Growth Trips	0	85	21	0	27	0	0	0	0	6	0	0
2029 Background Traffic Volumes	0	445	71	81	142	0	0	0	0	88	0	270
2029 SITE TRAFFIC VOLUMES												
% In					55					15		
Patterson Smyrna % Out		55	15									
Trips	0	64	17	0	19	0	0	0	0	5	0	0
2029 Site Traffic Volumes	0	64	17	0	19	0	0	0	0	5	0	0
2029 TOTAL TRAFFIC VOLUMES	0	509	88	81	161	0	0	0	0	93	0	270

TRAFFIC VOLUME WORKSHEET
ROCKY FORK ROAD AT ROCKY FORK ALMAVILLE ROAD
P.M. PEAK HOUR - 430PM TO 530PM

RaganSmith
a Pape - Dawson Company

Description	Northbound Rocky Fork Almaville Road			Southbound Rocky Fork Road			Eastbound			Westbound Rocky Fork Road		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2025 EXISTING TRAFFIC VOLUMES		152	45	242	446					47		95
2029 BACKGROUND TRAFFIC VOLUMES												
Annual Background Growth												
Growth Rate (%/year)		2.0	2.0	2.0	2.0					2.0		2.0
Growth Factor	1.00	1.08	1.08	1.08	1.08	1.00	1.00	1.00	1.00	1.08	1.00	1.08
Annual Background Growth Trips	0	13	4	20	37	0	0	0	0	4	0	8
Specific Development Background Growth												
% In					55					15		
The Courtyards at Stewarts Creek % Out		55	15									
Trips	0	19	5	0	32	0	0	0	0	9	0	0
% In					50					15		
Rocky Fork Almaville Road Annexation % Out		50	15									
Trips	0	16	5	0	27	0	0	0	0	8	0	0
% In					50					10		
Tuckers Pointe % Out		50	10									
Trips	0	18	4	0	30	0	0	0	0	6	0	0
Specific Development Background Growth Trips	0	53	14	0	89	0	0	0	0	23	0	0
2029 Background Traffic Volumes	0	218	63	262	572	0	0	0	0	74	0	103
2029 SITE TRAFFIC VOLUMES												
% In					55					15		
Patterson Smyrna % Out		55	15									
Trips	0	40	11	0	67	0	0	0	0	18	0	0
2029 Site Traffic Volumes	0	40	11	0	67	0	0	0	0	18	0	0
2029 TOTAL TRAFFIC VOLUMES	0	258	74	262	639	0	0	0	0	92	0	103

TRAFFIC VOLUME WORKSHEET
DEL THOMAS ROAD AT PROJECT ACCESS
A.M. PEAK HOUR - 700AM TO 800AM

RaganSmith
a Pape - Dawson Company

Description	Northbound **Project Access**			Southbound			Eastbound **Del Thomas Road**			Westbound **Del Thomas Road**		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2025 EXISTING TRAFFIC VOLUMES								32			46	
2029 BACKGROUND TRAFFIC VOLUMES												
Annual Background Growth												
Growth Rate (%/year)								2.0			2.0	
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.08	1.00	1.00	1.08	1.00
Annual Background Growth Trips	0	0	0	0	0	0	0	3	0	0	4	0
Specific Development Background Growth												
The Courtyards at Stewarts Creek % In												
% Out												
Trips	0	0	0	0	0	0	0	0	0	0	0	0
Rocky Fork Almaville Road Annexation % In												
% Out												
Trips	0	0	0	0	0	0	0	0	0	0	0	0
Tuckers Pointe % In												
% Out												
Trips	0	0	0	0	0	0	0	0	0	0	0	0
Specific Development Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0
2029 Background Traffic Volumes	0	0	0	0	0	0	0	35	0	0	50	0
2029 SITE TRAFFIC VOLUMES												
Patterson Smyrna % In									5	55		
% Out	5		55									
Trips	6	0	64	0	0	0	0	0	2	19	0	0
2029 Site Traffic Volumes	6	0	64	0	0	0	0	0	2	19	0	0
2029 TOTAL TRAFFIC VOLUMES	6	0	64	0	0	0	0	35	2	19	50	0

TRAFFIC VOLUME WORKSHEET
DEL THOMAS ROAD AT PROJECT ACCESS
P.M. PEAK HOUR - 430PM TO 530PM

RaganSmith
a Pape - Dawson Company

Description	Northbound Project Access			Southbound			Eastbound Del Thomas Road			Westbound Del Thomas Road		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2025 EXISTING TRAFFIC VOLUMES								43			41	
2029 BACKGROUND TRAFFIC VOLUMES												
Annual Background Growth												
Growth Rate (%/year)								2.0			2.0	
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.08	1.00	1.00	1.08	1.00
Annual Background Growth Trips	0	0	0	0	0	0	0	4	0	0	3	0
Specific Development Background Growth												
The Courtyards at Stewarts Creek % In												
% Out												
Trips	0	0	0	0	0	0	0	0	0	0	0	0
Rocky Fork Almaville Road Annexation % In												
% Out												
Trips	0	0	0	0	0	0	0	0	0	0	0	0
Tuckers Pointe % In												
% Out												
Trips	0	0	0	0	0	0	0	0	0	0	0	0
Specific Development Background Growth Trips	0	0	0	0	0	0	0	0	0	0	0	0
2029 Background Traffic Volumes	0	0	0	0	0	0	0	47	0	0	44	0
2029 SITE TRAFFIC VOLUMES												
Patterson Smyrna % In									5	55		
% Out	5		55									
Trips	4	0	40	0	0	0	0	0	6	67	0	0
2029 Site Traffic Volumes	4	0	40	0	0	0	0	0	6	67	0	0
2029 TOTAL TRAFFIC VOLUMES	4	0	40	0	0	0	0	47	6	67	44	0

TRAFFIC VOLUME WORKSHEET
ROCKY FORK ALMAVILLE ROAD AT COURTYARD ACCESS
A.M. PEAK HOUR - 700AM TO 800AM

RaganSmith
a Pape - Dawson Company

Description	Northbound Rocky Fork Almaville Road			Southbound Rocky Fork Almaville Road			Eastbound Courtyard Access			Westbound Kedron Church Road		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2025 EXISTING TRAFFIC VOLUMES		364	2	2	153					2		2
2029 BACKGROUND TRAFFIC VOLUMES												
Annual Background Growth												
Growth Rate (%/year)		2.0	2.0	2.0	2.0					2.0		2.0
Growth Factor	1.00	1.08	1.08	1.08	1.08	1.00	1.00	1.00	1.00	1.08	1.00	1.08
Annual Background Growth Trips	0	30	0	0	13	0	0	0	0	0	0	0
Specific Development Background Growth												
% In	30					70						
The Courtyards at Stewarts Creek % Out							70		30			
Trips	5	0	0	0	0	11	38	0	16	0	0	0
% In					65							
Rocky Fork Almaville Road Annexation % Out		65										
Trips	0	32	0	0	10	0	0	0	0	0	0	0
% In					60							
Tuckers Pointe % Out		60										
Trips	0	36	0	0	11	0	0	0	0	0	0	0
Specific Development Background Growth Trips	5	68	0	0	21	11	38	0	16	0	0	0
2029 Background Traffic Volumes	5	462	2	2	187	11	38	0	16	2	0	2
2029 SITE TRAFFIC VOLUMES												
% In	20	5				20						
Patterson Smyrna % Out					5		20		20			
Trips	7	2	0	0	6	7	23	0	23	0	0	0
2029 Site Traffic Volumes	7	2	0	0	6	7	23	0	23	0	0	0
2029 TOTAL TRAFFIC VOLUMES	12	464	2	2	193	18	61	0	39	2	0	2

TRAFFIC VOLUME WORKSHEET
ROCKY FORK ALMAVILLE ROAD AT COURTYARD ACCESS
P.M. PEAK HOUR - 430PM TO 530PM

RaganSmith
a Pape - Dawson Company

Description	Northbound Rocky Fork Almaville Road			Southbound Rocky Fork Almaville Road			Eastbound Courtyard Access			Westbound Kedron Church Road		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2025 EXISTING TRAFFIC VOLUMES		172	2	2	467					2		2
2029 BACKGROUND TRAFFIC VOLUMES												
Annual Background Growth												
Growth Rate (%/year)		2.0	2.0	2.0	2.0					2.0		2.0
Growth Factor	1.00	1.08	1.08	1.08	1.08	1.00	1.00	1.00	1.00	1.08	1.00	1.08
Annual Background Growth Trips	0	14	0	0	38	0	0	0	0	0	0	0
Specific Development Background Growth												
% In	30					70						
The Courtyards at Stewarts Creek % Out							70		30			
Trips	17	0	0	0	0	41	25	0	11	0	0	0
% In					65							
Rocky Fork Almaville Road Annexation % Out		65										
Trips	0	21	0	0	34	0	0	0	0	0	0	0
% In					60							
Tuckers Pointe % Out		60										
Trips	0	22	0	0	35	0	0	0	0	0	0	0
Specific Development Background Growth Trips	17	43	0	0	69	41	25	0	11	0	0	0
2029 Background Traffic Volumes	17	229	2	2	574	41	25	0	11	2	0	2
2029 SITE TRAFFIC VOLUMES												
% In	20	5				20						
Patterson Smyrna % Out					5		20		20			
Trips	24	6	0	0	4	24	14	0	14	0	0	0
2029 Site Traffic Volumes	24	6	0	0	4	24	14	0	14	0	0	0
2029 TOTAL TRAFFIC VOLUMES	41	235	2	2	578	65	39	0	25	2	0	2

APPENDIX C

CAPACITY ANALYSIS WORKSHEETS
EXISTING TRAFFIC



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	24	8	7	357	145	39
Future Volume (vph)	24	8	7	357	145	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.966				0.972	
Flt Protected	0.964			0.999		
Satd. Flow (prot)	1677	0	0	1799	1750	0
Flt Permitted	0.964			0.999		
Satd. Flow (perm)	1677	0	0	1799	1750	0
Link Speed (mph)	35			45	45	
Link Distance (ft)	226			394	372	
Travel Time (s)	4.4			6.0	5.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	27	9	8	406	165	44
Shared Lane Traffic (%)						
Lane Group Flow (vph)	36	0	0	414	209	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	8	7	357	145	39
Future Vol, veh/h	24	8	7	357	145	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	9	8	406	165	44

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	609	187	209	0	-	0
Stage 1	187	-	-	-	-	-
Stage 2	422	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	459	855	1362	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	662	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	455	855	1362	-	-	-
Mov Cap-2 Maneuver	455	-	-	-	-	-
Stage 1	839	-	-	-	-	-
Stage 2	662	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	12.51	0.15	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	35	-	515	-	-
HCM Lane V/C Ratio	0.006	-	0.071	-	-
HCM Ctrl Dly (s/v)	7.7	0	12.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	76	249	333	46	75	106
Future Volume (vph)	76	249	333	46	75	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.897		0.984			
Flt Protected	0.988					0.980
Satd. Flow (prot)	1596	0	1772	0	0	1765
Flt Permitted	0.988					0.980
Satd. Flow (perm)	1596	0	1772	0	0	1765
Link Speed (mph)	35		45			45
Link Distance (ft)	456		372			276
Travel Time (s)	8.9		5.6			4.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	80	262	351	48	79	112
Shared Lane Traffic (%)						
Lane Group Flow (vph)	342	0	399	0	0	191
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 59.6%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	7.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	76	249	333	46	75	106
Future Vol, veh/h	76	249	333	46	75	106
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	80	262	351	48	79	112

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	644	375	0	0	399	0
Stage 1	375	-	-	-	-	-
Stage 2	269	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	437	672	-	-	1160	-
Stage 1	695	-	-	-	-	-
Stage 2	776	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	405	672	-	-	1160	-
Mov Cap-2 Maneuver	405	-	-	-	-	-
Stage 1	695	-	-	-	-	-
Stage 2	719	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	19.61	0	3.45
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	582	746	-
HCM Lane V/C Ratio	-	-	0.588	0.068	-
HCM Ctrl Dly (s/v)	-	-	19.6	8.3	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	3.8	0.2	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	36	7	10	162	460	31
Future Volume (vph)	36	7	10	162	460	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.979				0.991	
Flt Protected	0.960			0.997		
Satd. Flow (prot)	1692	0	0	1795	1784	0
Flt Permitted	0.960			0.997		
Satd. Flow (perm)	1692	0	0	1795	1784	0
Link Speed (mph)	35			45	45	
Link Distance (ft)	226			394	372	
Travel Time (s)	4.4			6.0	5.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	37	7	10	167	474	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	44	0	0	177	506	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	36	7	10	162	460	31
Future Vol, veh/h	36	7	10	162	460	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	7	10	167	474	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	678	490	506	0	-	0
Stage 1	490	-	-	-	-	-
Stage 2	188	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	418	578	1059	-	-	-
Stage 1	616	-	-	-	-	-
Stage 2	844	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	413	578	1059	-	-	-
Mov Cap-2 Maneuver	413	-	-	-	-	-
Stage 1	609	-	-	-	-	-
Stage 2	844	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	14.25	0.49	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	105	-	433	-	-
HCM Lane V/C Ratio	0.01	-	0.102	-	-
HCM Ctrl Dly (s/v)	8.4	0	14.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	47	95	152	45	242	446
Future Volume (vph)	47	95	152	45	242	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.910		0.969			
Flt Protected	0.984					0.983
Satd. Flow (prot)	1612	0	1745	0	0	1770
Flt Permitted	0.984					0.983
Satd. Flow (perm)	1612	0	1745	0	0	1770
Link Speed (mph)	35		45			45
Link Distance (ft)	456		372			276
Travel Time (s)	8.9		5.6			4.2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	51	102	163	48	260	480
Shared Lane Traffic (%)						
Lane Group Flow (vph)	153	0	211	0	0	740
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	5.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	47	95	152	45	242	446
Future Vol, veh/h	47	95	152	45	242	446
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	102	163	48	260	480

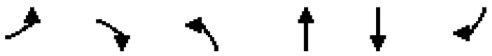
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1188	188	0	0	212	0
Stage 1	188	-	-	-	-	-
Stage 2	1000	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	208	854	-	-	1359	-
Stage 1	844	-	-	-	-	-
Stage 2	356	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	154	854	-	-	1359	-
Mov Cap-2 Maneuver	154	-	-	-	-	-
Stage 1	844	-	-	-	-	-
Stage 2	263	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	23.88	0	2.91
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	341	633	-
HCM Lane V/C Ratio	-	-	0.448	0.192	-
HCM Ctrl Dly (s/v)	-	-	23.9	8.3	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	2.2	0.7	-

APPENDIX D

CAPACITY ANALYSIS WORKSHEETS
BACKGROUND TRAFFIC



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	26	9	8	492	189	42
Future Volume (vph)	26	9	8	492	189	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.966				0.975	
Flt Protected	0.964			0.999		
Satd. Flow (prot)	1677	0	0	1799	1756	0
Flt Permitted	0.964			0.999		
Satd. Flow (perm)	1677	0	0	1799	1756	0
Link Speed (mph)	35			45	45	
Link Distance (ft)	226			995	372	
Travel Time (s)	4.4			15.1	5.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	30	10	9	559	215	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	0	0	568	263	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.3%		ICU Level of Service A	
Analysis Period (min) 15			

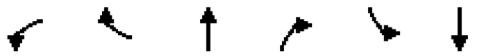
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	9	8	492	189	42
Future Vol, veh/h	26	9	8	492	189	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	10	9	559	215	48

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	816	239	263	0	-	0
Stage 1	239	-	-	-	-	-
Stage 2	577	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	347	800	1302	-	-	-
Stage 1	801	-	-	-	-	-
Stage 2	561	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	343	800	1302	-	-	-
Mov Cap-2 Maneuver	343	-	-	-	-	-
Stage 1	793	-	-	-	-	-
Stage 2	561	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	14.93	0.12	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	29	-	402	-	-
HCM Lane V/C Ratio	0.007	-	0.099	-	-
HCM Ctrl Dly (s/v)	7.8	0	14.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	88	270	445	71	81	142
Future Volume (vph)	88	270	445	71	81	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.898		0.981			
Flt Protected	0.988					0.982
Satd. Flow (prot)	1598	0	1766	0	0	1768
Flt Permitted	0.988					0.982
Satd. Flow (perm)	1598	0	1766	0	0	1768
Link Speed (mph)	35		45			45
Link Distance (ft)	456		372			276
Travel Time (s)	8.9		5.6			4.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	93	284	468	75	85	149
Shared Lane Traffic (%)						
Lane Group Flow (vph)	377	0	543	0	0	234
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 71.2%		ICU Level of Service C	
Analysis Period (min) 15			

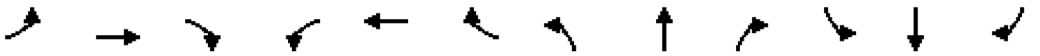
Intersection	
Int Delay, s/veh	12.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	88	270	445	71	81	142
Future Vol, veh/h	88	270	445	71	81	142
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	93	284	468	75	85	149

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	826	506	0	0	543	0
Stage 1	506	-	-	-	-	-
Stage 2	320	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	342	567	-	-	1026	-
Stage 1	606	-	-	-	-	-
Stage 2	736	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	311	567	-	-	1026	-
Mov Cap-2 Maneuver	311	-	-	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	669	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	36.7	0	3.21
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	471	654	-
HCM Lane V/C Ratio	-	-	0.8	0.083	-
HCM Ctrl Dly (s/v)	-	-	36.7	8.8	0
HCM Lane LOS	-	-	E	A	A
HCM 95th %tile Q(veh)	-	-	7.4	0.3	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	0	16	2	0	2	5	462	2	2	187	11
Future Volume (vph)	38	0	16	2	0	2	5	462	2	2	187	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			150		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.960			0.932			0.999			0.992	
Flt Protected		0.966			0.976					0.950		
Satd. Flow (prot)	0	1727	0	0	1694	0	0	1861	0	1770	1848	0
Flt Permitted		0.966			0.976					0.950		
Satd. Flow (perm)	0	1727	0	0	1694	0	0	1861	0	1770	1848	0
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		411			620			579			995	
Travel Time (s)		9.3			14.1			11.3			19.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	41	0	17	2	0	2	5	502	2	2	203	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	0	0	4	0	0	509	0	2	215	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.6%		ICU Level of Service A	
Analysis Period (min) 15			

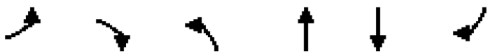
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	0	16	2	0	2	5	462	2	2	187	11
Future Vol, veh/h	38	0	16	2	0	2	5	462	2	2	187	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	0	17	2	0	2	5	502	2	2	203	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	727	729	209	722	734	503	215	0	0	504	0	0
Stage 1	214	214	-	514	514	-	-	-	-	-	-	-
Stage 2	513	515	-	208	220	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	340	350	831	342	347	568	1355	-	-	1060	-	-
Stage 1	789	726	-	543	535	-	-	-	-	-	-	-
Stage 2	544	535	-	794	721	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	336	347	831	332	345	568	1355	-	-	1060	-	-
Mov Cap-2 Maneuver	336	347	-	332	345	-	-	-	-	-	-	-
Stage 1	787	724	-	540	532	-	-	-	-	-	-	-
Stage 2	539	532	-	776	720	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	15.31	13.67	0.08	0.08
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	19	-	-	408	420	1060	-	-
HCM Lane V/C Ratio	0.004	-	-	0.144	0.01	0.002	-	-
HCM Ctrl Dly (s/v)	7.7	0	-	15.3	13.7	8.4	-	-
HCM Lane LOS	A	A	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0	0	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	39	8	11	243	608	34
Future Volume (vph)	39	8	11	243	608	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.977				0.993	
Flt Protected	0.960			0.998		
Satd. Flow (prot)	1689	0	0	1797	1788	0
Flt Permitted	0.960			0.998		
Satd. Flow (perm)	1689	0	0	1797	1788	0
Link Speed (mph)	35			45	45	
Link Distance (ft)	226			987	372	
Travel Time (s)	4.4			15.0	5.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	40	8	11	251	627	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	48	0	0	262	662	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	39	8	11	243	608	34
Future Vol, veh/h	39	8	11	243	608	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	8	11	251	627	35

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	918	644	662	0	-	0
Stage 1	644	-	-	-	-	-
Stage 2	273	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	302	473	927	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	773	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	297	473	927	-	-	-
Mov Cap-2 Maneuver	297	-	-	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	773	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	18.37	0.39	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	78	-	317	-	-
HCM Lane V/C Ratio	0.012	-	0.153	-	-
HCM Ctrl Dly (s/v)	8.9	0	18.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	74	103	218	63	262	572
Future Volume (vph)	74	103	218	63	262	572
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.922		0.970			
Flt Protected	0.979					0.985
Satd. Flow (prot)	1625	0	1747	0	0	1774
Flt Permitted	0.979					0.985
Satd. Flow (perm)	1625	0	1747	0	0	1774
Link Speed (mph)	35		45			45
Link Distance (ft)	456		372			276
Travel Time (s)	8.9		5.6			4.2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	80	111	234	68	282	615
Shared Lane Traffic (%)						
Lane Group Flow (vph)	191	0	302	0	0	897
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 80.3%		ICU Level of Service D	
Analysis Period (min) 15			

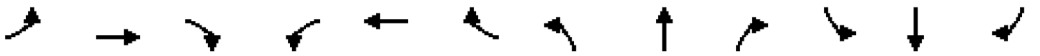
Intersection	
Int Delay, s/veh	16.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	74	103	218	63	262	572
Future Vol, veh/h	74	103	218	63	262	572
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	80	111	234	68	282	615

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1447	268	0	0	302	0
Stage 1	268	-	-	-	-	-
Stage 2	1178	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	145	770	-	-	1259	-
Stage 1	777	-	-	-	-	-
Stage 2	292	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	96	770	-	-	1259	-
Mov Cap-2 Maneuver	96	-	-	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	193	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	108.28	0	2.73
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	195	565	-
HCM Lane V/C Ratio	-	-	0.976	0.224	-
HCM Ctrl Dly (s/v)	-	-	108.3	8.7	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	8.2	0.9	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	11	2	0	2	17	229	2	2	574	41
Future Volume (vph)	25	0	11	2	0	2	17	229	2	2	574	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			150		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.958			0.932			0.999			0.990	
Flt Protected		0.967			0.976			0.997		0.950		
Satd. Flow (prot)	0	1726	0	0	1694	0	0	1855	0	1770	1844	0
Flt Permitted		0.967			0.976			0.997		0.950		
Satd. Flow (perm)	0	1726	0	0	1694	0	0	1855	0	1770	1844	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		495			549			750			987	
Travel Time (s)		11.3			12.5			17.0			22.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	0	12	2	0	2	18	249	2	2	624	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	39	0	0	4	0	0	269	0	2	669	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	0	11	2	0	2	17	229	2	2	574	41
Future Vol, veh/h	25	0	11	2	0	2	17	229	2	2	574	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	0	12	2	0	2	18	249	2	2	624	45

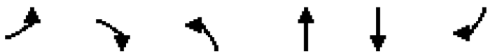
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	936	939	646	915	960	250	668	0	0	251	0	0
Stage 1	651	651	-	287	287	-	-	-	-	-	-	-
Stage 2	286	288	-	628	673	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	245	264	471	253	257	789	921	-	-	1314	-	-
Stage 1	458	465	-	720	674	-	-	-	-	-	-	-
Stage 2	721	674	-	471	454	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	238	258	471	241	250	789	921	-	-	1314	-	-
Mov Cap-2 Maneuver	238	258	-	241	250	-	-	-	-	-	-	-
Stage 1	457	464	-	704	659	-	-	-	-	-	-	-
Stage 2	703	658	-	458	453	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	19.89	14.87	0.62	0.03
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	123	-	-	281	369	1314	-	-
HCM Lane V/C Ratio	0.02	-	-	0.139	0.012	0.002	-	-
HCM Ctrl Dly (s/v)	9	0	-	19.9	14.9	7.7	-	-
HCM Lane LOS	A	A	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0	0	-	-

APPENDIX E

CAPACITY ANALYSIS WORKSHEETS
TOTAL TRAFFIC



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	84	15	10	515	196	60
Future Volume (vph)	84	15	10	515	196	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.980				0.968	
Flt Protected	0.959			0.999		
Satd. Flow (prot)	1692	0	0	1799	1743	0
Flt Permitted	0.959			0.999		
Satd. Flow (perm)	1692	0	0	1799	1743	0
Link Speed (mph)	35			45	45	
Link Distance (ft)	226			994	372	
Travel Time (s)	4.4			15.1	5.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	95	17	11	585	223	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	112	0	0	596	291	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	84	15	10	515	196	60
Future Vol, veh/h	84	15	10	515	196	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	95	17	11	585	223	68

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	865	257	291	0	-	0
Stage 1	257	-	-	-	-	-
Stage 2	608	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	324	782	1271	-	-	-
Stage 1	786	-	-	-	-	-
Stage 2	543	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	320	782	1271	-	-	-
Mov Cap-2 Maneuver	320	-	-	-	-	-
Stage 1	776	-	-	-	-	-
Stage 2	543	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	19.99	0.15	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	34	-	351	-	-
HCM Lane V/C Ratio	0.009	-	0.32	-	-
HCM Ctrl Dly (s/v)	7.9	0	20	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	1.4	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	93	270	509	88	81	161
Future Volume (vph)	93	270	509	88	81	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.900		0.980			
Flt Protected	0.987					0.984
Satd. Flow (prot)	1600	0	1765	0	0	1772
Flt Permitted	0.987					0.984
Satd. Flow (perm)	1600	0	1765	0	0	1772
Link Speed (mph)	35		45			45
Link Distance (ft)	456		372			857
Travel Time (s)	8.9		5.6			13.0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	98	284	536	93	85	169
Shared Lane Traffic (%)						
Lane Group Flow (vph)	382	0	629	0	0	254
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 76.9%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	18

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	93	270	509	88	81	161
Future Vol, veh/h	93	270	509	88	81	161
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	284	536	93	85	169

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	922	582	0	0	628	0
Stage 1	582	-	-	-	-	-
Stage 2	340	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	300	513	-	-	954	-
Stage 1	559	-	-	-	-	-
Stage 2	721	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	270	513	-	-	954	-
Mov Cap-2 Maneuver	270	-	-	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	650	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	57.4	0	3.06
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	417	602	-
HCM Lane V/C Ratio	-	-	0.916	0.089	-
HCM Ctrl Dly (s/v)	-	-	57.4	9.1	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	10	0.3	-



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	35	2	19	50	6	64
Future Volume (vph)	35	2	19	50	6	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.994				0.877	
Flt Protected				0.986	0.996	
Satd. Flow (prot)	1728	0	0	1714	1519	0
Flt Permitted				0.986	0.996	
Satd. Flow (perm)	1728	0	0	1714	1519	0
Link Speed (mph)	35			35	30	
Link Distance (ft)	405			226	259	
Travel Time (s)	7.9			4.4	5.9	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	40	2	22	57	7	73
Shared Lane Traffic (%)						
Lane Group Flow (vph)	42	0	0	79	80	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.3%		ICU Level of Service A	
Analysis Period (min) 15			

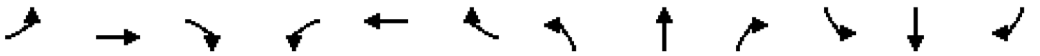
Intersection	
Int Delay, s/veh	4.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	35	2	19	50	6	64
Future Vol, veh/h	35	2	19	50	6	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	2	22	57	7	73

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	42	0	141	41
Stage 1	-	-	-	-	41	-
Stage 2	-	-	-	-	100	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1567	-	852	1030
Stage 1	-	-	-	-	982	-
Stage 2	-	-	-	-	924	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1567	-	840	1030
Mov Cap-2 Maneuver	-	-	-	-	840	-
Stage 1	-	-	-	-	982	-
Stage 2	-	-	-	-	911	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	2.02	8.87
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1011	-	-	496	-
HCM Lane V/C Ratio	0.079	-	-	0.014	-
HCM Ctrl Dly (s/v)	8.9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	0	39	2	0	2	12	464	2	2	193	18
Future Volume (vph)	61	0	39	2	0	2	12	464	2	2	193	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			150		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.947			0.932			0.999			0.987	
Flt Protected		0.970			0.976			0.999		0.950		
Satd. Flow (prot)	0	1711	0	0	1694	0	0	1859	0	1770	1839	0
Flt Permitted		0.970			0.976			0.999		0.950		
Satd. Flow (perm)	0	1711	0	0	1694	0	0	1859	0	1770	1839	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		359			431			601			994	
Travel Time (s)		8.2			9.8			13.7			22.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	66	0	42	2	0	2	13	504	2	2	210	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	108	0	0	4	0	0	519	0	2	230	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

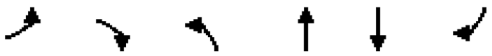
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	0	39	2	0	2	12	464	2	2	193	18
Future Vol, veh/h	61	0	39	2	0	2	12	464	2	2	193	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	66	0	42	2	0	2	13	504	2	2	210	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	754	757	220	746	765	505	229	0	0	507	0	0
Stage 1	224	224	-	532	532	-	-	-	-	-	-	-
Stage 2	530	533	-	214	234	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	325	337	820	330	333	567	1339	-	-	1058	-	-
Stage 1	779	718	-	531	526	-	-	-	-	-	-	-
Stage 2	532	525	-	788	711	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	319	332	820	308	328	567	1339	-	-	1058	-	-
Mov Cap-2 Maneuver	319	332	-	308	328	-	-	-	-	-	-	-
Stage 1	777	717	-	524	519	-	-	-	-	-	-	-
Stage 2	523	518	-	746	710	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	16.58	14.12	0.19	0.08
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	45	-	-	419	399	1058	-	-
HCM Lane V/C Ratio	0.01	-	-	0.26	0.011	0.002	-	-
HCM Ctrl Dly (s/v)	7.7	0	-	16.6	14.1	8.4	-	-
HCM Lane LOS	A	A	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1	0	0	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	75	12	17	257	632	95
Future Volume (vph)	75	12	17	257	632	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.982				0.982	
Flt Protected	0.959			0.997		
Satd. Flow (prot)	1696	0	0	1795	1768	0
Flt Permitted	0.959			0.997		
Satd. Flow (perm)	1696	0	0	1795	1768	0
Link Speed (mph)	35			45	45	
Link Distance (ft)	226			992	372	
Travel Time (s)	4.4			15.0	5.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	77	12	18	265	652	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	89	0	0	283	750	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	11			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.6%		ICU Level of Service A	
Analysis Period (min) 15			

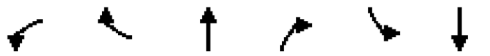
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	75	12	17	257	632	95
Future Vol, veh/h	75	12	17	257	632	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	12	18	265	652	98

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1001	701	749	0	-	0
Stage 1	701	-	-	-	-	-
Stage 2	300	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	269	439	860	-	-	-
Stage 1	492	-	-	-	-	-
Stage 2	752	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	263	439	860	-	-	-
Mov Cap-2 Maneuver	263	-	-	-	-	-
Stage 1	480	-	-	-	-	-
Stage 2	752	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	23.97	0.58	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	112	-	278	-	-
HCM Lane V/C Ratio	0.02	-	0.322	-	-
HCM Ctrl Dly (s/v)	9.3	0	24	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.3	-	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	92	103	258	74	262	639
Future Volume (vph)	92	103	258	74	262	639
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.929		0.970			
Flt Protected	0.977					0.986
Satd. Flow (prot)	1634	0	1747	0	0	1775
Flt Permitted	0.977					0.986
Satd. Flow (perm)	1634	0	1747	0	0	1775
Link Speed (mph)	35		45			45
Link Distance (ft)	456		372			854
Travel Time (s)	8.9		5.6			12.9
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	99	111	277	80	282	687
Shared Lane Traffic (%)						
Lane Group Flow (vph)	210	0	357	0	0	969
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	11		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 87.6%		ICU Level of Service E	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	42.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	92	103	258	74	262	639
Future Vol, veh/h	92	103	258	74	262	639
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	99	111	277	80	282	687

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1568	317	0	0	357	0
Stage 1	317	-	-	-	-	-
Stage 2	1251	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	122	723	-	-	1202	-
Stage 1	738	-	-	-	-	-
Stage 2	270	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 76	723	-	-	1202	-
Mov Cap-2 Maneuver	~ 76	-	-	-	-	-
Stage 1	738	-	-	-	-	-
Stage 2	167	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	297.47	0	2.59
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	144	523	-
HCM Lane V/C Ratio	-	-	1.458	0.234	-
HCM Ctrl Dly (s/v)	-	-	297.5	8.9	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	13.9	0.9	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	47	6	67	44	4	40
Future Volume (vph)	47	6	67	44	4	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985				0.877	
Flt Protected				0.971	0.996	
Satd. Flow (prot)	1712	0	0	1688	1519	0
Flt Permitted				0.971	0.996	
Satd. Flow (perm)	1712	0	0	1688	1519	0
Link Speed (mph)	35			35	30	
Link Distance (ft)	405			226	259	
Travel Time (s)	7.9			4.4	5.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	48	6	69	45	4	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	54	0	0	114	45	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	10	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.7%		ICU Level of Service A	
Analysis Period (min) 15			

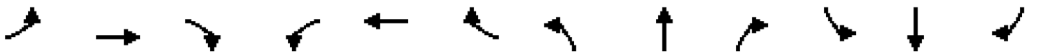
Intersection	
Int Delay, s/veh	4.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	47	6	67	44	4	40
Future Vol, veh/h	47	6	67	44	4	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	6	69	45	4	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	55	0	235	52
Stage 1	-	-	-	-	52	-
Stage 2	-	-	-	-	184	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1551	-	753	1016
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	848	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1551	-	719	1016
Mov Cap-2 Maneuver	-	-	-	-	719	-
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	809	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	4.48	8.85
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	979	-	-	1086	-
HCM Lane V/C Ratio	0.046	-	-	0.045	-
HCM Ctrl Dly (s/v)	8.9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	0	25	2	0	2	41	235	2	2	578	65
Future Volume (vph)	39	0	25	2	0	2	41	235	2	2	578	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	100		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			150		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.947			0.932			0.999			0.985	
Flt Protected		0.970			0.976			0.993		0.950		
Satd. Flow (prot)	0	1711	0	0	1694	0	0	1848	0	1770	1835	0
Flt Permitted		0.970			0.976			0.993		0.950		
Satd. Flow (perm)	0	1711	0	0	1694	0	0	1848	0	1770	1835	0
Link Speed (mph)		30			30			45			30	
Link Distance (ft)		382			488			292			992	
Travel Time (s)		8.7			11.1			4.4			22.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	42	0	27	2	0	2	45	255	2	2	628	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	69	0	0	4	0	0	302	0	2	699	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2

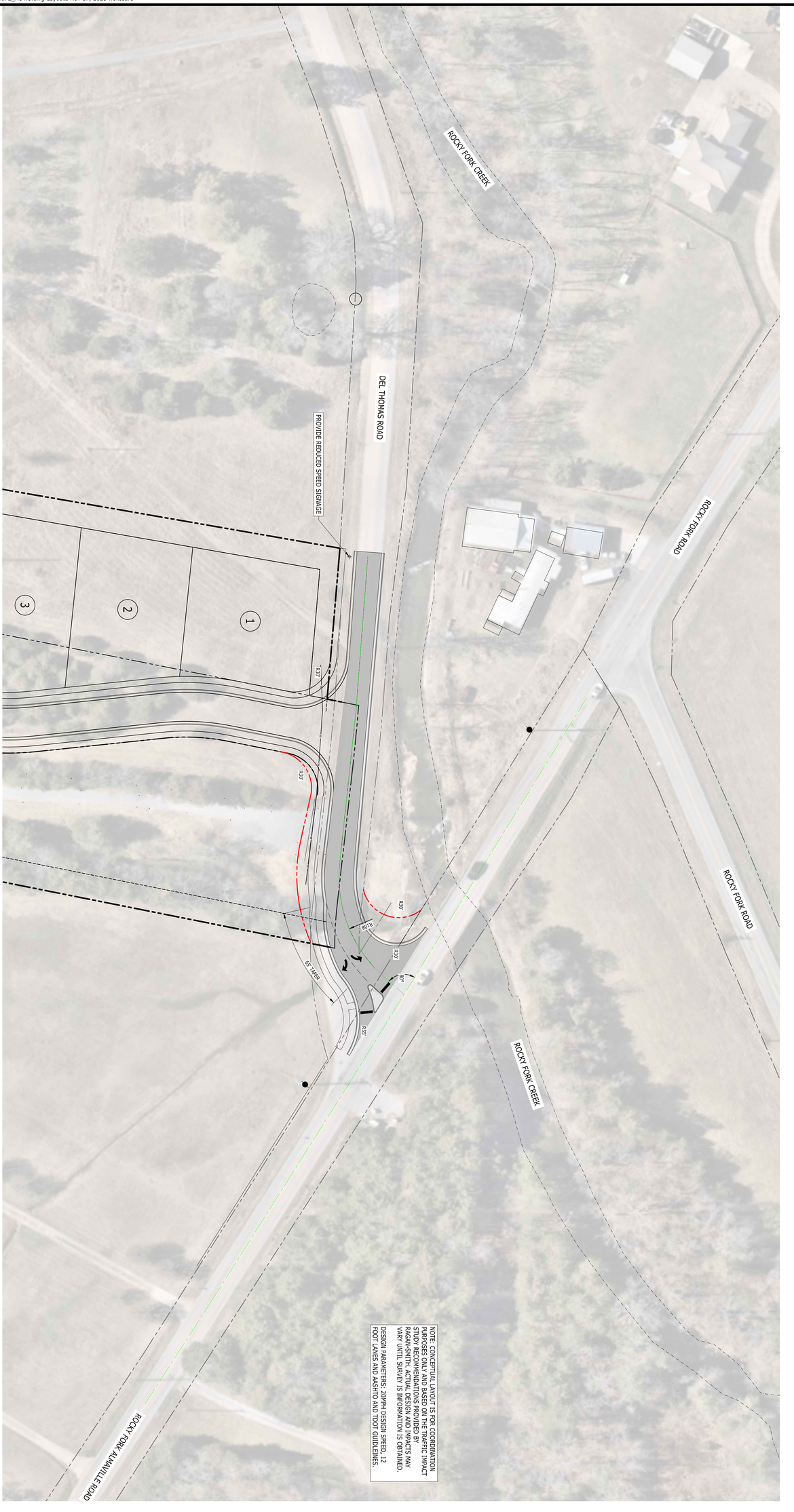
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	0	25	2	0	2	41	235	2	2	578	65
Future Vol, veh/h	39	0	25	2	0	2	41	235	2	2	578	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	0	27	2	0	2	45	255	2	2	628	71

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1013	1015	664	978	1049	257	699	0	0	258	0	0
Stage 1	668	668	-	346	346	-	-	-	-	-	-	-
Stage 2	345	347	-	633	703	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	218	238	461	230	227	782	898	-	-	1307	-	-
Stage 1	448	456	-	670	636	-	-	-	-	-	-	-
Stage 2	671	635	-	468	440	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	204	224	461	203	214	782	898	-	-	1307	-	-
Mov Cap-2 Maneuver	204	224	-	203	214	-	-	-	-	-	-	-
Stage 1	447	456	-	631	599	-	-	-	-	-	-	-
Stage 2	630	598	-	440	439	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	23.75	16.31	1.36	0.02
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	265	-	-	261	323	1307	-	-
HCM Lane V/C Ratio	0.05	-	-	0.267	0.013	0.002	-	-
HCM Ctrl Dly (s/v)	9.2	0	-	23.7	16.3	7.8	-	-
HCM Lane LOS	A	A	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1	0	0	-	-

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0' 20' 40' 80' 120'
DRAWING SCALE (1" = 40')

N

DRAWING NUMBER	PROJECT NUMBER	DRAWING TITLE
1	20250072	R.O.W. IMPROVEMENTS EXHIBIT

NO.	DATE	DESCRIPTION

GOODALL HOMES
PATTERSON PROPERTY
7025 DEL THOMAS ROAD
SMYRNA, TN 37167
RUTHERFORD COUNTY

GOODALL HOMES
393 MAPLE STREET
#100
GALLATIN, TN 37066
615.703.5883

Catalyst DESIGN GROUP
1524 WILLIAMS DRIVE, SUITE 201, MURFREESBORO, TN 37129
(615) 622-7200 | WWW.CATALYST-DG.COM

Catalyst DESIGN GROUP
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(615) 622-7200 | WWW.CATALYST-DG.COM

GOODALL HOMES
393 MAPLE STREET
#100
GALLATIN, TN 37066
615.703.5883

GOODALL HOMES
PATTERSON PROPERTY

7025 DEL THOMAS ROAD
SMYRNA, TN 37167
RUTHERFORD COUNTY

NO.	DATE	DESCRIPTION

DRAWING TITLE

R.O.W. IMPROVEMENTS EXHIBIT

PROJECT NUMBER
20250072

DRAWING NUMBER
2

P:\2025\20250072_Goodall – Patterson Property\dwg\The Courtyards\20250072_TurnLane.dwg-Layout1 Nov 17, 2025 wbissard

CONSOLIDATED UTILITY DISTRICT
Rutherford County, Tennessee

August 1, 2025

Mr. Danny Hieronimus
Goodall Homes
393 Maple Street, Suite 100
Gallatin, TN 37129

Re: Unnamed Development
7025 Del Thomas Road, Smyrna, TN
Tax Map 54, Parcels 20.00, 20.01, & 3.02 (part of)
Will Serve Letter – Water Only

Dear Mr. Danny Hieronimus,

This "Will Serve Letter" is for the property identified above (hereafter "Developer/Development") which lies within the water service area of Consolidated Utility District of Rutherford County (hereafter "the District"). Based on the Water Service Availability Request provided to the District, your proposed project will create a total of 202 residential lots (40 townhomes and 162 single-family) and one commercial lot (amenity center including pool, cabana building with restrooms, mail center, etc.). The fire protection requirement is 1,000 gpm @ 20 psi for the residential lots and 1,500 gpm @ 20 psi for the commercial lot (per the Smyrna Fire-Rescue Dept.). No fire sprinkler or irrigation requirements were submitted or assumed. An irrigation requirement of 30 gpm was ASSUMED for the amenity center.

The District's water system currently has a 12-inch water main along Del Thomas and an 8-inch water main along Du Bois Avenue which will be the main points of connection for the Development. **The current infrastructure should meet the domestic water and irrigation demands, plus the fire protection requirements for the residential lots, but NOT the fire protection requirements of the commercial lot (namely the amenity center) at full build out of the Development with connections to multiple existing water mains as noted above.** *The approximate maximum fire flow available is only 1,400 gpm at the commercial lot.* **Due to those multiple connections each section of the Development will need to be evaluated individually BEFORE detailed design commences on each section.** Exact details of the connections and water main size required throughout the Development will be determined in the design phase after the initial set of construction plans are submitted and reviewed.

The fire protection demands used in this evaluation are based on the information noted above which ASSUMES IF ANY multi-family residential structures (such as duplexes, triplexes, etc. or townhomes) are included in the Development they meet the requirements to be treated as a single-family residential lot. The Developer MUST verify with the applicable fire protection regulating body what the requirements are to meet that assumption and ADHERE TO THOSE REQUIREMENTS. Otherwise, the Developer MUST submit another Water Service Availability Request with the updated fire protection requirements (as prescribed in a letter or email from the applicable fire protection regulating body) BEFORE moving forward with the Development.

If the fire protection requirements for the commercial lot can be reduced by incorporating fire sprinklers, or other measures, another Water Service Availability Request MUST be submitted with the updated fire protection requirements BEFORE moving forward with the Development.

The District understands sewer service for this development will be provided by the Town of Smyrna Utilities Department. The Developer should verify availability and requirements with the applicable entity that reviews and approves such systems.

No public water improvements and/or extensions shall be approved or installed until all conditions are fulfilled as outlined in the District's Developer's Packet and are subject to payment by Developer of engineering and inspection fees. All water lines/facilities improvements needed to serve the property in question are to be installed by the Developer in accordance with the District's policies and procedures as outlined in the Technical Specifications of the District which can be found on our website or at our office.

This letter is specifically subject to the above conditions and such other terms and conditions as the District may require from time to time or at the time the water line improvements/upgrades are to be implemented and installed according to the District's requirements. This letter is intended only as a matter of "general information" and is not a contract between the parties. The letter shall not be considered an agreement or obligation of the District to provide water service to the Developer. In addition, there are or may be additional terms, requirements, and conditions of the District to provide water service to the Developer which are not set forth or otherwise referred to in this letter.

In addition to the foregoing, this letter and any approval(s) previously granted the Developer by the District shall automatically expire within two (2) years from the date of this letter, unless the District has approved the Developer's Construction Plans (meaning all the District's review comments have been fully addressed and it is ready for "CUD Water Plans" to be prepared) or the District has issued an approved commercial meter application for the site.

Please feel welcome to call or email if you have questions.

Sincerely,



Alan Stuemke, P.E.
Director of Engineering, Consolidated Utility District
PH: 615-225-3311 | Fax: 615-225-3314 | Email: astuemke@cudrc.com

Pc: Wesley Blissard, P.E., Catalyst Design Group:
Roger Goodson, CUD General Manager
Jimmy Hailey, P.E., James C. Hailey & Company
Mark Parker, P.E., Assistant Director of Utilities @ Town of Smyrna, Utilities
Kristi Worrell, Building Official @ Town of Smyrna, Building Safety
James Lawrence, Assistant Fire Chief @ Town of Smyrna, Fire-Rescue Dept.
Kevin Rigsby, Planning Manager @ Town of Smyrna, Planning & Zoning
Mitch Wensman, Planner @ Town of Smyrna, Planning & Zoning

Catalyst Design Group – Annexation and PRD Zoning Request

Tax Map 54, Parcel 20.00, owned by Ronald S. Patterson, Parcel 20.01, owned by the Ronald S. Patterson Living Trust, the Rodney C. Patterson Living Trust, and the Will Mefford Living Trust, and Parcel 3.04, owned by SCollins2 Properties. All properties requested by Catalyst Design Group on behalf of the owners.

Bordered on the west by Parcel 3.02, owned by Lou Ann Zelenik, Parcel 1.07, owned by Mark and Marcia Kendrick, and Parcel 35.02, owned by J. Kyle Maxfield; on the south by Parcel 39.02, owned by Jeffery A. Williams, and Parcel 39.08, owned by Jeffery A. and Robin T. Williams; on the east by the Courtyards at Stewart Creek development and Parcel 8.00, owned by Dennis Butler; and on the north by Parcel 3.01, owned by Gilbert and Yoana Cavazos, Parcel 3.03, owned by Jose Barrera and Nallely Del Valle Morales, Parcel 3.00, owned by the Gary and Melva Lou Follis Living Trust, and Del Thomas Road. Area annexed contains approximately 102 acres.

The annexation includes the existing right-of-way of Rocky Fork Almaville Road from the existing Town limits approximate 660’ to the intersection with Del Thomas Road, as well as the existing right-of-way of Del Thomas Road from Rocky Fork Almaville Road approximately 450’ to the westernmost boundary of the requested properties.

Del Thomas Road/Patterson Property Residential Project
Traffic Impact Study Recommendations

- Rocky Fork Almaville Road/Rocky Fork Road Intersection:
  Left turn lane from Rocky Fork Almaville Road onto Rocky Fork Road already warranted. TIS recommends that the Town build it.
- Del Thomas Road at the Project Access:
  Two lanes exiting the project. No turn lanes into the project from Del Thomas Road.
- Rocky Fork Road at Kedron Church Road/Restoration Drive Intersection:
  No intersection control changes
  A left turn lane from Rocky Fork Almaville Road into Restoration Drive is warranted at 80% buildout of the requested project.
  A right turn lane is not warranted into either side street from Rocky Fork Almaville Road
- Rocky Fork Road/Del Thomas Road Intersection:
  No intersection control changes
  Left turn lane is not warranted
  Right turn lane warranted at 50% buildout of the requested project. Includes the bridge widening as a part of the regional improvement that includes the Rocky Fork Road and Rocky Fork Almaville Road intersection improvements.

NATIONAL BRIDGE INVENTORY
TENNESSEE INVENTORY AND APPRAISAL REPORT

TN TDOT Department of Transportation

BRIDGE ID NUMBER: **75F00400001**
BRIDGE OWNER: **RUTHERFORD COUNTY**
FIPS CODE: **00000**
ROAD NAME: **ROCKY FORK-ALMAVILLE RD.**
CROSSING: **ROCKY FORK CREEK**
LOCATION: **3.6 MI SW JCT I24&SR266**

COUNTY: **RUTHERFORD**
ROUTE: **00986**
SPECIAL CASE: **0**
COUNTY SEQUENCE: **1**
LOG MILE: **1.98**
SUFFICIENCY RATING: **80.3**

IDENTIFICATION

(16a,b) LATITUDE:	N	35.92667	DEGREES
(17a,b) LONGITUDE:	W	86.58586	DEGREES
(98a) BORDER BRIDGE STATE CODE:			N/A
(98b) PERCENT SHARE:			00
(99) BORDER BRIDGE NUMBER:			NOT APPLICABLE

BRIDGE TYPE AND MATERIAL

(43a) MAIN SPAN MATERIAL: **CONCRETE CONTINUOUS**
(44a) APPR SPAN MATERIAL: **NOT APPLICABLE**

(45) NUMBER OF MAIN SPANS: **3**
(46) NUMBER OF APPROACH SPANS: **0**
(107) TYPE OF DECK: **CONCRETE CAST-IN-PLACE**
(108) TYPE OF WEARING SURFACE AND DECK PROTECTION:
A) TYPE OF SURFACE: **ASPHALT**
B) TYPE MEMBRANE: **NONE**
C) TYPE PROTECTION: **NONE**

AGE AND SERVICE

(27) YEAR THE BRIDGE WAS BUILT: **1972**
(106) YEAR THE BRIDGE WAS REHABILITATED: **N/A**
(42a) SERVICE ON BRIDGE: **HIGHWAY**
(42b) UNDER BRIDGE: **WATERWAY**
(28a) NUMBER OF LANES CARRIED BY BRIDGE: **2**
(28b) NUMBER OF LANES UNDER THE BRIDGE: **0**

GEOMETRIC DATA

(48) MAXIMUM SPAN LENGTH: **12.1 FT**
(49) TOTAL BRIDGE LENGTH: **44.9 FT**
(50a) LEFT SIDEWALK WIDTH: **0.0 FT**
(50b) RIGHT SIDEWALK WIDTH: **0.0 FT**
(51) BRIDGE CURB TO CURB WIDTH: **24 FT**
(52) BRIDGE OUT TO OUT WIDTH: **26.6 FT**
(32) APPROACH ROADWAY (W/ SHLDS) WIDTH: **18.0 FT**
(33) BRIDGE MEDIAN: **NO MEDIAN**
(34) BRIDGE SKEW: **45 DEGREES**
(35) BRIDGE FLARE: **NO FLARE**
(520) MIN VERTICAL CLEARANCE OVER RD: **100 FT**
(47) MIN HORIZONTAL CLEARANCE ON ROADWAY: **24.0 FT**
(54a) VERT UNDERCLR: **NOT A HIGHWAY OR RAILROAD**
(54b) MIN VERTICAL UNDERCLEARANCE: **NOT APPLICABLE**
(55a) HORZ UNDERCLR: **NOT A HIGHWAY OR RAILROAD**
(55b) MIN HORZ UNDERCLR ON RIGHT: **NOT APPLICABLE**
(56) MIN HORZ UNDERCLR ON LEFT: **NOT APPLICABLE**

NAVIGATION DATA

(38) NAV CONTROL: **NO NAVIGATION CONTROL**
(39) NAVIGATION VERTICAL CLEARANCE: **N/A**
(116) LIFT BRIDGE VERT CLEARANCE: **N/A**
(40) NAVIGATION HORZ CLEARANCE: **N/A**

PUBLICATION DATE
07-Mar-25

CLASSIFICATION

(112) MEETS NBIS BRIDGE LENGTH: **YES**
(104) NATIONAL HIGHWAY SYSTEM: **NOT A NHS ROUTE**
(26) FUNCTIONAL CLASS: **URBAN COLLECTOR**
(101) PARALLEL BRIDGE: **NO PARALLEL BRIDGE**
(102) TRAFFIC DIR: **2-WAY TRAFFIC**
(103) TEMPORARY BRIDGE: **NOT APPLICABLE**
(110) NATIONAL TRUCK ROUTE: **NOT ON TRUCK NETWORK**
(37) HISTORICAL CLASS: **BRIDGE IS NOT ELIGIBLE FOR THE NATIONAL REGISTER**

CONDITION RATINGS

(58) DECK: **N**
(59) SUPERSTRUCTURE: **N**
(60) SUBSTRUCTURE: **N**
(61) STREAM CHANNEL AND CHANNEL PROTECTION: **6**
(62) CULVERT CONDITION (IF APPLICABLE): **7**

DESIGN LOAD AND WEIGHT POSTING

(31) DESIGN LOADING: **HS-20-44**
WEIGHT POSTING (2 AXLE VEHICLES): **ALL LEGAL LOADS**
WEIGHT POSTING (3 OR MORE AXLES): **ALL LEGAL LOADS**
(70) BRIDGE POSTING CODE: **5**
(41) WT POSTING STATUS: **OPEN**

APPRAISAL

(67) STRUCTURAL EVALUATION: **7**
(68) DECK GEOMETRY: **2**
(69) UNDERCLEARANCE RATING: **N**
(71) WATERWAY ADEQUACY: **7**
(72) APPROACH ROADWAY ALIGNMENT: **8**
(36) TRAFFIC SAFETY FEATURES: **0000**
(113) SCOUR CONDITION RATING: **5**

RECOMMENDED IMPROVEMENTS

(75) TYPE OF WORK: **NOT APPLICABLE**
(76) LENGTH OF BRIDGE IMPROVEMENT: **N/A**
(94) BRIDGE IMPROVEMENT COST:
(95) ROADWAY IMPROVEMENT COST:
(96) TOTAL PROJECT COST:
(97) YEAR OF IMPROVEMENT COST ESTIMATE:

INSPECTION DATES

(90) DATE OF LAST REGULAR INSPECTION: **7/10/2024**
(91) REGULAR INSPECTION FREQUENCY (MONTHS): **24**
(93b) DATE OF LAST UNDERWATER INSP (MO/YR): **N/A**
(92b) UNDERWATER INSP FREQUENCY (MONTHS): **N00**
(93c) DATE OF SPECIAL INSPECTION (MO/YR): **N/A**
(92c) SPECIAL INSP FREQUENCY (MONTHS): **N00**

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Town of Smyrna
Town Council Meeting
Agenda Summary

Agenda Item Number 7.
Department: Building & Codes
Date: March 26, 2026

Subject:
Consideration of an Ordinance amending the Smyrna Municipal Code Title 7 relative to the adoption of the 2024 International Fire Code. Second Reading.

Fiscal Impact:
none known

Contract Type:

Contract Term (if applicable):

Background:
This item accompanies the adoption of the 2024 International Building Codes and updates Title 7 of the Municipal Code to reflect adoption of the 2024 International Fire Code. The Fire Code was inadvertently omitted from the prior agenda item that updated the Uniform Building/Utilities Codes.

Summary:
Under Tennessee law, all municipalities and county governments that adopt the International Codes must keep them updated within seven years of their most recent publication. To remain compliant, all Rutherford County entities that promulgate building and related codes, i.e., Rutherford County, Murfreesboro, Lavergne, Eagleville and Smyrna, will be updating their adopted codes to the 2024 editions of the International Code Council (ICC) publications, including the International Building, Plumbing, and Electrical Codes.

This item amends Title 7 of the Municipal Code to adopt the 2024 International Fire Code, which was inadvertently omitted from the agenda item implementing the 2024 editions of the other referenced ICC publications.

Recommended Council Action:
Staff recommends approval.

Attachments:

1. Ordinance #26-17 - 2024 Fire Code adoption
2. Title 7 - 2026 redline update

TOWN OF SMYRNA, TENNESSEE
ORDINANCE NO. 26-

AN ORDINANCE relative to the amendment of the Town of Smyrna Municipal Code, Title 7 "Fire Protection and Fireworks" Sections 7-101 and 7-103 relative to the adoption of the 2024 International Fire Code.

WHEREAS, in accordance with the Charter of the Town of Smyrna, Tennessee, Article 2, Section 2.01(26), Town Council shall have the power to provide and maintain charitable, educational, recreative, curative, corrective, detentive, or penal institutions, departments, functions, facilities, instrumentalities, conveniences and services; and

WHEREAS, in accordance with the Charter of the Town of Smyrna, Tennessee, Article 2, Section 2.01(32), Town Council shall have the power to plan for the orderly development of the community, including economic, physical, educational and cultural aspects, and to institute programs to effectuate such plans; and

WHEREAS, in accordance with the Charter of the Town of Smyrna, Tennessee, Article 2, Section 2.01(34), Town Council shall have the power to create and empower boards, commissions, committees and agencies to facilitate the orderly and efficient implementation of governmental tasks, regulations, and policies; and

WHEREAS, in accordance with the Charter of the Town of Smyrna, Tennessee, Article 2, Section 2.01(35), Town Council shall have the power to exercise and have all other powers, functions, rights, privileges and immunities granted by general law or necessary or desirable to promote or protect the safety, health, peace, security, good order, comfort, convenience, morals, and general welfare of the town and its inhabitants, and all implied powers necessary to carry into execution all powers granted in the Charter of the Town of Smyrna, Tennessee.

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF SMYRNA:

Section 1. That Title 7 "Fire Protection and Fireworks" Sections 7-101 and 7-103, shall be provided in the Code as appearing in Exhibit "A" attached hereto and incorporated herein by reference as if set forth at length verbatim, the health and welfare of the Town of Smyrna requiring it.

Section 2. This ordinance shall take effect immediately upon its adoption on second and final reading, the public health and welfare of the Town of Smyrna requiring it.

PASSED on first reading by the Town Council the ____ day of _____, 2026.

PASSED on second reading by the Town Council the ____ day of _____, 2026.

TOWN OF SMYRNA, TENNESSEE

_____
MARY ESTHER REED, Mayor

ATTEST:

_____

AMBER HOBBS, Town Clerk

CHAPTER 1: FIRE CODE[1]

§ 7-101 FIRE CODE ADOPTED.

The International Fire Code, 20242018 edition, and modifications thereto, is hereby adopted and incorporated by reference as part of this municipal code, and is hereinafter referred to as the Fire Code.

(2007 Code, § 7-101) (Ord. 14-02, Ord. 18-41, passed 11-13-2018)

§ 7-102 ENFORCEMENT.

The Fire Code shall be enforced by the building official or his or her designee. He or she shall have the same powers as the State Fire Marshal if he or she is a certified Tennessee fire inspector.

(2007 Code, § 7-102) (Ord. 04-46, passed 11-9-2004)

§ 7-103 MODIFICATIONS.

(1) Section 101.1 Title. Add "Town of Smyrna, TN" in place of "[name of jurisdiction]".

~~(2) Section 1010.1.9.5 Bolt locks. Exceptions #3 and 4. Add "M" after "F".~~

(23) Appendix B, C, and D are adopted.

(2007 Code, § 7-103) (Ord. 14-02, Ord. 18-41, passed 12-2018)

§ 7-104 GASOLINE TRUCKS.

No person shall operate or park any gasoline tank truck within the Central Business District or within any residential area at any time except for the purpose of and while actually engaged in the expeditious delivery of gasoline.

(2007 Code, § 7-104)

§ 7-105 VIOLATIONS.

It shall be unlawful for any person to violate any of the provisions of this chapter or the Fire Prevention Code hereby adopted, or fail to comply therewith, or violate or fail to comply with any order made thereunder; or build in violation of any detailed statement of specifications or plans submitted and approved thereunder, or any certificate or permit issued thereunder, and from which no appeal has been taken; or fail to comply with such an order as affirmed or modified by the Town Council or by a court of competent jurisdiction, within the time fixed herein. The application of a penalty under the general penalty clause for the town code shall not be held to

[1]Cross reference(s)—Emergency vehicles, see Title 15, Chapter 2; Fires in streets, see §16-112; Illegal use of fire hydrants, see §18-110; Private fire lines, see §18-107

prevent the enforced removal of prohibited conditions. Each day a violation is allowed to continue shall constitute a separate offense.

(2007 Code, § 7-105)

Town of Smyrna
Town Council Meeting
Agenda Summary

Agenda Item Number 8.
Department: Utilities
Date: March 26, 2026

Subject:
Consideration of an Ordinance relative to an update to the Sewer Use Ordinance.

Fiscal Impact:
There is no fiscal impact

Contract Type:

Contract Term (if applicable):
N/A

Background:
During the Pre-treatment Audit Inspection by TDEC at the WWTP, updates to the Sewer Use Ordinance were identified. All required changes are shown in red on the attached document.

Summary:
Updates required by TDEC to the Sewer Use Ordinance.

Recommended Council Action:
Staff recommends approval of the changes to the Sewer Use Ordinance.

Attachments:
1. Ordinance #26-22
2. SUO Updates

TOWN OF SMYRNA, TENNESSEE
ORDINANCE NO. 26-

AN ORDINANCE relative to the amendment of the Town of Smyrna Municipal Code, Title 18 “Water and Sewer” Chapter 2 "Sewer Use”, relative to updates identified and required by the Tennessee Department of Environment and Conservation (TDEC).

WHEREAS, it is the wish of the Town Council to amend, change, incorporate and adopt certain items identified and required by TDEC, and other policies for the various utilities of the Town of Smyrna; and

WHEREAS, in accordance with the Charter of the Town of Smyrna, Tennessee, Article 2, Section 2.01(r), Town Council shall have the power to [a]cquire, purchase, provide for, construct, regulate and maintain and do all things relating to all marketplaces, public buildings, bridges, sewers and other structures, works and improvements inside and outside the municipality;

WHEREAS, in accordance with the Charter of the Town of Smyrna, Tennessee, Article 2, Section 2.01(n), Town Council shall have the power to [p]rescribe reasonable regulations regarding the construction, maintenance, equipment, operation and service of public utilities and telecommunications systems;

WHEREAS, in accordance with the Charter of the Town of Smyrna, Tennessee, Article 2, Section 2.01(ii), Town Council shall have the power to [e]xercise and have all other powers, functions, rights, privileges and immunities granted by general law or necessary or desirable to promote or protect the safety, health, peace, security, good order, comfort, convenience, morals, and general welfare of the town and its inhabitants, and all implied powers necessary to carry into execution all powers granted in the Charter of the Town of Smyrna, Tennessee; and

WHEREAS, it is in the health, welfare, and interest of the Town of Smyrna to adopt the same.

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF SMYRNA:

Section 1. That Title 18 “Water and Sewers”, Chapter 2 “Sewer Use” of the Town of Smyrna Municipal Code, be and is hereby amended, and which amendment shall be provided in the Code as appearing in Exhibit A attached hereto and incorporated herein by reference as if set forth at length verbatim, the health and welfare of the Town of Smyrna requiring it.

Section 2. This ordinance shall take effect immediately as of the date of the adoption on second and final reading, the public health and welfare of the Town of Smyrna requiring it.

PASSED on first reading by the Town Council the ____ day of _____, 2026.

PASSED on second reading by the Town Council the ____ day of _____, 2026.

TOWN OF SMYRNA, TENNESSEE

_____
MARY ESTHER REED, Mayor

ATTEST:

_____
AMBER HOBBS, Town Clerk

CHAPTER 2: SEWER USE[1]

§ 18-201 GENERAL PROVISIONS.

This chapter sets forth uniform requirements for users of the publicly owned treatment works of the town ("POTW") and enables the town to comply with all applicable state and federal laws, including, but not limited to, the Clean Water Act of 1977, 33 U.S.C. §§ 1251 et seq., as amended; the general pretreatment regulations, C.F.R. Title 40, Part 403, as amended; and the state's Water Quality Control Act of 1977, T.C.A. §§ 69-3-101 et seq., as amended. This chapter shall apply to all users of the POTW. The objectives of this chapter are:

(1) To prevent the introduction of pollutants into the POTW which will interfere with the operation of the POTW or contaminate the resulting sludge;

(2) To prevent the introduction of pollutants into the POTW that will pass-through the POTW, inadequately treated, into receiving waters or the atmosphere or otherwise be incompatible with the operation of the POTW;

(3) To improve the opportunity to recycle and reclaim wastewaters and sludges from the POTW; and

(4) To provide for fees for the equitable distribution of costs attributable to the construction, operation, and maintenance of the POTW.

§ 18-202 ABBREVIATIONS.

The following abbreviations shall have the designated meanings:

BOD	Biochemical oxygen demand
C.F.R.	Code of Federal Regulations
COD	Chemical oxygen demand
EPA	U.S. Environmental Protection Agency
l	Liter
mg	Milligrams
mg/l	Milligrams per liter
NPDES	National pollutant discharge elimination system
O&M	Operation and maintenance
OSHA	Occupational Safety and Health Administration
POTW	Publicly owned treatment works
SWDA	Solid Waste Disposal Act
SS	Suspended solids
DWR	Tennessee Department of Environment and Conservation, Division of Water Resources

[1]Cross reference(s)—Water and sewers, see Title 18, Chapter 1

Editor's note(s)—This chapter was modified in the 2017 update

§ 18-203 DEFINITIONS.

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

ACCIDENTAL DISCHARGE. Any release of wastewater which, for any unforeseen reason, fails to comply with any prohibition or limitation in this chapter.

ACT or ***THE ACT.*** The Federal Water Pollution Control Act, also known as the Clean Water Act of 1977, 33 U.S.C. §§ 1251 et seq., as amended.

APPROVAL AUTHORITY. The Director of DWR, or the authorized representative of the Director.

AUTHORIZED REPRESENTATIVE OF AN INDUSTRIAL USER.

(a) If the user is a corporation:

(i) The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any person who performs similar policy or decision-making functions for the corporation; or

(ii) The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to:

(A) Make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations;

(B) Initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations;

(C) Ensure that the necessary systems are established or actions taken to gather complete and accurate information for individual wastewater discharge permit requirements; and

(D) Sign documents.

(b) If the user is a partnership or sole proprietorship: a general partner or proprietor, respectively.

(c) If the user is a federal, state, or local governmental agency: a director or highest official appointed or designated to oversee the operation and performance of the activities of the governmental facility, or their designee.

(d) An individual described in divisions (a) through (c) above may designate a duly authorized representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to the town.

BEST MANAGEMENT PRACTICES (BMPs). Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the discharge prohibitions and limits listed in this chapter. ***BMPs*** also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage. ***BMPs*** may provide alternative means of complying with certain established categorical pretreatment standards and effluent limits.

BIOCHEMICAL OXYGEN DEMAND (BOD). The quantity of oxygen used in the biochemical oxidation of organic matter under standard laboratory procedures in five days at 20°C (68°F) expressed in terms of weight and volume (milligrams per liter).

BLOWDOWN. The minimum discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts exceeding limits established by best engineering practice.

BUILDING SEWER or ***HOUSE CONNECTION.*** The connecting pipe from a building to the sanitary sewer.

COLOR. Considered to be the true color of the light transmitted by a waste solution after removing suspended material including pseudo colloidal particles.

COMPOSITE SAMPLE. A sample that is formed by mixing two or more discrete samples ("aliquots"). For flow-proportional ***COMPOSITE SAMPLES***, each individual aliquot is collected after the passage of a defined volume of discharge. For time-proportional ***COMPOSITE SAMPLES***, the aliquots are collected after the passage of a defined period of time.

CONSTITUENTS. The specific compounds and components which comprise the wastewater.

CONTROL AUTHORITY. The POTW.

COOLING WATER. The water discharged from any use of air conditioning, cooling, or refrigeration, or to which the only pollutant added is heat, that does not come into direct contact with any raw material, intermediate product, water product, or finished product.

DAILY MAXIMUM. The arithmetic average of all effluent samples for a pollutant (except pH) collected during a calendar day.

DAILY MAXIMUM LIMIT. The maximum allowable discharge limit of a pollutant during a calendar day. Where ***DAILY MAXIMUM LIMITS*** are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where ***DAILY MAXIMUM LIMITS*** are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.

DIRECT DISCHARGE. The discharge of treated or untreated wastewater directly to the waters of the state.

DIRECTOR OF UTILITIES. The administrative officer of the town who is charged with administrative control of all operations of the POTW, as designated by the Town Council, and is responsible directly to the Town Council. As used herein, it may also include any town employee delegated to act for the town by the Town Manager or the Town Council.

DOMESTIC WASTEWATER. All liquid and waterborne pollutants, exclusive of unpolluted wastewater and wastewater or wastes from processes or operations of industrial users.

ENVIRONMENTAL PROTECTION AGENCY (EPA). The U.S. Environmental Protection Agency or, where appropriate, the term may also be used as a designation for the administrator or other duly authorized official of EPA.

EXISTING SOURCE. Any source of a discharge that is not a new source.

GRAB SAMPLE. A sample that is taken from a waste stream without regard to the flow in the waste stream and over a period of time not to exceed 15 minutes.

HOLDING TANK WASTE. Any waste from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks, vacuum-pump tank trucks, and septic tank haulers.

INDIRECT DISCHARGE or DISCHARGE. The introduction of pollutants into the POTW from any nondomestic source.

INDUSTRIAL USER. A source of non-domestic wastewater.

INDUSTRIAL WASTE. The liquid or other wastes resulting from any process of industry, manufacture, trade, or business, or from the development of natural resources.

INFILTRATION. The water entering sewers and building sewer connections from the soil through defective joints, broken or cracked pipe, improper connections, manhole walls, and the like. ***INFILTRATION*** does not include, and is distinguished from, inflow.

INFLOW. The water discharged into sewers from such sources as roof leaders, cellar and yard area drains, foundation drains, commercial and industrial discharges of unpolluted wastewater as defined below, drains from springs and swampy areas, and the like. It does not include and is distinguished from infiltration.

INSTANTANEOUS LIMIT. The maximum concentration of a pollutant allowed to be discharged at any time, determined from the analysis of any discrete or composited sample collected, independent of the industrial flow rate and the duration of the sampling event.

INTERFERENCE. A discharge which, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal, or exceeds the design capacity of the treatment works or the collection system.

LOCAL ADMINISTRATIVE OFFICER. The Director of Utilities or the Director of Utilities' designee. The ***LOCAL ADMINISTRATIVE OFFICER*** shall administer and enforce the town's pretreatment program, as set forth in this chapter, and the provisions of T.C.A. §§ 69-3-123 through 69-3-129.

LOCAL HEARING AUTHORITY. An administrative board consisting of the Town Manager, the Director of Public Works, and the Engineer of Record for the town.

NATIONAL CATEGORICAL PRETREATMENT STANDARD, CATEGORICAL PRETREATMENT STANDARDS, or ***CATEGORICAL STANDARD.*** Any regulation containing pollutant discharge limits promulgated by EPA in accordance with § 307(b) and (c) of the Act (33 U.S.C. § 1317) that apply to a specific category of users and that appear in 40 C.F.R. Chapter I, Subchapter N, Parts 405-471.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT or ***NPDES PERMIT.*** A permit to discharge wastewater issued pursuant to § 402 of the Act and T.C.A. § 69-3-108.

NEW SOURCE.

(a) Any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the adoption of this chapter or the publication of proposed pretreatment standards under § 307(c) of the Act that will be applicable to such source if such pretreatment standards are thereafter promulgated in accordance with that section, provided that:

(i) The building, structure, facility, or installation is constructed at a site at which no other source is located;

(ii) The building, structure, facility, or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

(iii) The production or wastewater generating processes of the building, structure, facility, or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source, should be considered.

(b) Construction on a site at which an existing source is located results in a modification rather than a ***NEW SOURCE*** if the construction does not create a new building, structure, facility, or installation meeting the criteria of divisions (a)(ii) or (a)(iii) above but otherwise alters, replaces, or adds to existing process or production equipment.

(c) Construction of a ***NEW SOURCE*** as defined under this division (c) has commenced if the owner or operator has:

(i) Begun, or caused to begin, as part of a continuous onsite construction program:

(A) Any placement, assembly, or installation of facilities or equipment; or

(B) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of NEW SOURCE facilities or equipment; or

(ii) Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this division (c)(ii).

PASS-THROUGH. A discharge that exits the POTW into waters of the state in quantities or concentrations that, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the town's NPDES permit, including an increase in the magnitude or duration of a violation.

PERSON. Any individual, firm, company, association, corporation, governmental agency, board, commission, or municipal corporation other than the town.

pH. The logarithm of the reciprocal of the concentration of hydrogen ions in moles per liter of solution. Stabilized ***pH*** is that determined after a sample of waste has been subjected to natural aeration.

POLLUTANT. Includes dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

POLLUTION. The human-made or human-induced alteration of the chemical, physical, biological, and/or radiological integrity of water.

PRETREATMENT. The reduction of the amounts of pollutants, the elimination of pollutants, or the alteration of the nature of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to discharging or otherwise introducing such pollutants into the POTW. The reduction or alteration can be obtained by physical, chemical, or biological processes, process changes or other means, except as prohibited by 40 C.F.R. § 403.6(d).

PRETREATMENT REQUIREMENT. Any substantive or procedural requirement related to pretreatment, other than a national pretreatment standard, imposed on an industrial user.

PRETREATMENT STANDARDS. Prohibited discharge standards, categorical pretreatment standards, and local limits.

PRIVATE WASTEWATER DISPOSAL SYSTEM. Any facilities for wastewater treatment and disposal not maintained and operated by the town.

PROCESS WASTEWATER. Any water that, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

PROPERLY SHREDDED GARBAGE. The organic wastes resulting from the preparation, cooking, and dispensing of foods that have been shredded to such degree that all particles will be carried freely under flow conditions nominally prevailing in public sewers, with no particle being greater than one-half inch in any dimension.

PUBLIC SEWER. A sewer in which all owners of abutting properties shall have equal rights, and which is controlled by a governmental agency or public utility.

PUBLICLY OWNED TREATMENT WORKS (POTW). Any or all of the following: the collection/transmission system, treatment plant, and the reuse or disposal system, which is owned by the town. The ***POTW*** includes any

devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to the WWTP. The term also means the town. ***POTW*** means WWF, as used in the state's pretreatment regulations.

RECEIVING STREAM. The body of water, stream, or watercourse receiving the discharge from a wastewater treatment plant or that body of water, stream, or watercourse formed by the effluent from a wastewater treatment plant.

SANITARY SEWAGE or ***SANITARY WASTEWATER.*** Wastewater excluding process wastes from industrial users.

SANITARY SEWER. A public sewer controlled by a governmental agency or public utility that carries liquid and waterborne wastes from residences, commercial buildings, industrial plants, and institutions, together with minor quantities of ground and surface waters that are not admitted intentionally.

SEWER. A pipe or conduit for carrying wastewater.

SEWERAGE SYSTEM. All facilities for collecting, pumping, treating, and disposing of wastewater.

SHALL and ***MAY.*** Shall is mandatory; may is permissible.

SIGNIFICANT INDUSTRIAL USER.

(a) All industrial users subject to categorical pretreatment standards under 40 C.F.R. Chapter I, Subchapter N, Parts 405-471; or

(b) Any other industrial user who:

  (i) Discharges an average of 25,000 gallons per day or more of process wastewater to the POTW;

  (ii) Contributes process waste stream greater than 5% of the hydraulic flow or organic design capacity of the POTW; or

  (iii) Is designated by the town, the POTW, the approval authority, or EPA to have significant impact, either singly or in combination with other contributing industries, on the POTW, the quality of sludge, the system's effluent quality, or air emissions generated by the POTW.

SLUG DISCHARGE. Any discharge of a non-routine, episodic nature, including, but not limited to, an accidental spill or non-customary batch discharge, which has a reasonable potential to cause interference or pass-through, or in any other way violate the POTW's regulations, local limits, or permit conditions.

STANDARD INDUSTRIAL CLASSIFICATION (SIC). A classification of an industry based on its product or service pursuant to the *Standard Industrial Classification Manual*, 1972, Office of Management and Budget of the Federal Government, as amended.

STANDARD METHODS. The analytical procedures set forth in the latest edition of *Standard Methods for the Examination of Water and Wastewater*, published by the American Public Health Association, or EPA Methods for Chemical Analysis of Water and Wastes, as per 40 C.F.R. Part 136 and amendments thereto.

STATE. The State of Tennessee.

STORM SEWER. A sewer that carries storm and surface waters and drainage, but that excludes sanitary sewage and polluted industrial wastes.

STRENGTH. The concentration of pollutants or substances contained in a liquid waste.

SUSPENDED SOLIDS. The total solid matter that either floats on the surface of, or is suspended in, water or liquid waste and which is removable by laboratory filtration.

TOWN. The Town of Smyrna, Tennessee. Activities attributable to the ***TOWN*** shall be the responsibility of the Town Council or any town employee or contractor delegated to act for the town by the Town Council.

TOWN COUNCIL. The Town Council of the Town of Smyrna, Tennessee. As used herein, it may also include any town employee or contractor delegated to act on matters pertaining to operation of the POTW for the town by the Town Council.

UNPOLLUTED WASTEWATER.

(a) Any wastewater which is substantially free of pollutants and is discharged from the following:

(i) Rain downspouts and drains;

(ii) Footing drains;

(iii) Storm and surface water drains; and

(iv) Cooling water systems.

(b) ***UNPOLLUTED WASTEWATER*** shall contain, by definition, none of the following:

(i) BOD in excess of 10 mg/l;

(ii) Suspended solids in excess of 10 mg/l;

(iii) Free or emulsified greases or oils;

(iv) Acids or alkalides;

(v) Phenols or other substances imparting taste or odor to receiving waters;

(vi) Toxic or poisonous substances;

(vii) Noxious or odorous gases; or

(viii) Any wastewater with a temperature which exceeds 60°C (140°F) at its introduction into a storm sewer or which exceeds 40°C (104°F) at its introduction into a receiving stream.

USER. Any person who contributes, causes, or permits the contribution of wastewater into the POTW, including without limitation, industrial users.

WASTEWATER. Water-carried wastes that are contributed to the POTW from any source.

WASTEWATER TREATMENT PLANT (WWTP). The facilities of the town for treating and disposing of wastewater.

WATERCOURSE. A channel in which a flow of water occurs, either continuously or intermittently.

WATERS OF THE STATE. All bodies or accumulations of water, surface or underground, within the boundaries of the state.

§ 18-204 USE OF PUBLIC SEWERS REQUIRED.

(1) It shall be unlawful for any person to place, deposit, or permit to be deposited in any unsanitary manner on public or private property within the town or in any area under the jurisdiction of the town, any human excrement, garbage, or objectionable waste.

(2) It shall be unlawful for any person to discharge to any outlet other than a sanitary sewer, within the corporate limits of the town, any domestic or industrial wastes except where suitable treatment has been provided in accordance with subsequent provisions of this chapter and where an appropriate NPDES permit has been obtained from DWR pursuant to § 402 of the Act.

(3) Where a storm sewer, as defined by § 18-203, is adjacent to a property, it shall be legal to discharge cooling water, as defined by § 18-203 and which meets the requirements of the definition of unpolluted wastewater in § 18-203, into said storm sewer in accordance with subsequent provisions of this chapter and where the

town determines that sufficient capacity exists in said storm sewer to carry the cooling water without exceeding the design storm drainage capacity of said storm sewer and where an appropriate NPDES permit has been obtained from DWR pursuant to § 402 of the Act.

(4) The owner(s) of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, situated within the town and abutting on any street, alley, or right-of-way in which there is now located or may in the future be located a public sanitary sewer of the town that discharges to the POTW, who has installed suitable toilet and other facilities therein necessary for the discharge of domestic and industrial wastes, is hereby required at the owner(s) expense to connect such facilities directly with the proper public sanitary sewer in accordance with the requirements of the town, within 90 days after date of official notice to do so, provided that such public sanitary sewer abuts the property.

(5) All new connections to the town POTW shall be made in accordance with the provisions of Chapter 1 of this Title.

Cross reference(s)—Penalty, see § 18-252

§ 18-205 PRIVATE WASTEWATER DISPOSAL.

(1) Where a public sanitary sewer is not available under the provisions of § 18-204(4), such toilet and other facilities necessary for the discharge of domestic and industrial wastes shall be connected to a private wastewater disposal system complying with the requirements of the state, Rutherford County, and/or the town, and provisions of the most recently adopted building code of the town.

(2) Before commencement of construction of a private wastewater disposal system, the owner(s) shall first obtain a written permit from the appropriate regulatory authority and furnish a copy thereof to the Director of Utilities. The copy of the permit shall be accompanied by such supplemental data as deemed necessary by the building official to maintain an accurate file of such private wastewater disposal systems to facilitate the planning of future public sewer service.

(3) The type, capacity, location, and layout of a private wastewater disposal system, including methods of sludge disposal, shall comply with all requirements of the state and/or the town or other governmental body having jurisdiction.

(4) At such time as a public sewer is constructed which abuts a property served by a private wastewater disposal system, a direct connection shall be made to the public sewer within 90 days in compliance with this chapter; and septic tanks, cesspools, and similar private wastewater disposal systems shall be cleaned of sludge and filled with suitable material at the owner's expense.

(5) The owner(s) shall operate and maintain any private wastewater disposal systems in a sanitary manner at all times, at no expense to the town.

(6) Under no circumstances shall holding tank waste and septic tank wastes originating outside the town be discharged into the town POTW. Holding tank waste and septic tank wastes from private systems within the town shall be discharged into the POTW only under the following conditions.

(a) No person owning vacuum-pump or septic tank trucks or other liquid waste transport trucks shall discharge directly or indirectly such wastewater into the POTW unless such person shall first have applied for and received a wastewater haulers discharge permit from the town. All applicants for wastewater haulers discharge permits shall complete such forms as required by the town, pay appropriate fees, and agree in writing to abide by the provisions of this section and any special conditions or regulations established by the town. The owners of such vehicles shall affix and display their permit number on the side of each vehicle used for such purposes. Such permits shall be valid for a maximum period of one year from date of issuance, provided that such permit shall be subject to revocation by the town for violation of any provision of this section or reasonable regulation

established by the town. Such permits shall be limited to the discharge of sanitary sewage containing no industrial waste. Pumpage from commercial grease traps is specifically prohibited from discharge into the POTW. The manager of the WWTP shall designate the locations and times where such trucks may be discharged, and may refuse to accept any truckload of waste at his or her absolute discretion where it appears that the waste could interfere with the effective operation of the POTW.

(b) No person shall discharge any other holding tank waste including industrial process wastes into the POTW unless he or she shall have applied for and have been issued a permit by the town. Unless otherwise allowed under the terms and conditions of the permit, a separate permit must be secured for each separate discharge. The permit shall state the specific location of discharge, the time of day the discharge is to occur, the volume of the discharge, and shall limit the wastewater constituents and characteristics of the discharge. Such user shall pay any applicable charges or fees therefor, and shall comply with the conditions of the permit issued by the town.

(c) No person shall operate a dumping station for the discharge of sanitary sewage from recreation vehicles into the POTW unless the user of the dumping station has first applied for and received a recreational vehicle dumping station permit from the town. All applicants for recreational vehicle dumping station permits shall complete such form as required by the town, pay appropriate fees, and agree in writing to abide by the provisions of this section and any special conditions or regulations established by the town. These permits shall be issued only for approved facilities designed to receive sanitary sewage.

Cross reference(s)—Penalty, see § 18-252

§ 18-206 FEDERAL AND STATE LAW.

Nothing contained in this chapter shall be construed to interfere with any additional requirements that may be imposed by federal or state agencies.

§ 18-207 SPECIAL AGREEMENTS.

Nothing contained in this chapter shall be construed as preventing the execution of a contract, special agreement, or arrangement between the town and any person whereby water or wastewaters of unusual strength, character, or quantity may be admitted into the POTW upon such terms and conditions as the town deems appropriate so long as the objectives of this chapter, limitations established by 40 C.F.R. Part 403, and NPDES permit requirements of the town and other state laws, regulations, and permits are not adversely affected.

§ 18-208 INDUSTRIAL DISCHARGE PERMITS REQUIRED.

(1) No ~~significant~~ industrial user shall discharge wastewater into the POTW without first obtaining an industrial discharge permit.

(2) The town may require other users to obtain industrial discharge permits as necessary to carry out the purposes of this chapter.

(3) Any ~~significant~~ industrial user or user designated by the town under division (2) above must apply for a new or modified permit before making a significant change in the character or volume of its wastewater.

(4) A significant change in the character or volume of wastewater shall be deemed to be proposed if substances, compounds, and elements not previously constituting any significant part of a user's wastewater are to be introduced into such waste or if the average concentration of any substance, compound, or element in the waste, or average volume proposed to be discharged will cause a violation of any of the user's permit limitations. In case of doubt as to whether an intended change constitutes a significant change, it shall be the

responsibility of the user intending to make such a change to make the necessary application or obtain a written ruling from the town that an application for a new or modified industrial discharge permit is not required.

(5) Any user subject to a new national or state categorical pretreatment standard shall apply for a new industrial discharge permit within 180 days after the promulgation of the applicable national or state categorical pretreatment standard. Industrial discharge permits of users subject to such standards shall be issued or reissued in compliance with such standards within the time frames prescribed by such standards.

(6) It shall be unlawful for any user that has been denied an industrial discharge permit to discharge industrial waste into the POTW.

(7) The Town hereby has the authority to develop and enforce Local Limits pursuant to Tennessee Rule 0400-40-14-.05(3) and to implement the prohibitions listed in § 18-214 of this chapter. Such limits are subject to continued development and revision as necessary to prevent pollutants contributed by any user or users from resulting in interference or pass-through, and to ensure compliance with the town's NPDES permit or sludge use or disposal practices.

(8) A copy of the current Local Limits may be obtained by request from Town Hall.

Cross reference(s)—Penalty, see § 18-252

§ 18-209 INDUSTRIAL DISCHARGE PERMIT APPLICATION.

A user required to obtain an industrial discharge permit must submit an application containing the following information:

(1) Identifying information, including the name and address of the facility, the name of the operator and owners, contact information, and a description of activities, facilities, and plant production processes on the premises;

(2) A list of any environmental control permits held by or for the facility, or that should be, or are anticipated to be, held by or for the facility;

(3) A description of operations that includes:

(a) A brief description of the nature, average rate of production, standard industrial classification of the operation(s) carried out by the industrial user, and a schematic process diagram that indicates points of discharge to the POTW from the regulated processes;

(b) The time and duration of discharges;

(c) The location for monitoring all wastes to be covered by the permit; and

(d) Information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from regulated process streams and other streams as necessary to allow use of the combined waste stream formula of Tennessee Rule 0400-40-14-.06(5).

(4) The categorical pretreatment standards applicable to each regulated process and any new categorically regulated processes for existing sources;

(5) The results of sampling and analysis identifying the nature and concentration and/or mass, where required by the standard or the town, of regulated pollutants in the discharge from each regulated process. Both daily maximum and average concentration (or mass, where required) shall be reported. The sample shall be representative of daily operations. In cases where the standard requires compliance with a best management practice or pollution prevention alternative, the user shall submit documentation as required by the town or the applicable standards to determine compliance with the

standard. Sampling and analysis shall be performed in accordance with the techniques prescribed in § 18-220;

(6) Any other information as may be deemed necessary by the local administrative officer or his or her designee to evaluate the permit application;

(7) A signed copy of the certification statement contained in § 18-251;

(8) The Local Administrative Officer will evaluate the data furnished by the User and may require additional information. The Local Administrative Officer will determine whether to issue an individual wastewater discharge permit, and

(9) The Local Administrative Officer may deny any application for an individual wastewater discharge permit. A user that has been denied an industrial discharge permit may challenge such denial under the procedures set forth in §§ 18-245 and 18-246.

§ 18-210 CONTENTS OF INDUSTRIAL DISCHARGE PERMIT.

An industrial discharge permit shall include such conditions as are deemed reasonably necessary by the local administrative officer to prevent pass-through or interference, protect the quality of the water body receiving the WWTP's effluent, protect worker health and safety, facilitate sludge management and disposal, and protect against damage to the POTW.

(1) Industrial discharge permits must contain:

(a) A statement that indicates the industrial discharge permit issuance date, expiration date, and effective date;

(b) A statement that the industrial discharge permit is nontransferable without prior notification to the town in accordance with § 18-213 and provisions for furnishing the new owner or operator with a copy of the existing industrial discharge permit;

(c) Effluent limits, including best management practices, based on applicable pretreatment standards;

(d) Self-monitoring, sampling, reporting, notification, and record-keeping requirements. These requirements should include an identification of pollutants or best management practices to be monitored, sampling frequency, and sample type based on federal, state, and local law;

(e) A statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule. Such schedule may not extend the time for compliance beyond that required by applicable federal, state, or local law; and

(f) Requirements to control slug discharge, if determined by the local administrative officer to be necessary.

(2) Industrial discharge permits may contain, but need not be limited to:

(a) Limits on the average and/or maximum wastewater constituents, volume, and characteristics. The town may impose mass limitations on users that are using dilution to meet applicable pretreatment standards or requirements or in other cases where the imposition of mass limitations are appropriate;

(b) Limits on average and maximum rate of discharge, time of discharge, and/or requirements for flow regulations and equalization;

(c) Requirements for installation and maintenance of inspection and/or sampling facilities and equipment, including flow measurement devices;

(d) Requirements for submission of technical reports or discharge reports under § 18-222;

(e) Requirements for notification of the town of any new introduction of wastewater constituents or any significant changes in the character or volume of the wastewater constituents being introduced into the sewerage system; and

(f) Other conditions as deemed appropriate by the town to ensure compliance with the requirements and purposes of this chapter.

(3) A user may challenge the contents of an industrial discharge permit under the procedures set forth in §§ 18-245 and 18-246.

§ 18-211 EXPIRATION OF INDUSTRIAL DISCHARGE PERMIT.

An industrial discharge permit shall be issued for a specified time period, not to exceed five years. The user shall apply for industrial discharge permit reissuance a minimum of 90 days prior to the expiration of the user's existing industrial discharge permit. The terms and conditions of the industrial discharge permit may be subject to modification by the town during the term of the industrial discharge permit based on modifications of the prohibited discharge standards identified in § 18-214 or as the town deems necessary. The user shall be informed of any proposed changes in its industrial discharge permit at least 30 days prior to the effective date of change. Any changes or new conditions in the modified or reissued industrial discharge permit may include a time schedule for compliance. A user may challenge the contents of a modified or reissued industrial discharge permit under the procedures set forth in §§ 18-245 and 18-246. While such challenge is pending before the local hearing authority, the previous industrial discharge permit shall remain in effect.

§ 18-212 REVOCATION OF PERMIT.

In accordance with the procedure set forth in § 18-238, the town may revoke any user's industrial discharge permit for good cause, including, without limitation, the following:

(1) Failure to report the wastewater constituents and characteristics of its wastewater;

(2) Failure to notify the local administrative officer of significant changes to the character or volume of its wastewater;

(3) Failure to notify the local administrative officer of any change to the user's operations or systems that might cause a significant change in the character or volume of its wastewater;

(4) Refusal of reasonable access to the user's premises for the purpose of inspection or monitoring in accordance with provisions of § 18-227;

(5) Violation of any other conditions or requirements in its industrial discharge permit;

(6) Falsifying self-monitoring reports and certification statements;

(7) Tampering with monitoring facilities;

(8) Failure to pay any penalties, charges, or fees provided for under this chapter;

(9) Failure to meet any compliance schedules;

(10) Submission of an incomplete industrial discharge permit application;

(11) Violation of any pretreatment standard or requirement, or any terms of the wastewater discharge permit or this chapter; or

(12) Violation of any other provision of this chapter or any applicable state or federal regulation.

§ 18-213 INDUSTRIAL DISCHARGE PERMIT NOT TRANSFERABLE.

An industrial discharge permit is issued to a specified user for a specific operation. An industrial discharge permit shall not be reassigned or transferred or sold to a new owner, new user, different premises, or a new or changed operation without prior submission of applicable revisions to the application for the existing industrial discharge permit and without the written approval of the town. Any succeeding owner or user shall also comply with the terms and conditions of the existing industrial discharge permit.

§ 18-214 PROHIBITED DISCHARGE STANDARDS.

(1) No user shall contribute or cause to be contributed, any pollutant or wastewater into the POTW that causes pass-through or interference. These general prohibitions apply to all such users of the POTW whether or not the user is subject to national categorical pretreatment standards or any other national, state, or local pretreatment standards or requirements.

(2) Specific Prohibitions. No user shall contribute, or cause to be contributed, any of the following pollutants, substances, or wastewater into the POTW:

(a) Any wastewater having a temperature that will inhibit biological activity in the WWTP or resulting in other interference with the treatment processes but, in no case, wastewater with a temperature which exceeds 60°C (140°F) at its introduction into the POTW or which exceeds 40°C (104°F) at its introduction into the WWTP;

(b) Any water or waste containing:

(i) More than 50 mg/l of fat, oil, or grease;

(ii) Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass-through; or

(iii) Other substances that will solidify or become viscous at temperatures between 0°C (32°F) and 60°C (140°F).

(c) Wastewater from industrial users containing floatable oils, fat, or grease;

(d) Any garbage that has not been properly shredded so that no particles are any greater than one-half inch in any dimension;

(e) Any waste capable of causing abnormal corrosion, abnormal deterioration, damage to or creating a hazard to structures, equipment, or personnel of the sewerage system, or interfering with proper operation of the town's WWTP. All wastes discharged to the POTW must have a pH value in the range of six to ten standard units. Prohibited materials include, but are not limited to, concentrated acids or alkalides and high concentrations of compounds of sulfur, chlorine, and fluorine, and substances which may react with water to form strongly acidic or basic products;

(f) Any waters or wastes having a color which is not removable by existing wastewater treatment processes and which causes the WWTP effluent to exceed color requirements for discharge to the receiving stream;

(g) Any liquids, solids, or gases which by reason of their nature or quantity are or may be sufficient, either alone or by interaction with other substances, to cause fire or explosion or be injurious in any other way to the POTW or to the operation of the system, including, but not limited to, waste streams with a closed cup flashpoint of less than 140°F or 60°C using the test methods specified in 40 C.F.R. § 261.21. At no time shall two successive readings (15 to 30 minutes between readings) on an explosion hazard meter at the point of discharge into the POTW be more than 5% nor any single reading over 10% of the

lower explosive limit (L.E.L.) of the meter. Prohibited materials covered single reading over 10% of the lower explosive limit (L.E.L.) of the meter. Prohibited materials covered by this section include, but are not limited to, gasoline, kerosene, naphtha, benzene, fuel oil, motor oil, mineral spirits, commercial solvents, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, and hydrides;

(h) Any other solid or viscous substance in quantity or character capable of causing obstruction to flow in sewers or interference with proper operation of wastewater treatment facilities such as, but not limited to, eggshells from egg processors, ashes, cinders, ceramic wastes, sand, mud, straw, shavings, thread, glass, rags, metal, feathers, bones, tar, plastics, wood, paunch manure, insulation materials, fibers of any kind, stock or poultry feeds, processed grains, viscera or other fleshy particles from processing or packing plants, or lime or similar sludges;

(i) Any noxious or malodorous solids, liquids, or gases, which, either singly or by interaction with other wastes, are capable of creating a public nuisance or hazard to life or are or may be sufficient to prevent entry into a sewer for its maintenance and repair;

(j) Any substance which may cause WWTP effluent or any other product of the POTW, such as residue, sludge, or scum, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case shall a substance discharged to the POTW cause the system to be in noncompliance with sludge use or disposal criteria, guidelines, or regulations developed by town, state, or federal authorities;

(k) Any substance which will cause the POTW to violate its NPDES permit and/or the quality standards of the receiving stream;

(l) Any water or wastes which, by interaction with other waters or wastes in the POTW, release noxious or malodorous gases, form suspended solids which interfere with the POTW, or create a condition deleterious to structures and treatment processes;

(m) Any form of inflow, as defined by § 18-203, including storm drainage and uncontaminated thermal process water;

(n) Infiltration, as defined by § 18-203, in excess of 200 gallons per inch of pipe diameter per mile of pipe per day;

(o) Any unpolluted wastewater, as defined in § 18-203;

(p) Any water or wastes that contain more than ten mg/l of hydrogen sulfide, sulfur dioxide, or nitrous oxide;

(q) Any toxic or poisonous substance or any other materials in sufficient quantity to injure or interfere with the wastewater treatment processes, or to constitute a hazard to humans or animals, or to cause a violation of the water quality standards or effluent standards for the stream or watercourse receiving the effluent from the WWTP or to exceed limitations set forth in categorical pretreatment standards;

(r) Any wastewater containing suspended solids of such character and quality that unusual provisions, attention, or expense is required to handle such materials at the WWTP;

(s) Any wastewater containing quantities of radium or naturally occurring or artificially produced radioisotopes in excess of presently existing or subsequently accepted limits for drinking water as established by current drinking water regulations promulgated by EPA;

(t) Any wastewater that causes the town to exceed any limits or criteria established by DWR for the town at any time;

(u) Slug discharges, as defined in § 18-203;

(v) Any wastewater which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;

(w) Any wastewater, including, but not limited to, wastewater containing oxygen demanding pollutants (BOD and the like), released in a discharge at a flow rate or pollutant concentration which will cause interference with the POTW; and/or

(x) Any trucked or hauled wastewater, except at discharge points designated by the POTW.

(3) The admission into the POTW of any wastewater having a suspended solids content in excess of 500 mg/l on a 24-hour composite basis, or for any single sample having a suspended solids content greater than 1,500 mg/l will be subject to review by the town. Where necessary in the opinion of the town, the user shall provide and operate, at its own expense, such pretreatment as may be required to reduce the suspended solids content to meet the above requirements.

(4) (a) The admission into the POTW of any wastewater in volumes, or with constituents such that existing dilution conditions in the sewers or at the WWTP would be affected to the detriment of the POTW, shall be subject to review and approval of the town.

(b) Where necessary in the opinion of the town, pretreatment or equalizing units may be required to bring constituents or volumes of flow within the limits previously prescribed or to an otherwise acceptable level, and to hold or equalize flows such that no peak flow conditions may hamper the operation of any unit of the POTW. Said equalization or holding unit shall have a capacity suitable to serve its intended purpose and be equipped with acceptable outlet control facilities to provide flexibility in operation and accommodate changing conditions in the waste flow.

(5) Dilution is prohibited as substitute for wastewater treatment, except where expressly authorized to do so by an applicable pretreatment standard or requirement. No industrial user shall ever increase the use of process water, or in any other way attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a pretreatment standard or requirement. The town may impose mass limitations on industrial users whenever it deems appropriate.

(6) Upon the promulgation of the national categorical pretreatment standards for a particular industrial subcategory, the categorical standards, if more stringent than limitations imposed under this chapter for sources in that subcategory, shall immediately supersede the limitations imposed under this chapter. All affected users shall notify the town of the applicable reporting requirements under 40 C.F.R. § 403.12.

(7) State requirements and limitations on discharges shall apply in any case where they are more stringent than federal requirements and limitations or those of this chapter.

(8) The town reserves the right to establish additional regulations containing more stringent limitations or requirements on discharges to the POTW if deemed necessary.

Cross reference(s)—Penalty, see § 18-252

Editor's note(s)—Model GX-3 Meter as manufactured by Gas Tech, Inc., Mountain View, California, referenced to establish a standard of quality for a measuring device

§ 18-215 NATIONAL CATEGORICAL PRETREATMENT STANDARDS.

Where applicable, users must comply with the categorical pretreatment standards found at 40 C.F.R. Chapter I, Subchapter N, Parts 405-471.

§ 18-216 PRETREATMENT FACILITIES.

(1) Industrial users shall provide wastewater treatment as necessary to comply with this chapter, any permit issued by the town to the industrial user, and all categorical pretreatment standards within the time limitations specified by EPA, the state, or the local administrative officer, whichever is more stringent. Any pretreatment facilities necessary for compliance shall be provided, operated, and maintained at the user's sole expense. Such sole responsibility shall not be affected nor shall any responsibility be assumed by the town, notwithstanding that the town may render any advice or assistance to any user.

(2) Where pretreatment facilities are required under § 18-215, plans, specifications, and other pertinent data or information relating to such facilities shall first be submitted to the town for review and approval in accordance with this chapter. Satisfactory evidence must be included that the method of disposal of pretreatment sludge has the approval of the appropriate state and/or local solid waste program agency. Such approval shall not exempt the discharge or such facilities from compliance with any applicable code, ordinance, rule, regulation, or order of any governmental authority. Any subsequent alteration or addition to such pretreatment or flow control facilities shall not be made without due notice to and prior approval by the town.

(3) Such pretreatment facilities shall be constructed, maintained in good working order, and properly operated as efficiently as possible by the user at his or her own cost and expense, subject to the requirements of this chapter and all other applicable codes, ordinances, and laws.

(4) All food service establishments, including but not limited to restaurants, grocery stores, quick stop markets, schools, retirement/ nursing homes, mobile food units, and other facilities that cook and prepare food, are required to comply with the Town of Smyrna's Fats, Oils, and Grease Management Policy.

(Ord. 22-21, August 2022)

§ 18-217 ACCIDENTAL/SLUG DISCHARGE CONTROL PLANS.

(1) Each ~~significant~~ industrial user, at its sole expense, shall develop, submit for approval, and implement an accidental/slug discharge control plan to ensure that all ~~significant~~ industrial users are protecting against accidental or slug discharges. An accidental/slug discharge control plan shall address, at a minimum, the following:

  (a) A description of discharge practices, including non-routine batch discharges;

  (b) A description of stored chemicals;

  (c) Procedures for immediately notifying the local administrative officer (or the WWTP operator) of any accidental or slug discharge, as required by § 18-225(4); and

  (d) Procedures to prevent adverse impact from any accidental or slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures and equipment for emergency response.

(2) Review and approval of such plans and operating procedures do not relieve the ~~significant~~ industrial user from the responsibility to modify its facility as necessary to meet the requirements of this chapter.

§ 18-218 MEASUREMENT OF FLOW.

The volume or quantity of wastewater discharged by an industrial user into the POTW shall be measured by one or more of the following methods.

(1) If the volume of water used by any industrial user is substantially the same as the volume secured from the municipal waterworks system, then the volume of water purchased shall be considered to be the volume of waste discharged.

(2) If a substantial portion of the water secured by an industrial user from the municipal waterworks system is not returned to the POTW, the quantity of wastewater shall be determined as follows:

(a) By a meter (or meters) on the water supply line (or lines) to the industrial and/or process operations not discharging to the POTW;

(b) By a meter (or meters) on the waste line (or waste lines) that discharges into the POTW; or

(c) If meters as required under divisions (2)(a) or (2)(b) above are not installed, an estimate shall be made by the town for that proportion of water purchased which is used for industrial purposes and not returned to the POTW.

(3) If any industrial user now discharging or proposing to discharge wastewater into the POTW does not secure its entire water supply requirements from the municipal waterworks system, such user shall install and maintain a meter (or meters) on its waste line (or waste lines) that discharge into the POTW or shall install such additional meters on the private water supply as required to permit determination of the total quantity discharged to the POTW from both sources under procedures comparable to divisions (1) and (2) above.

§ 18-219 ALL SOURCES OF WATER DISCHARGE AND SUPPLY MUST BE IDENTIFIED.

All sources of water supply and all discharges of wastewater into the POTW must be identified in accordance with the provisions of § 18-218. Any omission shall be considered as an unauthorized use of the POTW.

§ 18-220 MONITORING FACILITIES.

(1) Any industrial user shall provide, operate, and maintain, at the user's sole expense, monitoring facilities to allow inspection, sampling, and flow measurement of the building sewer and/or internal drainage systems. These monitoring facilities shall be as specified by the town. The monitoring facilities shall be situated on the user's premises.

(2) There shall be ample room in or near such monitoring facilities to allow accurate sampling and preparation of samples for analysis. The facilities shall be maintained at all times in a safe and proper operating condition at the user's sole expense.

(3) When deemed necessary by the town, continuous recording and/or sampling equipment shall be installed and maintained at the user's sole expense.

(4) All sampling and monitoring facilities shall be provided in accordance with requirements of the town and all applicable local construction standards and specifications. Construction shall be completed within 90 days following written notification by the town. Additional construction time may be granted where so dictated by equipment availability.

(5) The town shall review monitoring facilities of present ~~significant~~ industrial users and may require additional monitoring facilities as required for compliance with divisions (1) through (3) above.

(6) New sources shall provide monitoring facilities as specified by the town prior to plant start up.

§ 18-221 SAMPLING AND MONITORING REQUIREMENTS.

(1) All pollutant analyses, including sampling techniques, to be submitted as part of an industrial discharge permit application or report shall be performed in accordance with the techniques prescribed in 40 C.F.R. Part 136, and amendments thereto, or with any other test procedures approved by the EPA Administrator, unless otherwise specified in an applicable categorical pretreatment standard.

(2) Samples collected to satisfy reporting requirements must be based on data obtained through appropriate sampling and analysis performed during the period covered by the report, and that is representative of conditions occurring during the reporting period.

(3) Except as indicated in divisions (6) and (7) below, the user must collect wastewater samples using 24-hour flow-proportional composite sampling techniques, unless the town specifically authorizes the user to use time-proportional composite sampling or grab sampling. Where time-proportional composite sampling or grab sampling is authorized by the town, the samples must be representative of the discharge and the decision to allow the alternative sampling must be documented in the industrial user file for that facility or facilities.

(4) Multiple grab samples collected during a 24-hour period may be composited prior to the analysis as follows:

(a) For cyanide, total phenols, and sulfides, the samples may be composited in the laboratory or in the field; and

(b) For volatile organics and oil and grease, the samples may only be composited in the laboratory.

(5) Composite samples for other parameters unaffected by the compositing procedures as documented in approved EPA methodologies may be authorized by the local administrative officer, as appropriate. In addition, grab samples may be required to show compliance with any instantaneous limits.

(6) Samples for oil and grease, temperature, pH, cyanide, total phenols, sulfides, and volatile organic compounds must be obtained using grab sampling techniques.

(7) For sampling required in support of baseline monitoring and 90-day compliance reports required in §§ 18-222(1) and 18-223, a minimum of four grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organic compounds for facilities for which historical sampling data do not exist; for facilities for which historical sampling data are available, the local administrative officer may authorize a lower minimum. The local administrative officer shall specify the number of grab samples to be collected by the industrial user that are necessary to assess and assure compliance with applicable pretreatment standards and the reports required by § 18-223.

§ 18-222 BASELINE REPORTING.

(1) Within either 180 days after the effective date of a categorical pretreatment standard, or the final administrative decision on a category determination under Tennessee Rule 0400-40-14-.06(1)(d), whichever is later, existing categorical industrial users currently discharging to or scheduled to discharge to the POTW shall submit to the local administrative officer a baseline report that contains the information in divisions (1)(a) through (1)(g) below. At least 90 days prior to commencement of their discharge, new sources, and sources that become categorical industrial users subsequent to the promulgation of an applicable categorical standard, shall submit to the local administrative officer a baseline report that contains the information listed in divisions (1)(a) through (1)(e) below. A new source shall report the method of pretreatment it intends to use to meet applicable categorical standards. A new source also shall give estimates of its anticipated flow and quantity of pollutants to be discharged.

(a) Identifying information, including the name and address of the facility, and the name of the operator and owners.

(b) A list of any environmental control permits held by or for the facility, or that should be, or are anticipated to be, held by or for the facility.

(c) A description of operations that includes a brief description of the nature, average rate of production, standard industrial classification of the operation(s) carried out by the industrial user, and a schematic process diagram that indicates points of discharge to the POTW.

(d) Information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from each of the following:

(i) Regulated process streams; and

(ii) Other streams as necessary to allow use of the combined waste stream formula of Tennessee Rule 0400-40-14-.06(5). The town may allow for verifiable estimates of these flows where justified by cost or feasibility considerations.

(e) Measurement of pollutants, including the following:

(i) The pretreatment standards applicable to each regulated process;

(ii) The results of sampling and analysis identifying the nature and concentration and/or mass, where required by the standard or the town, of regulated pollutants in the discharge from each regulated process. Both daily maximum and average concentration (or mass, where required) shall be reported. The sample shall be representative of daily operations. In cases where the standard requires compliance with a best management practice or pollution prevention alternative, the user shall submit documentation to the local administrative officer as required by the town or the applicable standards to determine compliance with the standard;

(iii) A minimum of one representative sample to compile that data necessary to comply with the requirements of this division (1)(e);

(iv) Samples should be taken immediately downstream from pretreatment facilities if such exist or immediately downstream from the regulated process if no pretreatment exists. If other wastewaters are mixed with the regulated wastewater prior to pretreatment, the user should measure the flows and concentrations necessary to allow use of the combined waste stream formula of Tennessee Rule 0400-40-14-.06(5) in order to evaluate compliance with the pretreatment standards. Where an alternate concentration or mass limit has been calculated in accordance with 0400-40-14-.06(5), this adjusted limit along with supporting data shall be submitted to the local administrative officer;

(v) Sampling and analysis shall be performed in accordance with the techniques prescribed in § 18-220;

(vi) The town may allow the submission of a baseline report which utilizes only historical data so long as the data provides information sufficient to determine the need for industrial pretreatment measures; and

(vii) The baseline report shall indicate the time, date, and place of sampling, and methods of analysis, and shall certify that such sampling and analysis is representative of normal work cycles and expected pollutant discharges to the POTW.

(f) A compliance certification statement, reviewed by an authorized representative of the user and certified by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis, and, if not, whether additional operation and maintenance (O&M) and/or additional

pretreatment is required for the industrial user to meet the pretreatment standards and requirements; and

(g) A compliance schedule if additional pretreatment and/or O&M will be required to meet the pretreatment standards. This shall be the shortest schedule by which the user will provide such additional pretreatment and/or O&M. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard.

(2) The following conditions shall apply to the compliance schedule required by division (1)(g) above:

(a) The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment facilities required for the user to meet the applicable pretreatment standards (such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, and beginning and conducting routine operation);

(b) No increment referred to above shall exceed nine months;

(c) The user shall submit a progress report to the local administrative officer no later than 14 days following each date in the schedule and the final date of compliance including, as a minimum, whether or not it complied with the increment of progress, the reason for any delay, and, if appropriate, the steps being taken by the user to return to the established schedule; and

(d) In no event shall more than nine months elapse between such progress reports to the local administrative officer.

§ 18-223 REPORTS ON COMPLIANCE WITH CATEGORICAL PRETREATMENT STANDARDS.

Within 90 days following the date for final compliance with applicable categorical pretreatment standards, or in the case of a new source, following commencement of the introduction of wastewater into the POTW, any user subject to categorical pretreatment standards and requirements shall submit to the local administrative officer a report containing the information described in § 18-222(1)(d) through (1)(f). For users subject to categorical pretreatment standards and requirements expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the user's actual production during the appropriate sampling period. All compliance reports must be signed and certified in accordance § 18-251 of this chapter. All sampling shall be done in accordance with the techniques prescribed in § 18-221.

§ 18-224 MONTHLY COMPLIANCE REPORTS.

(1) All ~~significant~~ industrial users shall submit monthly compliance reports indicating the nature and concentration of pollutants in the discharge that are subject to pretreatment standards, and the measured or estimated average and maximum daily flows for the reporting period. In cases where the pretreatment standard requires compliance with a best management practice or pollution prevention alternative, the user must submit documentation to determine the compliance status of the user. These monthly compliance reports shall be submitted using copies of monitoring forms available from the town or approved by the local administrative officer. Monthly compliance reports shall be received by the town on or before the fifteenth day of the month following the reporting period. All monthly compliance reports shall be signed and certified in accordance with § 18-251 of this chapter.

(2) Monthly compliance reports may be submitted by email, provided, however, that the user shall also submit a hard copy of the monthly compliance report by U.S. mail on the same day as the email submittal. If the user relies on its email submittal to comply with deadline established in division (1) above, the postmark of the contemporaneous hard copy submittal shall be the exclusive method for establishing the submittal date.

(3) If ~~an significant~~ industrial user monitors any regulated pollutant at the appropriate sampling location more frequently than required by the town, using the procedures prescribed in § 18-221, the results of this monitoring shall be included in the report.

§ 18-225 REPORTS OF POTENTIAL PROBLEMS.

(1) If sampling performed by an industrial user indicates a violation, the user must notify the local administrative officer within 24 hours of becoming aware of the violation. The industrial user shall also repeat sampling and analysis and submit the results of the repeat analysis to the local administrative officer within 30 days after becoming aware of the violation. Re-sampling by the industrial user is not required if the town performs sampling at the user between the time when the initial sampling was conducted and the time when the user or the town receives the results of this repeat sampling, or if the town has performed the sampling and analysis in lieu of the industrial user.

(2) Each industrial user must notify the local administrative officer of any change to the user's operations or system that might cause a significant change in the character or volume of its wastewater at least three months before the change.

(3) ~~Significant~~ industrial users are required to notify the local administrative officer immediately of any changes at its facility affecting the potential for a slug discharge.

(4) All industrial users shall notify the POTW immediately of all discharges that could cause problems to the POTW, including all slug discharges.

(5) Emergency notification procedures, including the contact information for the local administrative officer or his or her designee, shall be posted in a prominent place in each industrial user's facility so that all employees shall be advised of the procedures to be followed in the event of a violation, change, or discharge described in this section.

§ 18-226 HAZARDOUS WASTE NOTIFICATION.

All industrial users shall notify the town, the EPA Regional Waste Management Division Director, and state hazardous waste authorities in writing of any discharge into the POTW of a substance which, if otherwise disposed of, would be a hazardous waste under Tenn. Comp. R. & Regs. 0400-12-01-.01.

(1) Such notification must include the name of the hazardous waste as set forth in Tenn. Comp. R. & Regs. 0400-12-01-.01, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the industrial user discharges more than 100 kilograms of such waste per calendar month to the POTW, the notification shall also contain the following information to the extent such information is known and readily available to the industrial user: an identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the waste stream discharged during that calendar month, and an estimation of the mass of constituents in the waste stream expected to be discharged during the following 12 months. All notifications must take place within 180 days of the effective date of this division (1) or no later than 180 days after the first discharge of the listed or characteristic hazardous waste, whichever is greater. Any notification under this division (1) need be submitted only once for each hazardous waste discharged. However, notifications of changed discharges must be submitted within 90 days of such change. The notification requirement in this rule does not apply to pollutants already reported under the self-monitoring requirements of §§ 18-222 and 18-223.

(2) Industrial users are exempt from the requirements of division (1) above during a calendar month in which they discharge no more than 15 kilograms of hazardous wastes, unless the wastes are acute hazardous wastes as specified in Tenn. Comp. R. & Regs. 0400-12-01-.02(4)(a) and (4)(d). Discharge of

more than 15 kilograms of non-acute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in Tenn. Comp. R. & Regs. 0400-12-01-.02(4)(a) and (4)(d), requires a one-time notification. Subsequent months during which the industrial user discharges more than such quantities of any hazardous waste do not require additional notification.

(3) In the case of any new regulations under § 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the industrial user must notify the town, the EPA Regional Waste Management Waste Division Director, and state hazardous waste authorities of the discharge of such substance within 90 days of the effective date of such regulations.

(4) In the case of any notification made under this division (4), the industrial user shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.

§ 18-227 INSPECTION.

Industrial users shall be subject to periodic inspections. Such inspections shall be made annually or more frequently, as deemed necessary by the town or as indicated in the user's industrial discharge permit, where applicable. The purpose of the inspection shall be to determine the character and strength of the users' wastewater to ascertain whether the purposes of this chapter are being met, all standards and requirements are being complied with, and to calculate user charges.

§ 18-228 AUTHORITY FOR INSPECTION.

(1) The local administrative officer and other duly authorized employees and contractors of the town, bearing proper credentials and identification, shall be permitted to enter upon all properties for the purpose of inspection, observation, flow measurement, sampling, and testing of industrial wastes and other pollutants, in accordance with this chapter, at the expense of the wastewater discharger.

(2) (a) The local administrative officer and other duly authorized employees and contractors of the town are authorized to obtain information concerning industrial processes that have a direct bearing on the kinds and sources of discharges to the POTW. ~~Any information submitted to the town pursuant to this chapter may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information.~~

(b) Information and data on a User obtained from reports, surveys, wastewater discharge permit applications, individual wastewater discharge permits, and monitoring programs, and from local administrative officer's inspection and sampling activities, shall be available to the public without restriction, unless the User specifically requests, and is able to demonstrate to the satisfaction of local administrative officer, that the release of such information would divulge information, processes, or methods of production entitled to protection as trade secrets under applicable State law. Any such request must be asserted at the time of submission of the information or data.

(c) If no claim is made at the time of submission, the town may make the information available to the public without further notice. If a confidentiality claim is asserted, the information will be treated in accordance with the procedures in 40 C.F.R. Part 2 (Public Information). Notwithstanding the foregoing, ~~any information and data provided to the town that is effluent data~~ wastewater constituents and characteristics and other effluent data, as defined at 40 CFR 2.302 shall not be recognized as confidential information and shall be available to the public without restriction, and all other information which is submitted to the town shall be available to the public to the extent provided by T.C.A. §§ 10-7-501 et seq.

(d) When requested and demonstrated by the User furnishing a report that such information should be held confidential, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public, but shall be made available immediately upon request to governmental agencies for uses related to the NPDES program or pretreatment program, and in enforcement proceedings involving the person furnishing the report.

(3) Persons or occupants of premises where wastewater is created or discharged shall allow the local administrative officer and other duly authorized employees and contractors of the town ready access at all reasonable times to all points on the premises in any way related to the generation, storage, transmission, discharge, or documentation of pollutants or wastewater for the purposes of inspection, sampling, records examination, or in the performance of any of their duties.

(4) The local administrative officer and other duly authorized employees and contractors of the town shall have the right to set up at any location on the user's property such devices as are necessary to conduct sampling, inspection, compliance monitoring, and/or metering operations.

(5) Where a user has security measures in force that would require proper identification and clearance before entry upon the premises, the user shall make necessary arrangements with the security guards so that, upon presentation of suitable identification, the local administrative officer and other duly authorized employees and contractors of the town will be permitted to enter, without delay, for the purposes of performing their specific responsibilities.

(6) While performing the necessary work on private properties referred to in division (1) above, the local administrative officer and other duly authorized employees and contractors of the town shall observe all safety rules applicable to the premises established by the user; the user shall be held harmless for injury or death to town employees or contractors; and the town shall indemnify the company against loss or damage to its property by town employees and against liability claims and demands for personal injury or property damage asserted against the user and growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the user to maintain safe conditions as required by § 18-220(2).

§ 18-229 RECORD-KEEPING.

Users subject to the reporting requirements of this chapter shall retain, and make available for inspection and copying, all records of information obtained pursuant to any monitoring activities required by this chapter, any additional records of information obtained pursuant to monitoring activities undertaken by the user independent of such requirements, and documentation associated with best management practices. Records shall include the date, exact place, method, and time of sampling, and the name of the person(s) taking the samples; the dates analyses were performed; the person who performed the analyses; the analytical techniques or methods used; and the results of such analyses. These records shall remain available for a period of at least five years. This period shall be automatically extended for the duration of any litigation concerning the user or the town, or where the user has been specifically notified of a longer retention period by the town.

§ 18-230 PUBLICATION OF USERS IN SIGNIFICANT NONCOMPLIANCE.

The town shall publish annually, in a newspaper of general circulation that provides meaningful public notice within the jurisdictions served by the POTW, a list of the users that, at any time during the previous 12 months, were in significant noncompliance with applicable pretreatment standards and requirements. The term significant noncompliance shall be applicable to all significant industrial users (or any other industrial user that violates divisions (3), (4), or (7) below) and shall mean:

(1) Chronic violations of wastewater discharge limits, defined here as those in which 66% or more of all the measurements taken for the same pollutant parameter taken during a six-month period exceed (by any magnitude) a numeric pretreatment standard or requirement, including any instantaneous limits;

(2) Technical review criteria (TRC) violations, defined here as those in which 33% or more of wastewater measurements taken for each pollutant parameter during a six-month period equals or exceeds the product of the numeric pretreatment standard or requirement, including any instantaneous limits, multiplied by the applicable criteria (1.4 for BOD, TSS, fats, oils and grease, and 1.2 for all other pollutants except pH), TRC calculations for pH are not required;

(3) Any other violation of a pretreatment standard or requirement (daily maximum of longer-term average, instantaneous limit, or narrative standard) that the town determines has caused, alone or in combination with other discharges, interference or pass-through (including endangering the health of POTW personnel or the general public);

(4) Any discharge of a pollutant that has caused imminent endangerment to the public or to the environment, or has resulted in the town's exercise of its emergency authority to halt or prevent such a discharge;

(5) Failure to meet, within 90 days of the scheduled date, a compliance schedule milestone contained in an industrial discharge permit or enforcement order for starting construction, completing construction, or attaining final compliance;

(6) Failure to provide, within 45 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;

(7) Failure to accurately report noncompliance; or

(8) Any other violation(s), which may include a violation of best management practices, which the town determines will adversely affect the operation or implementation of the town's pretreatment program.

§ 18-231 PROTECTION OF EQUIPMENT.

No person shall maliciously, willfully, or negligently break, damage, destroy, deface, tamper with, or remove any equipment or materials which are a part of the POTW or any equipment or materials used by the town for the purpose of making waste examinations and waste flow measurements and left upon the premises of a user. Only persons authorized by the town will be allowed to uncover, adjust, maintain, and remove such equipment and materials.

§ 18-232 ENFORCEMENT RESPONSE PLAN.

The town shall maintain an enforcement response plan, as modified from time to time, that shall govern the town's enforcement of this chapter.

§ 18-233 NOTICE OF VIOLATION.

Whenever the town has reason to believe that a user has violated, is violating, or is about to violate any provision(s) of this chapter, an industrial discharge permit or order issued hereunder, or any other pretreatment standard or requirement, the local administrative officer may cause a notice of violation to be served upon the alleged violator or violators. The notice of violation shall specify the provision(s) of this chapter, industrial discharge permit, order, or pretreatment standard or requirement alleged to be violated, or about to be violated, and the facts alleged to constitute a violation thereof and shall inform the violators of the opportunity for a hearing before the local hearing authority pursuant to §§ 18-245 and 18-246.

§ 18-234 CORRECTIVE ACTION PLAN.

Within ten days of the receipt of a notice of violation, the user shall submit to the local administrative officer a written explanation of the violation and a plan for the satisfactory correction and/or prevention thereof, including specific required actions. Such a plan in no way relieves the user of liability for any violations occurring before or after receipt of the notice of violation, nor does it preclude the local administrative officer from issuing a separate compliance order pursuant to § 18-236.

§ 18-235 EMERGENCY AUTHORITY.

(1) Whenever the local administrative officer finds that an emergency exists requiring immediate action to protect the public health, safety, or welfare, the health of animals, fish, or aquatic life, a public water supply, or the POTW or WWTP, the local administrative officer may, without prior notice, issue an order reciting the existence of such an emergency and requiring that such action be taken as he or she deems necessary to address the emergency, including suspension of a user's right to discharge into the POTW.

(2) If the violator fails to respond or is unable to respond to the local administrative officer's order, the local administrative officer may take such emergency action as he or she deems necessary, or contract with a qualified person or persons to carry out the emergency measures. The local administrative officer may assess the user(s) responsible for the emergency condition for actual costs incurred by the town in addressing the emergency.

§ 18-236 COMPLIANCE ORDER.

(1) When the local administrative officer finds that a user has violated or continues to violate any provision(s) of this chapter, an industrial discharge permit or order issued hereunder, or any other pretreatment standard or requirement, the local administrative officer may issue a compliance order to that user. A compliance order shall set forth required corrective action to be taken and a schedule of compliance specifying the dates by which such corrective actions must be performed. The local administrative officer may order that the user's sewer service be discontinued until the user satisfies the requirements of the compliance order. A compliance order may not extend the deadline for compliance established by a pretreatment standard or requirement, nor may it relieve the user of liability for any violation, including any continuing violation. Issuance of a compliance order shall not be a bar against, or a prerequisite for, taking any other action against the user. A compliance order may be issued concurrently with a notice of violation.

(2) The compliance order may, without limitation:

(a) Require a user to demonstrate that in-plant modifications will reduce or eliminate the discharge of such substances in conformity with this chapter;

(b) Require pretreatment, including storage facilities or flow equalization, necessary to reduce or eliminate the objectionable characteristics or substances;

(c) Require additional monitoring and management practices designed to minimize the amount of pollutants discharged to the POTW; or

(d) Take such other remedial action as may be deemed to be desirable or necessary to achieve the purposes of this chapter.

§ 18-237 ORDER TO CEASE AND DESIST.

When the local administrative officer finds that a user has violated or continues to violate any provision(s) of this chapter, an industrial discharge permit or order issued hereunder, or any other pretreatment standard or

requirement, or that the user's past violations are likely to recur, the local administrative officer may issue an order to the user directing it to cease and desist all such violations and directing the user to:

(1) Immediately comply with all requirements; and

(2) Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and/or terminating the discharge. Issuance of a cease and desist order shall not be a bar against, or a prerequisite for, taking any other action against the user.

§ 18-238 TERMINATION OF DISCHARGE.

The local administrative officer may revoke an industrial discharge permit and/or terminate any user's right to discharge into the POTW for violation of any of the conditions listed in § 18-212. Prior to such revocation and/or termination, the user will be notified of such proposed action and be offered an opportunity to show cause under § 18-244 why the proposed action should not be taken. Exercise of this option by the local administrative officer shall not be a bar against, or a prerequisite for, taking any other action against the user.

§ 18-239 INJUNCTION.

When a user is alleged to have violated or is about to violate the provisions of this chapter, the local administrative officer may petition the Chancery Court of Rutherford County, Tennessee, through the Town's Attorney for the issuance of a preliminary or permanent injunction, or both, as may be appropriate in restraining the continuance of the violation. Court proceedings brought under this section shall not be a bar against, or a prerequisite for, taking any other action against the user.

§ 18-240 PRETREATMENT ENFORCEMENT COSTS OR EXPENSES.

(1) When the local administrative officer finds that a user has violated or continues to violate any provisions) of this chapter, an industrial discharge permit or order issued hereunder, or any other pretreatment standard or requirement, the local administrative officer may issue an order requiring the user to pay any costs or expenses incurred by the town in connection with the user's violation, including, without limitation:

(a) Compensation for damage to the POTW, WWTP, or other wastewater treatment processes;

(b) Costs of inspection and investigation to evaluate damage to the POTW, WWTP, or other wastewater treatment processes;

(c) Extraordinary monitoring of the wastes associated with the violation;

(d) Extraordinary treatment measures or processing imposed on the town by the violation;

(e) Any fine or penalty related to a violation of the town's NPDES permit;

(f) Costs or expenses incurred by the town related to damage to the environment that is attributed to the violation; and

(g) Attorney's fees.

(2) The town may also require the user to furnish a bond or other security, with terms specified by the town, to hold the town harmless from any loss or expense that it may incur as a result of such noncompliance or any future non-compliance.

(3) Any order for costs or expenses issued in accordance with this section shall be paid no later than 30 days after the date of service of such order, except as provided for in division (4) below.

(4) Any user against whom an order for costs or expenses is issued may challenge that order under the procedures set forth in §§ 18-245 and 18-246. If the decision by the local hearing authority includes costs or expenses incurred by the town, in any amount, such costs and expenses must be paid no later than 14 days after the decision by the local hearing authority.

(5) An order under this section shall not be a bar against, or a prerequisite for, taking any other action against the user.

§ 18-241 CIVIL PENALTIES.

(1) Any user who does any of the following acts or omissions shall be subject to a civil penalty of up to $10,000 per day for each day during which the act or omission continues or occurs:

(a) Violates any discharge prohibition, standard, or limitation imposed by this chapter;

(b) Violates the terms or conditions of the user's industrial discharge permit;

(c) Fails to submit applications, documentation, or plans required under this chapter;

(d) Fails to allow or perform an entry, inspection, monitoring, reporting, or notification requirement of this chapter;

(e) Fails to pay user or cost recovery charges imposed under this chapter; and

(f) Violates a final determination or order of the local hearing authority or the local administrative officer.

(2) In assessing a civil penalty, the local administrative officer shall consider the following factors, without limitation:

(a) The user's compliance history;

(b) Whether the violation occurred after a schedule of compliance was issued;

(c) Damages to the pretreatment agency, including compensation for the damage to the POTW, and also including any penalties, costs, and attorney's fees incurred by the pretreatment agency as the result of the illegal activity, as well as the expenses involved in enforcing this section and the costs involved in rectifying any damages;

(d) The severity of the violation, both in terms of the potential environmental damage of the pollutant, and its effect on the POTW;

(e) Whether the civil penalty imposed will be a substantial economic deterrent to the illegal activity;

(f) Cause of the discharge or violation;

(g) Effectiveness of the action taken by the user to cease the violation;

(h) The technical and economic reasonableness of reducing or eliminating the discharge; and

(i) The economic benefit gained by the violator.

(3) Any civil penalty assessed in accordance with this section shall be paid no later than 30 days after the date of service of the civil penalty, except as provided for in division (4) below.

(4) Any user against whom a civil penalty is assessed may challenge that assessment under the procedures set forth in §§ 18-245 and 18-246. If the decision by the local hearing authority includes a civil penalty, in any amount, such civil penalty must be paid no later than 14 days after the decision by the local hearing authority.

(5) The assessment of a civil penalty shall not be a bar against, or a prerequisite for, taking any other action against the user.

§ 18-242 TERMINATION OF WATER OR SEWER SERVICE.

Whenever a user fails to pay any applicable and duly prescribed charges, indemnities, or penalties provided for under this chapter, within the time limits prescribed for such payment, procedure for enforcement shall be as follows.

(1) The town shall give notice to such user by certified mail stating the specifics of the non-payment and requiring that the person make full payment within ten calendar days after receipt of notice.

(2) The town may thereupon, without further notice, cause the user's water service from the public water system to be discontinued or sever the user's connection to the sewerage system.

(3) In any case where water service is discontinued or the sewer connection is severed by the town for enforcement purposes, the restoration of such service shall be conditioned on full payment of all delinquent user charges and penalties and any expenses incurred in the enforcement proceedings and in the restoration of the service.

§ 18-243 USERS NOT CONNECTED WHO FAIL TO COMPLY.

In any case that involves a person who fails to comply with this chapter but who is not connected to or is not a user of the POTW, the town shall give notice to such person by certified mail, stating the specifics of the failure of compliance and requiring that the person promptly remedy the failure. At the same time, the town shall report the facts of such case in writing to such other government agency as may have jurisdiction and power to take appropriate enforcement action.

§ 18-244 ORDER TO SHOW CAUSE.

The local administrative officer may order any alleged violator to show cause before the local administrative officer why a proposed enforcement action should not be taken. A notice shall be served on the user specifying the time and place of a hearing to be held by the local administrative officer regarding the alleged violation; the proposed enforcement action; the reasons for the proposed enforcement action; and directing the user to show cause before the local administrative officer why the proposed enforcement action should not be taken. The notice of hearing shall also inform the user of his, her, or its right to be represented by counsel at the hearing and shall be served personally or by registered or certified mail (return receipt requested) at least ten days before the hearing. Service may be made on any agent or officer of a corporation.

§ 18-245 PETITION FOR HEARING.

(1) Any industrial discharge permit issuance, reissuance, modification, or denial, any notice of violation pursuant to § 18-233, any termination discharge pursuant to § 18-238, any civil penalty assessed pursuant to § 18-241, and any order issued by the local administrative officer pursuant to §§ 18-235, 18-236, and 18-240 shall become final and not subject to review unless the user subject to the action or order requests by written petition a hearing before the local hearing authority, no later than 30 days after the date such order is served. The local hearing authority may review an action or order that becomes final in the absence of a petition for hearing on the same grounds upon which a court of the state may review default judgments.

(2) A petition for a hearing under this section shall be submitted to the local administrative officer. The local administrative officer shall give the petitioner 30 days' written notice of the time and place of the hearing, but in no case shall the hearing be held more than 60 days from the receipt of the written petition, unless the local administrative officer and the petitioner agree to a postponement. Any person to whom an emergency order is directed pursuant to § 18-235 shall comply with the emergency order immediately, but

on petition to the local hearing authority shall be afforded a hearing as soon as possible, but in no case shall such hearing be held later than three days from the receipt of such petition by the local hearing authority.

(3) The petitioner shall have the opportunity to examine all relevant documents, records, and regulations of the town prior to the hearing.

§ 18-246 HEARING PROCEDURES.

The hearing provided for in § 18-245 will be conducted by the local hearing authority. The following procedures shall apply.

(1) A verbatim record of the proceedings shall be taken by a stenographer and filed with the town, together with the findings of fact and conclusions of law made pursuant to division (6) below. The transcript so recorded shall be made available to the petitioner or any party to the hearing upon payment of a charge set by the town to cover the costs of preparation.

(2) (a) In connection with the hearing, the local administrative officer shall issue subpoenas in response to any reasonable request by any party to the hearing requiring the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in the hearing.

(b) In case of contumacy or refusal to obey a notice of hearing or subpoena issued under this section, the Chancery Court of Rutherford County shall have jurisdiction upon the application of the local hearing authority or the local administrative officer to issue an order requiring such person to appear and testify or produce evidence as the case may require, and any failure to obey such order of the court may be punished by such court as contempt.

(3) Any member of the local hearing authority may administer oaths and examine witnesses.

(4) The petitioner has the right to be represented by counsel, to cross-examine any and all witnesses against it, and to present any affirmative legal or equitable defenses.

(5) The hearing shall be conducted informally and evidence pertinent to the facts and issues raised may be received without regard to admissibility under the rules of evidence applicable to judicial proceedings. The local hearing authority shall require all present to conduct themselves in an orderly fashion.

(6) Solely on the basis of the evidence produced at the hearing, the local hearing authority shall make findings of fact and conclusions of law and enter such decisions and orders as, in its opinion, will best further the purposes of the pretreatment program and shall give written notice of such decisions and orders to the alleged violator. The order issued under this section shall be issued no later than 30 days following the close of the hearing by the chair.

(7) The decision of the local hearing authority shall be final and binding on all parties unless appealed to chancery court under the common law writ of certiorari as set out in T.C.A. § 27-8-101 within 60 days from the date such order or determination is made.

§ 18-247 JUDICIAL PROCEEDINGS AND RELIEF.

Notwithstanding any other provisions of this chapter, the town may initiate proceedings in the Chancery Court of Rutherford County, Tennessee, under T.C.A. § 69-3-127, to seek injunctive relief and any other relief available to the town in law or equity against any person who is alleged to have violated, or is about to violate, the provisions of this chapter, to enforce this chapter or to recover damages caused by the failure of any user to comply with this chapter.

§ 18-248 COST RECOVERY.

The town may from time to time adopt charges and fees as part of its budget process for the purpose of recovering costs from users for the implementation of this chapter and for the construction, operation, and maintenance of the POTW. Charges and fees may include, but are not limited to:

(1) Service connection charges;

(2) User charges;

(3) Industrial user surcharges;

(4) Fees for monitoring, inspections, and surveillance procedures;

(5) Fees for reviewing accidental discharge procedures and construction;

(6) Fees for permit applications;

(7) Fees for filing appeals; and

(8) Other fees as the Town Council may deem necessary to carry out the requirements contained herein.

§ 18-249 RATE SCHEDULES.

The town will adopt and modify from time to time separate rate schedules to supplement this chapter.

§ 18-250 AMENDMENT.

The town expressly reserves the absolute right to amend, modify, rescind, or supplement this chapter at any time.

§ 18-251 CERTIFICATION STATEMENT.

The following certification statement is required to be signed and submitted by users submitting industrial discharge permit applications in accordance with § 18-209, baseline monitoring reports in accordance with § 18-222, reports on compliance with the categorical pretreatment standard deadlines in accordance with § 18-223, and monthly compliance reports in accordance with § 18-224. The following certification statement must be signed by an authorized representative of the industrial user as defined in § 18-203:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

§ 18-252 CRIMINAL PENALTIES.

In accordance with T.C.A. § 69-3-115(c), any person who willfully and knowingly falsifies any records, information, plans, specifications, or other data, or who willfully and knowingly causes the town to violate its NPDES permit or to otherwise fail to comply with applicable water quality standards, or who willfully fails, neglects, or refuses to comply with any of the provisions of the Water Quality Control Act of 1977, as amended, commits a Class E felony and is subject to punishment by a fine of not more than $25,000 or incarceration, or both.

Town of Smyrna
Town Council Meeting
Agenda Summary

Agenda Item Number 9.
Department: Administration
Date: March 26, 2026

Subject:
Consideration of the appointment of one (1) member to the Board of Zoning appeals to serve a three-year term ending in 2029.

Fiscal Impact:

Contract Type:

Contract Term (if applicable):

Background:
Annual Board and Committee appointments were held at the regular meeting on March 10, 2026. Current Sister City Committee member, Gregory Creasey, applied for consideration for appointment to the Board of Zoning Appeals and was subsequently appointed. In an effort to have citizens serve on only one board at a time, Mr. Creasey was removed from his seat on the Sister City Relations Committee and another applicant was appointed to his unexpired term.

Summary:
Since appointments were announced at the March 10, 2026, meeting, it has come to the attention of staff that Gregory Creasey has declined his recent appointment to the Board of Zoning Appeals in order to be considered to remain on the Sister City Relations Committee. The next item on your agenda is another vacancy that was just presented on the Sister City Relations Committee; an unexpired term ending in 2028.

Recommended Council Action:
Staff recommends appointing one (1) member to the Board of Zoning Appeals to serve a three-year term ending in 2029.

Attachments:
None

Town of Smyrna
Town Council Meeting
Agenda Summary

Agenda Item Number 10.
Department: Administration
Date: March 26, 2026

Subject:
Consideration of the appointment of one (1) member to the Sister City Relations Committee to serve an unexpired term ending in 2028.

Fiscal Impact:

Contract Type:

Contract Term (if applicable):

Background:
On Monday, March 16, 2026, staff received the following email from Sister City Relations Committee Member, Amy Wise, requesting to resign her position on the committee effective immediately:

"I am so thankful that I was able to serve on the Smyrna Zama Sister City Committee these past four years. Having the opportunity to visit the beautiful Zama City again and share this adventure with my grandson was so wonderful. I will always be grateful to you for allowing me to serve the town in this way.

As much as I enjoy this committee, I find it necessary to resign at this point. I know you will appoint a dedicated citizen to fulfil my last two years on the committee.

Again, thanks so much,

Amy Wise"

Summary:
Due to this resignation, the Council will need to fill an unexpired term on the Sister City Relations Committee ending in 2028.

Recommended Council Action:
Staff recommends the appointment of one (1) member to the Sister City Relations

Committee to serve an unexpired term ending in 2028.

Attachments:

1. Creasey, Gregory(Sister City)-Redacted

Smyrna Tennessee

Casey Conard <casey.conard@townofsmyrna.org>

Committee Application: Sister City Committee

1 message

noreply via Board Applications <boardapplications@townofsmyrna.org> Sat, Mar 1, 2025 at 9:20 PM
Reply-To: [redacted]
To: boardapplications@townofsmyrna.org
Cc: noreply@revize.com

Date = 2025-03-01
Committee-Requested[] = Sister City Committee
Full-Name = Gregory Creasey
Street-Address = [redacted]
City = Smyrna
State = TN
Zip-Code = 37167
How-long-have-you-lived-in-Smyrna = 45 years
Are-you-a-registered-voter = Yes
Phone-Number = [redacted]
Alternate-Phone-Number = N/A
E-mail-Address = [redacted]
Current-Workplace = [redacted]
Job-Title = Director of Public Relations / Strategic Business Communications
Length-of-Employment = 20 years
Business-Address = [redacted]
Franklin, Tenn
Business-Phone-Number = N/A
Education = Masters of PR
Past-Current-Community-Involvement = I've always found ways to be involved in my community, taking on different leadership and volunteer roles over the years. For the past seven years, I've served on the executive board of the Smyrna Baseball League as both PR Officer and Treasurer. I've also been an active member of Lifepoint Church for 15 years, serving as a deacon and helping with community outreach. Through Lifepoint, I've regularly volunteered with Room in the Inn, working with their overnight program to support those in need in both Nashville and Smyrna. On top of that, I have a big heart for animal welfare and have organized several pet adoption events and shelter beautification projects to support local rescues. Giving back and helping build a strong, connected community is something I truly care about, and I'm always looking for ways to contribute.
Professional-Organizations = I'm a member of the Public Relations Society of America (PRSA) and the International Association of Business Communicators (IABC).
Why-you-would-like-to-serve-on-this-committee = Serving on the Sister Cities Committee would be an incredible opportunity to give back to a program that has deeply impacted my family. In 2023, my daughter Adelai was selected as a Sister Cities ambassador, and we had the privilege of hosting Hina from Zama, Japan. This experience was transformative—not only for Adelai but for our entire family. Watching her grow in confidence, develop a broader worldview, and form lasting international friendships showed me firsthand the power of cultural exchange. Now, as she prepares to travel to Zama this summer, I see how this program fosters personal growth, mutual understanding, and a spirit of global connection that extends far beyond the trip itself.

Through my work in PR and government relations at Mars, I've had a lot of experience with stakeholder engagement and cross-cultural relationship building—both of which feel pretty relevant to strengthening our partnership with Zama. If I can use any of that to help support our Sister Cities program, I'd love the opportunity. Sister Cities has already had such a big impact on my family - in ways I never imagined - and I'd love to play a role in making sure more families and young leaders get to have the same kind of experience.
Do-you-know-of-any-potential-conflicts = I don't anticipate any conflicts that would prevent me from serving on the Sister Cities Committee. The only thing to note is that I won't be able to travel to Zama in 2025 when my daughter goes with the delegation. Honestly, I love the idea of her having this experience on her own. Other than that, I'm fully available and excited to contribute however I can.
Client IP = 99.51.240.78