



803 West State Street • O'Fallon, Illinois 62269
 phone: 618-632-9900 • fax: 618-632-9922
 qte@qteino.com

SOIL EVALUATION REPORT

CLIENT: Ms. Courtney Hagan
 304 South Benton
 New Athens, Illinois 62264

DATE: 8/19/21
 21-0518-S

SITE: 2340 Vinegar Hill Road
 New Athens, Illinois

COUNTY: St. Clair

DETAILED SOIL DESCRIPTION – BORING 1

Depth (in)	Color ¹	Texture ²	% Clay Range	Shrink/Swell Capacity	Mottles & Coatings ¹	Structure ²	Consistence	Conventional Loading Rate ³ (gpd/sq.ft.)
0 – 8	10 YR 4/3	Sil	20-28	L	--	1 f sbk	Friable	0.75
8 – 14	10 YR 4/4	L Scl	28-32	L	--	2 m sbk	Firm	0.62
14 – 22	10 YR 5/4	L Scl	28-32	L	c 10 YR 4/4	2 m sbk	Firm	0.62
22 – 24	10 YR 5/4	Scl	28-35	M	f 10 YR 4/4	2 m pr	Firm	0.52
24 – 35	10 YR 5/4	Scl	28-35	M	c 10 YR 4/2 f 10 YR 5/6	2 m pr	Firm	0.52
35 – 43	10 YR 5/4	Scl	28-35	M	c 10 YR 4/2 f 7.5 YR 5/6	2 m pr	Firm	0.52
43 – 50	10 YR 5/2	Scl	28-35	M	c 10 YR 5/4 f 7.5 YR 5/6	2 m pr	Firm	0.52
50 – 60	10 YR 5/2	Scl	28-35	M	f 10 YR 5/4 f 7.5 YR 5/6	2 m pr	Firm	0.52

Seasonal high water (SHW) is at 24 inches. Drainage classification is somewhat poorly. Bedrock is greater than 60 inches. Slope is 1 to 3 percent. Landscape position is on the plain. The site is an undeveloped lot.

DETAILED SOIL DESCRIPTION – BORING 2

Depth (in)	Color ¹	Texture ²	% Clay Range	Shrink/Swell Capacity	Mottles & Coatings ¹	Structure ²	Consistence	Conventional Loading Rate ³ (gpd/sq.ft.)
0 – 10	10 YR 4/3	Sil	20-28	L	--	1 f sbk	Friable	0.75
10 – 15	10 YR 4/4	L Scl	28-32	L	--	2 m sbk	Firm	0.62
15 – 21	10 YR 5/4	L Scl	28-32	L	c 10 YR 4/4	2 m sbk	Firm	0.62
21 – 23	10 YR 5/4	Scl	28-35	M	f 10 YR 4/4	2 m pr	Firm	0.52
23 – 35	10 YR 5/4	Scl	28-35	M	c 10 YR 4/2 f 10 YR 5/6	2 m pr	Firm	0.52
35 – 42	10 YR 5/4	Scl	28-35	M	c 10 YR 4/2 f 7.5 YR 5/6	2 m pr	Firm	0.52
42 – 50	10 YR 5/2	Scl	28-35	M	c 10 YR 5/4 f 7.5 YR 5/6	2 m pr	Firm	0.52
50 – 60	10 YR 5/2	Scl	28-35	M	f 10 YR 5/4 f 7.5 YR 5/6	2 m pr	Firm	0.52

Seasonal high water (SHW) is at 23 inches. Drainage classification is somewhat poorly. Bedrock is greater than 60 inches. Slope is 1 to 3 percent. Landscape position is on the plain.

DETAILED SOIL DESCRIPTION – BORING 3

Depth (in)	Color ¹	Texture ²	% Clay Range	Shrink/Swell Capacity	Mottles & Coatings ¹	Structure ²	Consistence	Conventional Loading Rate ³ (gpd/sq.ft.)
0 – 9	10 YR 4/3	Sil	20-28	L	--	1 f sbk	Friable	0.75
9 – 13	10 YR 4/4	L Scl	28-32	L	--	2 m sbk	Firm	0.62
13 – 20	10 YR 5/4	L Scl	28-32	L	c 10 YR 4/4	2 m sbk	Firm	0.62
20 – 23	10 YR 5/4	Scl	28-35	M	f 10 YR 4/4	2 m pr	Firm	0.52
23 – 36	10 YR 5/4	Scl	28-35	M	c 10 YR 4/2 f 10 YR 5/6	2 m pr	Firm	0.52
36 – 42	10 YR 5/4	Scl	28-35	M	c 10 YR 4/2 f 7.5 YR 5/6	2 m pr	Firm	0.52
42 – 50	10 YR 5/2	Scl	28-35	M	c 10 YR 5/4 f 7.5 YR 5/6	2 m pr	Firm	0.52
50 – 60	10 YR 5/2	Scl	28-35	M	f 10 YR 5/4 f 7.5 YR 5/6	2 m pr	Firm	0.52

Seasonal high water (SHW) is at 23 inches. Drainage classification is somewhat poorly. Bedrock is greater than 60 inches. Slope is 1 to 3 percent. Landscape position is on the plain.

Remarks: Quality Testing and Engineering, Inc. does not certify, warrant, or guarantee the proper function, operation, or maintenance of any installed septic system. Findings and conditions should be expected to differ if elevations are changed from the time of our observation. This soil evaluation was prepared for the sole use of the client and may not be transferred or modified without the prior written authorization of Quality Testing and Engineering, Inc

We appreciate the opportunity to be of service to you on this project. If you have any questions or comments, please call.

Respectfully submitted,

QUALITY TESTING AND ENGINEERING, INC.

A handwritten signature in black ink, appearing to be 'M. Widman', written over the company name.

Michael A. Widman, P.E.
President

WKS/MAW/bb

Enclosures

SOIL DESCRIPTION ABBREVIATIONS

Mottles	Texture	Structure	Drainage
<u>Abundance (%)</u>	s = sand	<u>Grade</u>	W = Well
f = few <2	ls = loamy sand	0 = structureless	MW = Moderately Well
c = common 2-20	sl = sandy loam	1 = weak	SWP = Somewhat Poor
m = many >20	l = loam	2 = moderate	P = Poor
	sil = silt loam	3 = strong	
	si = silt		
	sicl = silty clay loam	<u>Type</u>	
	cl = clay loam	Granular (gr)	<u>Size (mm)</u>
	scl = sandy clay loam		vf = very fine <1
	sc = sandy clay		f = fine 1-2
	c = clay	Crumb (cr)	m = medium 2-5
	vfs = fine sand		c = coarse 5-10
	cos = coarse sand		vc = very coarse >10
	vcs = very coarse sand	-----	
	<u>Rock Fragments</u>	Angular	vf = very fine >5
	g = gravelly 15-35%	blocky (abk)	f = fine 12-20
	vg = very gravelly 35-60%	Subangular	m = medium 20-50
	exg = extremely gravelly >60%	blocky (sbk)	c = coarse 50-100
			vc = very coarse >100

		Prismatic (pr)	vf = very fine <5
			f = fine 5-10
			m = medium 10-20
		Columnar (cpr)	c = coarse 20-50
			vc = very coarse >50

		Platy (pl)	vf = very fine <1mm
			f = fine 1-2mm
			m = medium 2-5mm
			c = coarse 5-10mm
			vc = very coarse >10mm

		Single grain (sg)	
		Massive (m)	

	<u>Shrink/Swell Capacity</u>		
	L = low shrink/swell		
	M = medium shrink/swell		
	H = high shrink/swell		

³ Private Sewage Disposal Licensing Act and Code, IDPH, Appendix A, Illustration M (1996).



NOT TO SCALE

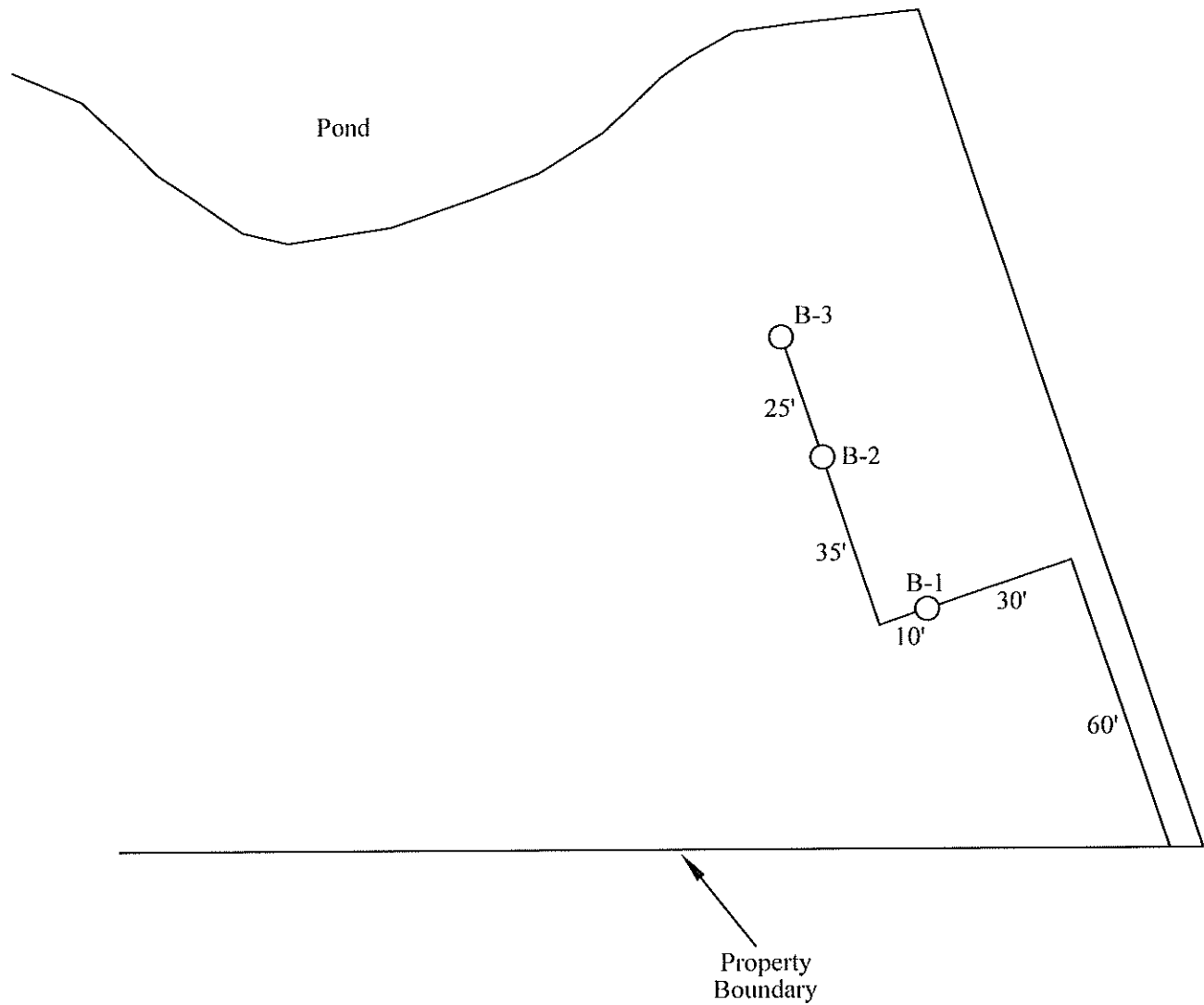


FIGURE 1

BASED ON OBSERVATIONS MADE BY THE STAFF OF QUALITY TESTING AND ENGINEERING, INC.
DIMENSIONS AND LOCATIONS ARE APPROXIMATE ACTUAL MAY VARY.
DRAWING NOT INTENDED FOR USE OTHER THAN AS PART OF THE REPORT FOR WHICH IT WAS CREATED.

QUALITY TESTING AND ENGINEERING, INC.

803 WEST STATE STREET, OFALLON, IL 62269
PHONE: 618-632-9900 FAX: 618-632-9922 EMAIL: QTE@QTEINC.COM



2340 Vinegar Hill Road
New Athens, IL

SITE MAP

AUGUST 2021

PROJECT NO. 21-0518-S

GENERAL TERMS AND CONDITIONS FOR SEPTIC SERVICES

1. SITE ENTRY: You, the Client, will provide for right of entry of QUALITY TESTING and ENGINEERING, INC. (hereinafter called QUALITY TESTING) or employees of firms working under the direction of QUALITY TESTING and all necessary equipment, in order to perform the work. QUALITY TESTING will take reasonable precautions to minimize any damages to the property caused by QUALITY TESTING's services. If you desire or require us to restore the site to its former condition, upon written request, we will perform such additional work as is necessary and you agree to pay all costs incurred.

2. SUBSURFACE STRUCTURES OR UTILITIES: In the performance of this work, we will take reasonable precautions to avoid damage to subsurface structures or utilities. Our proposal may indicate elsewhere the effort that you have indicated will be necessary to locate subsurface structures or utilities. If additional effort is required to locate subsurface structures, or utilities due to a failure by you or others to perform an agreed-to service, you agreed to pay our additional costs incurred with this additional effort.

You agree to waive any claim against QUALITY TESTING and to defend, indemnify and hold QUALITY TESTING harmless from any claim or liability for injury or loss allegedly arising from QUALITY TESTING's damaging underground utilities or other man-made objects that were not called to QUALITY TESTING's attention, or which were not properly located on plans furnished to QUALITY TESTING.

3. SAMPLES: Soil, rock, water, or other samples obtained from the project site are your property. QUALITY TESTING shall preserve such samples for no longer than thirty (30) calendar days after the issuance of any document that includes the data obtained from them, unless other mutually agreed arrangements are documented.

Concrete test specimens will be discarded after testing. If project specification strengths are met, "hold" cylinders will be discarded at that time.

4. INDEMNIFICATION – Mutual: The consultant agrees, to the fullest extent permitted by law, to indemnify and hold harmless the client, its officers, directors and employees (collectively, Client) against all damages, liabilities or costs, including reasonable attorney's fees and defense cost, to the extent caused by the consultants negligent performance of professional service under this agreement and that of its sub-consultants or anyone for whom the consultant is legally liable. The above indemnification presents no duty to defend the Client prior to the finding of fact.

The Client agrees, to the fullest extent permitted by law, to indemnify and hold harmless the Consultant, its officers, directors, employees and sub-consultants (Consultant) against all damages, liabilities or costs including reasonable attorney's fees and cost, to the extent caused by the Client's negligent acts in connection with the project and the acts of its contractors, sub-contractors and consultants. Neither the Client nor the Consultant shall be obligated to indemnify the other party in any manner for that party's own negligence or for the negligence of others.

Client shall not be liable to Quality Testing and Quality Testing shall not be liable to client for any consequential damages incurred by either due to the fault of the other, regardless of nature of this fault or whether it was committed by Quality Testing, its employees, sub consultants or anyone for whom Quality Testing is legal liable. Consequential damages include, but are not limited to loss of use and loss of profit.

5. LIMITATION OF LIABILITY: In recognition of the relative risks and benefits of the project to both the Client and the Consultant, the risks have been allocated such that the Client agrees, to the fullest extent permitted by law, to limit the liability of the Consultant (as defined above) for any and all claims, losses and costs of any nature or claims expense from any cause or causes, including reasonable attorney's fees and costs, so that the total liability of the Consultant shall not exceed \$1,000 or the Consultants total fee for professional services rendered on this project, whichever is greater. It is intended that this limitation apply to any all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

6. INVOICES: You will make all payments in accordance with QUALITY TESTING's invoices, and payment is due upon receipt of invoice. Interest of 1½ percent per month will be payable on any amounts not paid within thirty (30) days, payment thereafter to be applied first to accrued interest and then to your unpaid amount. You agree to pay invoices under these terms and to bear collection fees, court costs, or any other reasonable expense involved in the collection of amounts not paid.

7. HAZARDOUS MATERIALS; NOTIFICATION OF AND DISCOVERY OF: When hazardous materials are known, assumed, or suspected to exist at a site, QUALITY TESTING is required to take appropriate precautions to protect the health and safety of its personnel, to comply with applicable laws and regulations, and to follow procedures that QUALITY TESTING deems prudent to help minimize physical risks to employees and the public. You warrant that you have provided to QUALITY TESTING all available information about type and location of known and suspected hazardous materials on, under, or adjacent to the project site.

The discovery of unanticipated hazardous or suspected hazardous materials will constitute a changed condition mandating termination of services if QUALITY TESTING and you are unable to renegotiate the scope of service in a timely manner.

QUALITY TESTING will notify you as soon as practically possible should QUALITY TESTING encounter unanticipated hazardous or suspected hazardous materials.

The discovery of unanticipated hazardous or suspected hazardous materials may make it necessary for QUALITY TESTING to take measures that in QUALITY TESTING's professional opinion are needed to help preserve and protect the health and safety of QUALITY TESTING's personnel and of the public, and/or to preserve and protect the environment. As a condition precedent to the provision of service for this project, you agree to compensate QUALITY TESTING for the additional fees and costs associated with any such measures and further agree to defend, indemnify, and hold harmless from any claim or liability for injury or loss arising from QUALITY TESTING's encountering unanticipated hazardous or suspected hazardous materials.

8. CONTAMINATION OF AN AQUIFER: Unavoidable contamination of soil or groundwater may occur during subsurface exploration, as when drilling or sampling tools penetrate a contaminated area, linking it to an aquifer, underground stream, or other hydrous body not previously contaminated and capable of spreading contaminants off-site. Because the limitations of available methods make alleviating such risks practically impossible, and because subsurface exploration is an essential aspect of the services that QUALITY TESTING will provide on your behalf, you shall indemnify, defend, and hold QUALITY TESTING harmless from any claim or liability for injury or loss which may arise as a result of contamination allegedly caused by subsurface exploration.

9. SITE SAFETY Neither the professional activities of QUALITY TESTING, nor the presence of QUALITY TESTING's employees or subcontractors shall be construed by any party to imply that QUALITY TESTING has any responsibility for any contractor's methods of work performance, procedures, superintendence, sequencing of operations, or safety in, on, or about the project site. You agree that the general contractor is responsible for project site safety, and warrant that this intent shall be made evident in your agreement with the general contractor.

10. CONSTRUCTION COST ESTIMATES: An opinion of construction cost prepared by QUALITY TESTING represents our judgment as a design professional and is supplied for your general guidance only. Since we have no control over the cost of labor and material, nor over competitive bidding or market conditions, we do not guarantee the accuracy of our opinion as compared to other sources, such as, contractor bids of actual cost to the owner.

11. Dispute Resolution: In the event there is a dispute between QUALITY TESTING and Client concerning the performance of any provision in this agreement, all parties agree to a non-binding direct discussion mediation period to resolve the dispute. If the dispute or claim is not resolved all parties further agree to resolve the dispute in a court of competent jurisdiction. The losing party shall pay the prevailing party his reasonable attorney's fees and costs as determined by the court.

12. Standard of Care: Services performed by QUALITY TESTING under this Agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the same profession currently practicing in the same region under similar conditions. No other warranty, expressed or implied, is made.

13. Additional Terms: You agree that this contract is entered into by the parties for the sole benefit of the parties to the contract, and that nothing in the contract shall be construed to create a right or benefit for any third party.

Neither party shall hold the other responsible for damages or delay in performance caused by acts of God, strikes, lockouts, accidents, or other events beyond the control of the other or the other's employees and agents.

You and your personnel, contractors, and subcontractors shall promptly report to QUALITY TESTING any defects or suspected defects in QUALITY TESTING's work, in order that QUALITY TESTING may take prompt, effective measures which in QUALITY TESTING's opinion will minimize the consequences of a defect in service.

Test borings and test pits are an accepted and informative means of subsurface exploration. However, in the nature of things, they cannot indicate with absolute certainty the nature of the subsurface conditions between and below the test explorations. Therefore, a report based on test borings, test pits, or other exploration method cannot guarantee the nature of the subsurface conditions between and below the test explorations. If conditions different than are indicated in our report come to your attention after you receive the report, it is recommended that you contact QUALITY TESTING immediately to inform QUALITY TESTING completely of what you have discovered and to authorize further evaluation, if appropriate.

14. TERMINATION: Any or all services being provided for you by QUALITY TESTING under these General Terms and Conditions or under separate contract may be terminated by either party upon seven (7) days prior written notice. In the event of termination, QUALITY TESTING shall be compensated by you for all services performed up to and including the termination date, including reimbursable expenses.