

**Vacant Land Soil Evaluation for
Mr. Larry & Kathleen Terpstra**
Located at the south east corner of Sunfield Hwy & East Tupper Lake Road
&
East Tupper Lake Road East of "King & Wolcott" drain 550 feet east of drainage ditch
Sebewa Township, Section #35, County of Ionia
August 07, 2017
Field notes of evaluation & restrictions

Soil Boring #01

- Located 140 feet east of the center of Sunfield Hwy and 200 feet south of the center of Tupper Lake Road. Soils consist of 0-12 inches loam top soil, 12-16 inches of sandy clay loam, 16-21 inches sandy silt loam with mottling @ 24 inches, 21-72 inches clay soils. Seasonal water table encountered at 24 inches.
 - This soil boring location for a sewage disposal system will consist of removing the sod layer and placing 28 inches of clean coarse sand fill or 2NS washed sand fill in drainfield area. The bottom of drainfield stone must be no less than 24 inches above existing grade. Further details will be noted on the sewage disposal permit at the time of issuance.

Soil Boring #02

- Located 194 feet east of the center of Sunfield Hwy and 155 feet south of the center of Tupper Lake Road. Soils consist of 0-12 inches loam, 12-18 inches sandy silt loam, 18 -24 inches sandy clay loam, 24-30 inches silt loam, 30-72 inches clay. Seasonal water table encountered @ 24 inches.
 - This soil boring location for a sewage disposal system will be the same as stated above in the Soil Boring #01 location.

Soil boring #01 & #02 (above), drainfield must be in these location(s). Soil borings conducted on the high ground of the area. Drainfield and septic tank will need to be 100 feet from the ditch drain. Due to the limited room at this southeast corner and the lower ground surrounding the higher ground, a new dwelling will be limited to 2 bedroom without a garbage disposal to successfully meet soil condition criteria and isolation distances. Address is needed prior to permit issuance. Drainfield would be a 1300 square feet in size.

Soil Boring #03

- Located 221 feet south of the center of Tupper Lake Road and 550 east of the "King & Wolcott" drain. Soils consist of 0-12 inches sandy loam top soil, 12-30 inches sandy clay loam, 30-60 inches of medium sands (some fines) 60-72 inches clay soils. Seasonal water table encountered @ 24 inches.

Bowen, REHS, MS, Health Officer
Jill Lowhime, M.D., MPH, Assistant Health Officer

Protecting Life's Potential



- The sewage disposal system will consist of the same criteria as stated above, with the exception of the number of bedroom(s) and or garbage disposal not limited. System would be sized accordingly to the Ionia County Department of Public Health "Sanitary Code" requirements.

Soil Boring #04

- Located 284 feet south of the center of Tupper Lake and 550 feet east of the "King & Wolcott" drain. Soils consist of 0-16 inches of loam top soil, 16-24 inches clay (blocky structure), 24-48 inches sandy silt loam, 48-60 medium sands, 60-72 inches of clay. Seasonal water table encountered @ 24 inches. Sewage disposal system will be 24 inches above existing grade.

Soil Boring #05

- Located 284 feet south of the center of Tupper Lake Road and 585 feet east of the "King & Wolcott" drain. Soils consist of 0-12 inches of sandy loam top soil, 12-24 inches of sandy clay loam, 24-60 inches of sandy silt loam, 60-112 inches of fine to medium sands. Seasonal water table encountered @ 24 inches. Sewage disposal system will be 24 inches above existing grade.

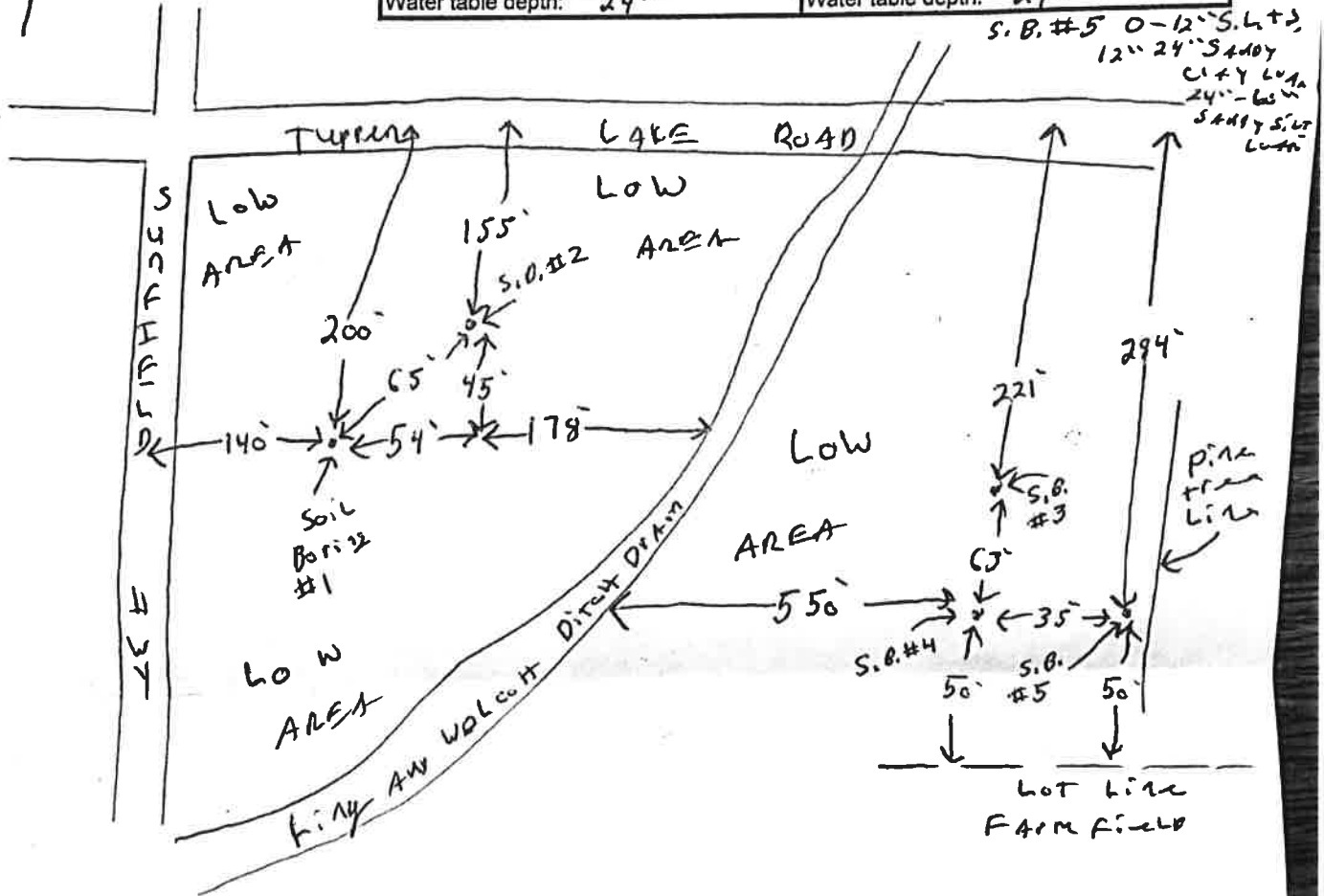
Further sewage disposal system details will be noted on the permit when applied for. Address is needed prior to permit issuance. System must be installed in the soil boring locations as indicated above. Dwelling may need to be elevated to maintain gravity flow to avoid a pump system in all soil boring locations.

Any questions, please contact me at jon@ioniacounty.org or (616) 527-5341 ext. 493 regarding sizing and placement of such system.

IONIA COUNTY HEALTH DEPARTMENT 175 E. ADAMS STREET, IONIA, MI 48846		VACANT LAND SOIL EVALUATION		ENVIRONMENTAL HEALTH DIV 616-527-5341	
Requester's Name: <u>LARRY TERPSTRA</u>			Date: <u>8-7-2017</u>		Acres: <u>10.150</u>
Road: <u>SUNFIELD/TURNER LAKE ROAD</u>					
Twp: <u>Sedgewick</u>	Sec: <u>35</u>	Boring 1: <u>0-12" LOAM T.S. DRY</u>	Boring 2: <u>0-12" LOAM DRY</u>		
Approved for permit <input checked="" type="checkbox"/>		<u>12"-16" SANDY CLAY LOAM</u>	<u>12"-18" SANDY SILT LOAM</u>		
Boring 1 <input checked="" type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input checked="" type="checkbox"/>		<u>16"-21" SANDY SILT LOAM</u>	<u>19"-24" SANDY CLAY LOAM</u>		
Denied permit <input type="checkbox"/>		<u>NOT</u>	<u>24"-30" SILT LOAM NOT</u>		
Approved for alternative <input type="checkbox"/>		<u>21"-72" CLAY NOT</u>	<u>30"-72" CLAY NOT</u>		
(Application expires in 12 months)		Water table depth: <u>24"</u>	Water table depth: <u>24"</u>		
		Boring 3: <u>0-12" SANDY LOAM T.S.</u>	Boring 4: <u>0-16" CLAY LOAM T.S.</u>		
		<u>12"-30" SANDY CLAY LOAM</u>	<u>16"-24" CLAY BLOCKY STRUCTURE</u>		
		<u>SANDY SILT LOAM POCKETS</u>	<u>24"-48" SANDY SILT LOAM NOT</u>		
		<u>30"-60" MED SANDS, 60"-72" CLAY</u>	<u>48"-60" MED SANDS - 72" CLAY</u>		
		Water table depth: <u>24"</u>	Water table depth: <u>24"</u>		



THIS IS NOT A PERMIT



COMMENTS:

SEE ATTACHED COMMENT CORRESPONDENCE

Mark Novak

Sanitarian