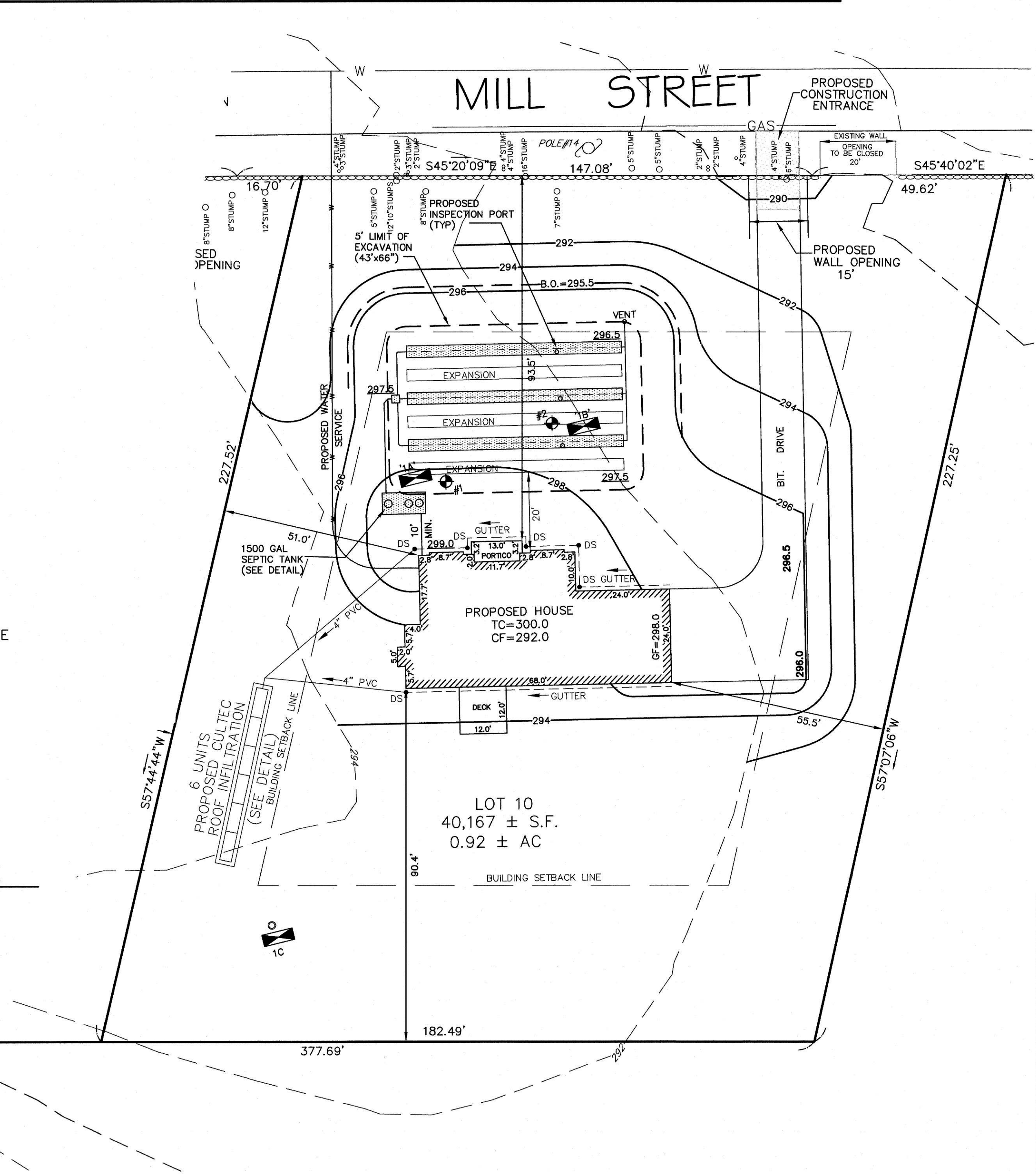
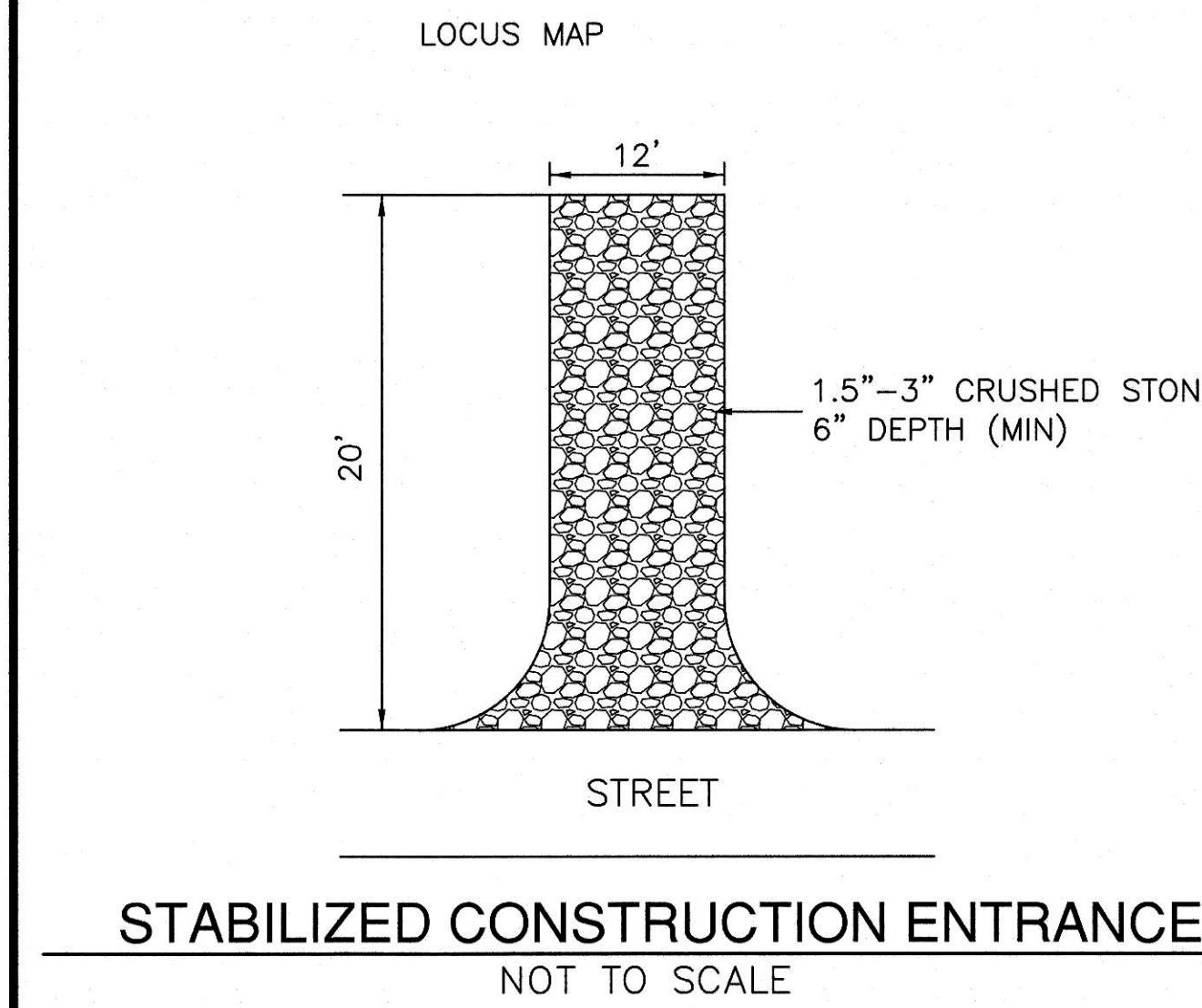
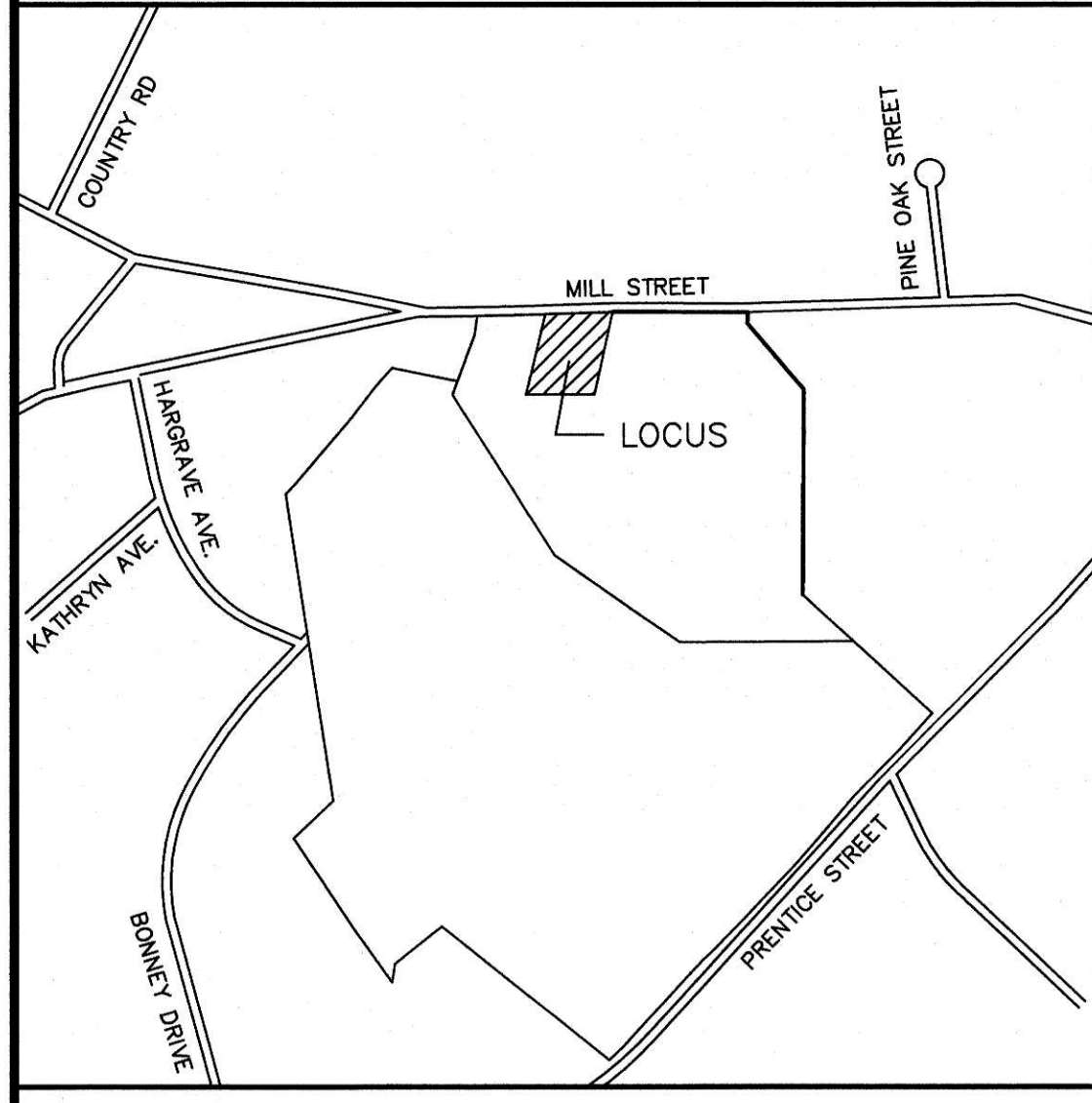


PERCOLATION TEST RESULTS			
TEST HOLE	DATE	DEPTH	RATE
(Old Lot 1) #1	5/12/97	38-56"	14 M.P.I.
(Old Lot 1) #2	5/12/97	34-52"	20 M.P.I.

DEEP OBSERVATION HOLE LOGS			
TEST	#1A (Old Lot 1)	TEST	#1B (Old Lot 1)
HORIZ DEPTH	DATE: 5/12/97 SOIL DESCRIPTION ELEV.	HORIZ DEPTH	DATE: 5/12/97 SOIL DESCRIPTION ELEV.
0"	SANDY LOAM 293.3	0"	SANDY LOAM 293.0
12"	10YR3/3 292.3	12"	10YR3/3 291.1
32"	Bw SANDY LOAM 290.6	32"	Bw SANDY LOAM 289.3
132"	C1 Med 30% Gravel SANDY LOAM 2.915/2 282.3	134"	C1 Med 13% Gravel SANDY LOAM 2.915/2 280.8
88"	GROUNDWATER OBSERVED 288.0	100"	GROUNDWATER OBSERVED 283.7
40"	SOIL MOTTLING 290.0	40"	SOIL MOTTLING 288.7
40"	GROUNDWATER MONITORED 290.0	40"	GROUNDWATER MONITORED 288.7
40"	ESTIMATED SEASONAL HIGH GROUNDWATER 290.0	40"	ESTIMATED SEASONAL HIGH GROUNDWATER 288.7

CERTIFIED SOIL EVALUATOR : JOSEPH M. NIHILL  
 WITNESSED BY B.O.H. AGENT : BILL DOMEY  
 DESIGN PERCOLATION RATE : 15 M.P.I.



ASSESSOR'S REFERENCE:  
 MAP 7, LOT 4-55

**\*NO GARBAGE GRINDER ALLOWED**  
**NEW CONSTRUCTION**

**TYPE OF FACILITY SERVED**  
 SINGLE FAMILY DWELLING - 4 BEDROOMS

DESIGN FLOW : 4 BEDROOMS x 110 GAL./DAY/BEDROOM = 440 G.P.D.

**SEPTIC TANK SIZING:**  
 DESIGN FLOW x 200%  
 440 GAL. x 200% = 880 GALLONS

**SEPTIC TANK PROPOSED: 1500 GALLON 2-COMPARTMENT**

**SYSTEM SIZING CALCULATIONS:**

GARBAGE GRINDER: NO

DESIGN FLOW = 440 GPD

EFFLUENT LOADING RATE = 0.53 GPD/SF  
 (INCREASE AREA BY 50% IF GARBAGE GRINDER)

LEACHING AREA REQUIRED = 440 GPD/0.53 GPD/SF = 830 SF

**SYSTEM DESIGN**

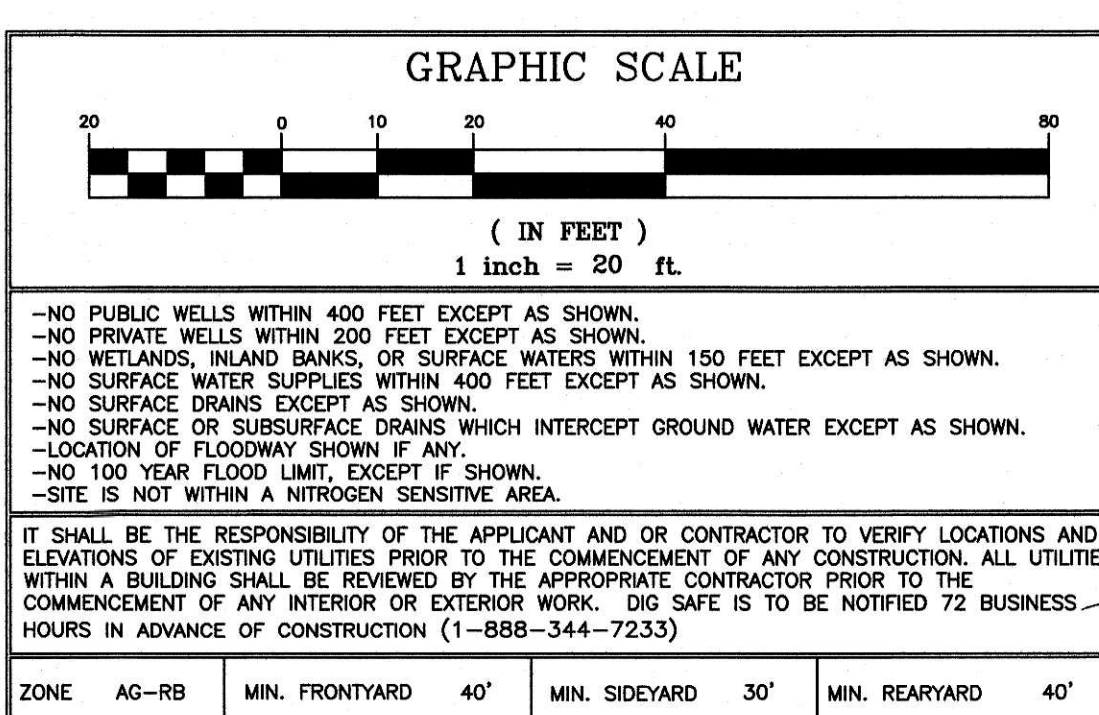
LEACHING TRENCHES - 3 @ 56'L x 36" W x 12"H

BOTTOM AREA: 3 x 56'L x 3'W = 504 S.F.

SIDEWALL AREA: 6 x 56' x 1'H = 336 S.F.

LEACHING AREA PROVIDED = 840 S.F.

FLOW PROVIDED = 840 S.F. x 0.53 GAL./S.F. = 445 G.P.D.



Soil Evaluator Certification: I certify that I am currently approved by the D.E.P. pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation are accurate and in accordance with 310 CMR 15.100 through 15.107.

C.S.E. #1746

**GENERAL CONSTRUCTION NOTES:**

- THE DETAILS SHOWN ARE GENERAL IN NATURE AND ARE NOT INTENDED TO SHOW EVERY POSSIBLE INSTALLATION REQUIREMENT. THE CONTRACTOR SHALL BE KNOWLEDGABLE IN THE REFERENCED CODES, INSTALLATION REQUIREMENTS AND PROVIDE NECESSARY LABOR, MATERIALS AND EQUIPMENT TO INSTALL A FUNCTIONAL SYSTEM.
- COMPONENTS SHALL NOT TO BE BACKFILLED OR CONCEALED WITHOUT INSPECTION BY AND PERMISSION FROM BOARD OF HEALTH.
- IT IS THE RESPONSIBILITY OF THE APPLICANT TO OBTAIN THE SERVICES OF THE DESIGN ENGINEER TO PROVIDE PROPER INSPECTIONS FOR CERTIFICATIONS AND AS-BUILT PLANS.
- INSTALLER REQUIRED TO PROVIDE PROPER CERTIFICATION.
- LEACHING AREA TO BE FLAGGED FOR PROTECTION UNTIL CERTIFICATE OF COMPLIANCE IS OBTAINED.
- NO STOCKPILING OF MATERIALS OVER SYSTEM.
- NO TRAFFIC OR PARKING OVER SYSTEM.
- BOTTOM AND SIDES OF EXCAVATION AREA SHALL BE SCARIFIED.
- PLACEMENT OF FILL SHALL BE DONE BY STOCKPILING AT THE EDGE OF THE EXCAVATION AREA AND PUSHED OR CAST IN PLACE.
- FILL SHALL NOT BE PLACED IN THE EXCAVATION AREA DURING RAIN OR SNOW STORM.
- IF ANY FILL IS TO BE PLACED BELOW THE WATER TABLE, DEWATERING IS REQUIRED PRIOR TO PLACEMENT.

**TO ENSURE THE PERFORMANCE OF THE SYSTEM, MAINTENANCE SHOULD BE PERFORMED ANNUALLY BY A LICENSED SEWAGE PUMPING CONTRACTOR.**

GLM ENGINEERING CONSULTANTS, INC. WILL NOT BE RESPONSIBLE FOR THE PERFORMANCE OF THIS SYSTEM UNLESS CONSTRUCTED AND INSPECTED IN ACCORDANCE WITH THIS PLAN. INSPECTIONS TO BE DONE AFTER EXCAVATION FOR SYSTEM AND AFTER CONSTRUCTION, BUT PRIOR TO BACKFILLING. ANY ALTERATION MUST BE APPROVED IN WRITING BY GLM ENGINEERING CONSULTANTS, INC.

**5' LIMIT OF EXCAVATION (43' x 56')**

ALL TOPSOIL, SUBSOIL AND ANY DELETERIOUS MATERIAL MUST BE REMOVED FROM THE AREA OF THE SYSTEM AND OTHER DESIGNATED LIMITS AND FILLED WITH APPROVED, CLEAN, GRANULAR SAND. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 2 INCHES AND BE GRADED SO NOT MORE THAN 45% OF THE SAMPLE IS RETAINED IN A #4 SIEVE, OF THAT PASSING, 20% OR LESS SHALL PASS A #100 SIEVE AND 5% OR LESS SHALL PASS THE #200 SIEVE. NOT MORE THAN 90% SHALL BE RETAINED ON THE #50 SIEVE. SAMPLE FOR SIEVE ANALYSIS TO BE TAKEN FROM SAMPLE IN PLACE.

ALL CONSTRUCTION & COMPONENTS SHALL CONFORM TO THE LATEST REQUIREMENTS OF 310 CMR 15.000 TITLE 5 OF THE STATE ENVIRONMENTAL CODE AND THE TOWN OF HOLLISTON BOARD OF HEALTH REGULATIONS.

<b>BENCH MARK</b> (DATUM = N.G.V.D.)			
<b>PROPOSED SEWAGE DISPOSAL SYSTEM</b> <b>LOT 10 - MILL STREET</b> <b>HOLLISTON, MASSACHUSETTS</b>			
APPLICANT/OWNER: Elite Home Builders LLC 1 Golden Court Westborough, MA			
DATE: AUGUST 22, 2019	<b>GLM Engineering Inc.</b> 19 EXCHANGE STREET HOLLISTON, MA 01746 P: 508-429-1100 F: 508-429-7160 www.GLMengineering.com		
REVISED: NOV. 20, 2019			
JAN 26, 2021 NEW HOUSE 3/6/2021 DETAILS ADDED			
DES: RST	SCALE: 1" = 20'	JOB #7701	SHEET #1 of 1

**PROFESSIONAL CIVIL ENGINEER**

The contractor shall notify the design engineer and the local board of health before, during and after the installation of the septic system to coordinate the following inspections (at a minimum):

- At completion of initial excavation for bottom inspection. Design engineer to perform a sieve analysis on Title 5 fill material (if required).
- Prior to backfilling, at completion of the installation of system components. All system components and system requirements must be installed at time of inspection. All pipes must be backfilled to the crown of the pipe.
- If dosing is proposed, design engineer shall perform a clear water flow test. Engineer needs access to control panel and breaker box. Test must be performed prior to backfilling of any components unless otherwise notified.
- After backfilling system components for final grading.