PROFESSIONAL SERVICES AGREEMENT

| THIS PROFESSIONAL SERVICES AG | REEMENT ("Agreement') is made and entered into this |
|---|---|
| day of | , 2022, by and between STV Incorporated dba STV |
| Engineers, Inc. "STV"; and the Town | n of Nolensville, TN. STV and Client are sometimes |
| referred to individually as a "Party" and | together as the "Parties." |

WITNESSETH

WHEREAS, Client, desires to retain STV to render and perform certain professional services relating to Client's planning and engineering program (the "Project"); and

WHEREAS, STV is willing to render such services in accordance with the terms and conditions in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter contained, the receipt and adequacy of which is hereby acknowledged by the Parties do hereby agree as follows:

<u>ARTICLE 1 – STV'S RESPONSIBILITIES</u>

- A. STV agrees to perform the professional services (the "Services") described in detail in <a href="Exhibit "A" attached hereto and incorporated herein (the "Scope of Services"). The schedule for performance of the Services shall be as set forth in the Scope of Services.
- B. If required for the Services, STV shall secure and maintain the licenses, professional registrations, permits and other authorizations necessary for STV to perform the Services identified herein. It is expressly understood that Client is responsible for any and all other permits, licenses, authorizations, and bonds, including related fees and any administrative fees or any taxes required by any federal, state, or local government law.
- C. STV reserves the right to assign this Agreement to its affiliates, subsidiaries, or successors as necessary in order to effectively carry out and complete the Services specified by this Agreement.
- D. STV will perform its obligations in a manner consistent with that level of skill and care exercised by members of the same field currently practicing under similar conditions and circumstances at the time such Services are rendered (the "Standard of Care"). Estimates of cost, approvals, recommendations, opinions and decisions by STV are made on the basis of STV's experience, qualifications and professional judgment and are not to be construed as warranties or guarantees.

- E. Consistent with the Standard of Care, the Services shall conform to applicable laws, ordinances, codes, rules, regulations and other legal requirements at the time Services are rendered.
- F. STV shall not be required to sign any documents, no matter by whom requested, that would result in STV having to certify, guaranty, or warrant the existence of conditions whose existence STV cannot ascertain. Any certification provided by STV shall be so provided based on STV's knowledge, information and belief subject to the standard of care set forth above, and shall be given in STV's professional opinion consistent with the same. STV shall be compensated for any work necessary to verify project compliance with regulatory standards for purposes of such certification.
- G. STV's opinions of probable construction cost provided pursuant to this Agreement are to be made on the basis of STV's experience and qualifications and, consistent with the Standard of Care, represent STV's judgment as a professional generally familiar with the industry. However, since STV has no control over the cost of labor, materials, equipment, or services furnished by others, or over the methods of determining prices, or over competitive bidding or market conditions, STV cannot and does not guarantee, and shall therefore have no liability in the event that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by STV.
- H. During the construction phase of the Project, STV shall not supervise, direct, or have control over a contractor's work, nor shall STV 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 contractor's work in progress, nor for any failure of contractor to comply with laws and regulations applicable to contractor's furnishing and performing the work.
- I. STV neither guarantees the performance of any construction contractor nor assumes responsibility for any contractor's failure to furnish and perform the work in accordance with the contract documents.
- J. STV shall not be responsible for the acts or omissions of any contractor(s), subcontractor or supplier, or of any of the contractor's agents or employees or any other persons (except STV's own contractors, subcontractors, agents or employees) at the Project site or otherwise furnishing or performing any of the contractor's work; or for any decision made on interpretations or clarifications of the contract documents given by Client.

ARTICLE 2 – CLIENT'S RESPONSIBILITIES

A. Immediately upon execution of this Agreement, Client shall provide available information to STV regarding the requirements for the Project. STV shall be entitled to rely upon the accuracy and completeness of all requirements, programs, instructions, reports, data and other information furnished by Client pursuant to this Agreement. When requested by STV, Client will arrange access to and make provisions for STV to enter upon public and private property as required for STV to perform Services under this Agreement

- B. Upon the request of STV, Client shall designate a representative authorized to act on its behalf with respect to the Project. Client, or such authorized representative, shall render decisions in a timely manner pertaining to documents submitted by STV in order to avoid unreasonable delay in the orderly and sequential progress of STV's Services.
- C. Client is alone responsible for payment to STV under this Agreement and such duty to pay STV shall not be subject to any third party agreement.

ARTICLE 3 – CHANGES AND ADDITIONAL SERVICES

Client may make changes within the Scope of Services to be performed by STV. All changes to this Agreement must be in writing and signed by both Parties. If such changes result in an increase in the STV's costs and/or increase the time required for the nature of performance of the Agreement ("Additional Services"), STV shall so notify Client and an equitable adjustment shall be made and the Agreement shall be changed in writing through a change order signed by the Client and STV. Client expressly agrees STV shall have no obligation to proceed with any Additional Services unless and until both Parties have signed the required change order document. STV shall not be in default hereunder for any refusal to proceed with any Additional Services.

<u>ARTICLE 4 – FORCE MAJEURE</u>

Neither Party will be responsible for delays attributable to acts of God, acts of third parties, intervention of public authorities, weather, work stoppages, changes in applicable laws or regulations after the date of commencement of performance hereunder and any other acts or omissions or events which are beyond the reasonable control of a Party. Costs and schedule commitments shall be subject to renegotiations for unreasonable delays caused by Client's or third party's failure to provide specified facilities or information. The time for performance of this Agreement shall be extended proportionately in the event STV is delayed in the performance of this Agreement by such causes and additional compensation may be due STV in accordance with the provisions of hereof.

ARTICLE 5 – COMPENSATION

- A. STV shall be compensated and paid for all Services described herein in the lump sum amount not to exceed one hundred seventy thousand and six hundred dollars, (\$170,600.00).
- B. Upon submission, not more frequently than once per month, by STV of an invoice for STV's Services, Client will, within thirty (30) calendar days, pay STV for Services performed. Time is of the essence in payment of STV's invoices, and timely payment is a material part of the consideration of this agreement between STV and Client. Invoice amounts in dispute shall not affect Client's obligation to pay remaining invoice charges.
- C. Unpaid balances shall be subject to an additional charge of one and three quarters (1.75) percent per month from the date of the invoice. In addition, STV may, after giving seven

(7) days written notice to Client, suspend Services without liability until Client has paid in full all amounts due STV. Sealed plans, final documents, reports and attendance at meetings/hearings will not be provided unless payment for Services is current. If STV is performing services for the Client under multiple projects, invoice payments must be kept current on all projects for Services hereunder to continue. Client acknowledges STV's right to suspend Services and withhold plans and documents, as provided above, if payments are not current on all projects. If Services are suspended for thirty (30) days or longer, upon resuming Services STV shall be entitled to expenses incurred in the interruption and resumption of its Services. If Services are suspended for ninety (90) days or longer, STV shall be entitled to compensation for all expenses incurred during the interruption and resumption of its Services and fees for remaining Services shall be equitably adjusted. Should it become necessary to utilize legal or other resources to collect any or all monies rightfully due for Services rendered, STV shall be entitled to full reimbursement of all such costs, including reasonable attorneys' fees and costs, as part of this Agreement.

ARTICLE 6- INSURANCE/INDEMNITY

- A. STV agrees to carry the following insurance during the term of this Agreement:
 - 1. Worker's Compensation and Employer's Liability Insurance in compliance with statutory limits.
 - 2. Professional Errors and Omissions Insurance with limits of not less than ONE MILLION DOLLARS (1,000,000.00) combined.
 - 3. Automobile Liability Insurance with limits of not less than ONE MILLION DOLLARS (1,000,000.00) combined single limit for all motor vehicles owned, rented or used by the STV.
 - 4. Comprehensive General Liability, Bodily Injury and Property Damage Insurance with combined single limits of ONE MILLION DOLLARS (1,000,000.00) per occurrence and in the aggregate.
 - 5. Certificates of insurance will be furnished upon request. If Client requires additional insurance coverage, and it is commercially available, Client agrees to reimburse STV for the expense of carrying such additional insurance.
- B. The Client and STV shall at all times indemnify and save harmless each other and their officers and employees on account of any claims, damages, losses, litigation, expenses and/or counsel fees arising out of any claims, damages, personal injuries and/or property losses sustained by or alleged to have been sustained by and person or entity, to the extent such claims, damages, losses, litigation, expenses and/or counsel fees are caused by the negligent acts, errors or omissions of the indemnifying Party, its employees, or subcontractors.

ARTICLE 7 – LIMITATION ON LIABILITIES

- A. Notwithstanding any other provisions of this Agreement, and to the fullest extent permitted by law, neither Party shall be liable to the other for any incidental, special, indirect or other consequential damages incurred due to the fault of the other Party, regardless of the nature of the fault or whether it was committed by the Client or STV, or their employees, subconsultants, or subcontractors. Consequential damages include, without limitation, liability for loss of use of the Project or existing property, loss of profits, loss of use, loss of production, or business interruption, however the same may be caused.
- B. Client hereby agrees that, to the fullest extent permitted by law, STV's total liability to Client and any persons or entities claiming by, through, or under Client, for any and all injuries, claims, losses, expenses, or damages whatsoever arising out of or in any way related to the Project, the Services, or this Agreement from any cause or causes including, without limitation, STV's negligence, errors, omissions, strict liability, statutory liability, indemnity obligation, breach of contract or breach of warranty shall not exceed Fifty Thousand & 00/100 Dollars (\$50,000.00) or STV's fee hereunder, whichever shall be greater.

ARTICLE 8 – OWNERSHIP OF DOCUMENTS

- A. All documents including without limitation all drawings and specifications (whether in hard or electronic format) prepared by STV pursuant to this Agreement are instruments of service with respect to the Project. Such documents are not intended or represented to be suitable for reuse by the Client or others on extensions of the Project or on any other project. Any reuse by Client or a third person or entity authorized by Client without written verification or adaptation by STV for the specific purpose intended will be at the Client's sole risk and without liability or legal exposure to STV; and the Client shall release, defend, indemnify, and hold harmless STV from all claims, damages, losses and expenses, including reasonable attorneys' fees, arising out of or resulting therefrom. Any such verification or adaptation will entitle STV to additional compensation at rates to be agreed upon by STV and the Client or the third person or entity seeking to reuse said documents.
- B. If any information hereunder is provided in electronic format, Client recognizes that such information record on or transmitted as electronic media, including CADD or BIM documents ("Electronic Documents") are subject to undetectable alteration, either intentional or unintentional, due to, among other causes, transmission, conversion, media degradation, software error, or human alternation. Accordingly, the Electronic Documents are provided to Client for informational purpose only and not as record documents.
- C. To the fullest extent permitted by law, STV retains the copyright in all written work products, including but not limited to plans, specifications, drawings, calculations, computer programs, and computer-generated materials in any form, produced in connection with the Services hereunder. Subject to the terms and conditions herein

contained, STV licenses to Client the use of all written work product produced in connection with the Project on a non-exclusive basis.

ARTICLE 9 - NOTICES

- A. For purposes of this Agreement, notices and all other communications provided for herein shall be in writing, addressed as provided hereinafter to the Party to whom the notice or request is given, and shall be either: (i) delivered personally; (ii) sent by United States certified mail, postage prepaid, return receipt requested; (iii) placed in the custody of Federal Express Corporation or other nationally recognized carrier to be delivered overnight; or, (iv) sent via confirmed facsimile transmission. Notice shall be deemed given: when received if delivered personally or sent via telecopy or facsimile transmission with written confirmation of receipt; forty-eight (48) hours after deposit if sent by mail; and twenty-four (24) hours after deposit if sent by Federal Express or other nationally recognized carrier. From time to time, either Party may designate another address for all purposes of this Agreement by giving the other Party not less than ten (10) days advance notice of such change of address in accordance with the provisions hereof.
- B. The address of Client for all purposes under this Agreement and for all notices hereunder shall be:

Client Victor Lay Town Manager Nolensville Town Hall 7218 Nolensville Road Nolensville, TN 37135 Phone No. (615) 776-3633 Fax No. (615) 776-3634

Email Address: vlay@nolensvilletn.gov

The address of STV for all purposes under this Agreement and for all notices hereunder shall be:

STV
Brad Thompson
Vice President
4037 Rural Plains Circle, Suite 270
Franklin, TN 37064
Phone No. (615) 632-0041
Email Address brad thompson@stvin

Email Address: brad.thompson@stvinc.com

ARTICLE 10 - CONFIDENTIAL INFORMATION

In connection with the performance of this Agreement, STV may disclose to Client, through its representative, secret or confidential information consisting of heretofore unpublished technical or other data in which STV or other parties have proprietary rights, patentable as well as

unpatentable. All of this information shall be considered confidential information. Client shall not, except as specifically authorized in writing by STV, disclose to any party any technical, confidential or secret information of whatever kind or nature, so long as, and to the extent that, such information remains unpublished. This obligation shall not apply to information which the Client can demonstrate was in the possession or known to it prior to the date of such disclosure as demonstrated by its records. Nor should this obligation apply to information, which Client can establish, has been properly and lawfully made available to Client from third parties who are under no obligation to maintain the confidential nature of this information. Client shall make no copies of any prints or other documents supplied by the STV, unless expressly authorized or directed to do so.

ARTICLE 11 – NO WAIVER

No failure of either Party hereto at any time to give notice of any breach by the other Party of, or to require compliance with, any condition or provision of this Agreement shall be deemed a waiver of any provisions or conditions hereof.

ARTICLE 12 – TERM & TERMINATION

The term of this Agreement shall commence as of the date and year first above written and shall continue until completion of the Services, as may be modified from time to time.

Either Party may terminate this Agreement for convenience upon thirty (30) days written notice. Notwithstanding the foregoing, either Client or STV may terminate this Agreement upon the other Party's material breach of this Agreement, provided that: (a) the nonbreaching Party sends written notice to the breaching Party describing the breach in reasonable detail; and (b) the breaching Party does not cure the breach within twenty (20) days following its receipt of such written notice. STV will be compensated for its Services rendered to the date of termination. Termination of this Agreement for any reason whatsoever shall not affect any right or obligation of any Party which is accrued or vested prior to such termination, and any provisions of this Agreement relating to any such right or obligation shall be deemed to survive the expiration or earlier termination of this Agreement.

ARTICLE 13 - SEVERABILITY

If any provision of this Agreement is held to be illegal, invalid or unenforceable under present or future laws, such provision shall be fully severable, and this Agreement shall be construed and enforced as if such illegal, invalid or unenforceable provision is not a part hereof, and the remaining provisions hereof shall remain in full force and effect. In lieu of any illegal, invalid or unenforceable provision herein, there shall be added automatically as a part of this Agreement a provision as similar in its terms to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

ARTICLE 14– SURVIVAL OF PROVISIONS

Termination of this Agreement for any reason whatsoever shall not affect any right or obligation of any Party which is accrued or vested prior to such termination, and any provision of this Agreement relating to any such right or obligation shall be deemed to survive the termination of

this Agreement. The indemnities, audit rights, representations, warranties, covenants, guarantees, confidentiality obligations, insurance requirements, and intellectual property rights provisions set forth herein shall survive termination or expiration of this Agreement, in addition to any other provisions which by their nature should, or by their express terms do, survive or extend beyond termination or expiration of this Agreement.

ARTICLE 15 - MODIFICATIONS

Except as otherwise provided herein, this Agreement may be altered, modified or amended only in writing and signed by both Parties.

ARTICLE 16 – GOVERNING LAW

This Agreement shall be governed in compliance with the laws of the State of New York and applicable governmental rules and regulations in effect at the effective date of this Agreement.

ARTICLE 17- INTEGRATION/MERGER CLAUSE

This Agreement contains the entire and complete agreement between the Parties respecting the Project, and any agreement or representation respecting the Project of the duties of either Party in relation thereto in prior negotiations, proposals, orders, representations letter agreements, memorandum or understandings, oral or written, shall be superseded as of the date hereof.

ARTICLE 18 – BINDING EFFECT

The Agreement shall be binding upon and shall inure to the benefit of the Parties hereto, their successors and assigns.

ARTICLE 19 – THIRD PARTIES

Nothing contained in this Agreement shall crate a contractual relationship with, or a cause of action in favor of, a third party against either STV or Client. STV's Services under this Agreement are being performed on behalf of and solely for the benefit and exclusive use of the Client for the limited purposes of this Agreement and no person or other entity shall have any claim against STV because of this Agreement. In addition, nothing herein shall be construed as creating a contractual relationship between the Client and any STV employee, representative, or consultant. The Client agrees that in the event of a dispute regarding this Agreement or the Services rendered by STV hereunder, the Client shall only seek recourse against STV and hereby expressly waives any and all right to purse a claim against STV's individual officers, directors, or employees.

ARTICLE 20 – ASSIGNMENT

Client may not assign or transfer any of its duties, obligations, or interests in this Agreement without the prior written consent of STV.

ARTICLE 21 – HEADINGS

All section and article headings herein are for convenience of reference only and are not part of this Agreement, and no construction or inference shall be derived therefrom. Wherever required by the context, any gender or neuter shall include the other gender or neuter, the singular shall include the plural, and the plural shall include the singular. Each defined term herein shall be used in its singular or plural form whether or not so defined.

ARTICLE 22 – CONSTRUCTION

The Parties acknowledge that each Party and, if it so chooses, its counsel, have reviewed and revised this Agreement and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting Party shall not be employed in the interpretation of this Agreement or any amendments or exhibits hereto or to any Task Order entered into hereunder.

ARTICLE 23 – DISPUTES

STV and Client agree to negotiate in good faith to resolve any disputes or differences arising under this Agreement. Any dispute that cannot be resolved by negotiation will be submitted to mediation conducted in accordance with the current Construction Industry Mediation Rules of the American Arbitration Association or such other form of non-binding Alternative Dispute Resolution (ADR) as they may mutually agree.

STV and Client agree that, in the event their dispute resolution procedures as described above do not resolve any disagreement among them and any Party elects thereafter to institute legal proceedings, the forum for any such action relating to this Agreement shall be in the Courts located in New York, New York, either State or Federal. STV and Client hereby irrevocably consent to the jurisdiction of such Courts and waive any defense, whether asserted by motion or pleading, that such Courts are an inconvenient or inappropriate venue.

Except to the extent that this Agreement expressly permits a Party to suspend performance, pending final resolution of a dispute, the Parties shall each proceed diligently and faithfully with performance of their respective obligations under this Agreement pending a final resolution of a dispute and failure to so proceed shall be considered a default under the terms of this Agreement.

[SIGNATURES TO THIS AGREEMENT ON THE FOLLOWING PAGE]

IN WITNESS WHEREOF, the Parties hereto have made and executed this Agreement the day and year first written above.

| Town of Nolensville | |
|------------------------------------|--------|
| By: | |
| Name: | |
| Title: | |
| STV Incorporated dba STV Engineers | , Inc. |
| By: | |
| Name: | |
| Title: | |

EXHIBIT A SCOPE OF SERVICES

PROJECT OVERVIEW

Project Description and Location

Prepare a phase 1 conceptual planning and scoping study to develop conceptual design options for Rocky Fork Road from Nolensville Road (US 31A/US 41A) to Rock Springs Road (approx. 1.7 miles). The result will be a recommended design concept to progress into survey and preliminary design plans. The project is anticipated to include widening to 3-lanes with sidewalk and/or a shared use path. The study will consider alternatives for intersection types, multi-modal connectivity, and bridge connectivity options for pedestrians and bicyclists.

Consulting Team

- STV Engineers: Lead Designer and Prime agreement holder
- Consor Engineers: Initial utility research and documentation

Future Scope (Approved via contract amendment)

Upon Town of Nolensville request and approval via contract amendment, the STV Team will move forward with developing survey, preliminary design plans, NEPA documentation (if desired), right of way plans, permit support, and final design/construction plans.

SCOPE OF SERVICES

The following outlines the proposed scope of services for the above-described project.

Task 1 - Project Management

This task consists of general project management, administrative, and accounting activities for the project. Coordination activities will consist of preparing and distributing project correspondence, scheduling of meetings, and discussion of project elements with internal consultant team members and the Town of Nolensville (Town). This task also includes the day-to-day management of the STV Team, resource planning, client coordination, and maintaining an understanding of all tasks and how they are progressing.

Schedule

The team will develop a detailed project schedule that outlines the proposed work. It will be maintained and tracked with reporting provided as part of a monthly Town Management Coordination Meeting. For purposes of this scope, it is assumed that it will take 7 months to complete. Initial block schedule is attached at the end of this document.

Task 1 Deliverables:

- Meeting agendas and minutes
- Monthly invoices and progress reporting
- Monthly management meeting (STV and Town)
- Project schedule

Task 2 - Public/Stakeholder Engagement

The intent of the public and stakeholder engagement process is to foster an open dialogue regarding the development of the project. To accomplish this, STV proposes to host a project website, and have public outreach opportunities and coordination meetings with the Board of Commissioners at key milestones of the project.

Project Website

STV will provide a project website that will be accessed via link from the Town of Nolensville's website. Anticipated content of the website includes the following:

- Project description and purpose
- Project timeline/schedule
- Meeting announcements
- Meeting materials
- Visualizations/concepts

Public Outreach

Following is a list of public outreach meetings related to the development of the Rocky Fork Road concept:

- 1) Conduct an initial public meeting prior to starting concept development. The intent of the meeting is to "Kick-Off" the project and present the scope of the project, existing corridor characteristics and features (roadway, bridge, and environmental), corridor opportunities and challenges, and an opportunity for the public to state their preference for the look and feel of the roadway and its design features. This meeting will occur after the development of the traffic analysis and analysis of the roadway characteristics.
- 2) The second public meeting will occur after the initial corridor concepts are developed. The concepts will be based on public input from the first public meeting, guidance from Town Staff and Board of Commissioners, and technical analysis. The intent of this meeting is to present the concept options for review and feedback. Specific focus will be on the typical section(s), multi-modal features and connectivity, streetscape, and intersection types.
- 3) The third and final public meeting will be a presentation of the recommended concept and will include renderings of the proposed typical section(s) and the intersections of Rocky Fork Road and Rock Springs Road and Rocky Fork Road and Newsome Lane. It will also include a roll plot of the entire corridor.

Stakeholder Engagement

Stakeholder engagement will focus on coordination with the Town of Nolensville Board of Commissioners (BOC). This process will closely follow the public outreach process described above to ensure the BOC is up to date and has reviewed all material prior to going to the public. Following is a list of BOC engagement points:

1) Conduct an initial meeting with the BOC to present the scope of the project, existing corridor characteristics and features (roadway, bridge, and environmental), and corridor opportunities

and challenges. This meeting will also include a discussion on what the BOC's vision for the corridor is and any issues they have heard as elected officials related to the Rocky Fork Road corridor. The BOC will also have the opportunity to share their thoughts with the STV team on specific features they would like to see included in the corridor. This meeting will occur early in the project process, but after the development of the traffic analysis and analysis of the roadway characteristics.

- 2) The second BOC meeting will occur after the initial corridor concepts are developed. The concepts will be based on public input from the first public meeting, guidance from Town Staff and Board of Commissioners, and technical analysis. The intent of this meeting is to provide the BOC with the opportunity to see and review the initial concepts and provide feedback prior to the second public meeting that will follow. Specific focus will be on the typical section(s), multi-modal features and connectivity, streetscape, intersection types, and cost estimates.
- 3) The third and final BOC meeting will be a discussion of the recommended concept and will include renderings of the proposed typical section(s) and the intersections of Rocky Fork Road and Rock Springs Road and Rocky Fork Road and Newsome Lane. It will also include a roll plot of the entire corridor and a cost estimate for the proposed improvements for review by the BOC.

Task 2 Deliverables:

- Meeting agendas
- Meeting notes
- PowerPoint Presentations
- Renderings to demonstrate proposed concepts
- Project website

Task 3 – Preliminary Utility Review

STV subconsultant, Consor, will provide an initial utility review that will include the following:

- Conduct planning level utility research to identify and locate existing utilities based on available GIS data and discussions with utility providers.
- Determine which utility companies, if any, have prior rights of way/compensable interest and who
 is financially responsible for the relocation of utilities that are in conflict.
- Provide a conceptual estimate of relocation costs.

Task 3 Deliverables:

• Utility summary memorandum for concepts.

Task 4 – Traffic Engineering/Analysis

To assist with concept development, the STV Team will conduct turning movement traffic counts and evaluate various intersection improvement options as well as assess warrants for the installation of turn lanes at the following locations are as follows:

- Rocky Fork Road at Newsom Lane This intersection will be analyzed for improvement scenarios including:
 - Unsignalized intersection w/ turn lanes and/or realignments
 - Signalized intersection w/turn lanes and/or realignments
 - Roundabout
- <u>School Entrances (bus and vehicles)</u> These intersections will be analyzed for potential traffic flow improvements during peak school periods (pick up and drop off) related to Rocky Fork Road.
- <u>Rocky Fork Road at Kirkpark Court</u> This intersection will be analyzed for the following improvement scenario:
 - Turn lane warrants
- Rocky Fork Road at Burberry Glen Boulevard This intersection will be analyzed for the following improvement scenario:
 - Turn lane warrants
- <u>Rocky Fork Road at Rock Springs Road</u> This intersection will be analyzed for the following improvement scenario:
 - Unsignalized intersection w/ turn lanes and/or realignments
 - Signalized intersection w/turn lanes and/or realignments
 - o Roundabout

The evaluation/analysis will look at AM and PM peak hours for both 2022 base year and 2045 future year.

Assumptions:

- Existing mainline traffic volumes will be obtained from either TDOT or the Town of Nolensville.
- STV will utilize Synchro/SimTraffic to analyze signalized and unsignalized intersection operations, and SIDRA for roundabout analysis.
- Growth rates applied to base year traffic will be recommended based on available information such as:
 - Historic ADT
 - o MPO Travel Demand Model
 - Local Plans and/or Studies

Task 4 Deliverables:

- Traffic Technical Memorandum that will include Intersection type recommendations, traffic data summary, crash data summary.
- Intersection turning movement counts at the following locations:
 - Rocky Fork Road at Newsom Lane

- Rocky Fork Road at School Entrances
- Rocky Fork Road at Kirkpark Court
- Rocky Fork Road at Burberry Glen Boulevard
- Rocky Fork Road at Rock Springs Road

Task 5 - Concept Development

STV in coordination with the Town Staff and BOC will evaluate different strategies and alternatives to address issues such as ROW needs, environmental impacts, utility conflicts, constructability aspects, and traffic congestion mitigation.

The STV Team will work collaboratively with the Town Staff to look at various intersection types, typical sections, multi-modal options, and lighting. These concepts will be vetted by both the BOC and the general public in the Public/Stakeholder Engagement process in Task 2.

The major activities of this task include:

- Identify Alternatives that will be evaluated based on:
 - Traffic
 - ROW impacts
 - Potential utility impacts
 - Environmental impacts (desktop survey of readily available data)
 - Constructability
 - Evaluation matrix (as needed)

The following applies to the concept:

- Concept will include horizontal alignment, vertical profile, and typical section(s). Concepts will be developed using existing TDOT lidar, aerial, and GIS mapping.
- Concept will indicate centerline, edge of pavement, curb and gutter, sidewalk, existing ground line, proposed ground line, and preliminary slope stake lines.
- Concept will be presented on a legible scale color roll plot.

Planning Level Cost Estimates

Planning level cost estimates for the concepts will be developed utilizing TDOT STID cost estimate spreadsheet and recent construction material cost estimates from various sources.

<u>Task 5 Deliverables</u>:

• Design criteria

- Evaluation of 2 intersection types per intersection listed in Task 5
- Evaluation of 2 typical section types for the mainline
- Roll plots and existing imagery of similar intersections and roads will be provided as examples of what each intersection and typical section may look like
- Planning level cost estimates for each concept
- Evaluation matrix (as needed)

Task 6 – Recommended Concept

Based on the alternative concepts described in Task 5, STV will make a recommendation to the Town Staff and BOC for a concept to move forward in the design process. This will include recommendations on the following:

- Typical section for the corridor
- Multi-modal/pedestrian features
- Intersection types for the intersections listed in Task 4

STV will develop a set of renderings/visualizations to illustrate the proposed improvements. This will include photo-realistic composites by overlaying a proposed rendering with existing photography. This will include removing trees, powerlines, vehicles, etc. and adding them back where necessary. STV will also use Color processing to match the photograph for visual enhancement.

It is anticipated that 6 photo-realistic composites will be created for this project.

Task 6 Deliverables:

• Up to 6 photo-realistic composites. Sites to be determined.

Task 7 - Survey

Not included in initial scope of work.

Task 8 - Preliminary Engineering

Not included in initial scope of work.

Task 9 - NEPA Studies and Document

Not included in initial scope of work.

Task 9 – Geotechnical Exploration/Engineering

Not included in initial scope of work.

Task 10 - ROW Plans

Not included in initial scope of work.

Task 11 - Permit Support

Not included in initial scope of work.

Task 12 - Construction Pans

Not included in initial scope of work.

Project Schedule

Rocky Fork Road Widening Concept

| | MONTH | | | | | | | | |
|-----------------------------------|-------|---|---|---|---|---|---|--|--|
| TASK | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| 1 - Project Management | | | | | | | | | |
| 2 - Public/Stakeholder Engagement | | | | | | | | | |
| 3 - Preliminary Utility Review | | | | | | | | | |
| 4 - Traffic Engineering/Analysis | | | | | | | | | |
| 5 - Concept Development | | | | | | | | | |
| 6 - Recommended Concept | | | | | | | | | |