



215-25

State of New Jersey

DEPARTMENT OF TRANSPORTATION

P.O. Box 600

Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

FRANCIS K. O'CONNOR
Commissioner

TAHESHA L. WAY
Lt. Governor

August 20, 2025
Zayibeth Carballo, PE, PLS, PP, CME, CFM, CFS
Assistant Municipal Engineer
Township of West Orange
25 Lakeside Avenue
West Orange, NJ 07052

Re: **MODIFICATION NO. 1 TO FEDERAL AID AGREEMENT**
Washington Street Corridor Improvement Project
Township of West Orange, Essex County
Federal Project No.: D00S806
State Job No.: 6122315

Dear Mr. Carballo:

On August 01, 2025, the Federal Highway Administration (FHWA) authorized additional funding in the amount of \$ 248,325.86 for the final design (FD) costs associated with the above captioned Federal Aid Highway Program project. This authorization was based on the scope of work and budget agreed upon by West Orange Township and the Division of Local Aid.

Enclosed please find a copy of Modification No. 1, to Federal Aid Agreement 2023-DT-DLA-507, for the subject project.

Please return three (3) original signed and sealed copies of the attached agreement modification for execution by the Department. Although not required for the modification, if passed per your entity's procedures, please provide three (3) copies of original signed/sealed Resolutions.

As a reminder, WORK CANNOT BEGIN ON FD ACTIVITIES UNTIL THIS AGREEMENT MODIFICATION IS EXECUTED BY NJDOT. Any costs associated with FD activities incurred prior to NJDOT execution of this agreement modification will be deemed non-participating and ineligible for reimbursement.

If you have any questions, please contact Mahmood Afrina Khandakar at (609) 963-1998.

Sincerely,

Mahmood Afrina Khandakar
Project Management Specialist 3
Division of Local Aid and Economic Development

**NEW JERSEY DEPARTMENT OF TRANSPORTATION
LOCAL AID & ECONOMIC DEVELOPMENT
TRENTON, NEW JERSEY**

AGREEMENT MODIFICATION

Contract ID: 24 70007

MODIFICATION NO.	<u>1</u>	FEDERAL PROJECT NO.	<u>D00S806</u>	DATE	<u>August 20, 2025</u>
PROJECT	<u>Washington Street Corridor Improvement Project</u>				
LOCATION	<u>Township of West Orange, Essex County</u>				
SPONSOR	<u>Township of West Orange</u>				
AGREEMENT DATE	<u>11/08/2023</u>	AGREEMENT NO.	<u>22023-DT-DLA-507</u>		

IN ACCORDANCE WITH THE PROVISIONS OF THE ABOVE NOTED AGREEMENT, THE SPONSOR AND THE STATE AGREE TO THE CHANGES TO THE AGREEMENT AS FOLLOWS:

- 3.1 The State hereby awards a Grant of federal funds, available on a reimbursement basis, in the amount of **\$199,070.68** for the period of performance ("Project Fund"). Neither the State, FHWA, nor USDOT shall provide funding greater than this amount under this Agreement. The Subrecipient acknowledges that neither the State, FHWA nor USDOT are liable for payments that exceed this amount.
- 3.2 The Project shall be completed by **November 30, 2026**, unless either terminated or extended by written authorization of the State.

CHANGE TO:

- 3.1 The State hereby awards a Grant of federal funds, available on a reimbursement basis, in the amount of **\$447,396.54** for the period of performance ("Project Fund"). Neither the State, FHWA, nor USDOT shall provide funding greater than this amount under this Agreement. The Subrecipient acknowledges that neither the State, FHWA nor USDOT are liable for payments that exceed this amount.
- 3.2 The Project shall be completed by **December 30, 2028**, unless either terminated or extended by written authorization of the State.

Original Agreement Amount (PE)	<u>\$199,070.68</u>
This Modification Amount (Mod. 1 FD)	<u>\$248,325.86</u>
Modified Agreement Amt (PE+Mod1)	<u>\$447,396.54</u>
Original Agreement Compl. Date	<u>11/30/2026</u>
Revised Agreement Compl. Date	<u>12/30/2028</u>

Additional Funds
CERTIFICATION OF FUNDS

Barbara DeLucia, Director of Accounting and Auditing Date

FOR PROGRAM USE ONLY:

Document No. _____

Registration No. _____

ACCEPTED


(Sponsor)

08/21/2025
Date

RECOMMENDED

Marquis McEwen, Project Management Specialist 1
Local Aid Date

Mahmood A Khandakar, Project Management Specialist 3
Local Aid Date

CERTIFICATION ACCEPTANCE PROJECTS
This Mod. is approved for Federal participation

Deval Desai, Director, Local Aid & Economic Development Date

AGREEMENT SUMMARY
FY2020 TRANSPORTATION ALTERNATIVES DESIGN ASSISTANCE
WEST ORANGE WASHINGTON STREET CORRIDOR IMPROVEMENT PROJECT

CONSULTANT: Greenman - Pedersen, Inc.

ADDRESS: 520 US Highway 22, Suite 200
Bridgewater, NJ 08807

OWNER: Township of West Orange
66 Main Street, Room 106
West Orange, NJ 07052

PROJECT TITLE: TAP – 2020 – Washington Street Corridor Improvement Project

TOTAL BUDGET: \$470,494.54
Federal (FHWA) Transportation Alternatives Program)
Preliminary Engineering: \$199,070.68
Final Design Engineering: \$248,325.86
Construction Engineering Services: \$23,098.00 Estimated

AGREEMENT AMENDMENT #1
FINAL DESIGN SERVICES
FOR
FY2020 TRANSPORTATION ALTERNATIVES DESIGN ASSISTANCE
WEST ORANGE WASHINGTON STREET CORRIDOR IMPROVEMENT PROJECT

This AMENDMENT #1, entered into on _____, 2025, by the TOWNSHIP OF WEST ORANGE, a municipal corporation of the State of New Jersey, hereinafter called "OWNER," and Greenman-Pedersen, Inc., hereinafter called "GPI."

WHEREAS, OWNER has received a grant commitment from the New Jersey Department of Transportation (NJDOT) under the 2020 Transportation Alternatives Program for final design funding for the Washington Street Corridor Improvement Project (PROJECT), and

WHEREAS, NJDOT has also made available a Design Assistance Program to fund the design of the PROJECT using federal funds and an approved engineering firm from a pool of firms established by NJDOT, and

WHEREAS, OWNER has selected GPI from the NJDOT pool to provide Design Assistance for this PROJECT, and

WHEREAS, OWNER and GPI have entered into an AGREEMENT on the 21st day of December 2023, to provide Design Services for Preliminary Engineering, Final Design Engineering and Construction Engineering for the PROJECT, and

WHEREAS, the AGREEMENT may be amended to commit funding for Final Design Services and Construction Engineering Services, when OWNER has determined that these services are ready to proceed, and

WHEREAS, OWNER has determined that the PROJECT may proceed to Final Design.

WHEREAS, GPI has provided a scope and fee proposal for final design services for the PROJECT, dated August 29, 2022 revised June 25, 2025, identified as AGREEMENT AMENDMENT #1 – EXHIBIT A,

NOW THEREFORE, GPI agrees to perform final design services for the PROJECT in accordance with the proposed scopes of services and cost proposals identified as Exhibit A, and

GPI further agrees to perform final design services for the PROJECT in accordance with the articles set forth in the AGREEMENT, and

OWNER agrees to reimburse GPI for all eligible final design costs for the PROJECT in accordance with the articles set forth in the AGREEMENT.

The following costs are applicable for Final Design Services:

(1) Direct Labor Costs:	\$76,309.02
(2) Indirect Costs (163.41% Overhead):	\$124,696.57
(3) Profit/Fixed Fee (22.5% of Labor):	\$17,169.53
(4) Non-Salary Direct Expenses	\$3,250.00
(5) Subconsultant Costs	\$26,900.74
TOTAL	\$248,325.86

AGREEMENT AMENDMENT #1
FINAL DESIGN SERVICES
FOR
FY2020 TRANSPORTATION ALTERNATIVES DESIGN ASSISTANCE
WEST ORANGE WASHINGTON STREET CORRIDOR IMPROVEMENT PROJECT

Except to the extent modified herein, all terms and conditions of the original Agreement shall continue in full force and effect.

IN WITNESS WHEREOF, the parties have executed this subcontract as of the day and year first above written.

ATTEST/SEAL

TOWNSHIP OF WEST ORANGE, NJ

Karen J. Carnevale, RMC
Municipal Clerk

By: _____
Susan McCartney
Mayor



Cynthia R. Okamoto
Cynthia R. Okamoto 8/25/2025
Contracts Manager

GREENMAN-PEDERSEN, INC.

By: *Brian W. Mausert*
Brian W. Mausert, P.E. 8/25/2025
Executive Vice President/ Branch Manager





August 29, 2022 - REVISED June 25, 2025

Zayibeth Carballo, PE, Township Engineer
Director of Public Works
Township of West Orange
25 Lakeside Avenue
West Orange, NJ

Re: NJDOT Transportation Alternatives Program
TAP-2020 Washington Street Corridor Improvement Project
Township of West Orange, Essex County

Subject: REVISED Proposed Scope of Services and Cost Proposal for Final Design

Dear Ms. Carballo,

Thank you for the opportunity to provide professional engineering design services for the Final Design (FD) phase for the above-mentioned project. Our scope of services is based on the TAP - 2020 Application completed by the Township, input received at our meeting on March 23, 2022, and the NJDOT standard network diagram and activity descriptions for the Final Design project phase. During Preliminary Engineering (PE) it was determined that temporary sidewalk work easements will be required from twenty-one (21) adjacent property owners to allow the new pavement grades to meet the existing where the pavement joints are outside the public right-of-way. The revised proposal includes the work necessary to perform the property research, prepare the easement documents and support the Township of West Orange during easement acquisition.

The Township is working to increase pedestrian safety, accessibility and walkability on Washington Street. This Washington Street Improvement Project will improve Washington Street from Main Street to High Street. The length of the project is approximately 1,050 linear feet or 0.2 miles. Washington Street is a County roadway, and as the project will make improvements to a County Road, the Township has secured the approval of the County of Essex for this project.

The proposed improvements will include improved crosswalks, signage, new sidewalks with curb extensions, new curbs, ADA-compliant curb ramps, detectable warning surfaces, flashing speed limit signs, flashing pedestrian crossing signs, enhanced lighting, street trees, and trash receptacles. These improvements are being made to promote walking and better accommodate pedestrian transit as an alternate travel mode. Deficient curb ramps, concrete driveway aprons and sidewalks will be replaced to conform with ADA requirements. Proposed improvements will be consistent with previously completed streetscape projects by the Township.

The project will be advanced in compliance with the Federal requirements for environmental protection by following the NEPA process, requirements for historic preservation under the Section 106 process and policies to protect publicly owned parks under Section 4(f). Federal compliance will be documented in the Categorical Exclusion Document (CED) prepared during Preliminary Engineering.

Zayibeth Carballo, PE, Township Engineer
Township of West Orange

May 16, 2025
Revised June 25, 2025

Scope of Services

GPI will perform the activities as described within this scope of services. It is understood that these activities will be directed by the Township of West Orange. The activities are more specifically described as follows:

Project Management: Scope Development, Budget, Schedule, and Invoicing – GPI will prepare and submit to the Township a baseline schedule in an agreed upon format for approval or comment. We will update the schedule on a monthly basis for the duration of this project.

GPI will submit a progress report with each invoice that will detail the following:

- ✓ Activities completed to date with the current invoice period highlighted
- ✓ A summary of the costs incurred to date and the percentage of project complete
- ✓ Confirmation of upcoming submittals and possible scheduling conflicts
- ✓ Any unanticipated cost and/or activities not included in these scope of services
- ✓ Responses required from the Township or NJDOT Local Aid
- ✓ Anticipated work during the next invoice period

It is understood that the Township will not process any submitted invoices unless the above information is attached to the same.

This activity will also include attending and preparing minutes of one (1) coordination meeting during FD development.

FD is expected to be completed in twelve (12) months from notice to proceed. The following summarizes the activities associated with this scope of services based on the NJDOT Activity Descriptions Manual and as modified for this specific design assistance project that are to be performed by GPI and our subconsultants:

Activity No.	Activity Description
4050	Develop Alternatives of Accommodation
4085	Conduct Supplemental Subsurface Utility Engineering
4090	Incorporate Utility Design in Contract Documents
4100	Prepare Jurisdictional Limits Maps and Agreements
4210	Complete Horizontal / Vertical Geometry
4215	Conduct Supplemental Surveys
4220	Prepare Final Roadway Plans
4230	Complete Lighting Design
4240	Complete Traffic Signal, Signing and Striping Plans
4265	Complete Landscape Architectural Design
4270	Complete Drainage Design
4275	Develop Construction Cost Estimate
4280	Develop Specifications
4285	Develop Construction Schedule
4290	Prepare Final Design Submission Package
4385	Prepare Permit Application
4390	Review & Submit Permit Application

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Township of West Orange

May 16, 2025
Revised June 25, 2025

Activity No.	Activity Description
4395	Secure Permits
4410	Prepare Soil Erosion and Sediment Control Plans
4430	Review Soil Erosion and Sediment Control Plans
4585	Complete Environmental Plans
4705	Prepare Access Cut-Outs
4715	Administer Access Alterations
4795	Execute Final Design Public Involvement Action Plan
4810	Review Final Design Submission
4830	Resolve Final Design Submission Comments
4840	Submit PS&E Package
4860	Obtain Construction Environmental Reevaluation

Develop Alternatives of Accommodation (4050): GPI will develop an Alternatives of Accommodation Plan and confirm the proposed utility accommodation with each affected utility company. Primary Tasks include:

1. Assess Impacts - Develop plans and descriptions as needed for utility companies to assess impacts. Discuss utility work and support required for construction.
2. Develop Scheme of Accommodation Plans showing proposed relocation / removal schemes for utility company review.
3. Utility Field Meeting - Schedule, participate and document results of meeting with utility owners.
4. Provide meeting follow-up with utilities by telephone and e-mail, and documentation of follow-up in utility correspondence log.
5. Update Scheme of Accommodation Plans to reflect comments provided during the meetings to obtain utility approval.

Assumptions:

1. The only other utility impacts are assumed to be limited to resetting valves and that the proposed design will be conducted to avoid utility relocations.
2. No underground utilities are anticipated to be relocated.
3. Assume no more than one (1) utility meeting will need to be conducted.

Conduct Supplemental Subsurface Utility Engineering (4085): Taylor, Wiseman & Taylor (TWT), subconsultant to GPI, will conduct subsurface utility engineering (SUE) investigations to determine the location of underground utilities that are potentially in direct conflict with the proposed improvements. GPI will coordinate these efforts with our subconsultant to provide accurate, reliable locations of subsurface utilities to evaluate possible alternatives of accommodation. GPI will prepare a test hole plan and provide for the Quality Assurance of the test hole results provided by subconsultant. It is assumed that no more than five (5) test holes will be required. Maintenance and Protection (MPT) and necessary permits to conduct the test holes will be acquired by GPI's subconsultant.

Please refer to TWT's Scope of Services and Estimate which is attached for more information.

Incorporate Utility Design in Contract Documents (4090): Based on the completion of the Scheme of Accommodation Plans, GPI will show final accommodations on the construction plans and in the Special Provisions.

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Prepare Jurisdictional Limits Maps and Agreements (4100): The project is located within Washington Street right-of-way, which is under the jurisdiction of Essex County. GPI will prepare a jurisdictional map depicting Township and County maintenance responsibilities within the limits of the project after the completion of the construction. It is assumed the Township and County will develop their own form of jurisdictional agreement.

Complete Horizontal / Vertical Geometry (4210): GPI will provide for the final development of horizontal and vertical geometry for all new construction. The proposed work includes defining all dimensions as will be constructed and providing station and offset from the project baseline to facilitate construction. Work includes the confirmation and finalization of baseline ties and final grading to be compliant with NJDOT and ADA Standards. GPI will develop final typical sections to detail sidewalk construction and driveway reconstruction. Per existing field conditions, sidewalk will typically be a minimum four-foot in width with a utility/planter strip adjacent to the curb to provide for streetscape elements. The utility strip will be consistent in width as much as possible, but isolated deviations may be required to avoid relocating utility poles or other objects.

Conduct Supplemental Surveys (4215): During FD the existing topography will be assessed for any changes or additional needs and a supplemental survey will be performed to make the base mapping and topographic features current. It is assumed that the supplemental survey will be conducted using the control established in the PE phase and that the project limits will not be extended. The base mapping and topographic models will be updated to reflect current field conditions.

Please refer to M&S's Scope of Services and Estimate which is attached for more information.

Prepare Final Roadway Plans (4220): GPI will update the plans prepared in Preliminary Engineering in the development of the final roadway plans showing construction ready details and providing necessary adjustments to reflect existing site conditions. This activity includes the development of the following sheets:

- 1 - Key Sheet
- 1 - EDOQ
- 1 - Typical Section
- 1 - Plan Sheet Index
- 2 - Construction Plans (1" = 20')
- 2 - Environmental & SESC Plans and Notes (1" = 20')
- 1 - Tie Sheet
- 2 - Traffic Signing and Striping Plans
- 2 - Traffic Control and Staging Plans
- 2 - Electrical Plans
- 2 - Electrical Highway Lighting Details
- 2 - Landscaping Plans and Details
- 8 - Construction Details (including curb ramps)

27 Total Sheets

It is anticipated that no more than fifteen (15) individual ADA compliant pedestrian ramp designs will be necessary. It is assumed that each curb ramp will be detailed on the Construction Detail plan sheets, approximately four (4) per plan sheet.

It is anticipated that the construction staging can be accomplished using standard MUTCD and/or NJDOT set ups. It is also anticipated that, as necessary, traffic can be maintained during non-peak periods during the day via

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alternating traffic through the use of flaggers or through detouring of one direction of travel around the work zone. At the end of the workday the roadway can be restored to typical two-way operation.

Complete Lighting Design (4230): GPI will update the plans prepared in Preliminary Engineering to develop the final electrical layout reflecting existing site conditions and coordinate with Township and PSE&G. GPI will design conduit location, conduit depth, hand hole locations, pole base installation, luminaire locations and service specifications.

PSE&G will provide the feed pole location, full utility requirements for electrical plans to service new lighting, and new decorative poles and lights to be installed once construction has been completed for conduit and hand holes. PSE&G requires at least 1 (one) site meeting to discuss the lighting layout prior to the beginning of construction with the contractor.

Complete Traffic Signal, Signing and Striping Plans (4240): GPI will update the plans prepared in Preliminary Engineering in the development of the final signing and striping plans showing construction ready details and providing necessary adjustments to reflect existing site conditions.

Complete Landscape Architectural Design (4265): GPI will perform a site analysis and develop landscape architectural plans and details of the placement of street trees, benches, bicycle racks and trash and recycling containers for the Township to review.

Complete Drainage Design (4270): GPI will provide a final assessment of drainage and design for drainage system for the relocated structures resulting from the proposed curb work. It is anticipated that drainage improvements will be limited to localized grading in the vicinity of the new curb. The analysis and design of roadway drainage systems is not anticipated and is excluded from this scope of work. Drainage calculations and a final drainage report is also excluded from this scope of work.

Net impervious and land disturbance maps will be updated to confirm that the project is not a "major development" under the Stormwater Management (SWM) Rules. It is assumed that the project will not be categorized as a "major development" and that the NJDEP SWM regulations will not need to be accommodated. Thus, the design of Best Management Practices (BMP) and associated geotechnical investigations and testing is excluded from this scope of services.

GPI will confirm and document compliance with NJDEP Flood Hazard Area Control Act Individual Permit for the final improvements within the flood hazard area.

Assumptions:

The following assumptions are related to Task 4270 and in addition to the general assumptions stated below.

1. Full depth pavement and/or pavement resurfacing will be limited to the narrow strips of pavement removal and replacement necessary to install the proposed curb.
2. The design of a new stormwater collection and conveyance system is not anticipated and therefore not included in this scope of services.
3. Permitting and regulatory compliance assessments will be based on the current NJDEP SWM Rules, NJDEP Flood Hazard Area Control Act and NJDEP Freshwater Wetlands Protection Act Rules as of the date of this proposal. This proposal does not include work to conform to subsequent rule changes made during this work effort.
4. The total net new impervious and total disturbance will be less than ¼ acre and one acre, respectively; therefore, it will not be necessary to comply with SWM Rules.

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5. The design and soils testing for Best Management Practices (BMPs) such as stormwater basins and/or mechanical treatment devices (MTDs), or Green Infrastructure, are not included in this scope of services.
6. Project disturbance is not within a NJDEP Freshwater Wetlands regulated area, NJDEP Freshwater Wetlands permits are not required and are excluded from this proposal.

Develop Construction Cost Estimate (4275): We will provide quantity takeoffs of proposed construction items and develop a construction cost estimate. We will develop unit costs for construction items using NJDOT AASHTOWare Project Estimating software and provide modification as necessary to reflect current bids on similar work as might be provided. Unit costs will be further modified to reflect the size of the project.

Develop Specifications (4280): GPI will supplement the 2019 NJDOT Standard Specifications for Road and Bridge Construction with Special Provisions and input provided by the Township and NJDOT Local Aid. Township will also provide available information/documentation regarding the streetscape amenities installed at other Township locations. GPI will develop special provisions for streetscape pay items.

Develop Construction Schedule (4285): GPI will develop the construction schedule in accordance with the NJDOT Construction Scheduling Manual providing typical scheduling logic and production rates. The construction schedule will incorporate seasonal and environmental restrictions. A construction schedule narrative report will not be required.

It is anticipated that construction schedule narrative report will not be required and therefore is not included in this scope of services.

Prepare Final Design Submission (FDS) Package (4290): GPI will compile plans, estimate, specifications and schedule into a Final Design Submission (FDS) deliverable. It is expected that all documents will be submitted in PDF format as well as a number of hard copies to be determined by the Township and NJDOT Local Aid. In addition, GPI will assist the Township with the preparation of the permit, right-of-way, railroad, and utility certifications. GPI will also execute the Design Certification and provide it with the FDS package.

Prepare Permit Application (4385): GPI will prepare a set of NJDEP permit plans and project description for inclusion with the Flood Hazard Area Individual Permit (FHAIP). The proposed roadway improvements within the NJDEP flood hazard area of the classified FW2-NT stream North Branch Wigwam Brook. To construct new curb and sidewalks for the curb extensions, it is anticipated that minor placement of fill within the flood hazard area will be unavoidable. GPI will provide a Flood Hazard Engineer's report for inclusion

in the Flood Hazard Area Individual permit (FHAIP) and Verification application, which will include net fill calculations for the proposed improvements within the flood hazard area. Cross sections will be provided in areas of fill within the flood plain to assist in net fill computations. It is anticipated that project does not exceed the "major development" threshold under the SWM rules and that SWM mitigation is not required. GPI will attend one pre-application meeting with NJDEP for permit coordination.

The FHAIP application will also include an FHA Verification. For establishing flood hazard area, GPI will utilize Preliminary (PFIRM FEMA Map Number 34013C0111F, effective June 4, 2007 and NJDEP FHA based on Method 3.

Assumptions:

1. The Township will obtain any required property owner signatures on the application forms.
2. NJDEP Application fees to be provided by the Township.
3. Application for a freshwater wetlands Letter of Interpretation is excluded from this scope of work.

4. The flood hazard area limits for the North Branch Wigwam Brook at Watson Avenue & Liberty Street intersections with Washington Street will be established based on the Preliminary (PFIRM) FEMA mapping dated June 4, 2007 and NJDEP "Method 3".
5. Hydrology and hydraulics for flood plain modeling is excluded.
6. Permitting and regulatory compliance assessments will be based on the current NJDEP SWM, NJDEP Flood Hazard Area Control Act and NJDEP Freshwater Wetlands Protection Act Rules as published by NJDEP as of the date of this proposal. Subsequent rule changes during the course of this work effort, which change the scope of our work effort, are excluded.
7. NJDOT BEPR will provide the necessary NJDEP SHPO coordination.
8. FHAIP Verification will not require metes and bounds or other survey maps for filing with the County as the project is within public ROW.
9. The flood area limits for the watercourse will be established based on the published (FIRM) FEMA Map Number 34013C0111F, effective June 4, 2007.
10. Hydrology and hydraulics for flood plain modeling is excluded.
11. Riparian Zone mitigation is assumed to not be required. A mitigation plan is excluded from this scope.
12. It is assumed that this project will not require a FEMA Conditional Letter of Map Revision (CLOMR) or a FEMA Letter of Map Revision (LOMR).
13. Permitting and regulatory compliance assessments will be based on the current NJDEP SWM, NJDEP Flood Hazard Area Control Act and NJDEP Freshwater Wetlands Protection Act Rules as published by NJDEP as of the date of this proposal. Subsequent rule changes during the course of this work effort, which change the scope of our work effort, are excluded.

Review & Submit Permit Application (4390): GPI will submit the combined NJDEP permit application and supporting documents to the Township and NJDOT Local Aid and BEPR for review and comment. The GPI team will address comments provided by the Township and NJDOT prior to submission to the NJDEP. It is assumed that the Township will provide payment for all permitting fees. Funding for these costs is not included in this proposal. Upon approval, the GPI team will send Public Notice and submit the required documentation to NJDEP.

Secure Permits (4395): GPI will coordinate any NJDEP review comments/responses with NJDOT BEPR and Township of West Orange. NJDEP interpretations of permitting regulations which lead to additional work not included under this scope of services will be addressed through a modification in scope or a contract modification.

Assumptions:

1. The Township, as the permittee, will be responsible for recording the permit with the County Clerk for compliance with any permit conditions imposed by NJDEP.

Prepare Soil Erosion & Sediment Control Report, Plans and Specifications (4410): GPI will develop soil erosion and sediment control (SESC) plans, details, and notes for the purposes of submitting to the Hudson-Essex-Passaic Soil Conservation District for SESC plan certification for the project. Application fees are to be provided by the Township. It is assumed that the project will result in less than 1 acre of land disturbance and that a NJPDES 5g3 construction stormwater general permit will not be required. It is also assumed to be minimally disturbed vegetated areas. For these areas topsoil will be constructed in accordance with NJ SESC Standard for Topsoiling.

Review Soil Erosion & Sediment Control Report and Plans (4430): GPI will provide for responses to the Hudson-Essex-Passaic Soil Conservation District permit reviewer comments and provide for plan revisions as necessary to address comments.

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Complete Environmental Plans (4585): Upon receiving approved SCD and FHA permit GPI will update and complete the environmental plans by transposing the Hudson-Essex-Passaic Soil Conservation District approved design onto the plans and will add the permit conditions, notes, and commitments which are applicable to the contractor's work.

Prepare Access Cut-Outs (4705): It is anticipated that as many as twenty-one (21) properties could be impacted by the construction or reconstruction of curb ramps, sidewalks, and driveway aprons. GPI will prepare project access cut out sketches for each property in support of specific Right-of-Access agreements (ROA) for each impacted property. These cut-out sketches will be derived from the construction plans and will be provided to the Township with ROA letters.

Administer Access Alterations (4715): GPI will prepare Right-of-Access Agreements (ROA) along with the access cut-out sketches for the properties impacted by the reconstruction of curb ramps, sidewalks, and driveway aprons. The Township will send to the property owners ROA documents received from GPI, engage in discussions, and acquire ROA endorsement by the property owners as required. GPI's team is available during the ROA process to modify and submit up to three (3) revisions of documents based on negotiations with the property owner. GPI will submit signed ROA letters received from the Township to NJDOT Local Aid for ROW Clearance.

It is noted that from the PE findings, ROW acquisition will not be required. Accordingly, ROW acquisition Activity Tasks such as Entire Tract Maps (ETM), General Property Parcel Maps (GPPM) or other ROW Activities as typically prepared on NJDOT projects are not required and are not included in this proposal.

Execute Final Design Public Involvement Action Plan (4795): GPI will attend and prepare the mailing list, the handout, presentation material and minutes with attached sign-in sheet for one (1) anticipated Public Information Center (PIC). Notice letters will be mailed via standard USPS by GPI (not certified). The goal of the PIC is to obtain public input on the Final Design. The PIC is a community outreach forum to develop a partnership with the public. The public is a stakeholder, along with local and state officials, and public interest groups. It is preferable to obtain documentation of local support before the PIC.

It is anticipated that the Township will review the PIC handout and mailing list. The presentation material may include: an aerial of the study area, final plans, existing and proposed typical sections, environmental concerns, and construction staging. It is anticipated that the Township will secure the meeting facility for the PIC.

If requested by the Township, the PIC will be held virtually. A virtual public information center (VPIC) would be a prerecorded video with a slide presentation illustrating the project need, proposed improvements and anticipated benefits. The video can be available in more than just the English language. The video is to be available for viewing for at least a two-week period to allow the public to view at their convenience. The Township would host the link to the VPIC or, if Township prefers, GPI will host a project website with a Township link to website.

Review FDS (4810): GPI will prepare the job training and civil rights goal requests as necessary based on feedback provided by NJDOT Local Aid through the Township to comply with Federal regulations.

Resolve FDS Comments (4830): GPI will provide written responses to all FDS comments and ensure all comments are satisfied prior to updating plans and documents for the PS&E submission.

Submit PS&E Package (4840): GPI will update the plans and documents as indicated in the FDS comment resolution summary and compile final plans, specifications, estimate, schedule and supporting documents into the PS&E package. GPI will distribute the cover sheet and obtain required signatures as necessary prior to contract advertisement.

Zayibeth Carballo, PE, Township Engineer
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Obtain Construction Environmental Reevaluation (4860): GPI will provide support to document significant changes including modifications and new improvements to the project from original CED document and list of permits obtained. GPI will provide final project plans.

Assumptions:

The following assumptions are in addition to those stated in the previous activity descriptions for this task order:

- Modifications will not be required to the existing roadway profile or roadway cross slopes.
- Full depth pavement and/or pavement resurfacing will be limited to the narrow strips of pavement removal and replacement necessary to install the proposed curb and ADA ramps.
- Drainage design is limited to resolving issues at curb ramps, relocated curbs, curb extensions and cross walks. Analysis of existing drainage systems and the correction of existing drainage issues is excluded from this scope.
- Final design CADD drawings and design will be produced in AutoCAD/C3D format.
- BEPR advised that a Cultural Resource Study Phase IA will not be necessary for this project and all SHPO coordination has been completed.
- BEPR advised that a Threatened and Endangered species survey will not be necessary and all USFWS coordination has been completed.
- Green Acres coordination, if required, will be conducted by NJDOT BEPR and NJDEP
- Hazardous waste investigations and studies, if necessary, are to be performed by NJDOT BEPR and therefore not included in this scope of services.
- Environmental mitigation is not anticipated and therefore not included in this scope of services.
- Changes to the NJDEP Flood Hazard Area Control Act and NJDEP Freshwater Wetlands Protection Act Rules could affect the project scope and effort.

Cost Estimate – A copy of the proposed costs for the aforementioned services is attached.

We would be happy to discuss this scope of services with you, at your convenience. Thank you for the opportunity to provide professional engineering design services to the Township of West Orange.

Sincerely,
Greenman-Pedersen, Inc.


Andrew Cangiano, P.E.
Director of Engineering / Vice President

Township of West Orange
 NJDOT Transportation Alternatives Program (TAP) Design Assistance Program
 TAP - 2020 - Washington Street Corridor Improvements
 FINAL DESIGN FEE SUMMARY
 August 29, 2022, Revised June 25, 2025

Activity	Activity No.	Project Manager	Senior Engineer	Project Engineer	Engineer	Associate Engineer	Junior Engineer	Senior Tech	Assistant Tech	Total Hours	Total
Maximum Hourly Rate:		\$127.72	\$111.76	\$107.12	\$89.10	\$77.25	\$45.32	\$104.03	\$57.68		
Average Hourly Rate :		\$110.95	\$97.18	\$81.96	\$68.21	\$49.04	\$38.93	\$77.35	\$46.51		
Project Management: Scheduling and Coordination	24	0	36	0	0	0	0	0	0	60	\$5,613.36
Develop Alternatives of Accommodation	4050	0	0	8	0	20	0	0	0	28	\$1,636.48
Conduct Supplemental Subsurface Utility Engineering	4085	0	0	2	4	4	0	0	0	10	\$632.92
Incorporate Utility Design in Contract Documents	4090	0	0	4	0	2	4	2	0	12	\$736.34
Prepare Jurisdictional Limits Maps and Agreements	4100	0	0	8	0	0	12	0	0	20	\$1,122.84
Complete Horizontal / Vertical Geometry	4210	4	0	6	22	0	16	0	0	48	\$3,059.06
Conduct Supplemental Surveys	4215	1	0	4	0	0	0	0	0	5	\$438.79
Prepare Final Roadway Plans	4220	8	12	24	40	40	40	0	0	164	\$10,268.00
Complete Lighting Design	4230	0	4	2	24	0	2	0	0	32	\$2,267.54
Complete Traffic Signal, Signing and Striping Plans	4240	0	2	6	32	0	24	0	0	64	\$3,803.16
Complete Landscape Architectural Design	4265	4	4	4	0	20	16	32	0	80	\$5,239.24
Complete Drainage Design	4270	0	8	0	8	32	24	0	0	72	\$3,826.72
Develop Construction Cost Estimate	4275	0	0	4	0	12	8	0	0	24	\$1,227.76
Develop Specifications	4280	4	8	16	12	0	0	0	0	40	\$3,351.12
Develop Construction Schedule	4285	2	4	8	10	0	0	0	0	24	\$1,948.40
Prepare FDS Package	4290	2	6	16	0	0	16	0	0	40	\$2,739.22
Prepare Permit Application	4385	8	4	2	20	14	0	0	0	48	\$3,491.00
Review & Submit Permit Application	4390	2	4	0	6	0	0	0	0	12	\$1,019.88
Secure Permits	4395	2	0	0	6	8	0	0	0	16	\$1,023.48
Prepare Soil Erosion & Sediment Control Plans	4410	0	4	0	0	20	24	0	0	48	\$2,303.84
Review Soil Erosion & Sediment Control Plans	4430	4	0	4	8	8	0	0	0	24	\$1,709.64
Complete Environmental Plans	4585	4	4	0	16	24	0	0	0	48	\$3,100.84
Prepare Access Cut-Outs	4705	4	8	16	16	16	24	0	0	84	\$5,342.92
Administer Access Alterations	4715	4	2	4	12	8	12	0	0	42	\$2,644.00
Execute Final Design Public Involvement Action Plan	4795	8	0	12	0	16	0	0	4	40	\$2,841.80
Review FDS	4810	2	0	2	0	4	0	0	0	8	\$581.98
Resolve FDS Comments	4830	4	2	6	0	4	0	0	0	16	\$1,326.08
Submit PS&E Package	4840	2	0	2	0	4	0	0	0	8	\$581.98
Obtain Construction Environmental Reevaluation	4860	1	2	4	8	16	12	0	0	43	\$2,430.63
Total Hours		94	78	200	244	272	234	34	4	1,160	
Total \$		\$10,429.30	\$7,580.04	\$16,392.00	\$16,643.24	\$13,338.88	\$9,109.62	\$2,629.90	\$186.04		\$76,309.02

Labor	\$76,309.02
x 1.6341 Overhead	\$124,696.57
Fixed Fee (22.5% Labor)	\$17,169.53
Mileage	\$750.00
Printing / Postage / Misc.	\$2,500.00
GPI Total	\$221,425.12

Subconsultants:	M&S	\$14,900.74	(see attached M&S proposal)
	TWT	\$12,000.00	(see attached TWT proposal)
Grand Total		\$248,325.86	

TOWNSHIP OF WEST ORANGE
Final Design
West Orange, Washington Street TAP 2020 Design Assistance
West Orange, Essex County, NJ

PROJECT DESCRIPTION

Malick & Scherer, PC (M&S) will assist GPI in the Final Design Phase for the Streetscape Improvement of Washington Street, located in West Orange Township, Essex County, NJ. M&S will be responsible for the preparation of the survey and base mapping documents.

The project limits will extend along Washington Street its intersection with Main Street to approximately 100 feet SE of High Street, for a total of approximately 1,150 linear with a swath up to approximately 10 feet beyond the ROW or building face where noted. Additionally, the side streets will be surveyed for approximately 100 feet from the centerline intersection with Washington Street as shown on the sketch below. Conventional ground survey will be performed within these limits. A Drainage & Sanitary Survey will be performed, and will include pipe sizes and material, and inverts will be measured during this phase.



The following is a detailed description of tasks to be performed by M&S, broken into Activity numbers as described under the NJDOT Capital Project Delivery Process:

SURVEY & BASE MAPPING

Survey services will be performed by Malick and Scherer, P.C. (M&S). To perform the existing conventional ground field survey along the existing roadway corridor within the project limits, it is assumed that a temporary shadow vehicle or local police/flagman may be required to protect the survey crew and safely maintain the flow of traffic. For the purpose of this proposal, it is assumed that these temporary lane interruptions, if required, will be permitted by the County and the Township between 9:00 am - 3:00 pm Mon-Fri.

TASK 4215 – Conduct Supplemental Surveys

Base mapping was prepared by M&S during the Preliminary Engineering phase of this project. Additional Topographic ground survey is anticipated during the Final Design phase for specific identified areas as requested by GPI. The survey work, data and information will be processed, compiled, and incorporated into the existing base mapping and Digital Terrain Model (DTM).

Additional tasks required for the supplemental survey are:

Permit and MPT Coordination - It is assumed that M&S will not need to prepare or obtain a roadway permit from the Township, County, or State for this project. We will coordinate and schedule the Maintenance and Protection of Traffic sub consultant services and or local Police for temporary lane interruptions as required. Up to 1 day of MPT/Police is included in this proposal as most of the survey effort will focus on areas behind the curb.

Auxiliary Survey Controls - The Primary Survey Report was previously prepared for this project by M&S in conformance with the most recent and applicable sections of the Procedures Manual and Article 44 of the Consultant Contract. These same control points will be used to perform any FD supplemental survey and establish additional auxiliary controls as needed, so it is assumed that no update to the survey report will be required. M&S will locate and refresh the original controls in the vicinity of the supplemental work as needed.

Field Edit Survey - M&S will perform a field edit survey of the existing conditions base mapping for the survey limits and verify/update the topo based on any changed conditions.

Supplemental Survey - To facilitate the Final Design documents, M&S will perform additional field and office survey as required and as directed by the engineer to supplement the existing base mapping. During the final design phase, as additional survey needs arise, or specific locations require detailed mapping, supplemental survey will be performed. Assume up to 1 day of field & office supplemental survey.

Assumptions

Additionally, the following assumptions are made:

- No ADA curb ramp survey is included
- Specific property surveys will not be performed; however visible accessible corner markers within the survey limits will be located.
- If intent to enter letters are required for this project, they will be provided by the Prime Consultant
- Street signs will be located; however, a sign inventory with ID's by MUTCD is not included in this proposal.

UTILITY COORDINATION

M&S will perform the following utility coordination task for the Final Design phase of the project in accordance with the NJDOT Capital Project Delivery Procedures and Activity Codes.

Task 4085 - Conduct Subsurface Utility Engineering

This task involves performing subsurface utility engineering (SUE) in areas of potential conflict consisting of an anticipated five (5) test holes. The SUE plan will be created by M&S and coordinated with GPI. SUE Services will be designated through M&S to Taylor Wiseman

Taylor (TWT) to perform the SUE services. It is anticipated that test holes will be utilized as necessary to adequately determine the horizontal and vertical location of existing subsurface utilities. Upon completion of the work, a SUE Test Hole Report created by TWT will be submitted to the NJDOT and the existing utility mapping will be updated as necessary.

Township of West Orange
 NJDOT Transportation Alternatives Program (TAP) Design Assistance Program
 TAP - 2020 - Washington Street Streetscape Improvements
 FINAL DESIGN FEE SUMMARY
 Malick & Scherer
 June 2025

Activity	Activity No.	Project Manager	QA/QC Engineer	Project Engineer	Engineer	Associate Engineer	Crew Chief	Instrument Operator	Junior Engineer	Research Tech	Total Hours	Total
Hourly Rate:		\$110.00	\$88.00	\$81.00	\$67.00	\$54.64	\$57.25	\$33.56	\$33.04	\$33.56		
Project Management: Scheduling and Coordination	-										0	\$0.00
Conduct Supplemental Survey	4215	6	2	0	12	20	30	30	0	4	104	\$2,867.04
Conduct Subsurface Utility Engineering	4085	2	0	2	0	8	0	0	8	0	20	\$1,083.44
											0	\$0.00
											0	\$0.00
Total Hours		8	2	2	12	28	30	30	8	4	124	
Total \$		\$880.00	\$176.00	\$162.00	\$804.00	\$1,529.92	\$991.20	\$991.20	\$264.32	\$134.24		\$5,932.88

Labor	\$5,932.88
x 1.118 Overhead	\$6,632.96
Fixed Fee (0.225 Labor)	\$1,334.90
Aerial Mapping	\$0.00
SUE (Provided by GPI)	\$0.00
Deed/Map Packets	\$0.00
IMPT	\$1,000.00
M&S Total	\$14,900.74

Township of West Orange
 NJDOT Transportation Alternatives Program (TAP) Design Assistance Program
 TAP - 2020 - Washington Street Streetscape Improvements
 FINAL DESIGN FEE SUMMARY
 Malick & Scherer
 June 2025

Activity	Activity No.	Project Manager	QA/QC Engineer	Project Engineer	Engineer	Associate Engineer	Crew Chief	Instrument Operator	Junior Engineer	Research Tech	Total Hours	Total
Hourly Rate :	-	\$110.00	\$88.00	\$81.00	\$67.00	\$54.64	\$57.25	\$33.56	\$33.04	\$33.56	0	\$0.00
Project Management: Scheduling and Coordination	-										0	\$0.00
Conduct Supplemental Survey	4215	6	2	0	12	20	30	30	0	4	104	\$2,867.04
Conduct Subsurface Utility Engineering	4085	2	0	2	0	8	0	0	8	0	20	\$1,083.44
											0	\$0.00
											0	\$0.00
Total Hours		8	2	2	12	28	30	30	8	4	124	
Total \$		\$880.00	\$176.00	\$162.00	\$804.00	\$1,529.92	\$991.20	\$991.20	\$264.32	\$134.24		\$5,932.88

Labor	\$5,932.88
x 1.118 Overhead	\$6,632.96
Fixed Fee (0.225 Labor)	\$1,334.90
Aerial Mapping	\$0.00
SUE (Provided by GPI)	\$0.00
Deed/Map Packets	\$0.00
MPT	\$1,000.00
M&S Total	\$14,900.74



Taylor Wiseman & Taylor

ENGINEERS | SURVEYORS | SCIENTISTS

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June 17, 2025

#92022.2050.XX_R

RE: Project:

Washington Street TAP

West Orange, Essex County, NJ

QL-A

Andrew Cangiano, PE
Vice President
GPI, Inc.
301 Gibraltar Drive, Suite 2A
Morris Plains, NJ 07950

Dear Mr. Cangiano:

Taylor Wiseman & Taylor (TWT) is pleased to submit this proposal you requested for Subsurface Utility Engineering (SUE) Services to support the above referenced project.

Our proposal consists of this cover letter and the following attachments:

1. Scope of Services
2. Man-Hour Estimate
3. Cost Proposal Summary
4. Fixed Fee Calculation
5. NJDOT Overhead Rate Letter

We are grateful to the for this opportunity and look forward to assisting you to deliver this project. Please do not hesitate to contact me at (609) 417-0938 if you have any questions.

Yours truly,

Adam L Taylor
Manager, SUE Department

Attachments

Scope of Services – SUE

A3080 – Conduct Subsurface Utility Engineering (SUE): The anticipated work to be performed by Taylor Wiseman & Taylor (TWT) includes:

- A. Mobilization, consisting of:
 - 1. Review available as-built plans and utility record plans. It is assumed that GPI has secured these plans for design purposes and will provide them to TWT.
 - 2. Assess site conditions and plan/layout required traffic control needs for both survey and SUE work.
 - 3. Apply for and obtain a HOP from Essex County for the proposed work.
 - 4. Obtain utility mark-out through NJ One-Call.
 - 5. Review Survey Control Report provided by GPI.
 - 6. Plan and discuss proposed work procedures and schedules with field survey and SUE crew chiefs, with focus on safety.
- B. Perform Quality Level A SUE (Locating/Test Holes) five (5) test holes to locate various utilities as requested, TWT will identify the type and material, measure the size and depth and record the information gathered on a field sketch plan. *** Specific MPT costs are unknown at this point. For estimating purposes one (1) day of local police have been included in our estimate.

Excavated areas will be backfilled as follows, based upon conditions encountered:

- In non-paved areas: Backfill with the excavated material and raked to provide a smooth surface grade.
- In asphalt paved areas: Backfill with the excavated subsurface material, with asphalt cold patch applied top 6"± and tamped.
- In concrete sidewalk areas: Backfill with the excavated subsurface material, with hand-mixed concrete applied to the top 4" ±.

Note: Test holes in asphalt and concrete will be sawcut to provide a smooth joint along patch lines

- C. Recover existing survey control, set supplemental control points as necessary, and survey the locations of the five (5) SUE Test Holes. It is assumed that the previously established survey control identified in the Control Survey Report will be recoverable, and not have to be re-established.
- D. Compile, review and summarize test hole results. Prepare CADD legal size Test Hole Plan for the five (5) locations providing x,y,z coordinates, a plan view with short ties to the test hole location, and a cross section sketch providing the size and type (material) of subsurface utility, and pertinent elevations (i.e. ground and top/bottom of utility).
- E. Prepare a CADD file (microstation) the provides the location and number for each test hole, illustrated using the standard test hole CADD cell.

A3999 – Administration & Invoicing: Under this Activity, TWT will coordinate/meet with Department in-house design staff as necessary, administer the work, and prepare/submit monthly invoices, with supporting back-up as required.

Scope of Services – SUE

Subsurface Utility Engineering Services Standard Provisions:

1. Taylor Wiseman & Taylor (TWT) will provide subsurface utility investigations in accordance with accepted industry standards. Investigations will be performed at Utility Quality Levels as specified in the Client Approved Scope of Work. Utility Quality Levels (QL) will be classified as QL-D (existing records search), QL-C (visible features), QL-B (surface geophysical - Designating) or QL-A (actual exposure/test hole - Locating).
 2. QL-D investigations (Records Search) will be limited to due diligent efforts based on available existing records and oral recollections. TWT will not be responsible for QL-D services provided by others.
 3. QL-C (Visible Features) will be limited to information obtained by surveying and plotting visible aboveground utility features. TWT will not be responsible for QL-C services provided by others.
 4. QL-B investigations (Designation) will be accomplished using passive and active types of utility detection equipment that detects induced or naturally occurring energy fields on conductive type utilities. Non-metallic lines cannot be detected without trace wire. If there is no trace wire, the Client will be informed.
 5. Accuracy of QL-B investigations may be limited due to conditions beyond the control of TWT. Such conditions include, but are not limited to:
 - a. Access to utilities
 - b. Depth and conductivity of utilities
 - c. Soil composition and moisture content
- TWT will not be responsible for utility designation errors and omissions due to unforeseen conditions beyond their control.
6. QL-B services, including marking, surveying and plotting, are expressly understood to be approximate.
 7. Designation marks (paint marks) are visible for a maximum period of fourteen (14) days (weather permitting); any marks older than fourteen (14) days are not the responsibility of TWT.
 8. QL-A (Locating) investigation includes information obtained by the actual exposure (or verification of previously exposed and surveyed utilities) of subsurface utilities, using (typically) minimally intrusive excavation equipment to determine their precise horizontal and vertical positions, as well as their other utility attributes. This information is surveyed and reduced onto plan documents. Accuracy is typically set at 15mm vertical, and to applicable horizontal survey and mapping standards.
 9. Utility record information shall at no time act or be regarded as a substitute for actual visual conformation of the underground utility. QL-A will be performed only when authorized by the Client, and will be competed only by the method of vacuum excavation.
 10. SUE utility data information is intended for design purposes only. During construction, the Contractor is fully liable for the protection and preservation of all existing utility facilities. SUE services performed, and information provided by TWT does not, in any way, limit or reduce this responsibility of the Contractor during construction. Deliverables will be provided to the client in accordance with the approved Scope of Work.
 11. This agreement does not relieve Contractors of their responsibility to notify Owners, Utility Companies and "one-call" centers before excavation.

GPI, Inc.
Washington Street TAP
West Orange, Essex County, New Jersey

SUE Services

MAN-HOUR ESTIMATE

Activity Code	Description	ASCE Grade:						Total Hours
		PVI	PIV	PII	ETIII	ETIV & ETI	ETIV, ETIII, ETI	
		Proj. Mgr.	Proj. Surv.	Eng. II	Draft.	2-Man Survey Crew	3-Man Survey Crew	
3080	Conduct Subsurface Utility Engineering							
	A. Mobilization (One Call)(County Permit)	1		2	2			5
	B. Perform QL-B SUE (Designating)							0
	C. Perform QL-A SUE (Locating/Test Holes)	2		2			12	16
	D. Recover survey control & survey locations of SUE Test Holes	1	2		2	10		15
	E. - F. Prepare Test Hole Plans & CADD File	1	1	1	5			8
3999	Project Administration & Invoicing	2						2
MAN-HOUR TOTALS:		7	3	5	9	10	12	46

GPI, Inc.
Washington Street TAP
West Orange, Essex County, New Jersey

SUE Services

COST PROPOSAL SUMMARY

ASCE GRADE	TITLE	EST. HOURS	AVERAGE RATE	*ESC. AVERAGE RATE	DIRECT LABOR COST
PVI	Project Manager	7	\$ 74.00	\$ 75.66	\$ 529.61
PIV	Project Surveyor	3	\$ 65.17	\$ 66.63	\$ 199.89
PII	Engineer II	5	\$ 49.75	\$ 50.87	\$ 254.33
ETIII	Drafter	9	\$ 42.38	\$ 43.33	\$ 389.97
ETIV & ETI	2-Man Survey Crew	10	\$ 84.38	\$ 86.27	\$ 862.72
ETIV, ETIII, ETI	3-Man Survey Crew	12	\$ 114.59	\$ 117.16	\$ 1,405.91
DIRECT LABOR TOTAL					\$ 3,642.43
OVERHEAD 180.0%					\$ 6,556.37
SUBTOTAL					\$ 10,198.80
FIXED FEE 22.5%					\$ 819.55
DIRECT EXPENSES					\$ 981.65
GRAND TOTAL=					\$ 12,000.00

SALARY ESCALATION RATE INFORMATION

Effective Date of Approved Wage Rates:	3-Jan-25
Estimated Start Work Date:	1-Aug-25
Estimated Finish Work Date:	31-Oct-25
Estimated Midpoint of Work Date:	15-Sep-25
Approved Wage Rates to Midpoint of Work:	9 Months
Calculated Salary Escalation Rate	2.242%

EXPENSE BREAKDOWN

DIRECT EXPENSES	COST
Vendor Traffic Control Services:	\$ 800.00
Miscellaneous Reimbursables (concrete mix; cold patch material; etc.)	\$ 181.65
TOTAL DIRECT EXPENSES =	\$ 981.65