

TOWN OF VIENNA, VIRGINIA

On-Call Engineering Services for Local-State-Federal Projects

Proposal

Church Street NE/East Street NE Mini Roundabout

Contract Number: RFP 23-17, Year 1

RK&K Task Order Number 23087

By:



**Rummel, Klepper & Kahl, LLP
12600 Fair Lakes Circle, Suite 300
Fairfax, VA 22033
703-246-0028**

March 8, 2024

WORK PLAN

Contract Name: On-Call Engineering Services for Local-State-Federal Projects
Contract Number: RFP 23-17, Year 1
RK&K Commission No.: 23087

INTRODUCTION

The Town of Vienna, Virginia (the Town) has requested assistance with the design of a roundabout at the intersection of Church Street NE and East Street NE. This effort includes surveying, geotechnical, design and construction administration services. This scope of services outlines our planned activities related to performing these services. RK&K will be assisted in this assignment by the following subconsultants:

- Legacy Engineering, Inc. for surveying services
- American Geotechnical and Environmental Services for geotechnical services
- CES Consulting LLC for Engineering Support and Utility Coordination.

SCOPE OF WORK

The scope of work is broken into the following parts:

- Task 1 is for overall project management and coordination;
- Tasks 2 through 4 will carry the assignment through concept development;
- Tasks 5 through 9 will be for final design;
- Task 10 is for Construction Management Services.

The following tasks are proposed for this assignment:

1. PROJECT MANAGEMENT AND COORDINATION

The RK&K Team will

- a. Provide ongoing project management and coordination services for the project. The project duration is estimated at 24 months.
- b. Periodic progress meetings with the client will be conducted during active phases of the work. RK&K estimates that 6 meetings will be required over the duration of the contract.

2. PUBLIC INVOLVEMENT

The RK&K Team will

- a. Prepare an exhibit suitable for presentation of the proposed improvements at a public meeting.
- b. Attend one public meeting by one member of the RK&K project team.

3. SURVEYING & GEOTECHNICAL SERVICES

The RK&K Team will perform boundary and topographic services in accordance with the proposal by Legacy Engineering, Inc's proposal (attached). The RK&K Team will perform geotechnical services in accordance with the proposal by American Geotechnical and Environmental Services, Inc. (AGES) (attached)

4. MINIMAL IMPACT CONCEPT

The RK&K Team will:

- a. Develop a conceptual mini-roundabout design that will have minimal impact on the existing conditions.
- b. Prepare an operational analysis of the proposed mini roundabout.
- c. Prepare a conceptual cost estimate.

Minimal Impact Concept Deliverables

- Draft Operational Analysis Technical Memorandum
- Draft Exhibit depicting conceptual mini-roundabout design.
- Conceptual cost estimate

Following completion of the minimal impact concept and the preliminary design services (see below), the Town will determine the preferred design to proceed with to final design. If the minimal impact concept is designated as the preferred design, The RK&K Team and the Town will renegotiate the scope and fee to deliver a final plan for the minimal impact concept.

5. PRELIMINARY DESIGN SERVICES

5.1 Traffic

The RK&K Team will

- a. Collect an 8-hour Turning Movement Count (TMC) at the intersection of Church Street NE and East Street NE for the time from 7:00am – 10:00am; 11:30am – 1:30pm; and from 4:00pm – 7:00pm
- b. Using this count, RK&K will prepare an existing conditions analysis for the intersection using *Synchro/SimTraffic* in accordance with the VDOT TOSAM requirements.
- c. Coordinate with the Town on an appropriate growth rate for the intersection and perform a future year No Build and Build analysis in accordance with the VDOT TOSAM requirements. The future year Build analysis will be conducted with the use of *SIDRA* software.
- d. Prepare a technical memorandum documenting the operational performance of the proposed roundabout.
- e. Prepare a Lighting Justification Report in accordance with VDOT I&IM TE 390 (latest version). This will evaluate the need for roadway and/or pedestrian scale lighting for the proposed roundabout considering whether lighting is both warranted and justified.
- f. Develop preliminary signing and marking plans within the project limits in accordance with the MUTCD and Virginia Supplement to the MUTCD. The preliminary plans will include proposed pavement marking locations and types and proposed signing messages and locations.

- g. Develop preliminary Maintenance of Traffic (MOT) plans showing the proposed construction sequencing of the project.

5.2 Roadway

The RK&K Team will

- a. Prepare an updated cost estimate for the project in accordance with the requirements of VDOT's Cost Estimate Workbook (CEWB). RK&K will coordinate this work to be performed by CES Consulting LLC.
- b. A preliminary plan of the proposed improvements will be prepared. This work will be consistent with the requirements set forth in VDOT's:
 - i. Locally Administered Projects Manual, and
 - ii. LD-436 Quality Control Checklist corresponding to PH level of design.
- c. Preliminary structure improvements will be prepared to update the existing bridge structure with new railings, wider sidewalk and raised concrete median.
- d. A Roundabout package will be prepared in accordance with VDOT standards for review by the VDOT Roundabout Committee
- e. A Quality Control review of all proposed improvements will be conducted.

5.3 Hydraulics

The RK&K team will

- a. Conduct a field visit to document existing conditions and take pictures.
- b. Prepare a preliminary drainage layout to show storm drainage infrastructure to accommodate the roundabout. The design will comply with the standards of the VDOT Drainage Manual, Fairfax County Public Facilities Manual (PFM), and the Town of Vienna Public Infrastructure Manual (PIM).
- c. Include preliminary spread computations as required in the plan set.
- d. Include a narrative for storm drainage, stormwater management, and erosion and sediment control.
- e. Delineate preliminary limits of disturbance and calculate total phosphorus removal requirements using the VRRM spreadsheet. It is assumed that water quality requirements will be satisfied by purchasing nutrient credits.
- f. It is assumed that stormwater management water quantity requirements will be satisfied using the 1 percent rule at the outfall to Wolftrap creek.
- g. Prepare a preliminary single-phase erosion and sediment control plan.

5.4 Environmental

- a. Hazardous Materials - RK&K will complete an initial "desktop" review as a screening for potential environmental liabilities associated with the project. While this screening does not meet the ASTM International Standard E1527-21, Standard Practice for Environmental Site

Assessments, it will provide useful, cost-effective, information that can be incorporated into VDOT's NEPA (National Environmental Policy Act) document.

- b. Threatened and Endangered Species Resource Assessment – State- and federally-listed species that are reported to occur within the vicinity of the project area will be identified by RK&K through use of the US Fish and Wildlife Services' Information for Planning and Consultation database and Critical Habitat Mapper for Virginia, Virginia Department of Wildlife Resources' Virginia Fish and Wildlife Information Service database, Northern Long-Eared Bat Regulatory Buffer Interactive Tool, and Little Brown Bat and Tri-colored Bat Winter Habitat and Roosts Application, Virginia Department of Conservation and Recreation's Division of Natural Heritage's Natural Heritage Data Explorer, and the Center for Conservation Biology's Eagle Nest Locator. The species and resources which will be considered will be those listed as state or federally threatened or endangered and confirmed by the agencies as present in the project area, and areas of critical habitat for the project area. The results of the reviews will be used to inform the project's EQ-555 form. This scope of work does not include species surveys nor habitat surveys within the project area.
- c. Environmental Documentation – Environmental documentation services will be performed by RK&K in accordance with VDOT's LAP Manual, Part 3, Chapter 15 (Environmental Requirements). Environmental documentation needed for the project is outlined below based on the understanding that the project is funded with federal and local funds, and, therefore, must follow the federal and local process for Locally Administered projects. It is assumed that as the project is using federal funds, it would be exempt from the state's Environmental Impact Report (EIR) process.
 - 1. The VDOT Project Early Notification Form (EQ-429) will be completed and sent to VDOT with a topographic map depicting the general project limits.
 - 2. VDOT's EQ-121 form (Hazardous Materials Due Diligence Certification for Locally Administered Projects) will be completed and submitted for Town signature.
 - 3. Water Quality Permits and Natural Resource Due Diligence Certification/Checklist for Locally Administered Projects Form (EQ-555) will be completed and sent to the Town for review and signature based on the threatened and endangered species resource assessment completed by RK&K and the necessary wetlands and waters impact and permitting information for the project to be provided by VDOT.

5.5 Structures

- a. To ensure that the existing bridge structure is adequate to withstand the proposed roadway and structural improvements, we will perform the following:
 - i. Review existing as built documents (as-built plans, current inspection report, existing load rating, specifications, and photographs) to ascertain the existing condition of the structure.
 - ii. Perform a structural evaluation of the bridge structure's elements (top and bottom slabs, walls) to determine the structural capacity of the bridge structure to withstand loads induced due to proposed roadway and structural improvements.

- iii. Coordinate with the geotechnical engineer to ensure the bearing capacity and settlement of the bridge is adequate and within acceptable limits for the proposed modifications.
- iv. Develop a technical memorandum detailing the procedure used for the evaluation, assumptions used, and findings of the evaluation – if the bridge structure is adequate to withstand the proposed modifications or will require repair, rehabilitation, and/or replacement. The technical memorandum will be submitted in electronic pdf format to the Town.
- v. Repair or rehabilitation and/or replacement recommendations or costs are not included in the scope. If the structural evaluation determines that repair, rehabilitation, and/or replacement is required, supplemental scope will be provided for the Town's review and approval.

Preliminary Design Deliverables

- Draft Operational Analysis Technical Memorandum
- Draft Lighting Justification Report
- Cost estimate in VDOT's CEWB format
- Roundabout Package
- Structural Technical Memorandum
- Hazardous materials database review memorandum
- Environmental justice memorandum
- EQ-121
- EQ-429
- EQ-555
- LD-436
- The plan set includes the following sheets.
 - o Title Sheet
 - o Survey Control
 - o Construction Alignment
 - o Transportation Management Plan
 - o Sequence of Construction
 - o General Notes
 - o Typical Details
 - o Geometric Layout
 - o Storm Drainage Narrative
 - o Storm Drainage Computations
 - o Plan
 - o Profiles
 - o Erosion and Sediment Control
 - o Signing & Pavement Marking
 - o Lighting
 - o Cross Sections

6. FINAL PLAN SUBMITTAL

6.1 Traffic

The RK&K Team will

- a. Respond to one set of written comments provided by the Town and by VDOT on the preliminary submittals.
- b. Final Signing and Pavement Marking plans of the proposed improvements will be prepared. This work will be consistent with the requirements set forth by VDOT, the MUTCD, and the Virginia Supplement.
- c. Final MOT plans of the proposed improvements detailing each phase of construction in accordance with VDOT I&IM 241.

6.2 Roadway

The RK&K Team will

- a. Respond to one set of written comments provided by the Town and by VDOT.
- b. Prepare an updated cost estimate for the final design of the project in accordance with the requirements of VDOT's Cost Estimate WorkBook (CEWB). RK&K will coordinate the work to be performed by CES Consulting LLC.
- c. Final plans for the proposed improvements will be prepared. This work will be consistent with the requirements set forth in VDOT's:
 - i. Locally Administered Projects Manual, and
 - ii. LD-436 Quality Control Checklist corresponding to PAC level of design.
- d. Final lighting plans will be prepared, including photometrics and lighting placement.
- e. Revise and resubmit the roundabout package.
- f. A Quality Control review of all proposed improvements will be conducted.

6.3 Hydraulics

The RK&K team will

- a. Develop an existing and proposed Drainage Area map.
- b. Update the storm drainage narrative and computations sheet to include pipe computations as needed.
- c. Develop a limits of disturbance map to include land cover breakdown.
- d. Develop a stormwater pollution prevention plan per the VDOT template.
- e. Address comments from the Town and VDOT.

6.4 Environmental

Environmental Certification/Commitments Checklist Form (EQ-103) - Following completion of VDOT's NEPA documentation, RK&K will complete the Certification/Commitments Checklist Form and submit for Town review and submittal to VDOT.

6.5 Structures

The RK&K team will

- a. Develop and review final design of structure improvements to update the existing bridge structure with new railing, wider sidewalk, and a raised concrete median.
- b. Review the loadings and update the structural evaluation.
- c. Update the technical memorandum.

6.6 Final Plan Completion

The RK&K Team will:

- a. Respond to one set of written comments on the final plans.
- b. Make the necessary final plan changes.
- c. Finalize Cost Opinions
- d. Sign and seal all plans.
- e. Deliver final plans to Town.

Final Design Deliverables

- Final Operational Analysis
- Final Lighting Justification Report
- Updated cost estimate in VDOT's CEWB format
- Updated Roundabout Package
- Updated Structural Technical Memorandum
- Comment package with RK&K responses.
- EQ-103
- LD-436
- Updated plan set including the following sheets.
 - o Title Sheet
 - o ROW Data
 - o Revision Data Sheet
 - o Survey Control
 - o Construction Alignment
 - o Transportation Management Plan
 - o Sequence of Construction
 - o General Notes
 - o Typical Details
 - o Geometric Layout
 - o Curb Ramp Details
 - o Structure details.
 - o Storm Drainage Narrative
 - o Storm Drainage Computations
 - o Limits of Disturbance Map
 - o Existing Drainage Area Map
 - o Proposed Drainage Area Map
 - o Plan
 - o Profiles

- Stormwater Pollution Prevention Plans
- Erosion and Sediment Control
- Signing & Pavement Marking
- Lighting
- Cross Sections
- Structural Details
- EQ-121 and EQ-555

7. IFB ASSISTANCE

After plans are complete and ready for bidding, the RK&K Team will assist the Town with the preparation of the Invitation to Bid (IFB) for the project. This work will include:

- a. Assistance with the preparation of Section B to include:
 - i. assistance with development of the Construction scope
 - ii. assistance with the preparation of project special provision and details not included in the plan set.
- b. Evaluate bids for accuracy and qualifying the bidders through reference checks. RK&K will perform a low bid analysis for the bids and report to the Town.
- c. Assist in developing the required documents for VDOT approval to award.
- d. Participation in a pre-construction conference.

8. RIGHT-OF-WAY ACQUISITION SERVICES

RK&K will provide Right of Way (ROW) acquisitions services for up to 3 parcels related to Church Street NE and East St. NE Roundabout, Town of Vienna, VA.

Scope of Work

Based on our current project understanding, our Scope of Work will include the following services as outlined below:

Title Research

RK&K will perform the following services:

- Coordinate and order title searches (outsourced to subcontractor)
 - This task will include a 60-year title search to the last conveyance of General Warranty title for each parcel from which property rights are being acquired with the possible exception of those involving temporary rights only, in which case a less extensive research may be conducted as directed and approved by the Client. It is noted that property encumbrances, such as utility easements, may have been recorded prior to the period of the title search requested and therefore will not be included in the title report or supporting documentation. If such information is desired by the Client, a more extensive review search can be provided for an additional fee.
- Review of title commitments

Valuations

RK&K will perform the following services:

- Coordinate and order simple Acquisition Appraisal, (AA) reports- 3 properties (outsourced to subcontractor)
- Coordinate and order Appraisal Reviews- 3 Properties (outsourced to subcontractor)
 - It is assumed that once the appraiser has been provided an approved set of plans including a ROW Data Sheet, construction plan view sheets, cross section sheets, profile sheets and plats or ROW Sheets, no revisions to these documents will be necessary. However, if revisions are required and the appraiser is required to make changes to any completed work product and/or conduct subsequent site visits, additional fees will apply depending upon the magnitude of the work and time required.

Pre-Negotiation/Negotiation & Administration

RK&K will perform the following services:

- Attend all progress update meetings with Client (assume up to 3 meetings)
- Prepare and send Letter of Interest, as may be required by the Client.
- Evaluate appraisal and title report for use in negotiations.
- Prepare offer packages.
- Contact the property owner to present and follow-up on offer. RK&K understands when we communicate with property owners, we are representing our clients and conduct all communications in a professional and courteous manner.
 - This task will include all functions necessary in an attempt to obtain an amicable conveyance from each landowner in accordance with Client's guidelines.
 - Included services: preparation of all necessary documents that will be assembled into an offer packet to be presented to the landowner; contacting the landowner; presenting and explaining to the landowner the appraisal or basis for offer amount, title report, and construction plans and profiles (and cross sections where appropriate)
 - Landowner contact: can occur through personal visits; if necessary, telephone and email communications; mailings as required for the completion of the transaction including the obtainment of all necessary and notarized signatures on all required documents, confirmation of title objections (i.e., mortgages or other liens, judgments, estate heirs, etc.) with the landowner, and preparation of a final negotiation report on all parcels in accordance with Client's directive.
 - Negotiation meetings with property owners to include up to 3 meetings to obtain executed Deed/Easement. If approval package cannot be obtained after 3 meetings RK&K will notify the Client of the need for any supplemental funding for the additional services.
- Maintain property contact logs.
- Complete package submission to the Client for closing
- If appropriate, draft an Administrative Settlement recommendation for the Client review and approval.
- If refusal results, draft a recommendation to file a Certificate of Take if an impasse exists.
- If refusal results, explain eminent domain process to property owner, prepare and mail letter of intent to file Certificate of Take to property owner.

NOTE: It is noted that if any unknown landowner interest, the identification of which was not available prior to it being discovered through title research upon execution of the service contract, results in additional negotiation efforts, an additional fee may be warranted. If such interest is discovered, such as additional heirs through intestate succession, RK&K will notify the Client of the need for any supplemental funding for the additional services.

Clearance of Title Objections and Settlement Procedures

- Closing coordination and preparation of applicable Deed or Easement Agreements
 - This scope does not include clearance and negotiation of any title encumbrances that may arise as a result of the title search.
- It is assumed that once negotiations have been completed on a parcel, whether resulting in a voluntary conveyance or refusal, the file will be transferred to the Client with no further services required by RK&K including the provision of additional appraisals and any condemnation consultation and/or testimony. Once the conveyance instrument, whether by deed or certificate of take, has been recorded, RK&K will no longer have any responsibilities regarding management of any acquired property. This is especially noted for parcels involving the relocation of displaced occupants including such tasks as disconnecting utilities, boarding up windows, contacting the local police department, and obtainment of any applicable permits.

Utilities

- RK&K will rely upon others (engineering firm, utility relocation consultant, locality, etc.) to identify all existing utility lines that will be impacted by the proposed project and to contact the respective utility companies to determine whether their lines are within existing right-of-way through a franchise agreement or in privately owned easements by right.
- RK&K will not be responsible for obtaining applicable easement and/or right-of-entry agreements, subordinations and/or extinguishments from the private utility companies.
- This proposal assumes that no utility relocations will be required and will work to the extent practicable to eliminate or minimize any required relocations and potential need for utility easements.

Assumptions and Exclusions

RK&K recognizes the importance of the delivery of cleared right-of-way for the project owner to enter the affected properties on a timely basis. In some instances, delays will occur that are beyond the control of RK&K that may require additional time or work by RK&K. It is assumed that RK&K will be provided with and/or not responsible for the following:

- All required legal documents (or electronic samples thereof) including deeds that have been approved by a qualified licensed attorney in accordance with the Commonwealth of Virginia; approved applicable private utility easement agreements, if required; electronic copies of certified plats and construction plans sufficient for right-of-way and/or easement acquisition; and a sufficient number of recordable survey plats and legal descriptions, if applicable.

- Payment for the fee acquisitions and easements will be the responsibility of the Client.
- Title insurance fees and fees required to clear objections to title will be the responsibility of the Client if determined necessary. Title insurance is calculated at \$4.10 per \$1,000.00 if required and any Mortgage Release/Consent would \$400.00 per requirement. These fees would be determined upon receipt and review of title commitments.
- It is assumed that the values of 3 of the properties will require an AA report appraisal. If an AA appraisal is determined to be necessary for additional properties or if a NA appraisal is required for any of the properties, the cost for the additional AA or NA appraisals and the associated appraisal reviews shall be provided at an additional fee (outsourced to subcontractor).
- Titles Searches, appraisals and appraisal reviews will be performed by subcontractors. These fees have been calculated based on preliminary plans. Additional fees may be incurred due to the complexity of the parcel being acquired. Any additional expense will be passed through to the Client without mark-up and cannot be determined until incurred and therefore are not included in the total proposed fee. RK&K will be entitled to reimbursement for these expenses.

9. OPTIONAL SERVICES

9.1 Lighting Design (Pending Results of LJR): Develop preliminary and final lighting plans based on the outcome of Lighting Justification Report in Task 5.1.e. The preliminary plans will include pole locations based on photometric analysis. Final plans will consist of conduit runs for a leased lighting system based on Dominion Energy's electrical design of the system.

10. CONSTRUCTION ADMINISTRATION SERVICES

- 1) RK&K will provide a full-time VDOT Certified Senior Construction Inspector and a part-time Construction Manager for 6 months to verify conformance with plans, contract documents and in accordance with the Town and VDOT specifications and requirements.
 - o Perform required materials testing to meet VDOT requirements.
 - o Provide a daily work report (DWR) in electronic word format for each day that inspector and contractor are on site to include details of installed work, contractors' labor, equipment and materials and other relevant information to include project photos.
 - o Perform required inspections and complete forms for Work Zone safety and Environmental compliance
 - o Coordinate daily with contractor and Town's CM regarding schedule and any project issues.
 - o Maintain VDOT materials notebook (TL-142LAP) for the project.
 - o Attend the pre-construction meeting and any routine progress meetings.
 - o Interact with impacted property owners
- 2) RK&K will coordinate misc. materials' testing that we do not perform. Specific to this task will be curing and breaking of concrete cylinders and any soil proctors necessary. Lab fees associated with this testing are shown as part of the direct cost and all other materials

testing are included in the hourly rates for our inspectors. We, of course, will only bill what we use, and the Town approves prior to invoicing.

- 3) RK&K's construction manager will provide field support to our inspector and a monthly report with a breakdown of work performed and review any change orders as requested by the Town.
- 4) The specific scope identified for this task includes the monitoring of the construction activities associated with the construction of the roundabout and approaches to include any drainage or storm structures.
- 5) If needed, we will coordinate and manage the third-party testing firm special inspections engineer of record.

TASK SCHEDULE:

Work will be undertaken immediately upon authorization and will require 24 months to complete design phase services. A detailed schedule will be provided within one week of authorization.

GENERAL TASK ORDER ASSUMPTIONS AND EXCLUSIONS

1. It is understood that this is a Locally Administered Project (LAP) that includes state and federal funds. RK&K's services will be provided in accordance with the VDOT LAP Manual.
2. All work shall be performed in accordance with the Town of Vienna's Design and Construction Standards and/or VDOT standards as appropriate.
3. The Town's project manager will be responsible for reviewing all comments provided by VDOT and other agencies prior to submitting to RK&K for action. RK&K understands that the Town's project manager will make a preliminary assessment of whether or not to comply with each comment.
4. RK&K will respond to one round of comments at each project submittal. Except for the Final Design Submittal, a resubmittal will not be made unless the Town's project manager declares the milestone submittal unsatisfactory.
5. Retaining wall design will not be required.
6. No signalization, traffic monitoring devices or ITS features will be included in the design.
7. Wetland and water delineations and/or preparation of a request for a jurisdictional determination of delineated wetlands and waters is/are excluded.
8. VDOT will provide the necessary WOUS and permit information to the Town for completion of the project's EQ-555.
9. Threatened and endangered species and habitat surveys, and consultation services, are excluded.
10. Cultural resource evaluations, V-CRIS review, ePIX submittal, and/or Section 106 consultation with the Virginia Department of Historic Resources is/are excluded.

11. Phase I archaeological testing, Phase II significance evaluations, and Phase III archaeological data recovery or other mitigation measures as well as any archaeological permit coordination is excluded.
12. Architectural survey and reporting, including identification, evaluation, and effects, and/or consultation with consulting parties is/are excluded.
13. Preparation of an agreement document to resolve adverse effects under Section 106 and/or mitigation measures is/are excluded.
14. Preparation of a VDOT NEPA Concurrence Form is excluded.
15. Section 4(f) programmatic and/or individual evaluations, water quality permit acquisition, air quality analysis, noise analysis, environmental justice analysis, and/or Phase I Environmental Site Assessment services is/are excluded.
16. RK&K understands that the bridge structure over Wolf Trap Creek is to be retained and any proposed design will tie into the bridge structure. RK&K will rely on bridge plans and inspection reports provided by the Town in determining how modifications to the sidewalks will be performed to accommodate the new features. Should it be determined that any portion of the deck structure, other than modifying the parapets or sidewalks, be required, then additional fees will be required.
17. Public involvement will be limited to one (1) in-person meeting with citizens and members of the Town Council. This meeting will not be a public hearing as defined by VDOT.
18. All proposed work will be designed in such a way as to avoid improvements resulting in fill or excavation in the floodplain and encroachment into the floodway of Wolf Trap Creek. Per confirmation from the Town, RK&K's services will not include any H&HA or scour analysis work.
19. Town of Vienna being within Chesapeake Bay Preservation Area will be subject to VSMP requirements.
20. It is assumed that the proposed improvements will include milling and overlay of the existing pavements, rather than complete reconstruction of the existing pavements. Should reconstruction of the existing pavements be required, such areas will be exempt from stormwater management requirements per VDOT Instructional & Informational Memorandum (IIM-LD-195.13).
21. It is assumed that the stormwater management water quality requirements will be met via purchase of nutrient credits; Water quantity/Quality control will not be required.
22. Erosion and sediment control design will be one (1) phase for ultimate conditions only.
23. Environmental NEPA analysis and documentation will be VDOT's responsibility.
24. Design will be developed in CAD via Bentley's OpenRoads Designer.
25. It is understood that the Town typically does not include a pre-bid conference or a pre-construction conference, so no effort is included in this estimate for these activities.
26. All design submissions will be submitted digitally.

27. Any service not explicitly listed is excluded.

28. This effort assumes that no Design Waivers or Design Exceptions will be required for the project.

29. RK&K Project Manager will provide monthly invoices and progress reports.

SCHEDULE OF FEES:

Subtask Numbers	Description	Hours	Fee	Totals
Design Services				
1	Project Management and Design	105	\$19,754	\$19,754
2 - 4	Public Involvement	24	\$ 3,303	\$89,295
	Surveying and Geotechnical Services	172	\$ 71,337	
	Minimal Impact Concept	95	\$14,656	
5 - 8	Preliminary Design Services	657	\$92,767	\$227,255
	Final Plan Submittal	737	\$104,583	
	IFB Assistance	71	\$12,162	
	Right-of-Way Acquisition Services	120	\$17,743	
	Direct Expense/Subcontractors		\$24,754	\$24,754
Subtotal Base Design		1,981		\$361,059
9	Optional Preliminary and Final Lighting Design	130	\$ 18,070	\$18,070
GRAND TOTAL – ALL DESIGN SERVICES		2,111		\$379,129
Construction Phase Services				
10	Construction Administration Services	1,386	\$167,107	\$167,107

ATTACHMENTS:

- A. Legacy Engineering, Inc. Proposal for Surveying and Mapping
- B. American Geotechnical and Environmental Services Proposal for Geotechnical Exploration
- C. CES Consulting LLC Proposal for Engineering Support and Utility Coordination
- D. Project Schedule
- E. Breakdown of Fees and Charges

ATTACHMENT A

Legacy Engineering, Inc. Proposal for Surveying and Mapping

ATTACHMENT B

American Geotechnical and Environmental Services Proposal for Geotechnical Exploration

ATTACHMENT C

CES Consulting LLC Proposal for Engineering Support and Utility Coordination

ATTACHMENT D

Breakdown of Fees and Charges

ATTACHMENT A

Legacy Engineering, Inc. Proposal for Surveying and Mapping



March 6, 2024

Via email: jmcdowell@rkk.com

Mr. John McDowell, PE, F. ASCE
RK&K
12600 Fair Lakes Circle, Suite 300
Fairfax, VA 22033

Re: East and Church Street
Topographic Survey & Base Map for Roundabout Design
Town of Vienna, Virginia

Proposal No. 9303-01

Dear Mr. McDowell:

We are pleased to offer this proposal to perform surveying services for your property identified above, in the Town of Vienna, Virginia. This proposal will be to prepare a topographic base sheet and above-ground utilities, boundary surveys, as-builts of the utilities, underground location of the utilities, and dedication plats for the improvements. Scope and details are below on pages 2-4. The area to be surveyed is an area along three legs of the intersection of Church Street NE and East Street NE.

If available, the Client will provide the following electronic drawing files compatible with AutoCAD 2020; final approved site plans; a boundary survey; a topographic survey; any applicable sketches, renderings or exhibits; zoning drawings; preliminary plans; associated construction plans and record plats. Additionally, we will need copies of any proffers, covenants and/or binding agreements; wetland delineations and/or permits; geotechnical or soils reports and/or studies; survey coordinate information on any established property corners and monumentation or control stations associated with the property as well as a copy of a recent title report. If not available, we shall use publicly available records.

We propose to perform the following services:

Base Contract			
Item	Description	Fee Basis	Fee
366	Property Owner Notifications	Lump Sum	\$800.00
335	Field Run Topography & Base Map	Lump Sum	\$5,400.00
437	Utility As-built Survey	Lump Sum	\$1,100.00
265	Easement Plats - (3) at \$3,200/Plat	Per Plat	\$9,600.00
484	SUE Work	Lump Sum	\$12,500.00
TOTAL			\$29,400.00
Optional Items			
215	Meetings and Consultation	Estimated	\$1,200.00

ENVIRONMENTAL, GEOTECHNICAL, SOILS, TRAFFIC, and ARCHITECTURE

Legacy will work with the client and the various consulting firms to address issues as they may arise. Additional tasks may result from those consultations. There appear to be jurisdictional wetlands on this property which may be impacted by development. As such, an environmental consultant may be needed.

Base Contract

Property Owner Notifications (item 366)

We shall research and compile a list of all adjoining properties with the owners' names and addresses. We shall mail (certified) a notification letter to those adjoining property owners, as required by the jurisdiction. Postage costs will be billed as a reimbursable.

Field Run Topography & Base Map (item 335)

We shall perform a detailed field run survey resulting in one foot (1') contour interval topography. It is our estimate ± 1.5 acres will be surveyed, including a small overlap around the entire periphery of the sidewalk extension. Physical features within the limits of the survey will be identified including selected critical spot elevations, the location and elevation of the existing edge of pavement and ditch line along interior and immediately adjacent roadways, location and elevation of existing wet utilities and storm drainage structures in the proximity of the project limits, particularly those for which tie-ins are proposed. This topographic survey will be of a level of accuracy suitable for engineering design.

We reserve the right to use drone/aerial technology to obtain the topographic information at our sole discretion, maintaining the same design tolerances which would be achieved with field-run survey methods.

This task also includes extensive Land Records research in order to build the geometry for the adjoining Parcels. Survey field crews will also recover existing property monumentation in the area of the R/W. This task does NOT include certified boundary surveys of any Parcels. *See Item 484 below.*

Utility As-built Survey (item 437)

We shall survey on-site or immediately adjacent utility infrastructure for water, storm, and sanitary sewer for the above-referenced project which will be suitable for final design to tie to that utility. The field survey of the as-built conditions will include, specifically, the horizontal location, top elevations and inverts of sanitary sewer and storm sewer structures, and the horizontal location (only) of readily visible waterline appurtenances. The client is responsible for uncovering and clearing off all manhole lids so we may access the inverts. *See Item 484 below.*

R/W Dedication and/or Easement Plats (item 265)

A plat showing the dedication of easements/dedications for Church and/or East Streets in the area of the roundabout will be prepared in conformance with the ordinances of the local jurisdiction. A plat showing easements, or dedication of right-of-way & easements, for Church and/or East Streets will be prepared in conformance with the ordinances of the local jurisdiction. These Plats will be made suitable for recordation among their land records. If any deed preparation is required in conjunction with this task, it shall be provided by others. *The fee includes addressing one (1) round of comments from the Town of Vienna. City Submission fees are not included in this proposal. Estimated (3) Plats will be needed (\$3,400/Plat), if less than (3) Plats are needed Legacy will invoice accordingly.*

SUE (Subsurface Utility Engineering) - (item 484)

Legacy shall subcontract the work with an outside consulting firm (SAM, LLC) for underground utility locations within the project boundaries. All such utilities located will be added to the topographic base sheet prepared by Legacy. *See scope & conditions below.*

Optional Items

General Consulting, Meetings and Coordination (item 215)

If required, this task includes communication and coordination efforts associated with meetings, conferences, plan and plat submission and/or processing, teleconferences and communications, and general consulting. Such coordination efforts might include, but not necessarily limited to, addressing second submission and subsequent comments, contacts with the Client, various

East and Church Streets – Roundabout Survey

Proposal No. 9303-01

Page 4 of 7

governmental officials, contractors, builders, consultants, architects, geotechnical engineers, transportation engineers, and wetland/environmental consultants. Submission coordination will include compiling documents, plans, review fees, etc. and coordinating with public review agencies.

We welcome the opportunity to provide these surveying services for you. If this proposal is acceptable, please execute one copy and return it to our office. Should you have any questions, please feel free to contact us.

Very truly yours,

LEGACY ENGINEERING, P.C.



Kevin D. Shreiner, LS, PS
Director of National Land Surveys

Work will be invoiced monthly, as work progresses. All jurisdictional and agency review fees, deed preparation, title work, and release of other consultant work will be the responsibility of the Client. Our "General Conditions of Service" are an integral part of our proposal and are attached.

SUE Work Scope, Conditions and Exclusions

Industry Standard of Care – All aspects of the subsurface utility engineering performed on this project will be in accordance with ASCE Standard 38-22 “Standard Guideline for Investigating and Documenting Existing Utilities” and industry standards as of the date of the Notice to Proceed.

Project Understanding and Approach:

The roadway roundabout improvement project includes East Street NE (approximately 350') and Church Street NE (approximately 250') in the Town of Vienna. The entire Project limits are depicted on Attachment “D”.

Utility Designating –

T2ue will complete a SUE investigation in accordance with “ASCE Standard 38-22 Standard Guideline for Investigating and Documenting Existing Utilities”. T2ue will search within the project limits. “Attachment D- Project Limits” depicts the location of the area to be designated for the existence and approximate location of subsurface utilities except those listed under “Attachment B – Conditions and Exclusions”.

T2ue will research available record information of existing utilities within the project area. The records will be used to determine the existence of facilities and will not be utilized as actual designating information. In the event that a particular utility is not able to be located to the tolerances of ASCE Quality Level B, record information will be depicted in accordance with Quality Level D or C.

Using geophysical methods, T2ue will field locate and mark the approximate horizontal location of the existing conductive utilities (mains and services) within the Project Limits. For the purposes of locating non-conductive utility lines, T2ue may, if needed, utilize Ground Penetrating Radar (GPR). The effectiveness of GPR is dependent on consistent soil conditions. T2ue has experienced some degree of success in this area with respect to GPR. If it is effective, the GPR can locate plastic, concrete and/or other non-metallic utilities. Due to the nature of this technology, T2ue cannot guarantee the effectiveness of the GPR.

The Project Surveyor will provide topographic files and project survey control. T2ue will survey the subsurface utility marks and related above ground utility features (WV, Peds, E-Transformers, etc.). The data will be processed, and a CAD file will be generated in the project datum. The CAD file will be generated in accordance with the CAD requirements of the project, specifically the software and line- styles as required by The Town of Vienna. The utility file will be able to be referenced into the base topography that was gathered by others. Once the data has been collected and reviewed, T2ue will provide the utility file certified as being in compliance with ASCE 38-22 Quality Level B.

- T2ue shall not work other than 7:00 AM to 6:00 PM, Monday through Friday, unless required by the Town of Vienna.
- T2ue will not enter into any confined spaces such as vaults and sewer or drain manholes.
- Designating gravity sanitary sewer, gravity sanitary sewer laterals, irrigation systems, traffic control loops and storm drainage lines are not included.
- GPR is fully dependent on the composition of site soils and reacts negatively to highly conductive soils (namely clays and saturated soils). In ideal conditions with highly resistive soils (sands), GPR can be expected to penetrate to a maximum of 10 feet. Soils with significant clay content commonly limit GPR depth penetration to 3 feet or less. For this reason, it is possible that GPR data may prove inconclusive.
- Unless the property owner provides access, property behind fences will not be included.
- Excessive clearing and grubbing of overgrowth is not included.
- T2ue will be responsible for negligent acts, errors, or omissions for its services as outlined within this Scope of Services.
- Client Team will provide:
 - Right of Entry notification
 - Existing topographic survey
 - survey control
 - previously collected utility records, points of contact, as-builts and electronic files.

Legacy Engineering, P.C.
PROPOSAL ACCEPTANCE

Proposal Number: 9303-00
Scope of Work: Topographic Mapping
Location: Town of Vienna, VA

Client Signature:_____

Date of Acceptance:_____

Please complete and return this page to Legacy Engineering Inc.; to indicate acceptance of this proposal and to initiate work on the above referenced project.

BILLING INFORMATION

(Please Print or Type)

Name of Client:_____

Name of Contact Person:_____

Telephone No. of Contact:_____

Party Responsible for Payment:_____

Company Name:_____

Person/Title:_____

Department:_____

Billing Address:_____

Telephone Number:_____

Email address:_____



ATTACHMENT B

American Geotechnical and Environmental Services Proposal for Geotechnical Exploration



American Geotechnical & Environmental Services, Inc.

February 27, 2024

Mr. John McDowell, P.E.
RK&K
12600 Fair Lakes Circle, Suite 300
Fairfax, Virginia 22033

Re: Church Street NE and East Street NE - Roundabout
Contract No. 23-17 – On-Call Engineering Services for Local/State/Federal Projects
Town of Vienna, Fairfax County, Virginia

Technical Proposal – Geotechnical Design Services

Dear Mr. McDowell:

American Geotechnical & Environmental Services (A.G.E.S.), Inc. is pleased to provide its technical proposal to provide geotechnical design services as a subconsultant to Rummel, Klepper & Kahl (RK&K) for the above referenced project. The task was assigned under the Town of Vienna Contract No. 23-17 – On-Call Engineering Services for Local/State/Federal Projects.

We wish to extend our appreciation for this opportunity to participate with you in your proposal for this project. Should you have any questions, or require any additional information, please contact us.

Very truly yours,

American Geotechnical & Environmental Services, Inc.

Adam Marolf, P.E., BC GE
Senior Geotechnical Engineer /
Branch Manager

GEOTECHNICAL DESIGN SERVICES

In collaboration with RK&K, A.G.E.S., Inc. will perform geotechnical design services and prepare the Geotechnical Engineering Report (GER) for the Church Street NE and East Street NE Roundabout in the Town of Vienna. The work described below also includes project management, invoicing and general coordination with RK&K concerning schedule. Deliverables will be submitted as electronic (pdf) files, paper submissions will not be required.

The Town of Vienna is located within the Piedmont Upland Physiographic Section with bedrock belonging to the Mather Gorge Formation (schist), Popes Head Formation (metasandstone and phyllite), and the tertiary Miocene Sand and Gravel (at the northeastern portion of the town limits). Mapped marine and non-marine shrink-swell soils are not present within the town limits. Potential asbestos containing soils are not mapped within the town. Depth to bedrock is expected to be relatively shallow throughout most of the town.

Subsurface exploration and laboratory testing will be required for the geotechnical design. The spacing and depth of the proposed borings are based on Table 3-1 (Guidelines for Minimum Number of Investigation Points and Depths of Investigation) from the VDOT Materials Division Manual of Instructions, Chapter III and the 2016 Road & Bridge Standards for Asphalt Pavement Widening (WP-2) Drawing 303.02. The following provides a summary of the various geotechnical design elements:

Roadway and Subgrade

Based on the proposed roadway length of approximately 100 feet from each of the three (3) legs of the roundabout and the anticipated work within the footprint of the existing roadway, it is anticipated that a total of seven (7) roadway and subgrade borings are to be drilled. Pavement cores will also be collected in each of the borings to evaluate the condition of the existing asphalt on Church Street NE and East Street NE. The borings will be located within the existing pavement and will require Maintenance of Traffic. The subgrade borings will extend a minimum of 10 feet below existing roadway grade or refusal, whichever occurs first. The subgrade borings

will be used to evaluate the presence of unsuitable materials prior to construction. It is our recommendation that three (3) standard Proctor and California Bearing Ratio (CBR) tests be performed on bulk samples to support the subgrade and pavement design.

The subsurface information will also be utilized for considerations of embankment global stability and settlement for the proposed embankments which are expected to be generally less than 5 feet in height and no steeper than 3H:1V. Due to minimal slope height and slope, undisturbed Shelby tube samples are not considered warranted for soil strength testing as standard soil parameters will be utilized from “Soil Design Parameters for Sound Barrier Walls, Retaining Walls, and Non-Critical Slopes, Northern Virginia District” dated August 2023.

Pavement Evaluation

As discussed previously, seven (7) pavement cores will be collected to evaluate the pavement condition for pavement salvage and widening. Based on the results of the subgrade testing and pavement condition, we will provide analysis using the 1993 AASHTO method and the 2018 VDOT Pavement Design for Subdivision and Secondary Roads in Virginia to confirm whether the existing pavement section is adequate for the roadways.

Retaining Walls

Based on discussions with RK&K, retaining walls will not be required for this location.

Stormwater Management Facilities

Based on discussions with RK&K, stormwater management facilities will not be required for this project as the area of impervious coverage is not expected to be increased.

Sign Structures, Signal and Light Poles

There are no sign structures, signal poles, or light poles other than standard light poles to be considered for this project.

Drainage Pipes and Structure

It is not expected that significant changes will be required to the drainage pipes and structures. Specific borings will not be drilled for this purpose, but the information collected for the roadway and subgrade will provide general characteristics of the soil if minor drainage pipe reconstruction is to be considered. There is an existing four (4) cell box culvert structure to the east of the intersection on East Street NE that will not be modified as part of this project, but it will require evaluation due to changes to the lane configuration for the roundabout (concrete island, curb and gutter, grading behind curb line). The two (2) borings located to the southeast of the intersection will be extended to 20 feet in order to provide additional subsurface information to evaluate the material located beneath the culvert foundations.

Soil Laboratory Testing

Based on the borings that are to be drilled, laboratory testing will be performed and will consist of the following:

- 45 moisture content tests
- 9 soil classification (including Atterberg limits) tests
- 3 standard Proctor tests
- 3 California Bearing Ratio (CBR), 1-point tests
- 1 soil corrosivity test
- 1 water corrosivity test

Specific work elements to be completed by A.G.E.S., Inc. are as follows:

- Complete a literature search of readily available published soils and geologic information.
- Request and review previously completed subsurface explorations within the Town of Vienna near the project location.
- Perform a site reconnaissance to identify geotechnical conditions in relationship to the proposed construction.
- Prepare a brief letter with recommendations for proposed subsurface exploration program, including boring location plan and schedule of borings, and submit to Town of Vienna for review and approval.
- Administer and execute a subcontract and make payment to a drilling contractor to perform the subsurface investigation.
- As the boring locations are on the existing pavement, it is anticipated that permits will not be required, other than through the Town of Vienna, to perform the subsurface investigation.
- Proposed boring locations will be surveyed and staked by others. If necessary, RK&K will obtain right-of-entry from property owners prior to mobilization of the drilling contractor and provide copies of the letters for the inspector to have on-site during drilling operations.
- The drilling contractor will perform a Miss Utility call in advance of their field activities after the boring locations have been staked. Boring locations will be shifted away from known utilities as necessary.
- Maintenance of Traffic will be required as the borings will be drilled on or near the roadways and will be provided by the drilling subcontractor. As the roadway is owned by

the town, notifications through the Lane Closure Advisory Management System (LCAMS) and VA Traffic systems will not be required.

- Drilling activities will occur during daytime hours with assumed work hours of 8:30am to 3:30pm for roadway borings.
- The drilling contractor will access the boring locations from town right-of-way when practical to minimize disturbance to adjacent properties.
- During the drilling operations, A.G.E.S., Inc. will provide an on-site trained boring inspector familiar with the local geology and the requirements of VDOT Materials Division Manual of Instructions, Chapter 3.
- Borehole infiltration testing will not be required based on discussions with RK&K.
- There are no known hazardous materials to be considered for drilling operations.
- Containerization and offsite disposal of drill cuttings will not be required. Drill cuttings will be returned to the borehole upon completion of the final water level reading. Borings on the roadway will be patched at the surface with asphalt or non-shrink cement grout.
- Upon completion of the drilling, the soil jar samples will be transported to our soil laboratory for testing. If there are rock core samples, they will be stored in core boxes and we will deliver them to the Town of Vienna for storage until our reports have been approved.
- The boring logs will be presented using the VDOT gINT templates.
- Interpret the subsurface data and prepare plotted generalized geologic profiles.

- Based on a review of the subsurface conditions, perform geotechnical analyses, and provide recommended geotechnical input parameters for use in the pavement, roadway, and minor structure designs to be performed by RK&K. Geotechnical recommendations for stormwater facilities are not required based on discussions with RK&K.
- As necessary, pavement subgrade treatments for unsuitable materials will be recommended and will include a combination of removing unsuitable soils and replacement with suitable material, drying and moisture conditioning to allow for proper compaction, modifying with lime or cement (as a method of drying and compacting), or the use of aggregate and geosynthetic.
- Analysis will be performed for the pavement (structural number) and minor structure bearing materials and will be performed using standard equations from design manuals.
- The design will be in accordance with VDOT Materials Divisions Manual of Instructions Chapter III (Geotechnical Engineering) and Chapter VI (Pavement Design and Evaluation), in addition to the requirements of the Fairfax County Public Facilities Manual (PFM) as necessary.
- Soil and bedrock parameters will be determined based on the actual subsurface conditions but will not exceed the maximum limiting values defined in the VDOT document titled “Soil Design Parameters for Sound Barrier Walls, Retaining Walls, and Non-Critical Slopes, Northern Virginia District” and dated August 2023.
- Based on the results of the subsurface exploration and geotechnical analyses, A.G.E.S., Inc. will prepare the Geotechnical Engineering Reports (GER) in accordance with the requirements of VDOT Materials Division Manual of Instructions, Chapter 3 – Geotechnical Requirements, Section 306.03. The report will include project description, background information, subsurface exploration data, laboratory testing data, design parameters and analyses (including independently checked calculations and software output), and geotechnical recommendations. The report will include geotechnical special

provisions and details for construction as necessary. It is intended that the report submission will be a Multi-Purpose GER that includes various elements of the project in a single submission.

- It is expected that embankment fill slopes and cut slopes will not be steeper than 3H:1V and the height will be less than 5 feet. Global slope stability analysis is not expected to be required. Retaining walls will not be required.
- Evaluation of the increased loading on the box culvert foundations to consider impacts to bearing resistance and settlement. Separate recommendations are not expected for the box culvert due to the minor loading increases.
- Coordinate with RK&K for preparation of geotechnical details and geotechnical design notes for construction plans for items that are not adequately addressed in the Standard Specifications.
- A.G.E.S., Inc. will perform an internal quality control review of the Geotechnical Engineering Report performed by us in accordance with our company policies. After completion of the review, the reports will be submitted to RK&K.
- Address review comments and submit revised copies of the report as necessary. It is assumed that one resubmission will be required.
- Attend status meetings at the office of RK&K or the Town of Vienna during the design.
- A.G.E.S., Inc. will provide construction consultation on an as-needed basis. It is assumed that a maximum of one (1) site visit will be required during construction to view the pavement subgrade material.
- Our scope of services excludes blasting consultation, environmental and hazardous waste recommendations, and full-time on-site construction inspection.

- If additional items are needed or required, A.G.E.S., Inc. can modify this proposal or submit a separate proposal to cover additional work desired.

Monthly progress invoices will be submitted based on actual completion of each item as outlined above and there will be no retainage on invoiced amounts.

A.G.E.S., Inc. is a certified Disadvantaged Business Enterprise (DBE) and Small, Woman-owned, and Minority-owned (SWaM) Business.

AMERICAN GEOTECHNICAL & ENVIRONMENTAL SERVICES, INC.
CHURCH STREET NE AND EAST STREET NE - ROUNDABOUT
CONTRACT NO. 23-17 - ON-CALL ENGINEERING SERVICES
TOWN OF VIENNA, FAIRFAX COUNTY, VIRGINIA

Direct Payroll Costs	\$	7,230.68	(a)
Overhead (141.670%)	\$	10,243.70	(b)
Subtotal - Direct & Indirect Payroll Costs	\$	17,474.38	(c)
Fixed Fee (10.0% of Direct & Indirect Payroll)	\$	1,747.44	(d)
Direct Costs Other Than Payroll	\$	3,500.63	(e)
Direct Cost of Work and Services Performed by Others	\$	13,500.00	(f)
Subtotal (c+d+e+f)	\$	36,222.46	(g)
Premium Pay	\$	0.00	(h)
Total Engineering Cost	\$	36,222.46	(i)

This proposal contains \$22,722.46 of Certified Disadvantaged Business Enterprise participation by A.G.E.S., Inc. representing 63% of the total proposed amount.

Proposed Method of Payment:	Cost Plus Fixed Fee
Proposed Agreement Period:	12 months
Total Estimated Man-Hours:	146 hours

American Geotechnical & Environmental Services, Inc.
1765 Greensboro Station Place, McLean, VA 22102

Federal I.D. No. 25-1759733

Contact Person: Adam Marolf, P.E., Senior Geotechnical Engineer / Branch Manager
(703) 481-9832

Proposal Prepared by: Adam Marolf, P.E., Senior Geotechnical Engineer / Branch Manager

ANTICIPATED PROJECT EMPLOYEES AVERAGE HOURLY RATES

Payroll Classification	Average Hourly Rate	
	First 12 months	Second 12 months
Senior Geotechnical Engineer	\$ 79.55	\$ 81.94
Project Engineer / Geologist	\$ 52.18	\$ 53.75
Staff Engineer / Geologist	\$ 39.40	\$ 40.58
Administration / CAD Technician	\$ 29.83	\$ 30.73

ON-CALL ENGINEERING SERVICES**Drilling Inspection and Coordination**

Estimated Time:	46	hrs							
Senior Geotechnical Engineer	4	hrs.	@	\$	79.55	=	\$	318.20	
Project Engineer / Geologist	8	hrs.	@	\$	52.18	=	\$	417.44	
Staff Engineer / Geologist	30	hrs.	@	\$	39.40	=	\$	1,182.00	
Administration / CAD Technician	4	hrs.	@	\$	29.83	=	\$	119.32	
	46						\$	2,036.96	

Geotechnical Engineering Reports

Estimated Time:	92	hrs							
Senior Geotechnical Engineer	13	hrs.	@	\$	81.94	=	\$	1,065.22	
Project Engineer / Geologist	33	hrs.	@	\$	53.75	=	\$	1,773.75	
Staff Engineer / Geologist	29	hrs.	@	\$	40.58	=	\$	1,176.82	
Administration / CAD Technician	17	hrs.	@	\$	30.73	=	\$	522.41	
	92	hrs.					\$	4,538.20	

Geotechnical Construction Consultation

Estimated Time:	8	hrs							
Senior Geotechnical Engineer	8	hrs.	@	\$	81.94	=	\$	655.52	
	8	hrs.					\$	655.52	

Total Man-Hours **146 hrs.**
Total Direct Labor **\$ 7,230.68**

OVERHEAD

The most recent FAR audited overhead rate for American Geotechnical & Environmental Services, Inc. which we will utilize for this project is 141.67%.

Direct Payroll Costs	=	\$	7,230.68
141.670% x \$ 7,230.68	+	\$	10,243.70
		\$	17,474.38

FIXED FEE

Direct/Indirect Payroll Costs Without Escalation	=	\$	17,474.38
	x		10.00%
Fixed Fee		\$	1,747.44

DIRECT COSTS OTHER THAN PAYROLL

(a) Travel									
Meetings	2	x	2	x	4	=	16	miles	
Site Visit	1	x	2	x	3	=	6	miles	
Drilling Inspection	3	x	2	x	3	=	18	miles	
Construction Consultation	1	x	2	x	3	=	6	miles	
							<u>46</u>	<u>miles</u>	
46 miles @ 0.655 /mile = \$ 30.13									

(b) Geotechnical Laboratory Testing

Include \$ **3,470.50** to perform soil classification, moisture content, Standard Proctor, California Bearing Ratio (CBR), soil and water corrosion testing

SUMMARY

(a) Travel	\$	30.13
(c) Geotechnical Laboratory Testing	\$	3,470.50
Total Direct Costs Other Than Payroll	\$	3,500.63

DIRECT COST OF WORK AND SERVICES PERFORMED BY OTHERS**(a) Drilling Subcontractor**

Include \$ **7,050.00** to subcontract with All American Geotech, Inc. to provide drilling services for a maximum of three (3) drilling days.

(b) Maintenance of Traffic

Include \$ **6,450.00** for the drilling subcontractor to provide Maintenance of Traffic (MOT) for a maximum of three (3) days during drilling operations. If the Town of Vienna provides MOT, this item will not be utilized.

SUMMARY

(a) Drilling Subcontractor	\$	7,050.00
(b) Maintenance of Traffic	\$	6,450.00
	\$	13,500.00

ESCALATION OF DIRECT AND INDIRECT PAYROLL COSTS

Considered based on First 12 Months and Second 12 Months rates for various tasks.

PREMIUM PAY FOR OVERTIME AND/OR HAZARDOUS DUTY

None

NON-PROFESSIONAL SUBCONTRACTS

None

ATTACHMENT C

CES Consulting LLC Proposal for Engineering Support and Utility Coordination



Date: ~~November 6, 2023.~~
March 6, 2024.

Project: East Street NE and Church Street NE Mini Roundabout

Contract: On-Call Engineering Services for Local/ State/ Federal Projects

Owner: Town of Vienna

Prime Consultant: Rummel, Klepper & Kahl, LLP (RK&K)

Project Description: This project will convert an existing T-intersection which receives a large volume of traffic into a mini roundabout that will more efficiently and safely manage traffic through the intersection.

CES Consulting LLC (CES) is pleased to submit this proposal to provide design services for the following tasks:

- Task 1 - Cost Estimates at different project milestones
- Task 2 – Utility Coordination

Scope of Work

Task 1: Cost Estimating

CES will provide the following:

- Update the cost estimate and prepare VDOT CEWB to identify the funding deficit
- Prepare cost estimates at two different project milestones
 - 60% Design
 - Final Design

The cost estimate packages will be prepared in accordance with the VDOT Cost Estimating Manual and will include the VDOT Construction Estimate Workbook and risk register. The contingencies will be based on risks identified by the project team.

Task 2: Utility Coordination

CES will provide utility coordination services for the project. Based on the preliminary review, the following utilities are present within the project limits:

- Overhead 3-Phase Power with neutral crossing intersection
- Underground Manhole (Unknown)
- Natural Gas Meter on house adjacent to project & Gas Testing Station in roadway east of intersection along East Street

- Communications Handhole with Marker Post near existing power pole northeast of intersection

CES will perform all the utility coordination, and conflict analysis needed for the project. The proposed project will be designed to avoid conflicts with existing utilities to the greatest extent practical.

The utility coordination activities will include the following:

- Pre- Utility Field Inspection activities
 - perform field visits to verify and validate the utility designations
 - make initial contact with the affected utility company representatives
 - review the site conditions and discuss the project's design concept with the design engineers
- Schedule and hold a Preliminary Utility Field Inspection (PUFI) meeting with the utility companies.
 - The purpose of the meeting is to ensure that all of the utility systems are shown on the plans, determine if there are any facilities that have long lead times to relocate or are expensive to adjust, obtain utility as-builts, and identify any planned upgrades to the facilities
 - CES will develop a preliminary utility memorandum identifying the utility companies, conflicts, meeting minutes with the utility companies, preliminary findings, and specific strategies for each utility.
- Utility Field Inspection
 - As the design continues, we will evaluate conflicts and develop preliminary mitigation strategies to resolve the conflicts in the most effective way possible.
 - Once the 60% design plans are developed, the Town and CES will then conduct a Utility Field Inspection meeting with all utilities within the project limits.
 - The purpose of this meeting will be to review the 60% design and confirm any relocation or adjustment to the utilities that may be needed. Electronic copies of the plans will be provided to impacted utility companies to determine easement requirements
 - During this meeting, we will focus the utility companies' attention on the due date for any requested easements requirements, relocation plan and estimate delivery dates, as well as the overall schedule of events.
- Plan and Estimate Submission
 - At the end of this process, the utility companies will provide their Plan and Estimate Package to identify the cost, schedule, and scope of the utility relocation efforts. CES will review the plan and estimates (P&Es) for accuracy

to determine that all the identified conflicts will be resolved with the relocation of the specific utility.

Assumptions and Exclusions

- A Subsurface Utility Engineering (SUE) will be completed by others to designate the location of the existing utilities. This information should meet a minimum of a Quality Level B utility data standards.
- Utility test pits (if needed) will be performed by others
- If any new Land Use Permit applications show proposed work near or within the project limits, the Town will notify the project team immediately
- Utility relocation plans will be prepared by others
- Construction inspection of utility installations will be performed by others

Fee Estimate

See attached Fee Estimate.



East Street NE and Church Street NE Mini Roundabout
Contract: On Call Engineering Services for Local/ State/ Federal Projects
Town of Vienna
PRICE SUMMARY (COMBINED PHASES)

1. DIRECT LABOR

Classification		Hours	Rate	Cost	Total
Principal Engineer	6.6%	12.0	\$215.72	\$2,588.64	
Senior Engineer	41.8%	76.0	\$163.60	\$12,433.60	
Engineer	51.6%	94.0	\$119.56	\$11,238.64	
Jr. Engineer	0.0%	0.0	\$94.90	\$0.00	
Designer/ Drafter	0.0%	0.0	\$135.01	\$0.00	
Administrative Assistant	0.0%	0.0	\$68.54	\$0.00	
Direct Labor		182.0		\$26,260.88	
TOTAL DIRECT LABOR (1)					\$26,260.88

2. OTHER DIRECT COSTS

		Quantity	Rate	Cost	
a. TRAVEL					
Transportation		250.0	@ \$0.655 / mi	\$140.00	
Per Diem		0.0	\$7.50	\$0.00	
SUBTOTAL(2a):				\$140.00	
b. EQUIPMENT, MATERIALS					
B&W Copies (11x17)		0	\$0.36	\$0.00	
Color Copies (11x17)		0	\$1.50	\$0.00	
Presentation Boards (48"X36")			\$30.00	\$0.00	
SUB TOTAL (2b)				\$0.00	
c. SUBCONTRACTS/SUBDISCIPLINES					
N/A					
SUBTOTAL(2c):				\$0.00	
TOTAL OTHER DIRECT COSTS (2a+2b+2c)					\$140.00

3. TOTAL ESTIMATED COST
\$26,400.88

East Street NE and Church Street NE Mini Roundabout
Contract: On Call Engineering Services for Local/ State/ Federal Projects
Town of Vienna



Direct Labor Estimate

Task No.	Task Description	STAFF HOURS BY EMPLOYEE CLASSIFICATION							Total Labor Estimate
		Principal Engineer	Senior Engineer	Engineer	Jr. Engineer	Designer/ Drafter	Administrative Assistant	Subtask Total Hours	
1	Scoping and Preliminary Design Phase	4	24	26	-	-	-	54	\$ 7,897.84
	Field Visits		4	4				8	
	Utility Coordination		4	16				20	
	Pre-UF1 meeting		4	4				8	
	Cost Estimate - Application Update	2	12	2				16	
	Project Management, QA/ QC	2						2	
2	Detail Design Phase	3	28	36	-	-	-	67	\$ 9,532.12
	Utility Coordination		8	32				40	
	UF1 meeting		4	4				8	
	Cost Estimate - PH	1	16					17	
	Project Management, QA/ QC	2						2	
3	Right of Way and Utility Authorization	2	12	28	-	-	-	42	\$ 5,742.32
	Utility Agreements and UT-9 forms		8	24				32	
	Utility P&E review		4	4				8	
	Project Management, QA/ QC	2						2	
4	Final Design	3	12	4	-	-	-	19	\$ 3,088.60
	Cost Estimate - PAC	2	8	4				14	
	Bid Review assistance	1	4					5	
	Total Hours	12	76	94	-	-	-	182	
	Wage Rate	\$ 215.72	\$ 163.60	\$ 119.56	\$ 94.90	\$ 135.01	\$ 68.54		
	Burdened Cost	\$ 2,588.64	\$ 12,433.60	\$ 11,238.64	\$ -	\$ -	\$ -		\$ 26,260.88

ATTACHMENT D

Breakdown of Fees and Charges

Task Order No. 23087.001 Church Street NE & East Street NE Roundabout

March 8, 2024

SubTask Number	Task Description	RK&K												
		Project Manager	Task Leader	Senior Professional	Project Professional III	Project Professional II	Project Professional I	Professional II	Professional I	Administrative Assistant	Construction Manager	Senior Inspector	Inspector	Total Estimated Hours
	Assigned Personnel	J McDowell S Samberg	M Arnone A Moy S Yamijala	R Mora R Rose S Larsen	B O'Donnell F Menke M Bhandari	P Phillips T Roys W Leonetti	B Bondalapati Z High H Chen	M Fohs P Hanson R Hin	B Cortez M Ajlan A Gutierrez	A McIntyre	T DiLiscia			
RK&K.000														
1	Project Management and Coordination													
1	Periodic Coordination Meetings (6)	3	18		6			6						33
2	Monthly project management and reporting (24 mo.)		48							24				72
Hours Subtotal for Task 1		3	66	0	6	0	0	6	0	24	0	0	0	105
2	Public Involvement													
1	Prepare Public Involvement Exhibit		2			2			16					20
2	Attend Public Involvement Meeting		4											4
Hours Subtotal for Task 2		0	6	0	0	2	0	0	16	0	0	0	0	24
3	Surveying & Geotechnical Services													
1	Coordination with subconsultants	2	8				16							26
Hours Subtotal for Task 3		2	8	0	0	0	16	0	0	0	0	0	0	26
4	Minimal Impact Concept													
	Draft Operational Analysis	1	2	4	8		24							39
	Design and Draft Exhibit	1	4		12		24							41
	Conceptual Cost Estimate	1	2		4		8							15
Hours Subtotal for Task 4		3	8	4	24	0	56	0	0	0	0	0	0	95
5	Preliminary Design Services													
5.1	Traffic													
	Operational Analysis	1	1	4	8	2	24							40
	Lighting Justification Report		4				36							40
	Traffic Plans - TMP, Sequence of Construction, and Signing & Pavement Marking	1	3	3	12		18		16					53
	QA/QC		1	2			2		4					9
	5.2 Roadway													
	CEWB (All Disciplines) - By CES		2											2
	Roadway Plans - 1 Series (Title Sheet, Survey Control, and Construction Alignment)		3			4			20					27
	Roadway Plans - 2 Series (General Notes, Typical Details, Typical Sections, and Geometric Layout)		4			6		4	28					42
	Roadway Plans - Plan and Profiles		2			4		12	24					42
	Roadway Plans - Cross Sections		1			4		8	40					53

Task Order No. 23087.001 Church Street NE & East Street NE Roundabout

March 8, 2024

SubTask Number	Task Description	RK&K												
		Project Manager	Task Leader	Senior Professional	Project Professional III	Project Professional II	Project Professional I	Professional II	Professional I	Administrative Assistant	Construction Manager	Senior Inspector	Inspector	Total Estimated Hours
	Assigned Personnel	J McDowell S Samberg	M Arnone A Moy S Yamijala	R Mora R Rose S Larsen	B O'Donnell F Menke M Bhandari	P Phillips T Roys W Leonetti	B Bondalapati Z High H Chen	M Fohs P Hanson R Hin	B Cortez M Ajlan A Gutierrez	A McIntyre	T DiLiscia			
5.3	Roundabout Package		4			8		8	32					52
	QA/QC		2			6		4	8					20
	Hydraulics													
	Conduct field visit			2			2							4
	Preliminary spread calculations		1	2			2		4					9
	Delineation of limits of disturbance		1	1			2		4					8
	Storm drain layout		1	2			2		4					9
	VRRM spreadsheet calculations		1	2			2		4					9
	Erosion and sediment control design		1	2			2		2					7
	Storm drainage, stormwater management, and erosion and sediment control narrative, and storm drain computations sheets		2	2			6							10
	Erosion and sediment control sheet		1	2			4							7
	QA/QC		2	2			2							6
	Environmental													
	Hazardous Materials Database Review		4		1	4								9
	Threatened and Endangered Species Resource Assessment				2							6		8
	Environmental Documentation		2		4	2						6		14
	Structures													
	Structural Evaluation			4	4									8
	ii Structural Evaluation			20	40									60
	iii Coordination with the geotechnical engineer			4	4									8
	iv Technical memorandum	1	1	12	24									38
	v Respond to Town's comments and incorporate changes	1		4	4									9
Hours Subtotal for Task 5		4	44	70	103	40	104	36	190	0	0	12	0	603
6	Final Plan Submittal													
6.1	Traffic													
	Finalize Preliminary Items (Ops Analysis & LJR)	1	1	2	4	4	8							20
	Traffic Plans - TMP, Sequence of Construction, and Signing & Pavement Marking	4	5	12	16	14	32	8	32					123
	QA/QC		1	2			4		8					15
	Roadway													
	Comment Coordination & Responses		2			4		8						14
	CEWB (All Disciplines) - By CES		2											2
6.2	Roadway													
	Roadway Plans - 1 Series (Title Sheet, ROW Data, Revision Data Sheet, Survey Control, and Construction Alignment)		3			4		4	15					26

Task Order No. 23087.001 Church Street NE & East Street NE Roundabout

March 8, 2024

SubTask Number	Task Description	RK&K												
		Project Manager	Task Leader	Senior Professional	Project Professional III	Project Professional II	Project Professional I	Professional II	Professional I	Administrative Assistant	Construction Manager	Senior Inspector	Inspector	Total Estimated Hours
	Assigned Personnel	J McDowell S Samberg	M Arnone A Moy S Yamijala	R Mora R Rose S Larsen	B O'Donnell F Menke M Bhandari	P Phillips T Roys W Leonetti	B Bondalapati Z High H Chen	M Fohs P Hanson R Hin	B Cortez M Ajlan A Gutierrez	A McIntyre	T DiLiscia			
6.3	Roadway Plans - 2 Series (General Notes, Typical Details, Typical Sections, Geometric Layout, and Curb Ramp Details)		6			10		22	36					74
	Roadway Plans - Plan and Profiles		4			8		12	24					48
	Roadway Plans - Cross Sections		2			2		6	12					22
	Roundabout Package		2			4		8	12					26
	QA/QC		2			8		4	16					30
	Hydraulics													
	Develop existing and proposed drainage area maps		2	2			4							8
	Update storm drainage, stormwater management, and erosion and sediment control narrative and computations including sheets		3	6			8		4					21
	Develop limits of disturbance map to include land cover breakdown		1	2			2		2					7
	Stormwater Pollution Prevention Plan sheets		1	2			2	4						9
	Update erosion and sediment control plan sheet		1	2			4							7
	Address comments from the Town		2	4			4							10
	Address comments from VDOT		2	4			4							10
	QA/QC		1	2			4							7
	Environmental													
	EQ-103 Preparation and Submittal					2								2
	Structures													
	Structural Detail Plans		1	2		4		8	24					39
	Final Plan Completion													
	a. Address final comments		8	8										16
	b. Make needed final plan changes	2	16											18
	Roadway			4	4			8						16
	Traffic/MOT			4	2			8						14
	Water Resources			4	2			8						14
	Structures			2	2			8						12
	c. Sign and seal all plans			4	4									8
	d. Finalize cost opinions	1		2	4									7
	e. Deliver final plans to Town	1		2										3
Hours Subtotal for Task 6		9	68	72	38	64	76	116	185	0	0	0	0	628
7	IFB Assistance													
	a. Assistance with preparation of Section B		4	2	24									30
	b. Assistance in evaluating bids		4		8									12
	c. Assist Town in preparing VDOT approval to award		2		8									10

Task Order No. 23087.001 Church Street NE & East Street NE Roundabout

March 8, 2024

SubTask Number	Task Description	RK&K												
		Project Manager	Task Leader	Senior Professional	Project Professional III	Project Professional II	Project Professional I	Professional II	Professional I	Administrative Assistant	Construction Manager	Senior Inspector	Inspector	Total Estimated Hours
	Assigned Personnel	J McDowell S Samberg	M Arnone A Moy S Yamijala	R Mora R Rose S Larsen	B O'Donnell F Menke M Bhandari	P Phillips T Roys W Leonetti	B Bondalapati Z High H Chen	M Fohs P Hanson R Hin	B Cortez M Ajlan A Gutierrez	A McIntyre	T DiLiscia			
														0
Hours Subtotal for Task 7		0	10	2	40	0	0	0	0	0	0	0	0	52
8	Right-of-Way Acquisition Services													
														0
	Right-of-Way Services		21				99							120
														0
Hours Subtotal for Task 8		0	21	0	0	0	99	0	0	0	0	0	0	120
Estimated Hours Per Payroll Classification - Base		21	231	148	211	106	351	158	391	24	0	12	0	1653
Percent of Hour By Classification		1.3%	14.0%	9.0%	12.8%	6.4%	21.2%	9.6%	23.7%	1.5%	0.0%	0.7%	0.0%	100%

Task Order No. 23087.001 Church Street NE & East Street NE Roundabout

RFP 23-17 Town of Vienna, VA, On-Call Engineering Services for Local-State-Federal Projects - Contract Year 1

March 8, 2024

SubTask Number	Task Description	RK&K - BASE SERVICES													
		Project Manager	Task Leader	Senior Professional	Project Professional III	Project Professional II	Project Professional I	Professional II	Professional I	Technician	Administrative Assistant	Construction Manager	Senior Inspector	Inspector	Total Estimated Hours
RK&K.000															
1	Project Management and Coordination	3	66	0	6	0	0	6	0	0	24	0	0	0	105
2	Public Involvement	0	6	0	0	2	0	0	16	0	0	0	0	0	24
3	Surveying & Geotechnical Services	2	8	0	0	0	16	0	0	0	0	0	0	0	26
4	Minimal Impact Concept	3	8	4	24	0	56	0	0	0	0	0	0	0	95
5	Preliminary Design Services	4	44	70	103	40	104	36	190	0	0	0	12	0	603
6	Final Plan Submittal	9	68	72	38	64	76	116	185	0	0	0	0	0	628
7	IFB Assistance	0	10	2	40	0	0	0	0	0	0	0	0	0	52
8	Right-of-Way Acquisition Services	0	21	0	0	0	99	0	0	0	0	0	0	0	120
Estimated Hours Per Payroll Classification - Base		21	231	148	211	106	351	158	391	0	24	0	12	0	1653
Approved Fully Loaded (Including Profit) Hourly Rates		\$ 304.24	\$ 225.47	\$ 174.90	\$ 161.72	\$ 142.70	\$ 131.40	\$ 121.86	\$ 104.03	\$ 101.17	\$ 94.13	\$ 163.01	\$ 108.78	\$ 81.19	
Estimated Fee Per Payroll Classification (rounded) - Base		\$6,389	\$52,084	\$25,885	\$34,123	\$15,126	\$46,121	\$19,254	\$40,676	\$0	\$2,259	\$0	\$1,305	\$0	\$243,222
Estimated Payroll - Base		\$243,222													
Direct Cost - Pre-Construction		\$24,754													
GRAND TOTAL - RK&K ONLY - BASE SERVICES		\$267,976													

Project Labor Task Value Summary - Base Services		RK&K		Subconsultant - Legacy Engineering Inc.		Subconsultant - American Geotechnical and Environmental Services, Inc		Subconsultant - CES Consulting LLC		TOTAL	
Subtask Number	Task Description	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Total Estimated Hours	Total Estimated Fee
RK&K.000											
1	Project Management and Coordination	105	\$19,754							105	\$19,754
2	Public Involvement	24	\$3,303							24	\$3,303
3	Surveying & Geotechnical Services	26	\$4,515		\$30,600	146	\$36,222			172	\$71,337
4	Minimal Impact Concept	95	\$14,656							95	\$14,656
5	Preliminary Design Services	603	\$84,869					54	\$7,898	657	\$92,767
6	Final Plan Submittal	628	\$89,309					109	\$15,274	737	\$104,583
7	IFB Assistance	52	\$9,073					19	\$3,089	71	\$12,162
8	Right-of-Way Acquisition Services	120	\$17,743							120	\$17,743
	Direct Expenses & Subcontractors - Design Phase		\$24,754							0	\$24,754
	BASE TOTAL	1653	\$267,976	0	\$30,600	146	\$36,222	182	\$26,261	1981	\$361,059

Task 1 \$19,754

Tasks 2 - 4: \$89,295

Tasks 5 - 8: \$227,256

Directs: \$24,754

TOTAL: \$361,060

Task Order No. 23087.001 Church Street NE & East Street NE Roundabout															
RFP 23-17 Town of Vienna, VA, On-Call Engineering Services for Local-State-Federal Projects - Contract Year 1															March 8, 2024
SubTask Number	Task Description	RK&K - OPTIONAL SERVICES - PRELIMINARY AND FINAL LIGHTING DESIGN													
		Project Manager	Task Leader	Senior Professional	Project Professional III	Project Professional II	Project Professional I	Professional II	Professional I	Technician	Administrative Assistant	Construction Manager	Senior Inspector	Inspector	Total Estimated Hours
RK&K.000															
9	Optional Preliminary and Final Lighting Design	0	2	8	0	40	80	0	0	0	0	0	0	0	130
Estimated Hours Per Payroll Classification - Base		0	2	8	0	40	80	0	0	0	0	0	0	0	130
Approved Fully Loaded (Including Profit) Hourly Rates		\$ 304.24	\$ 225.47	\$ 174.90	\$ 161.72	\$ 142.70	\$ 131.40	\$ 121.86	\$ 104.03	\$ 101.17	\$ 94.13	\$ 163.01	\$ 108.78	\$ 81.19	
Estimated Fee Per Payroll Classification (rounded) - Base		\$0	\$451	\$1,399	\$0	\$5,708	\$10,512	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,070
Project Labor Task Value Summary - OPTIONAL PRELIMINARY AND FINAL LIGHTING DESIGN		RK&K		Subconsultant - Legacy Engineering Inc.		Subconsultant - American Geotechnical and Environmental Services, Inc		Subconsultant - CES Consulting LLC		TOTAL					
Subtask Number	Task Description	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Total Estimated Hours	Total Estimated Fee				
Estimated Payroll - Option 1															
9	Optional Preliminary and Final Lighting Design	130	\$18,070							130	\$18,070				
	OPTION TOTAL	130	\$18,070	0	\$0	0	\$0	0	\$0	130	\$18,070				

Task Order No. 23087.001 Church Street NE & East Street NE Roundabout															
RFP 23-17 Town of Vienna, VA, On-Call Engineering Services for Local-State-Federal Projects - Contract Year 1															March 8, 2024
SubTask Number	Task Description	RK&K - OPTIONAL SERVICES - CONSTRUCTION MANAGEMENT													
		Project Manager	Task Leader	Senior Professional	Project Professional III	Project Professional II	Project Professional I	Professional II	Professional I	Technician	Administrative Assistant	Construction Manager	Senior Inspector	Inspector	Total Estimated Hours
RK&K.000															
10	Constuction Management	6	0	0	0	0	0	0	0	0	0	300	1040	40	1386
Estimated Hours Per Payroll Classification - Base		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved Fully Loaded (Including Profit) Hourly Rates		\$ 304.24	\$ 225.47	\$ 174.90	\$ 161.72	\$ 142.70	\$ 131.40	\$ 121.86	\$ 104.03	\$ 101.17	\$ 94.13	\$ 163.01	\$ 108.78	\$ 81.19	
Estimated Fee Per Payroll Classification (rounded) - Base		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project Labor Task Value Summary - Construction Management		RK&K		Subconsultant - Legacy Engineering Inc.		Subconsultant - American Geotechnical and Environmental Services, Inc		Subconsultant - CES Consulting LLC		TOTAL					
Subtask Number	Task Description	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Total Estimated Hours	Total Estimated Fee				
Estimated Payroll - Construction Management															
10	Constuction Management	1386	\$167,107							1386	\$167,107				
	OPTION TOTAL	1386	\$167,107	0	\$0	0	\$0	0	\$0	1386	\$167,107				

Task Order No. 23087.001 Church Street NE & East Street NE Roundabout						
RFP 23-17 Town of Vienna, VA, On-Call Engineering Services for Local-State-Federal Projects - Contract Year 1					March 8, 2024	
DIRECT EXPENSES - PRE-CONSTRUCTION						
DIRECT EXPENSES:						
a. Mileage	846	miles at	\$ 0.655	per mile =	\$	554.13
b. Printing		sheets at	\$ 0.65	per sheet =	\$	-
c. Courier (overnight) and certified mail					\$	-
d. Outside copying		"say"			\$	1,000.00
e. Hotel					\$	-
f. Perdiem					\$	-
g. Recordation costs (by others)					\$	-
h. Title insurance (by others)					\$	-
i. Lender release fees (by others)					\$	-
					Total Direct Costs:	\$ 1,554.13
SUBCONTRACTORS:						
a. Title Search	Property Title Escrow				Amount	\$ 4,600.00
b. Appraisal	Allen Armstrong					\$ 10,500.00
c. Review Appraisal	Appraisal Review Specialists					\$ 4,200.00
d. Settlement & Recording Fees	Key Title					\$ 3,900.00
					Total Subcontractors:	\$ 23,200.00
GRAND TOTAL DIRECT EXPENSES (PRE-CONSTRUCTION)						\$ 24,754.13