



August 9, 2023

Beth Bauer  
RossTarrant Architects  
101 Old Lafayette Ave  
Lexington, KY 40502

RE: New Mercer County Elementary School  
Geothermal Test Well Proposals  
RTA Project: 2229  
CMTA Project: XMES22

Dear Beth:

On behalf of the Mercer County Board of Education, CMTA Engineers solicited proposals from contractors for geothermal test bores and a thermal conductivity test at the proposed site of the geothermal well field for this project. On July 26, 2023, we sent an RFP to eight different geothermal well drillers that we have extensive experience with and received three proposals. Those proposals received were as follows:

T & M Drilling Columbia, KY	\$17,000
Bluegrass Geothermal Gray, KY	\$24,000
Geothermal Solutions, LLC Lawrenceburg, TN	\$31,500

After reviewing the proposals in detail, it is our recommendation to award the installation of the test wells and conductivity testing to T & M Drilling. In the interest of the design for the geothermal well field this work needs to be complete and reports turned in to the design team no later than September 22, 2023.

Sincerely,

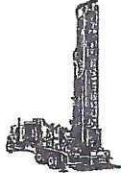
Aaron Shultz, P.E.  
Project Manager

Attachment: Original Proposals



**Terry Withers**  
**Cell 270-634-0588**

**T & M Drilling**  
45 Keltner Rd.  
Columbia, KY 42728-9530



**Ph. 270-634-0917**

**Fax 270-384-3584**

**Oil & Gas Drilling • Geothermal Drilling**

August 7, 2023

Aaron Shultz, PE, LEED AP  
CMTA, Inc.  
220 Lexington Green Circle, Suite 600  
Lexington, KY 40503

RE: Geothermal Test Bore & Conductivity Test  
New Mercer County Elementary School  
Industry Road  
Harrodsburg, KY 40330  
CMTA Project: XMES22

SCOPE OF WORK

Drill one 400' test bore and provide drill log  
Install casing if needed  
Install 1 1/4" SDR-09 piping loop in well and fully grout well bore  
Perform a 48 hour thermal conductivity test and provide report

Lump sum bid to perform all work on RFP                      \$17,000.00



August 7, 2023

Mr. Aaron Shultz, P.E.  
CMTA Inc

Re: Geothermal Test Bore and Conductivity Test  
New Mercer County Elementary School  
Industry Road  
Harrodsburg, KY 40330  
CMTA Project: XMES22

Quote: \$24,000

Please accept this as our quote for the bore on this project. We are quoting (1) 400' deep test well and we will provide a well log delineating subsurface conditions and recommendations, install a 1.25" SDR-09 poly pipe into the well and backfill well with 1.0 enhanced bentonite grout. We will complete a conductivity test on the well and we will furnish the report. We have included site clean-up in this quote. We are a Kentucky Certified Water Well Driller as required and our certification number is 0281-0347. We can drill the test bore just about any time within three to seven working days from awarded notice. The conductivity test will follow behind the completed hole at a minimum of five days to give the earth time to return to normal temperature. The conductivity test is 48 hours, and the test results should be obtained within about a week from there. Total time allotted for this project is one day for drilling/grouting, five days' rest, two days for conductivity test, and then approximately five days for the analysis to be completed. I truly expect a 10-12-day turnaround for all the reports.

We will make our necessary calls to KY 811 as required. As with any quote you receive, if additional well casing is required for geological conditions such as caves or other bad formation, it is an added cost of \$30.00 per foot for permanent steel casing.

**What is not included:** (These are standard exclusion although non may apply.) If casing is required, that will be an extra cost. Drill location information must be made available for us to make calls to underground protection before mobilizing on site. We have included site

mobilization in this quote but have not included extra money for access into or out of site (we will drill when weather allows us access, otherwise a dozer or similar equipment may be necessary to get in/out of site if wet and muddy) or site improvements (brush removal, road building, leveling, benching, etc.). This will be an extra cost if necessary.

If I can be of any further services, please advise and thank you for allowing us the opportunity to quote these test bores with you.

Sincerely,

Michael Christopher



# Geothermal Solutions LLC

Energy, efficiency at it's best!

August 7, 2023

In accordance with the request for a Geothermal Test Bores and Conductivity Test for the New Mercer County Elementary School located at Industry Rd, Harrodsburg KY 40330, we understand the scope of work to include the following:

- 1) Drill and install 1 geo-loops HDPE (1.25 in. dia. SDR 9) to a depth of 400' feet
- 2) Provide and backfill the boreholes with thermally enhanced grout utilizing graphite to a 1.00 Btu and provide one grout sample
- 3) Water to be provided onsite
- 4) Borehole location to be flagged by others
- 5) Removal of excess material and cleanup of site
- 6) Provide equipment and conduct 48-hour thermal conductivity test for borehole
- 7) Test will begin at a minimum of 5 days after completion of borehole
- 8) Thermal Conductivity Test Report
- 9) Cap loops to prevent contamination of loops and allow test wells to be incorporated into final project
- 10) Private utility locates

**Lump Sum Price - \$31,500.00**

**UNIT PRICING: Permanent Steel Casing - \$27.00 If**

**Not included in ANY of the above proposal costs:**

- 1) Additional Permits
- 2) Bonding
- 3) Prevailing Wages and/or Davis Bacon Wages
- 4) Casing
- 5) Extensive erosion control and water containment measures (SWPPP, water removal, frac tanks, water pumps, retainage ponds, etc)
- 6) Any costs associated with uncontrollable gas encountered during drilling process
- 7) Site restoration, final grading, seeding/straw/watering
- 8) Parking lot, sidewalks, curbs, walls, fencing, foundations, etc removal and/or replacement unless otherwise specified

Respectfully,

GEOHERMAL SOLUTIONS, LLC

*Tammy M Holt*

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Proposal Acceptance

\_\_\_\_\_  
Date

