

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION MATERIALS & TESTS DIVISION

GEOTECHNICAL ENGINEERING SECTION 6601 CENTENNIAL BOULEVARD NASHVILLE, TENNESSEE 37243-0360

January 15, 2021

Interested laboratory testing firms are invited to provide a quotation and requested information for a statewide contract beginning on or about March 1, 2021, to conduct acid-base accounting geochemical testing on soil and/or rock samples for the Tennessee Department of Transportation (TDOT). Contracts will be awarded to the three (3) qualified laboratories submitting the lowest total evaluation cost. A total of three (3) separate contracts will be awarded. Each contract will have a term of four (4) years. Each contract will have an initial ceiling of \$200,000. Contracts may be amended to increase the contract ceiling, but in no event shall the maximum contract amount exceed \$300,000.

The following acid-base accounting geochemical tests shall be required:

- o Paste pH: EPA 600/2-78-054 or ASTM D4972-13
- o Neutralization potential (NP): EPA 600/2-78-054
- o Acidity Potential from T.S. (AP): EPA 600/2-78-054
- Calcium Carbonate Def/Sur- Net Neutralization potential (NNP): EPA 600/2-78-054
- o Fizz: EPA 600/2-78-054
- o Total Sulfur: ASTM D4239-14
- Pyritic Sulfur: ASTM D2492-02 (2012)

NOTE: For requests on projects currently under construction, or as otherwise specified in work orders, there will be a **mandatory** thirty-six (36) hour turnaround time to provide reports. Other requests will require two (2) week turnaround time to provide reports.

To be considered eligible for award of a contract, the following information will be required, and the identified criteria must be met:

 Submit brief resumes/biographies of main personnel expected to participate in the testing and quality control processes.

- Laboratory operations shall be overseen by a person possessing a minimum of four (4) years experience performing laboratory tests similar to those required herein.
- List current applicable accreditations the laboratory has achieved.
- Identify business address of laboratory.
- List current contact information for representative client references for which same or similar testing has been performed.

Samples will be shipped through private courier or hand delivered in accordance with the terms of each work order. The testing is expected to be completed promptly upon sample receipt, as provided in each work order. Please see the attached sample report format for additional information.

Individual work orders will be issued on the basis of price, consultant availability to perform the work, consultant proximity to the project location, and past performance on prior work orders issued under the contract.

Please provide the above information and the completed Price Evaluation Form to Mr. Robert Jowers at <u>Robert.Jowers@tn.gov</u> by or before 4:30 p.m. CDT (5:30 EDT) on January 29, 2021. Once the information is received and evaluated, firms will be contacted regarding the selected laboratories.

Sincerely,

Robert Jowers P.E.

Civil Engineering Manager 2

Geotechnical Engineering Section

SAMPLE REPORT FORMAT

SR 123 CNM 789 Putnam County PIN #012345 6		Paste pH	Neutralization Potential (NP)	Potential Acidity (AP)	CaCO3 (Def)/Sur Net Neutralization Potential (NNP) (NP- AP)	Neutraliz ation Potential Ratio (NPR) (NP/AP)	Fizz	Total Sulfur *	Pyritic Sulfur
			**	**	**			%	%
Lab ID	Sample ID	EPA 600/2-78- 054 or ASTM 4972	EPA 600/2- 78-054	EPA 600/2- 78-054	EPA 600/2-78- 054			ASTM D4239	ASTM D2492-02 (2012)
K-3871	Sample# 1 Station122+00 CL Ref 38' Left 0'-10;	5.32	0.275	0.131	0.144	2.10	none	0.004 2	<0.0063
K-3872	Sample# 2 Station122+00 CL Ref 12' Right 0'-5'	4.80	0.000	0.228	-0.228	0	none	0.007 3	0.0122
K-3873	Sample# 3 Station 121+50 CL Ref CL 0'-5'	4.90	0.540	0.244	0.296	2.21	none	0.007 8	0.0075
K-3874	Sample# 4 Station 121+50 CL Ref 60' Left 0'-10'	5.33	1.131	0.22	0.912	5.14	none	0.007	<0.0070
	Sample# 5 Station 120+00							0.007	
K-3875	CL Ref 68' Left 0'-5'	5.02	0.590	0.23	0.359	2.57	none	4	0.0086
K-3876	Sample# 4 Station 120+00 CL Ref 25' Right 0'-5'	4.81	0.000	0.22	-0.222	0	none	0.007 1	0.0089

** Tons of CaCO3 per 1000 tons of material

 $^{^{\}star}\,$ The quantitation limit for sulfur was 0.010%

PRICE EVALUATION FORM RESPONDENT SIGNATURE: **PRINTED NAME & TITLE:** DATE: **RESPONDENT LEGAL ENTITY NAME: Unit Item Description** Proposed Cost (per Unit)* State Use ONLY **Evaluation Effective** Jan. 1, 2024 -Cost Jan. 1, 2022 - Jan. 1, 2023 -Evaluation **Test Method Name** Date - Dec. End of **Average** Dec. 31, 2022 Dec. 31, 2023 **Factor** (average X 31, 2021 Contract factor) PYRITE TESTING WITH 36-HOUR TURNAROUND: Preparation of samples for testing; Paste pH: EPA 600/2-78-054 or ASTM D4972-13; Neutralization potential (NP): EPA 600/2-78-054, or modified Skousen 1997 if requested; Acidity 3.00 Potential from T.S. (AP): EPA 600/2-78-054; Calcium Carbonate Def/Sur- Net Neutralization potential (NNP): EPA 600/2-78-054; Fizz: EPA600/2-78-054; Total Sulfur: ASTM D4239-14; Pyritic Sulfur: ASTM D2492-02 (2012) PYRITE TESTING WITH TWO-WEEK TURNAROUND: Preparation of samples for testing; Paste pH: EPA 600/2-78-054 or ASTM D4972-13; Neutralization potential (NP): EPA 600/2-78-054, or modified Skousen 1997 if requested: Acidity 1.00 Potential from T.S. (AP): EPA 600/2-78-054; Calcium Carbonate Def/Sur- Net Neutralization potential (NNP): EPA 600/2-78-054; Fizz: EPA600/2-78-054; Total Sulfur: ASTM D4239-14; Pyritic Sulfur: ASTM D2492-02 (2012) **TOTAL EVALUATION COST AMOUNT** (sum of evaluation costs above):

The Department will use this sum and the formula below to calculate the cost proposal. Numbers rounded to two (2) places to the right of the decimal point will be standard for calculations.

* The "proposed cost" shall be the price for "EACH" sample request, to include all listed tests completed in accordance with all applicable test methods.