City of Rochester Hills
RFP-RH-24-065
Geotechnical Engineering and Construction Material Testing Services
Bid Opening: Wednesday, November 13, 2024 @ 3:00 PM

	DLZ Michigan, Inc. 4494 Elizabeth Lake Rd Waterford, MI 48328	G2 Consulting Group 1866 Woodslee Street Troy, MI 48083	NTH Consultants, Ltd. 41780 Six Mile Road; Suite 200 Northville, MI 48168	PEA Group 1849 Pond Run Auburn Hills, MI 48326	Professional Service Industries, Inc. (PSI) 16049 Leone Drive Macomb, MI 48042	Testing Engineers & Consultants, Inc. (TEC) 1343 Rochester Road Troy, MI 48083
Firm Established:	1955	1994	1968	1947	1972	1966
Years in Business:	69 years	30 years	56 years	77	100+	58
Type of Organization:	Corporation	LLC	Corporation	Corporation	Corporation	Corporation
# of years company has been providing geotechnical engineering services:	35 years	30 years	56 years	32 years	Not specified	58 years
# of years company has been providing construction material testing and inspection services:	35 years	30 years	More than 40 years	32 years	Not specified - The company has been servicing Michigan since the 1930's, but a new incorporation was founded as A & H Materials Testing in 1961 in Champaign-Urbana, Illinois.	58 years
# of clients your company currently serves with the type of services described/ explain capacity:	No specific number given - company serves numerous clients across the Midwest. Roughly 80% of work is local, state and federal. The other 20% is private sector.	G2 serves roughly 500 clients in both the public and private sectors. They have provided consulting, design and testing services on over 18,000 projects throughout Michigan and 34 other states. Currently, they are providing testing services to 48 different Michigan municipalities.	Currently serving hundreds of clients each year, NTH has the flexibility and adaptability that allows them to scale services according to the specific needs of each project and client. They have the ability to allocate the necessary support, from additional staff to specialized equipment, as projects evolve. This ensures that clients receive consistent, high-quality service regardless of project size or complexity.	PEA Group currently provides geotechnical engineering and construction material testing to 118 active clients.	PSI performs approximately 30,000 projects/year. The PSI - Macomb branch is currently under contract to perform the Geotechnical and Construction Testing with but not limited to the following: City of Royal Oak, City of Troy, City of Warren, Macomb Township, Road Commission of St. Clair County, and the City of Port Huron.	TEC serves hundreds of clients per month. TEC listed 11 clients in particular to Geotechnical and Construction Services .
Was a list of client references provided? Briefly describe.	Yes - contact information is provided in RFP proposal. 1) **MDOT Kalamazoo TSC As-Needed Inspection and Testing Services** - services performed included as-needed inspection, quality control testing and reporting, density testing, measurement computation, and documentation of quantities for construction work performed by the contractor. 2) **MDOT Marshal TSC As-Needed Inspection and Testing Services** - preparation and maintenance of an inspection calendar that listed all DLZ, MDOT, and subconsultant inspectors and assignments for the TSC. 3) **Joe Louis Greenway** - providing Construction Engineering and Inspection Services for the Joe Louis Greenway. 4) **Mt. Elliott Road Reconstruction** - contracted by Detroit Economic Growth Corporation and the Michigan Department of Transportation to carry out a major street improvement project on Mt. Elliott Street. 5) **Fort Street Crossing (Woodward and Fort Street)** - Professional construction engineering and inspection services. 6) **Observational and Testing Services, Oakman Boulevard Green Infrastructure -** contracted by Blaze Contracting Inc. to perform field & laboratory material testing and construction observation services. 7) **Geotechnical, Inspection, and Testing Services, Brighton Area Schools Bond Project -** contracted in conjunction with Integrated Designs Inc. (IDI) to perform Geotechnical Testing, Construction Inspections and Material Testing services in connection with the BAS 2019 Bond Project which includes ten school district facilities. 8) **Gordie Howe International Bridge Project (w/ subconsultant FKE)-** install project geotechnical instrumentation at sites and perform various geotechnical engineering services.	Yes 1) **As-Needed Geotech and CMT and Inspection - Road Commission for Oakland County** Provide geotechnical engineering and construction inspection and testing services on an as-needed basis. 2) **MDOT Metro Region As-Needed Geotechnical Services - MDOT** Provide geotechnical services to support numerous projects for the Metro Region under its as-needed geotechnical contracts. 3) **MDOT Bay Region As-Needed Geotechnical Services - MDOT** Provide MDOT Bay Region with as-needed geotechnical engineering services. 4) **Construction Materials Testing Services - City of Ann Arbor** Perform testing and consulting services for select 2022 and 2023 local road reconstruction projects in the City. 5) **Jackson TSC As-Needed Inspection and Testing - MDOT** Provide full-time and as-needed inspection, measurements, computations, documentation of quantities and reporting. 6) **As-Needed Geotechnical and Environmental Engineering - City of Detroit** Provide as-needed geotechnical engineering, construction materials testing services, and miscellaneous testing services for the City's Department of Public Works – City Engineering Division. 7) **US-23 CEI - Spencer Road to M-59 and Genesee County - MDOT** Provided services including full time and on-demand QA material sampling and testing and inspection assistance. 8) **MDOT Statewide A/N PSI - MDOT** Provising PSI services to MDOT under an as-needed contract.	Yes - Contact information provided in proposal. References 1-4 were provided geotechnical engineering and construction material testing. 1) **Rochester Community School** - Perle Musico 2) **Road Commission for Oakland County** - Lou Gonzalez 3) **St. Clair County** - Bill Hazelton 4) **Rochester Hills Bldg. Dept** - Jay Fakhoury 5) **Insite Real Estate** - Jack Daluga - Civil engineering, geotechnical engineering and construction materials testing 6) **Full Circle Communities** - Carl Kunda - Civil engineering, surveying, geotechnical engineering, and construction material testing 7) **Covenant Community Care** - Jacqueline Bejma - Materials testing and construction services 8) **Robertson Brothers Homes** - Darian NEubecker - Civil, surveying, geotechnical and ecological engineering 9) **Northpoint Development** - Robbie Nguyen - Geotechnical engineering and construction material testing 10) **General Motors** - Daniel Mullen - Civil engineering, geotechnical engineering and construction material testing	Yes - a list of 8 municipal references was provided. Contact information provided in proposal. 1) **City of Port Huron** - Construction Materials Testing for Public Improvements - Brent Moore 2) **St. Clair County Road Commission** - As-Needed Construction Testing Services - Bill Hazelton 3) **MDOT Bay Region** - As-Needed HMA QA Sampling, Lab Testing and TMI Services - Dean Roggenbuck 4) **City of Jackson** - As-Needed Construction Testing Services - Troy White 5) **City of Warren** - Environmental, Geotechnical, and Testing Engineering Svcs - Tina Gapshes 6) **City of Troy** - Geotechnical Exploration and Recommendations, QA/QC Construction Materials - Antonio Ciochetti 7) **Macomb Township** - Geotechnical Engineering & Materials Testing Svcs - Crystal Kozak 8) **City of East Lansing** - As-Needed Construction Testing Services - Stephen Clayton	Yes - a list of 5 municipal references was listed. Current client list also includes contact information. 1) **City of Rochester Hills** - Keith Depp 2) **City of Farmington Hills** - Gary Mekjian and Jim Cubera 3) **City of Troy** - Scott Finley 4) **City of Sterling Heights** - Brent Bashaw 5) **City of Warren** - Tina Gapshes
	9) **Miller's Point US-131 Towers Project (w/ FKE)** - Construction of eleven new steel poles (towers) were required to support new high voltage distribution (HVD) lines across Oshtemo Township and Kalamazoo, Michigan. 10) **GLWA 96-inch WTM (w/ FKE) -** Provided geotechnical engineering services for the relocation of approximately 3 miles of Great Lakes Water Authority (GLWA) 96-inch water transmission main (WTM).		9) **Amazon Ambient Air Quality Monitoring** establish an air quality monitor network to monitor the levels of volatile organic compounds (VOCs), particulates (PM10 and PM2.5), and nitrogen oxides (NOx) over the four (4) year period occurring before, during, and after construction of a new Amazon Fulfillment Center. 10) **As-Needed Environmental/Occupational Health and Safety Services - GLWA** Assist GLWA and predecessor organizations with protecting employees and meeting regulatory obligations.			
Full-time employees:	753	120	99	207	1,900	60
Part-time employees:	57	30	6	10	0	2
Total Geotechnical Engineers:	9	56	22	7	725	5
Total Geotechnical Technicians:	32	38	10	14	975	25
Describe the geotechnical and material testing and inspection resources company is capable of bringing to the City of Rochester Hills:	DLZ provides an experienced workforce of nearly 860 professionals in a regionally local office, with the closest location in Waterford. They offer a full range of geotechnical engineering services - foundation evaluations, dewatering analyses, soil-structure interaction analyses, slope stabilization and seepage control, and geotechnical site assessments. DLZ collaborates with FK Engineering to further enhance their capabilities. DLZ shares state-of-the-art laboratories and experienced field teams with FK Engineering to ensure that materials testing is conducted to the highest standards.	G2 has years of experience performing geotechnical engineering, materials testing and engineering and construction inspection for the City. They believe they have a depth of understanding of the City's needs that other firms may not. They maintain a staff of qualified geotechnical engineers and techs with relevant experience, with one of the engineers having over 25 years of project experience in the City. G2 maintains MDOT service prequalification for inspections and testing, and has a fully equipped geotechnical and materials engineering laboratory. They are located in Troy, which is a close proximity to Rochester Hills. The company concentrates their client focus on municipal clients.	**Geotechnical Equipment/Software** NTH provides experienced engineers, geologists, or engineering technicians alongside the selected sub vendors for all field work to coordinate activities and perform sample testing and logging. **Construction Material Testing Equipment** NTH owns all the necessary equipment to obtain samples and perform soil and aggregate testing, Bituminous Pavement Inspections, Hot-Mix-Asphalt and SUPERPAVE testing, as well as concrete testing and inspection. **Subsurface Utility Engineering (SUE) Equipment** Routinely performs subsurface utility designating services using various equipment.	PEA Group is capable of providing geotechnical investigations, foundation recommendations and design, site work recommendations, ground water control recommendations, pavement design and recommendation, retaining wall design, slope analysis, infiltration testing, failure analysis, electrical resistivity testing, vibration analysis, construction material testing, steel inspection and special inspections, and seismic design class site testing. Please refer to the Capacity section for a complete list of specialized testing capabilities.	PSI can assemble a project team comprised of experienced, competent, and dedicated personnel. Their office where they will conduct all services is located in Macomb, Michigan - which is close proximity to Rochester Hills. They believe they will have no problem dedicating qualified personnel, equipment, and financial resources to all assignments. All individuals identified in this proposal are available for immediate assignment. PSI is pre-qualified with various government agencies including the Michigan Department of Transportation to provide core services of soils, concrete and asphalt testing and inspection, as well as various environmental and geotechnical services. The office is made up of experienced and credentialed staff.	Personnel is very accountable and several staff has outside resources to assist with projects. TEC maintains a full library with all the latest ASTM's, BOCA Requirements, ANS, MDOT and AASHTO Standards. Staff engineers serve as project managers that deliver 24 hour scheduling, daily reports. TEC participates in Round Robin AASHTO Aggregate and Bituminous Laboratory testing. TEC's technicians are MDOT/ACI certified field personnel. TEC is prequalified with MDOT, and has all the staff and equipment to provide services requested in the RFP.
Does company have on-site testing facilities? Please describe capacity.	Yes, in Melvindale, MI, where they are able to conduct the following testing: soil, aggregate, concrete, asphalt, rock, plastic and SFRM. DLZ also has access to labs in Indiana, Ohio and Pennsylvania. Their collaborator, FK Engineering, offers additional geotechnical testing and analysis.	G2 has a central materials laboratory in Troy, and has all the equipment necessary and available ranging from basic lab or field tests and measurements to advanced techniques or analytical processes necessary for construction materials inspection and testing projects.	NTH has a fully equipped geotechnical and construction materials testing laboratory in Livonia, Michigan, only 40 miles from the City. Services include sample collection, field and laboratory testing, and preparation of detailed, for-record construction documentation.	PEA Group has on-site testing labs at their headquarters in Auburn Hills and in their Lansing office. Their labs are equipped to perform geotechnical testing as well as construction materials testing.	PSI - Macomb is equipped with the personnel and equipment necessary to complete the services outlined in this proposal response. PSI also has office and laboratory locations in Detroit, Lansing, Plymouth and Saginaw.	TEC can place a trailer on a site with full equipment and personnel. TEC often does this for special projects when results are needed on an immediate basis or when the project is a significant distance from a TEC office. In this case the proximity to the City allows TEC to provide services from the full service laboratories located in our Troy headquarters in a prompt efficient manner.
Profiles of staff submitted that will work on City of Rochester Hills projects and examples of similar work performed by each staff member:	**Dor'Mario Brown - Project Manager** Battle Creek Air National Guard Base Roads - Construction Inspector Project Dir. Detroit - Brownfield Redevelopment Environmental Site Assessments Project Manager Detroit Water and Sewerage Department - Field Services Project Director **Heather Escarenno, PE - Construction Manager** 2023 Canton Neighborhood Road Program - Project Manager 2023 Novi Concrete Road Program Project Manager Washington Twp - Mound Road and Jewell Road Pathways - Project Manager **Andre Greer - Material Technician** **Thomas Lee - Material Technician** **Keith Tanner - Material Technician** Detroit - Brownfield Redevelopment Authority - Field Technician Detroit - CS-1812 Detroit Water and Sewerage Department - Field Technician Ann Arbor - - Material Testing 2023 - Inspector. **Reginald Tatum - Material Technician** **Alida Tokarz - Lab Tech/ Material Tech** Wayne Rd. / Ecorse Rd. Intersection Reconstruction - Laboratory Technician Detroit - Joe Louis Greenway Construction - Laboratory Technician Detroit - Gordie Howe International Bridge - Technician **Paul Wheat - Material Technician** ADC Detroit Brownfield Redevelopment Authority Site 12 Lot - Technician Detroit - Oakman Blvd Material Testing - Quality Control Technician Ann Arbor Wastewater Treatment Plant - Technician **John Kirka - Material Technician**	**Amy Schneider - Associate/Project Manager** - oversee quality control observation and testing services on jobs, as well as provide geotechnical and design services. Worked as Project Manager for geotechnical and quality control testing for Waterford Schools, Clarkston Schools, Troy Schools, food chains, Senior Living Communities and more. **Noel Hargrave-Thomas - Principal/Founding Partner** - responsible for all aspects of the firm's Geotechnical Engineering Services. Worked as Project Consultant for the Detroit High Rise Development, Dearborn CSO Contract No.8, M-24 Corridor Sanitary Sewer, and more. **Jeffrey M Hayball - Project Manager** - Primarily works on geotechnical investigations, including new building construction, underground utilities, and building additions. Work experience includes: I-75 Modernization Project in Oakland County, Local Streets Paving Program in Ferndale, GM Tech Center in Warren, and more. **Jennifer Casey - Project Manager** - 24 years of engineering experience in geotechnical engineering and construction quality control observation and testing. Project experience includes: I-94 Design-Build Reconstruction, 400,000 Sq Ft Manufacturing Facility in Detroit, and more. **Tim Dumala - Senior QA / QC Engineer** - provides clients with quality assurance/ quality control during structural construction operations for more than 25 years. Project experience includes: FCA Warren Truck assembly Plan Reconstruction, Oakland University, Amazon Distribution Center, Cellular Towers, and more.	**Tyler Dawson - Project Manager/Geotechnical Engineering Lead** - Has worked with NTH for 13 years with a focus on engineering for transportation projects. Project scopes have included but are not limited to geotechnical explorations, evaluations and environmental contamination studies. Project experience includes RCOC Clarkston Rd at Camp Agawam where engineering for remediation took place to reduce future pavement distress and RCOC Bear Creek Ct. Culvert Replacement. **Anthony Sinatra - Construction Materials Testing Lead** - Has over 19 years of experience in construction services. Expertise in quality control/assurance testing and supervision and training of field staff members. Project experience includes: Construction Manager of OCWRC 8 Mile Relief Force main CES for the construction of the new 54-inch force main, and Construction Manager for RCOC CMT for as-needed services on various projects in Oakland County. **Joseph O-Connell - Lab Services Lead** - has over 42 years of experience in managing construction quality assurance/quality control programs. Joseph is a Project Manager, a Senior Manager, Laboratory Operations Manager, and responsible for training staff in various operations within the firm. Acted as Project Manager for Domino's Research Center and Sports Medicine Institute MOUB during construction including inspections and testing for backfill/density/footings and structural concrete placement. **Kenneth Hanson, P.E. - Geotechnical Engineering Lead** - 28 years of geotechnical engineering and project management. Project experience includes I-75 Modernization project as an Owner's Representative Consultant and I-94 Between Burns Street and Bannett Avenue Reconstruction as a Geotechnical Engineer. **Bhushan Modi - Environmental Services Lead** - 38 years of experience in conducting and managing environmental due diligence, compliance/permitting, and Brownfield redevelopment projects. Project experience includes M-139 Improvement Project as an Owner's Representative and responsible for preparing Site Investigation (PSI) for highway improvement, and US-23 Flex Route Project as Project Manager where he managed and coordinated PSI for roadway reconstruction.	**Jack Sattelmeier - Director of Geotechnical Engineering** - over 30 years of experience managing geotechnical and construction materials testing project. Project experience includes: St. Clair County Road Commission Road and Bridge Geotechnical Investigations/ Oakland County Facilities Planning and Engineering Services - Waterford, MI / Legacy of Rochester Hills, Rochester Hills, MI **David Hunter - Chief Operating Officer** - over 30 years of land surveying and civil engineering experience. Project experience includes: General Motors Worldwide Facilities Group (WFG) Corporate Paving Program / General Motors Assembly Plant Paving Rehabilitation / General Motors Property Condition Assessments **James Camfield - Project Manager** - over 10 years of geotechnical engineering experience. Project experience includes: Rochester Hills Trio - Rochester Hills, MI / Crystal Lake Subdivision - Commerce Twp, / Windridge Residential Development, Phase 3 - Lyon Township **Jonathan Andare - Project Engineer** - has over 10 years of experience in geotechnical engineering. Project experience includes: City of Rochester Hills Roadway Replacement / Hamlin Road MDOT RRR Improvements - Rochester Hills / Taxiway Bravo Construction - Detroit Metropolitan Airport **Brandon Junga - Project Manager** - nearly 10 years of civil engineering experience to his role as a Project Manager at PEA Group. Project experience includes: Troy Athletic Fields, Troy / Schoenherr North Geotech - Shelby Township / Airport Terminal Demolition - Romulus **Robert Roohon - Quality Management** - has over 30 years experience in the engineering industry. Project experience includes: Troy School District Drainage and Paving Improvement Projects - Troy / Brightmoor Community Land Clearing Project - Detroit / Old Goddard and Lafayette Road Reconstruction Projects (Wayne County Funded) - Lincoln Park	**Taha Khaleff - Senior Geotech Engineer** - Over 18 years of experience with construction material testing and geotechnical engineering. **Abdulkareem Kuaryoul - Building & Construction Engineering -Michigan** - 18 years of experience as a Project Engineer/ Project Manager in construction, structural engineering, condition assessments, and more. **Russell Bennett - Branch Manager - Saginaw** - Over 20 years of experience with PSI and is a qualified principal consultant/branch manager. **Kyle K. Erskine - Branch Manager - Macomb** - Has over 17 years of experience with geotechnical engineering, materials engineering, quality assurance/quality control, and project management. **Prasun Manadhar - Staff Engineer** - Has over 7 years of experience with construction service and materials testing. **Adan Najera - Primary Field Tech** - Has been involved with construction quality control (QC) and quality assurance (QA) testing services for approximately six (6) years. **Mizanur Rahman - Lab Lead Tech** - Has over twenty (20) years of experience with PSI and over 30 years' experience in the construction materials testing industry. **Zoren Gjorgjievski & Adam Dresden - Secondary Field Tech** - Has been involved with construction quality control (QC) and quality assurance (QA) testing services for approximately twenty-three (23) years. * Did not specify project experience for individual staff *	**Carey Suhen - VP/ Geotechnical and Environmental Svcs** - 38 years of experience in geotechnical engineering, material testing, and more. Has extensive Rochester Hills project experience. **Donald Kaylor - Manager/Environmental Assessment** - More than 34 years of environmental consulting experience. Project Experience includes but is not limited to extensive UST removal and investigations, and environmental consulting around Michigan, **Ruben Ramos - VP and Principal** - Has 34 years of experience in construction/QA/QC consulting, project engineering and management for commercial, industrial and governmental projects. **Harry Papadopoulous - Senior Geotechnical Engineer** - Has over 40 years' experience providing geotechnical engineering, construction materials testing and environmental site assessment investigations and supervision of engineering and technical staff. Has extensive municipal project experience including but not limited to Rochester Hills (Hampton Circle Rehab, Museum Foot Bridge Replacements, and more) and projects in Detroit, Troy, Macomb County, Ecorse, and more. **Jesale Johnson - Field and Laboratory Testing Technicians/ Construction Services** - more than 2 years of experience in field inspection and testing of construction materials. Extensive Rochester Hills experience, and experience in Troy, Wixom, Sterling Heights and Farmington Hills. **Chris Roach - Senior Engineering Tech/ Construction Services** - 32 years of experience in field inspection and testing of construction materials. Extensive Rochester Hills experience , and work experience in Troy and Sterling Heights. Work will also be completed by other techs and employees under Environmental Services, Geotech Services and Construction Services.
Detailed description of the reports to be submitted to the City on a daily basis and any other applicable information:	Daily material testing reports will include: • Project Information • Testing Overview • Test Results • Equipment Used • Field Observations • Recommendations or Action Items • Signature and Certification	Field inspection and materials testing reports are prepared daily by technical staff that document the work performed by the Contractor, identify the sampling, testing and observations performed by G2 personnel, and itemize the individual test results and sample locations. G2 also offers multiple Field Reports as well as Routinely Issued Lab Test Reports.	Daily Field Reports (DFR) and Laboratory Test Reports will be completed using SpectraQEST software and will include the technician/s name; amount of time worked; brief description of weather; description of the work completed clearly identifying the area by station number or identifying structures; the type of equipment (model no., manufacture's name, etc.) on the work site; applicable standard/s used; description of field tests performed along with the field test results; lab test results; identification of the personnel who was notified of the field test results; and the name of the person who performed the review of the reports for accuracy and completeness. Geotechnical reports may include data reports/letters or full geotechnical reports with analyses and recommendations depending on the specific request of the City and needs of the project. In addition, any conditions or unanticipated findings will immediately be brought to the City's attention.	For construction materials testing and inspection, PEA will provide accurate daily test reports related to the activities tested each day. The report will vary slightly depending on the activity, but will generally include project name, job number, client name, contractor performing work and PEA tech. Report itself will contain specs referenced for testing, test results and description of work.	PSI will prepare daily field reports presenting a summary of the type of work performed, areas worked, observations, measurements, and field test results using QESTLab. QESTLab is a product designed for laboratory operations that are using the QESTLab Laboratory Information Management System in their construction materials and geotechnical testing laboratories.	Field Daily Reports will be created and list the project, location, client, report number, observation date, weather, and summary of the work accomplished.
When will the City receive reports?	The reports will be submitted to the City electronically and daily by the end of the workday or within 24 hours. In addition to the reports, DLZ will provide any relevant lab tests, photos or charts to supplement findings.	Daily results and issues will be communicated and corrected as they occur on site daily. The turn-around time from initial report preparation to publication for most daily reports is one to two weeks and are presented in pdf format. Many project-related reports, however, require a much quicker turn-around time and G2 can accommodate these requests on a site-by-site basis.	NTH will be in communication with the City on a daily basis regarding services performed, and will deliver weekly reports on a weekly basis. Geotechnical data reports/letters will be provided within one week of completion of laboratory testing of soil samples. Full geotechnical reports are typically provided within two to three weeks of completion of laboratory testing depending on the amount and complexity of the geotechnical analyses required for the project.	City can expect the construction materials testing and inspection reports no later than 48 hours from the completed test or inspection. Geotechnical investigation reports will be provided within two weeks of the completion of drilling.	Construction Materials Testing reports are submitted via our PSIQEST - Construction Hive distribution system on an average of two (2) business days.	A daily preliminary report can be provided to the City by the field technician on site. Final reports are reviewed by TEC Professional Engineering staff and can be made available on the third business day after the test is performed. Upon request, TEC will make reports available immediately to the client. Reports can be sent via e-mail with a summary disk of all TEC reports at the end of the project.
Describe methods of communication with clients:	DLZ is available by phone or email, in-person meetings, project meetings and coordination calls, and written communication. Throughout the project, DLZ will provide regular progress updates through email reports and meetings.	• Day-to-day communication via telephone • Project Site Communication - Test Results and Observations verbally communicated to the City or inspection staff • Data and Report Transmittal communicated in writing to the City • Communication between G2 and City Admin Staff - via telephone as issues or questions arise	NTH's policy is "communicate early, communicate often." Many project requirements include weekly conference calls with the client and monthly/weekly project summaries. Daily communications between NTH's task managers and the client's designated staff take place on-site where applicable or by phone/e-mail. These communications may be related to staff scheduling, reporting of inspection/testing results, or general construction progress.	PEA has an established communication method that includes a kick-off meeting, identify key stakeholders, establish point of contact for consultant or client, conduct milestone meetings and regular correspondence with main point of contact.	PSI utilizes conventional communication methods within the engineering and construction industries. Project Managers/Engineers are available via cellular phone as well as having office numbers and Microsoft Outlook for e-mail. Engineering Technicians also utilize cellular phones and e-mail to maintain open lines of communication.	TEC communicates by attending pre-construction meetings, progress meetings and by having the Project Managers contact City representatives to discuss schedule, budget and progress. Technicians carry cell phones, and a phone list is generated for clients.
Can you provide geotechnical and material testing services within 24 hours of notification?	Yes - Melvindale laboratory is equipped to handle immediate testing needs.	Yes - G2 routinely provides geotechnical and materials testing services with less than 24 hours notification, depending on the services required.	Yes - one business days' notice for materials testing services is requested to allow time for coordination of the appropriate staff for the type of services needed.	While PEA is responsive, Geotech cannot typically perform a job within 24 hours due to the need to schedule a driller who may not be available. Construction Materials Testing can respond to a request within 24 hours.	Yes, PSI typically requires a 24-hour notice. Geotechnical engineering requests will be responded to within 24 hours.	Yes
Describe company's policy regarding errors or omissions in plans and specifications:	Immediate identification and resolution - if errors are identified, DLZ will notify the City and work to resolve the issue. DLZ has in-house expertise across multiple disciplines, which is beneficial to address errors by leveraging their cross-functional team. DLZ aims to be transparent with errors found by documenting and researching the impact and will take steps to resolve the issue.	All geotechnical reports are prepared by G2 engineering staff and reviewed by fellow professional engineering staff. The system of oversight and review is employed to minimize the risk of errors and omissions in geotechnical investigations.	When errors or omissions are found, NTH will discuss the items at the preconstruction meeting or contact the owner and/or Engineer for clarification via email. If a formal Request for Information policy is required, NTH will follow those procedures when asking for clarification. If NTH is informed by the contractor or discovers errors or omissions regarding the installation of construction elements, NTH will suggest the contractor contact the Engineer by the specified process for resolution prior to completing the installation. NTH will also notify and make aware of the issue to the Owner/Engineer.	Any errors or omissions on PEA's part will be investigated and resolved quickly. Project team will evaluate issue, followed by a plan to resolve the errors and implement immediate steps to revise the instruments of service. PEA will look into how errors could impact the project and reporting. PEA will provide a summary of steps needed to resolve error and client will be informed of progress.	Any omissions or errors noted in plans or specifications will be brought to the attention of the City of Rochester Hills engineer of record or engineering consultant via e-mail or phone conversation. If additional documentation is required, an RFI process may be followed to document future changes.	Manager will analyze root cause and outlines a corrective action plan. Manager will define and assign responsibilities. Action required is determined by magnitude and impact of problem. Response to client will be prepared and submitted. Manager will ensure timely and effective resolution to the issues.
Is a contract required? If so, did company attach a copy of the standard contract?	DLZ can work without a separate contract and can accept a purchase order in lieu of a formal contract.	G2 requires a blanket contract for work to be performed. If G2 is chosen, a contract can be prepared.	Yes - with exceptions listed in Appendix B.	Yes - standard terms and agreements are within submitted proposal.	No additional contract will be required by PSI. Standard terms and conditions may be submitted by the City for review upon award.	It is customary for TEC to negotiate terms with the City's contract. However, as a current blanket contract holder, TEC is very familiar with the City of Rochester Hills contract and will continue to accept the City's contract terms going forward.
What are the billing procedures?	DLZ invoices on a 30-day period with a term of net 30 days.	G2 only charges for the direct involvement in the project by technical staff. They can either bill hourly or on a half/day full day inclusive rate. Time spent in the interest of the project in the field is documented via daily time tickets, if requested, that are signed by the Client's representative, plus manager and administrative time. Laboratory testing is billed on a unit rate basis.	Invoices are issued on a monthly basis for each project that NTH incurred effort during the previous month.	1) Billing schedule :Payment terms Net 30; billed on a monthly basis reflecting the work for the prior month. 2) Detailed invoicing: Each invoice includes a breakdown of hours and associated costs, categorized by project tasks/phases. 3) Billing rates and terms: Standard rates are outlined in initial contract. 4) Payment methods: ACH (Preferred)	Invoicing is done on a monthly bias, at the end of each month. They are submitted as requested by the client, and can be hand-delivered or emailed. They include the site location and date of service. Invoices will be submitted to the City's Accounts Payable email.	TEC submits monthly invoicing from daily timesheets. For time verification, field technicians' daily timesheets are signed by the client prior to leaving the site. Net 30 days.

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Has the company been involved in any litigation during the past five years? If so, provide an explanation.	No	No	**Yes - 2018 - Wade Trim Associates, Inc. v Rio-Man Construction, Inc. v Oakland County Water Resources Commissioner - Closed - Confidential Settlement 2/2023** The first issue concerns impact to the residential wells during the contractor's dewatering operations. The second issue relates to the owner's decision to shorten the tunnel's length by 25% to avoid further dewatering on the project by the contractor.	Yes - 1) Outstanding Claim: PEA Group currently has one unresolved claim in mediation. This claim involves a geotechnical report prepared by PEA Group and issues related to caisson construction. 2) Settled Claim: Last year, PEA Group settled a claim related to a typographical error in a pavement grading report. A small settlement amount was paid by PEA Group to resolve the matter.
Cost Proposal - Personnel - Engineering Service Rates	**2025 / 2026 / 2027 / 2028 / 2029**	**2025 / 2026 / 2027 / 2028 / 2029**	**2025 / 2026 / 2027 / 2028 / 2029**	**2025 / 2026 / 2027 / 2028 / 2029**
Principal of Firm	$ 270.00 / $ 275.40 / $ 280.91 / $ 286.53 / $ 292.26	$ 257.00 / $ 265.00 / $ 273.00 / $ 281.00 / $ 289.00	Sr. Principal Eng: $220.00 / $ 226.60 / $ 233.40 / $ 240.40 / $ 247.61	$ 225.00 / $ 240.00 / $ 250.00 / $ 260.00 / $ 270.00
Project Engineer	Project Engineer I: $115.00 / $ 117.30 / $ 119.65 / $ 122.04 / $ 124.48	$ 167.00 / $ 172.00 / $ 177.00 / $ 182.00 / $ 188.00	Principal Eng: $210.00 / $ 216.30 / $ 222.79 / $ 229.47 / $ 236.36	155.00 / $ 165.00 / $ 170.00 / $ 180.00 / $ 190.00
Project Manager	Project Manager I: $185.00 / $ 188.70 / $ 192.47 / $ 196.32 / $ 200.25	$ 215.00 / $ 221.00 / $ 228.00 / $ 235.00 / $ 242.00	$ 190.00 / $ 195.70 / $ 201.57 / $ 207.62 / $ 213.85	165.00 / $ 175.00 / $ 180.00 / $ 190.00 / $ 200.00
Staff Engineer (Field Engineer)	N/A	$ 129.00 / $ 133.00 / $ 137.00 / $ 141.00 / $ 145.00	N/A	130.00 / $ 135.00 / $ 145.00 / $ 150.00 / $ 160.00
Engineering Technician	N/A	N/A	N/A	100.00 / $ 105.00 / $ 110.00 / $ 115.00 / $ 120.00
Technician I	Field Tech I: $80.00 / $ 81.60 / $ 83.23 / $ 84.90 / $ 86.59	Engineering Tech I: $89.00 / $ 92.00 / $ 94.00 / $ 97.00 / $ 100.00	$ 59.40 / $ 61.18 / $ 63.02 / $ 64.91 / $ 66.86	110.00 / $ 115.00 / $ 120.00 / $ 125.00 / $ 135.00
Technician II	Field Tech II: $90.00 / $ 91.80 / $ 93.64 / $ 95.51 / $ 97.42	Engineering Tech II: $107 / $ 110.00 / $ 114.00 / $ 117.00 / $ 120.00	$ 70.20 / $ 72.31 / $ 74.48 / $ 76.71 / $ 79.01	115.00 / $ 120.00 / $ 125.00 / $ 135.00 / $ 140.00
Technician III	Field Tech III: $100.00 / $ 102.00 / $ 104.04 / $ 106.12 / $ 108.24	N/A	$ 75.60 / $ 77.87 / $ 80.20 / $ 82.61 / $ 85.09	125.00 / $ 130.00 / $ 135.00 / $ 145.00 / $ 150.00
				Admin Svcs: $80.00 / $ 85.00 / $ 90.00 / $ 95.00 / $ 100.00
				Sr. Project Mgr.: $190.00 / $ 200.00 / $ 210.00 / $ 220.00 / $ 230.00
Identify all direct and indirect costs, including any and all minimums relative to hourly rates and other cost categories.	The hourly rates of the individual classifications identified in the Cost Proposal include all direct, indirect, and overhead costs related to the professional services.	• A cost proposal, identifying unit rates for laboratory testing, equipment, and other reimbursable charges is attached to this proposal (Previous Sheets 21 through 24). • G2 proposes NO COST ESCALATOR for 2025 and 2026 contract unit rates and a 3% cost escalator per year for the next 3 years. • G2 can invoice at an hourly rate for field personnel, project management, and administrative personnel as well as equipment and laboratory testing fees. • They can invoice on daily half day/ full day rates. • Fees charged for field services based on a daily rate of $800 (up to 8 hours portal to portal) or half day rate of $500 (up to 4 hours portal to portal). Overtime hours (in excess of 8 hours) will be charged at a rate of $120 per hour. Weekend and holidays are charged at time and a half. • A minimum half day is charged daily.	Engineering Service rates for labor are inclusive of direct and indirect costs as well as profit. NTH will charge for the actual time of the technician when services are canceled while the technician is enroute to the project site or canceled after the technician's arrival to site. Costs for field services will be charged for the actual time the technician is on site plus travel time. Minimums will not be charged on this project for field time. Overtime will be charged at a rate of 1.33 times the technician's hourly rate for time over 8 hours and for Saturdays, Sundays, and holidays. Management, coordination, and review time is typically up to 10% of the field work time and is dependent on the amount of meetings attended and start up, close out or resolution issues needing attention during the course of the project. Support services and equipment such as traffic control or test boring drilling will be charged with a 5% markup.	Field technician hourly time is considered portal to portal. Premium time of 1.5 times standard rate may be charged beyond 8.0 hours M-F, weekends, holidays.
Laboratory Testing Services	**2025 / 2026 / 2027 / 2028 / 2029**	**2025 / 2026 / 2027 / 2028 / 2029**	**2025 / 2026 / 2027 / 2028 / 2029**	**2025 / 2026 / 2027 / 2028 / 2029**
Aggregates	N/A	$ 150.00 / $ 150.00 / * Increase of 3% thereafter/year unless noted otherwise.	$ 120.00 / $ 123.60 / $ 127.31 / $ 131.13 / $ 135.06	165.00 / $ 175.00 / $ 180.00 / $ 190.00 / $ 200.00
Washed Gradations				
1/2" Maximum and Larger	N/A	$ 150.00 / $ 150.00 / N/A	$ 120.00 / $ 123.60 / $ 127.31 / $ 131.13 / $ 135.06	165.00 / $ 175.00 / $ 180.00 / $ 190.00 / $ 200.00
3/4" Maximum and Larger	N/A	$ 150.00 / $ 150.00 / N/A	$ 120.00 / $ 123.60 / $ 127.31 / $ 131.13 / $ 135.06	165.00 / $ 175.00 / $ 180.00 / $ 190.00 / $ 200.00
Abrasion (LA Machine)	$ 360.00 / $ 367.20 / $ 374.54 / $ 382.03 / $ 389.68	N/A	$ 210.00 / $ 216.30 / $ 222.79 / $ 229.47 / $ 236.36	N/A
Sulfate Soundness, per cycle	$ 210.00 / $ 214.20 / $ 218.48 / $ 222.85 / $ 227.31	N/A	Pricing TBD based on specified requirements or project needs.	N/A
Mix Design Verification, per agg.	N/A	N/A	Pricing TBD based on specified requirements or project needs.	165.00 / $ 175.00 / $ 180.00 / $ 190.00 / $ 200.00
Deleterious Substances - visual pick	N/A	$ 150.00 / $ 150.00 / N/A	$ 65.00 / $ 66.95 / $ 68.96 / $ 71.03 / $ 73.16	125.00 / $ 130.00 / $ 135.00 / $ 145.00 / $ 150.00
Moisture Density Tests				
Modified Proctor (ASTM D1577, AASHTO T180)	$ 275.00 / $ 280.50 / $ 286.11 / $ 291.83 / $ 297.67	$275/Sand and $325/Clay / $275/Sand and $300/Clay / N/A	$ 210.00 / $ 216.30 / $ 222.79 / $ 229.47 / $ 236.36	250.00 / $ 265.00 / $ 275.00 / $ 290.00 / $ 300.00
Standard Proctor (ASTM D698, AASHTO T99)	$ 225.00 / $ 229.50 / $ 234.09 / $ 238.77 / $ 243.55	$275/Sand and $300/Clay / $275/Sand and $300/Clay / N/A	$ 205.00 / $ 211.15 / $ 217.48 / $ 224.01 / $ 230.73	235.00 / $ 245.00 / $ 260.00 / $ 275.00 / $ 285.00
Portland Cement Concrete				
Concrete Compression Tests, Each	N/A	$ 18.00 / $ 18.00 / N/A	$ 24.00 / $ 24.72 / $ 25.46 / $ 26.23 / $ 27.01	23.00 / $ 24.00 / $ 25.00 / $ 27.00 / $ 28.00
Flexural Tests on Concrete Beams	$ 78.00 / $ 79.56 / $ 81.15 / $ 82.77 / $ 84.43	$ 75.00 / $ 75.00 / N/A	$ 85.00 / $ 87.55 / $ 90.18 / $ 92.88 / $ 96.67	130.00 / $ 135.00 / $ 145.00 / $ 150.00 / $ 160.00
Concrete Mix Design Preparation	N/A	N/A	Pricing TBD based on specified requirements or project needs.	N/A
Asphalt Materials Per Sample				
Extraction Tests	$ 225.00 / $ 229.50 / $ 234.09 / $ 238.77 / $ 243.55	$ 300.00 / $ 300.00 / N/A	$ 235.00 / $ 242.05 / $ 249.31 / $ 256.79 / $ 264.49	300.00 / $ 315.00 / $ 330.00 / $ 345.00 / $ 360.00
Marshall Properties (stability, Flow unit wt)	$ 115.00 / $ 117.30 / $ 119.65 / $ 122.04 / $ 124.48	$ 350.00 / $ 350.00 / N/A	None provided	300.00 / $ 315.00 / $ 330.00 / $ 345.00 / $ 360.00
Theoretical Maximum Specific / Gravity-Rice's Method	N/A	$ 200.00 / $ 200.00 / N/A	$ 110.00 / $ 113.30 / $ 116.70 / $ 120.20 / $ 123.81	300.00 / $ 315.00 / $ 330.00 / $ 345.00 / $ 360.00
Asphalt Recovery by Abson Method (ACI 211)	N/A	N/A	Pricing TBD based on specified requirements or project needs.	N/A
Equipment Charges				
Nuclear Moisture/Density Gauge, per day	$ 65.00 / $ 66.30 / $ 67.63 / $ 68.98 / $ 70.36	$ 50.00 / $ 50.00 / N/A	$ 50.00 / $ 51.50 / $ 53.05 / $ 54.64 / $ 56.28	60.00 / $ 63.00 / $ 68.00 / $ 71.00 / $ 75.00
Field Marshall Test Equipment, per day	N/A	N/A	Included in labor fee	N/A
MDOT Michigan Cone Density Test Equipment, per day	N/A	$ 25.00 / $ 25.00 / N/A	Included in labor fee	100.00 / $ 105.00 / $ 110.00 / $ 115.00 / $ 120.00
Reimbursable Expenses				
Overnight mail Charges	N/A	Cost + 15% (same for 5 years)	$ 10.00 / $ 10.30 / $ 10.61 / $ 10.93 / $ 11.26	Individual Shipping Rate + 10%
Transportation Charges	$70 (mileage rate per day) / $ 71.40 / $ 72.83 / $ 74.28 / $ 75.77	Hourly rate + $.85/mile (same for 5 years)	$ 80.00 / $ 82.40 / $ 84.87 / $ 87.42 / $ 90.04	N/A
Provide a fee schedule for any additional laboratory testing services, equipment charges and reimbursable expenses inclusive of five (5) years that the firm may provide. Fee schedule should define services/charges and fees for five (5) years (2025-2029).	N/A	Mileage: ($.085/mile (same for 5 years)	None provided	**2025 / 2026 / 2027 / 2028 / 2029** Moisture Content (per test): $25.00 / $26.00 / $27.00 / $28.00 / $29.00 Atterberg Limits (per test): $175.00 / $185.00 / $195.00 / $200.00 / $210.00 Loss of Ignition (per test): $70.00 / $73.00 / $75.00 / $80.00 / $85.00 Hydrometer (per test): $250.00 / $260.00 / $275.00 / $290.00 / $300.00
		Cylinder Pickup: $110/hour — 3% increase/year thereafter Mortar Proportions: $300.00 — N/A Grout Specimen: $30.00 — N/A Soil Borings/Cores: Cost per job basis		**2025 / 2026 / 2027 / 2028 / 2029** Unconfined Compressive Strength: $150.00 / $ 155.00 / $ 165.00 / $ 175.00 / $ 180.00 HMA Core Thickness & Bulk Density: $125.00 / $ 130.00 / $ 135.00 / $ 145.00 / $ 150.00 Pavement Coring (up to 6" thickness, per hr): $200.00 / $ 210.00 / $ 220.00 / $ 230.00 / $ 245.00 Pavement Coring (over 6" thickness, per hr): $225.00 / $ 235.00 / $ 250.00 / $ 260.00 / $ 275.00 Asphalt Mix Verification (In Supplier Plant): $700.00 / $ 735.00 / $ 770.00 / $ 810.00 / $ 850.00 Private Utility Locating (per hr): $185.00 / $ 195.00 / $ 205.00 / $ 215.00 / $ 225.00
Do you charge administrative overhead? Please explain.	No	Yes - for preparation of reports if hourly rates are accrued. However, if half day/full day rates are agreed upon, administrative fees are included in the rates.	Administrative services are charged per the hourly rates herein based on time spend supporting the project.	Corporate overhead is included in our billing rates. A 10% markup on expenses and a 15%lump sum fees per project will be provided upon request. For standard materials testing, hourly rates include administrative services. For geotechnical investigations, markup on consultant fees.
List any exceptions/alternates to the specifications contained in this Request for Proposal.	DLZ requests changes to the hold harmless section to make it consistent with MCL 691.991. See exceptions' section of proposal for full explanation.	None	NTH does not have any exceptions/alternates to the specifications contained in the Request for Proposal.	None provided

PSI - Macomb has not been involved in any litigation during the past five years. PSI, has been involved in legal or administrative proceedings as a plaintiff or defendant. With annual fees exceeding $250 million and with approximately 1,900 employees nationwide, PSI does not maintain a comprehensive historical listing of claims. With assets exceeding $300 million, no claim, individually or claims collectively could adversely affect project(s).	No	
2025 / 2026 / 2027 / 2028 / 2029	**2025 / 2026 / 2027 / 2028 / 2029**	
$ 150.00 / $ 157.00 / $ 165.00 / $ 175.00 / $ 180.00	$ 150.00 / $ 155.25 / $ 160.68 / $ 166.31 / $ 172.13	
$ 125.00 / $ 130.00 / $ 135.00 / $ 145.00 / $ 150.00	$ 125.00 / $ 129.38 / $ 133.90 / $ 138.59 / $ 143.44	
$ 135.00 / $ 140.00 / $ 145.00 / $ 155.00 / $ 165.00	$ 120.00 / $ 124.20 / $ 128.55 / $ 133.05 / $ 137.70	
$ 95.00 / $ 100.00 / $ 105.00 / $ 110.00 / $ 115.00	$ 105.00 / $ 108.68 / $ 112.48 / $ 116.42 / $ 120.49	
$ 65.00 / $ 68.00 / $ 72.00 / $ 75.00 / $ 80.00	N/A	
$ 65.00 / $ 68.00 / $ 72.00 / $ 75.00 / $ 80.00	$ 47.00 / $ 48.65 / $ 50.35 / $ 52.11 / $ 53.93	
$ 65.00 / $ 68.00 / $ 72.00 / $ 75.00 / $ 80.00	$ 52.00 / $ 53.82 / $ 55.70 / $ 57.65 / $ 59.67	
$ 65.00 / $ 68.00 / $ 72.00 / $ 75.00 / $ 80.00	$ 57.00 / $ 59.00 / $ 61.06 / $ 63.20 / $ 65.41	
$ 120.00 / $ 125.00 / $ 133.00 / $ 140.00		
Engineering Technicians are invoiced on a per hour rate, minimum of three (3) hours per visit. Hours are to be invoiced in full hour increments. All rates are billed on a portal to portal basis. Principal/Engineer/Manager rates are invoiced on a per hour rate. No minimum required. Items such as site visits, meetings, estimates and/or quotes shall be at no cost the the City, Concrete and HMA mix design review billed on a hourly basis.	Two (2) hour minimum. Hourly Rates include all direct and indirect costs. Overtime will apply for technician at 1.333 times the hourly rate for hours in excess of 8 hours Monday through Friday and Saturday and 1.67 times the hourly rate for Sunday and Holidays.	
2025 / 2026 / 2027 / 2028 / 2029	**2025 / 2026 / 2027 / 2028 / 2029**	
N/A	$ 225.56 / $ 233.45 / $ 241.62 / $ 250.08 / $ 258.83	
125.00 / $ 131.00 / $ 138.00 / $ 144.00 / $ 150.00	$ 100.00 / $ 103.50 / $ 107.12 / $ 110.87 / $ 114.75	
125.00 / $ 131.00 / $ 138.00 / $ 144.00 / $ 150.00	$ 100.00 / $ 103.50 / $ 107.12 / $ 110.87 / $ 114.75	
500.00 / $ 525.00 / $ 550.00 / $ 575.00 / $ 605.00	$ 300.00 / $ 310.50 / $ 321.37 / $ 332.62 / $ 344.26	
N/A	$ 135.00 / $ 139.73 / $ 144.62 / $ 149.68 / $ 154.92	
250.00 / $ 265.00 / $ 275.00 / $ 290.00 / $ 305.00	$ 250.00 / $ 258.75 / $ 267.81 / $ 277.18 / $ 286.88	
N/A	$ 100.00 / $ 103.50 / $ 107.12 / $ 110.87 / $ 114.75	
225.00 / $ 235.00 / $ 245.00 / $ 260.00 / $ 270.00	$ 175.00 / $ 181.13 / $ 187.46 / $ 194.03 / $ 200.82	
225.00 / $ 235.00 / $ 245.00 / $ 260.00 / $ 270.00	$ 175.00 / $ 181.13 / $ 187.46 / $ 194.03 / $ 200.82	
20.00 / $ 21.00 / $ 22.00 / $ 23.00 / $ 24.00	$ 16.00 / $ 16.56 / $ 17.14 / $ 17.74 / $ 18.36	
25.00 / $ 26.00 / $ 28.00 / $ 30.00 / $ 32.00	$ 28.00 / $ 28.98 / $ 29.99 / $ 31.04 / $ 32.13	
600.00 / $ 630.00 / $ 660.00 / $ 695.00 / $ 730.00	$ 300.00 / $ 310.50 / $ 321.37 / $ 332.62 / $ 344.26	
300.00 / $ 315.00 / $ 330.00 / $ 345.00 / $ 360.00	$ 175.00 / $ 181.13 / $ 187.46 / $ 194.03 / $ 200.82	
150.00 / $ 158.00 / $ 165.00 / $ 174.00 / $ 182.00	$ 200.00 / $ 207.00 / $ 214.25 / $ 221.74 / $ 229.50	
150.00 / $ 158.00 / $ 165.00 / $ 174.00 / $ 182.00	$ 200.00 / $ 207.00 / $ 214.25 / $ 221.74 / $ 229.50	
N/A	115.00 / $ 119.03 / $ 123.19 / $ 127.50 / $ 131.97	
Included in Engineering Tech Rate	$ 20.00 / $ 20.70 / $ 21.42 / $ 22.17 / $ 22.95	
Included in Engineering Tech Rate	N/A	
Included in Engineering Tech Rate	N/A	
N/A	$ 15.00 / $ 15.53 / $ 16.07 / $ 16.63 / $ 17.21	
N/A	$ 0.72 / $ 0.75 / $ 0.77 / $ 0.80 / $ 0.83	
2025 / 2026 / 2027 / 2028 / 2029 Environmental: $ 520.00 / $ 545.00 / $ 575.00 / $ 600.00 Sample Analysis: $495.00	Lane Tie Testing Equipment (per day): $25.00 / $25.88 / $26.78 / $27.72 / $28.69 Mobilization of drilling equipment (per mile): $3.50 / $3.62 / $3.75 / $3.88 / $4.02 * * Per day (minimum): $525.00 / $543.38 / $562.39 / $582.08 / $602.45 ATV Charge (per day): $450.00 / $465.75 / $482.05 / $498.92 / $516.39 Boring Layout (per hour): $115.00 / $119.03 / $123.19 / $127.50 / $131.97	
	Soil sampling using either split-barrel sampler (ASTM D1586) or liner sampler (ASTM D1587) at 2 1/2 foot intervals to 10 feet.	
	0' - 25' Foot: $17.00 / $ 18.19 / $ 19.46 / $ 20.83 / $ 22.28	
	26' - 50' Foot: $19.00 / $ 20.33 / $ 21.75 / $ 23.28 / $ 24.91	
	51' - 75' Foot: $21.75 / $ 23.27 / $ 24.90 / $ 26.64 / $ 28.51	
	76' - 100' Foot: $28.00 / $ 29.96 / $ 32.06 / $ 34.30 / $ 36.70	
	100+ Quoted Upon Request	
	Additional Split-Spoon Sampling	
	0' - 50' Each: $19.00 / $ 19.67 / $ 20.35 / $ 21.07 / $ 21.80	
	50' - 100' Each: $28.00 / $ 28.98 / $ 29.99 / $ 31.04 / $ 32.13	
	Rock Coring $150 set up per hole	
	Plus foot: $75.00 / $ 80.25 / $ 85.87 / $ 91.88 / $ 98.31	
	Auger-drilling with profile sampling	
	Foot: $15.50 / $ 16.59 / $ 17.75 / $ 18.99 / $ 20.32	
	Cost of special equipment or permit for moving drilling equipment about the site at Cost Plus	
	15% / 15% / 15% / 15% / 15%	
	Set up time per hole or time required to move between boring locations in excess of 1/2 hour or stand by time hour	
	$230.00 / $ 238.05 / $ 246.38 / $ 255.01 / $ 263.93	
	Thin wall (Shelby) tubes Each	
	$ 70.00 / $ 72.45 / $ 74.99 / $ 77.61 / $ 80.33	
	Drill through concrete or asphalt inch	
	$ 16.00 / $ 16.56 / $ 17.14 / $ 17.74 / $ 18.36	
None provided	No	
None provided	No	