### CONTRACT AND SPECIFICATIONS

### BORING PROGRAM IN CONNECTION WITH CULVERT REPLACMENT WORK

TOWN OF WARWICK, NEW YORK

Town of Warwick Attn: Town Clerk 132 Kings Highway Warwick, New York 10990

February 09, 2023

### SECTION A

### INFORMATION TO BIDDERS

### FOR

### BORING PROGRAM IN CONNECTION WITH CULVERT REPLACMENT WORK TOWN OF WARWICK, NY

### ARTICLE I. <u>DEFINITIONS</u>

For the purposes of the Contract, the terms listed below will have the meaning indicated:

- (a) "Owner" refers to the Town of Warwick, 132 Kings Highway, Warwick NY 10990
- (b) "Engineer" refers to HDR, 50 Tice Boulevard, Suite 210, Woodcliff Lake NJ 07677

### ARTICLE II. INVITATION

Bids in writing for the making of subsurface borings for Emergency Bridge and Culvert Work, Town of Warwick NY will be received by the TOWN OF WARWICK, Attn: Town Clerk, 132 Kings Highway, Warwick NY 10990, on or before 10am, March 14, 2023. Questions on bid package should be sent directly to the Planning Board Engineer: Laura A. Barca, PE (201) 335 – 9437 or Laura.Barca@hdrinc.com by February 28, 2023.

### ARTICLE III. FORM OF PROPOSAL

All bids must be submitted in the form of the Proposal attached hereto and must give the bid unit prices both in writing and in figures plus a tabulation of the amounts bid and the total sum bid. Bidders need submit only the Proposal, Section P, pages P1 to P4, completed in the manner required herein. The Owner reserves the right to reject any or all bids or to accept the lowest or any other bid.

### ARTICLE IV. TIME

The Proposal must state the time within which work can begin after orders to proceed are received by the bidder. The work must be begun no later than April 10, 2023 and completed by May 05, 2023, using no less than the number of rigs and drill crews specified in Article XI. The contractor shall notify the Engineer of the schedule of work two days prior to the commencement of the work. If you are not able to comply with this schedule (or are able to provide the work at a faster schedule), please provide the schedule of when you would be able to start and complete the work.

### ARTICLE V. EXAMINATION OF SITE

Bidders, before submitting bids, must inform themselves as to the location and nature of the work, character of equipment and facilities needed for the performance of the work, the general and local conditions and all matters, which may in any way affect the work under this contract. They shall also familiarize themselves with the form of contract and with specification requirements for the several types of borings for observation and records. If you would like a site inspection, please contact the Town of Warwick Planning Board Engineer Laura Barca PE at Laura.Barca@hdrinc.com or (201) 335-9437 before February 28, 2023.

### ARTICLE VI. CONTRACT

The contracting parties will be the Owner and the Boring Contractor whose proposal is accepted. Acceptance of the Boring contractor's proposal by the Owner and their authorized signature thereon will constitute a binding agreement between the parties hereto.

The Contract Drawings are as follows:

<u>Exhibit No.</u>	Title
A-1	Boring Location Plan for Hoyt Road Culvert Project
A-2	Boring Location Plan for Cascade Road Culvert Project
A-3	Boring Location Plan for Old Ridge Road Retaining Wall Project
A-4	Boring Location Plan for Ball Road Culvert Project
A-5	Boring Location Plan for Pumpkin Hill Road Culvert Project

### ARTICLE VII. LOCATION OF WORK

The work shall be performed at the locations shown on Exhibits A-1, A-2, A-3, A-4, and A-5.

### ARTICLE VIII. CONTRACTOR'S LIABILITY AND INSURANCE

- (a) The Boring Contractor shall defend, indemnify and save harmless the Owner and the Engineer, their respective members, officers, partners, associates, employees, servants and agents, and each and every one of them, against and from all claims, damages, losses and expenses, including attorneys' fees, and costs of every kind and description to which any of them may be subjected by reason of personal injury or death, and/or damage to property, both real and personal, including the loss of use and occupancy, resulting from, arising out of, or in consequence of the performance of this contract due in whole or in part of the negligence, act or omission, supervision or direction of the Boring Contractor, his/her officer, employees, servants or agents, or his/her subcontractor.
- (b) The above contractual agreement shall be included for coverage under the Boring contractor's General Liability Insurance Policy.
- (c) In any and all claims against the Owner and the Engineer, or any of their members, officers, partners, associates, employees, servants and agents by any employee of the Boring Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose actions any of them may be liable, the indemnification obligation under subdivision (a) of this Article shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Boring Contractor or any Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.
- (d) The obligations of the Boring Contractor under this Article shall not extend to the liability of the Owner and the Engineer, or their members, officers, partners, associates, employees, servants and agents arising out of defects in maps, plans, designs or specifications, prepared, acquired or used, by the Owner and the Engineer.
- (e) Without limitation of the foregoing, the Boring Contractor shall provide and maintain throughout the life of the contract, the following insurance and any such additional insurance as may be required by law. All policies shall provide for thirty (30) days written notice to the Owner by Registered Mail prior to any modification, cancellation or changes in said policies.
  - 1. Workers' Compensation as required by law and Employers' Liability insurance with a limit of at least \$1,000,000 per occurrence. The Workers' Compensation Insurance to evidence of Waiver of Subrogation provision in favor of the Consulting Engineer.
  - 2. Comprehensive General Liability with a Combined Single Limit for Bodily Injury, Personal Injury and Property Damage of \$1,000,000

per occurrence and \$2,000,000 annual aggregate. The limit may be provided through a combination of Primary and Umbrella/Excess Liability Polices. This insurance to include:

- Premises Operations Coverage
- Personal Injury Liability Coverage (Employee Exclusion Deleted)
- Independent Contractor Coverage
- Blanket Contractual Coverage
- Broad Form General Liability Endorsement or its Equivalent.
- Explosion, Collapse and Underground (XCU) Exclusions Deleted.

The Owner and the Engineer, their officers, Partners, Employees or Agents must be named as Additional Insured with respect to the operation of Boring Contractor.

- 3. Comprehensive Automobile Liability for All Owned, Leased, Hired and Non-Owned Autos with a Combined Single Limit of \$1,000,000 per occurrence and \$2,000,000 annual aggregate. The limit may be provided through a combination of Primary and Umbrella/Excess Liability Policies.
- 4. If any part of the work is sublet, identical insurance coverage and limits shall be provided by the Subcontractor or, on his behalf by the Boring Contractor, to cover that part of the work they have contracted to perform.
- (f) The Boring Contractor shall deliver to the Owner before starting work, Certificates from insurance companies, or their duly authorized agents, stating that such insurance is in force. The Certificates to be issued by companies (1) licensed in State of Operations and (2) have an A.M. Bests Rating of at least "A". The General Liability Insurance Certificate shall include the following wording:

"This Policy includes Contractual Liability Coverage for the Indemnification Provision assumed by the Boring Contractor under this Contract."

(g) The Boring Contractor shall report and pay all Old Age Benefit and Social Security Taxes and other insurance as required by State and Federal Laws.

### ARTICLE IX. AVAILABLE INFORMATION

The Owner and Engineer do not represent that the drawings included in this package completely show the existing conditions. See Article V.

### ARTICLE X. <u>SCOPE OF WORK</u>

The work to be done consists of making the following number and types of borings in the manner specified and as located on the contract drawings, together with the taking of samples as specified, the delivery of the samples, and the reporting of soil findings as specified in Article XI of Section A.

The Boring Contractor is to furnish all labor, materials and tools, supplies, transportation and equipment and any other items required for the work. The number and depths of borings stated below and the estimated quantities of each item of work noted in the proposal are for purposes of establishing bid units only. The Engineer reserves the right to add to or decrease the number of borings or to change the type of borings or the type of sampling or the amount of work in any category as the work progresses. Such changes will be based on the needs of the work and information disclosed by borings as they are completed, and payment therefore will be made on the basis of the unit prices stated in the Contract.

The following units of work have been established:

- 1. Mobilization and demobilization of one truck rig and crew including costs for clearing utilities, obtaining permits, insurances, moving equipment/tools and supplies to and from the job, providing maintenance and protection of pedestrians and traffic, boxing and shipping of soil samples, and location survey. Contractor to provide a flagman for traffic control. Also includes meeting the requirements of the Town of Warwick.
- 2. Ten 3 <sup>1</sup>/<sub>2</sub>" minimum diameter borings made with a truck or ATV rig including penetration of obstructions, cobbles and boulders. Approximate boring depth will be between 30' and 60', as shown on Exhibits A-1, A-2, A-3, A-4, and A-5.
- 3. Continuous sampling shall be taken for the first fifteen feet.
- 4. Recovery and analysis of split-spoon samples in each boring every 5 feet (after the first 5 feet, where continuous sampling is required).
- 5. Drilling, recovery, and analysis of rock cores.
- 6. Undisturbed soil samples to be extracted if deemed necessary for qualifying local soil conditions.

7. Issuance of a geotechnical report signed and sealed by a NYS-licensed Professional Engineer, as detailed in Article XI, Special Conditions of Work (n).

### ARTICLE XI. SPECIAL CONDITIONS OF WORK

Articles in these specifications referring to types of borings and sampling <u>not</u> enumerated in Article X shall be deemed excluded from the contract unless such types of borings are later included by separate agreement between the Contracting Parties. Unit Prices are requested for only those items of work listed on Pages P2 and P3 of the Proposal.

- (a) PERMITS: All permits (i.e. sidewalk, hydrant, street opening etc.) and notifications required by law for the work shall be obtained by the Boring Contractor prior to commencement of work.
- (b) UTILITIES: The Boring Contractor shall notify the Central Registry of Underground Facilities in accordance with Industrial Code Rule 53, Part 53 of Title 12 of the official compilation of codes, rules and regulations of the State of New York (cited as 12NYCRR53) effective April 1, 1975. In addition, the Boring Contractor shall confirm locations of buried structures and utilities with all government agency and/or utility companies for all borings. The Boring Contractor shall obtain all applicable utility clearances and overhead clearance restrictions. Should the Boring Contractor's operations cause damage to utilities or structures, the Contractor shall notify the appropriate agency, as well as the Owner/Engineer and shall arrange for immediate repairs at his/her sole cost.
- (c) WATER: A source for water used in drilling may not be readily available at each boring location. The Boring Contractor may elect to pump water from street level hydrants, if available or any other source. However, it is the Contractor's responsibility to obtain proper permits for the use of municipal water facilities. It is also the Boring Contractor's responsibility to provide hoses of sufficient length to run from sources of water.
- (d) DRILLING TECHNIQUES: The use of rotary drilling techniques with weighted drilling mud will be permitted. If the Boring Contractor elects to advance the borings using drilling mud, each borehole shall be flushed with clean water to remove all mud so that representative stabilized groundwater levels can be observed. Hollow stem augers will not be permitted. The borehole shall be kept full with drilling fluid at all times when the borehole is being advanced, during sampling, and when drilling tools are being withdrawn.

- (e) CREWS AND EQUIPMENT: The Boring Contractor shall provide a minimum of one drill rig and crew for the making of borings. It shall remain the responsibility of the Contractor to provide the necessary equipment and personnel sufficiently experienced in the use of the selected equipment to perform the work in a satisfactory manner in accordance with the applicable permit requirements. All costs of moving the rig to and from boring locations shall be included in the prices stated in the contract.
- (f) BORING LOCATIONS: The Contractor shall lay out the borings for the culvert replacements at the proposed locations shown in Plans A-1, A-2, A-3, A-4, and A-5 (one of either side of the culvert to be replaced, 2 per culvert). The borings should extend 30 (minimum) to 60 feet. Sampling should be continuous for 15 feet then at 5-foot intervals thereafter. If rock is encountered, a minimum of 10 feet of NX core should be obtained. The Boring Contractor shall establish the as-drilled locations of the borings. All costs for layout and for making the required boring logs shall be included in the price stated in the proposal.

The borings for the retaining wall replacement along Old Ridge Road should be located one each near the wall ends, say 15-20 feet inboard. The borings should be located in the roadway as close to the back of wall as possible without hitting any anticipated heel. The borings should extend 3H below bottom of wall (so 40 feet each from top of wall elevation, not counting for the roadway elevation due to the slope). Sampling should be continuous for 15 feet below anticipated bottom of footing elevation, then at 5-foot intervals thereafter. In this area, based on surficial geology, bedrock may be encountered within the upper 40 feet. If it is, a minimum of 10 feet of NX core should be obtained.

- (g) LOCATION OF EQUIPMENT: All equipment, supplies, vehicles and material shall be stored at locations approved by the Engineer. The Contractor shall not locate rigs in a manner that will inhibit access to public areas. Any equipment, supplies, vehicles, or materials left by the Contractor at the project site during non-working hours shall be at Contractor's own risk.
- (h) BORING: Each boring shall be sampled using a 3½" O.D. split spoon sampler, with samples obtained at every change in soil formation and at a maximum of 5 foot intervals. The Boring Contractor shall provide continuous split-spoon samples in the first fifteen feet of each boring, measured from ground surface. The sampling barrel shall be driven 24" with the number of blows for each successive 6" penetration observed and recorded. Within three days of the completion of the boring operations, the contractor shall provide the boring logs to the

**Engineer.** The cost of taking these additional split spoon samples shall be included in the unit price per split-spoon sample stated in the contract.

- (i) CASINGS: The Boring Contractor shall provide pipe or drill casing in quantities and sizes adequate for expeditious performance of the work. Casings shall be 3½" diameter for sample borings. Where feasible include blow counts on casing in addition to blow counts on split spoon sampler. Larger sizes of casing may be required where obstructions or hard driving require "telescoping" of casing to advance the minimum sizes of casing to the depth of sampling. All holes are to be cased for the upper 10 feet and to greater depths as needed to meet field conditions. The Engineer may require casing for the full depth of the borings if, in their opinion, successful boring and sampling operations cannot be carried out without casings, or if casings are required to obtain ground water observations at particular depths or for extended periods.
- (j) SAMPLING: Boulders and rubble fill may be encountered in the advancement of the borings. No extra payment will be made for advancement by roller bit through obstructions.
- (k) DELIVERY OF SAMPLES: The Boring Contractor shall deliver all soil samples to a local soil laboratory to be specified by the contractor's Geotechnical Engineer under contract to the contractor. All samples shall be shipped or delivered by the Boring Contractor within two days after completion of the boring from which the samples were obtained. Samples placed in jars are to be packed in corrugated cardboard cartons to prevent breakage, properly marked to indicate to the shipper that soil samples are enclosed. Boring Nos. shall be indicated on each container. Undisturbed soil samples are to be carefully boxed in wooden boxes, with each sample container surrounded by soft, dry packing, so that these samples may be safely shipped. Care shall be exercised when handling undisturbed soil samples to avoid shock or jar, which may affect the character of the sample, and adequate precautions shall be exercised to prevent freezing of samples during transportation.
- (I) GROUND WATER: Ground water level observations shall be made by filling the hole with clean water to a point above the natural ground water level and observing the drop in level of water in the hole. This shall be followed by bailing the hole to a point below the natural ground water level and observing the rise in level of water in the hole. All individual measurements of water level in holes shall state the time elapsed since the last filling or bailing of the hole
- (m) BACKFILL AND REPAIRS: Upon completion of each boring, the borehole shall be backfilled with cuttings or clean, granular fill to the ground surface. The final one foot of borings made in the sidewalk or pavement shall be

backfilled with lean concrete or asphalt patching material to match existing conditions. Borings in paved areas will be patched with asphalt. All drilling debris shall be removed by the Boring Contractor.

- (n) GEOTECHNICAL REPORT: The Contractor shall retain a Professional Engineer licensed in the state of New York to analyze the soil samples and submit a complete report which will include, but not be limited to, the following:
  - a. Visual classifications of soil samples;
  - b. Rock Quality determination if rock cores are taken;
  - c. The recommended allowable bearing capacity of the soil in pounds per square foot for each 5 foot interval, including recommendations on the depth and type of foundation for the proposed construction;
  - d. Potential for long term and immediate settlement at each five foot interval; and
  - e. Recommended values for the modulus of subgrade to be used in the design of a slab-on-grade.

Submission of boring records, prepared under the supervision of an engineer licensed to practice in the State of New York, who shall sign and seal the cover page of the records/report. Contractor shall submit four copies of the boring logs and analysis listed above, each copy bound in a three-ring binder, to the Engineer within ten days of completion of operations.

No representations are made as to the character of the subsoil through which the borings are to be progressed, or that any locations given will be found free from obstructions or underground utilities. The Contractor shall notify the Engineer immediately of any potential conflicts so that a determination can be made for locating the proposed borings to a more appropriate location.

The Engineer may reasonably relocate the proposed boring locations shown in the plans at no additional cost. Payment will be made at the unit prices specified.

### ATTACHMENT 1

Exhibit No.	Title
A-1	Boring Location Plan for Hoyt Road Culvert Project
A-2	Boring Location Plan for Cascade Road Culvert Project
A-3	Boring Location Plan for Old Ridge Road Retaining Wall Project
A-4	Boring Location Plan for Ball Road Culvert Project
A-5	Boring Location Plan for Pumpkin Hill Road Culvert Project

# 02-09-23 Hoyt Road Culvert Replacement Boring Locations



### o Approximate proposed boring location

Borings should be installed 30' (minimum) to 60' deep. Sampling should be continuous for 15 feet then at 5-foot intervals thereafter. If rock is encountered, a minimum of 10 feet NX core should be obtained.

		1:9,0	28	
0	0.07	0.15		0.3 mi
0	0.13	0.25		0.5 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

# 02-09-23 Cascade Road Culvert Replacement Boring Locations



#### Approximate proposed boring location

Borings should be installed 30' (minimum) to 60' deep. Sampling should be continuous for 15 feet then at 5-foot intervals thereafter. If rock is encountered, a minimum of 10 feet NX core should be obtained.

		1:9,028	
0	0.07	0.15	0.3 mi
0	0.13	0.25	0.5 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



# 02-09-23 Old Ridge Road Retaining Wall Replacement Boring Locations

### Approximate proposed boring location

The borings should be located one each near the wall ends, say 15-20 feet inboard. The borings should be located in the roadway as close to the back of wall as possible without hitting any anticipated heel. The borings should extend 3H below bottom of wall (so 40 feet each from top of wall elevation, not counting for the roadway elevation due to the slope). Sampling should be continuous for 15 feet below anticipated bottom of footing elevation, then at 5 foot intervals thereafter. In this area, based on surficial geology, bedrock may be encountered within the upper 40 feet. If it is, a minimum of 10 feet of NX core should be obtained.



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

# 02-09-23 Ball Road Culvert Replacement Boring Locations



• Approximate proposed boring location

Borings should be installed 30' (minimum) to 60' deep. Sampling should be continuous for 15 feet then at 5-foot intervals thereafter. If rock is encountered, a minimum of 10 feet NX core should be obtained.

			1:4,514		
0	0.04		0.09		0.17 mi
0	0.05	0.1		0.2 km	

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USCS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



# 02-09-23 Pumpkin Hill Road Culvert Replacement Boring Locations

• Approximate proposed boring location

Borings should be installed 30' (minimum) to 60' deep. Sampling should be continuous for 15 feet then at 5-foot intervals thereafter. If rock is encountered, a minimum of 10 feet NX core should be obtained.

0 0.04 0.09 0.17 mi 0 0.05 0.1 0.2 km

1:4,514

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USCS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

### SECTION P

### PROPOSAL AND CONTRACT FOR BORING PROGRAM IN CONNECTION WITH CULVERT REPLACEMENT WORK TOWN OF WARWICK NY

The undersigned bidder declares he has read the "Information to Bidders", this "Proposal and Contract", the General and Special Conditions, sections of the "Standard Specifications" attached hereto; that he has examined and familiarized himself with the drawings and the sites, and determined for himself the conditions affecting the work, and he proposes and agrees, if this proposal is accepted, to provide at his expense all labor, materials, tools, supplies, transportation and equipment, in accordance with "Standard Specifications" attached hereto, and other required items, and to complete the items listed in the "Information to Bidders", and shown on the contract drawings and for which bid prices are stated on Pages P2 and P3, in accordance with the Plans and Specifications, and that he will prosecute the work on the basis of the following unit prices for the various items of the work.

FIRM NAME:		 
ВҮ:		
TITLE:		
ADDRESS:		
DΔTE·		

#### **BID FORM**

### FIRM NAME: \_\_\_\_\_

ITEM		ESTIMATED	UNIT BID	AMOUNT
NO.	DESCRIPTION	QUANTITY	PRICE	BID
1.	All costs of mobilization and			
	demobilization of one truck rig, equipment	Lump Sum		
	and personnel to and from the site			
	including moving to and from boring			
	locations, survey, insurance, and permit			
	costs necessary for the work. Providing a			
	flagman for traffic control.			
	For lump sum.	0015		
2.	Hoyt Road: 3 1/2" minimum diameter	60 LF		
	bonny made with a truck hy including			
	beulders and split speep sampling in			
	each boring			
	For per lin ft			
3.	Cascade Boad: 3 ½" minimum diameter	60 L F		
0.	boring made with a truck rig including	00 2.		
	penetrating obstructions, cobbles and			
	boulders and split-spoon sampling in			
	each boring.			
	Forper lin. ft.			
4.	Old Ridge Road: 3 1/2" minimum diameter	60 LF		
	boring made with a truck rig including			
	penetrating obstructions, cobbles and			
	boulders and split-spoon sampling in			
	each boring.			
	For per lin. ft.	0015		
5.	Ball Road: 3 1/2" minimum diameter boring	60 LF		
	made with a truck hy including			
	boulders and split-spoon sampling in			
	each boring			
	For per lin ft			
6.	Pumpkin Hill Boad: 3 1/2" minimum	60 L F		
0.	diameter boring made with a truck rig	00 2.		
	including penetrating obstructions.			
	cobbles and boulders and split-spoon			
	sampling in each boring.			
	Forper lin. ft.			
1				

## BID FORM (con't)

# FIRM NAME:

7.	Hoyt Road: Continuous sampling for the	2 borings		
	first 15 ft of each Boring.			
8.	Cascade Road: Continuous sampling for	2 borings		
	the first 15 ft of each Boring.			
9.	Old Ridge Road: Continuous sampling for	2 borings		
	the first 15 ft of each Boring.			
10.	Ball Road: Continuous sampling for the	2 borings		
	first 15 ft of each Boring.	_		
11.	Pumpkin Hill Road: Continuous sampling	2 borings		
	for the first 15 ft of each Boring.	Ū		
12.	Hoyt Road: Recovery and analysis of	12 Samples		
	split-spoon samples in each boring every			
	5 feet; each boring assumed at 30 feet.			
13.	Cascade Road: Recovery and analysis of	12 Samples		
	split-spoon samples in each boring every			
	5 feet; each boring assumed at 30 feet.			
14.	Old Ridge Road: Recovery and analysis	12 Samples		
	of split-spoon samples in each boring	•		
	every 5 feet; each boring assumed at 30			
	feet.			
15.	Ball Road: Recovery and analysis of split-	12 Samples		
	spoon samples in each boring every 5			
	feet; each boring assumed at 30 feet.			
16.	Pumpkin Hill Road: Recovery and	12 Samples		
	analysis of split-spoon samples in each	•		
	boring every 5 feet: each boring assumed			
	at 30 feet.			
17.	Recovery and analysis of undisturbed soil	10 Samples		
	samples.			
18.	Drilling, recovery and analysis of 10' rock	50' of cores		
	cores.			
19.	Geotechnical report submission.	Lump Sum		
	Separate report for each location (five	•		
	total reports).			
		TOTAL SU	JM BID	

I. The undersigned bidder agrees to commence work by April 10, 2023 (or other date as specified \_\_\_\_\_\_), and to equip and prosecute the work continuously and as rapidly as possible during the day shifts and complete the work at or before May 05, 2023 (or other date as specified \_\_\_\_\_\_). The undersigned bidder agrees that the specified number of rigs and crews will be used on the work.

3Y (NAME):
ADDRESS:
DATE:
ACCEPTED:
3Y (NAME):
DATE: