

- 1. ALL UNSUITABLE MATERIAL MUST BE REMOVED FROM THE PROPOSED CONSTRUCTION AREA BELOW THE SOIL ABSORPTION SYSTEM AND A MINIMUM OF FIVE FEET LATERALLY IN ALL DIRECTIONS BEYOND THE OUTER PERIMETER OF THE SYSTEM. BACKFILL MATERIAL SHALL CONSIST OF CLEAN SAND OR GRAVEL FREE OF FINES AND HAVING A PERCOLATION RATE OF 2 MIN. PER INCH OR LESS AFTER BEING PLACED AND COMPACTED.
- 2. ALL STONE MUST BE DOUBLE WASHED AND FREE FROM FINES AND MUST HAVE LESS THAN 0.5% FINER MATERIAL PASSING THE NO. 200 SIEVE.
- 3. HEAVY MACHINERY SHALL NOT BE PERMITTED TO PASS OVER ANY PART OF THE PROPOSED SUBSURFACE DISPOSAL SYSTEM.
- 4. SYSTEM PIPING SHALL CONSIST OF POLYVINYL CHLORIDE PIPE(PVC) SCHEDULE 40 NSF, UNLESS OTHERWISE NOTED.
- GARBAGE GRINDER/DISPOSAL SYSTEM IS NOT TO BE CONNECTED TO THE SUBSURFACE DISPOSAL SYSTEM.
- 6. SITE SURVEY WAS SOLELY PERFORMED TO OBTAIN SITE TOPOGRAPHY FOR THE INSTALLATION OF A SUBSURFACE DISPOSAL SYSTEM. THE DESIGNER IS NOT RESPONSIBLE FOR THE ACCURACY OF THE REPRESENTATION OF ANY PROPERTY LINES OR BUILDING LOCATIONS SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROLS.
- 7. ALL DISTURBED AREAS SHALL BE LOAMED, SEEDED AND MAINTAINED TO PREVENT EROSION. ANY DISTURBED PAVING MUST BE REPLACED IN-KIND.
- 8. THE DESIGNER HAS NOT BEEN RETAINED BY THE CLIENT TO CONSTRUCT OR SUPERVISE THE CONSTRUCTION OF THE SYSTEM. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ARRANGEMENTS FOR INSPECTION OF THE INSTALLATION OF THE SYSTEM WITH THE LOCAL BOARD OF HEALTH.
- ALL SURFACE AND SUBSURFACE DRAINAGE SHALL BE DIRECTED AWAY FROM THE SUBSURFACE DISPOSAL SYSTEM AND FOUNDATIONS.
- ALL SYSTEM TANKS AND PIPING CONNECTIONS SHALL BE MADE WATERTIGHT THROUGH MANUFACTURERS SPECIFICATIONS AND WARRANTY.
- 11. PROPER MAINTENANCE AND PERFORMANCE OF THE SUBSURFACE DISPOSAL SYSTEM SHOULD CONSIST OF INSPECTING THE SEPTIC TANK AT LEAST ONCE A YEAR AND WHEN THE TOTAL DEPTH OF SCUM AND SOLIDS EXCEEDS 1/3 THE LIQUID DEPTH OF THE TANK, THE TANK SHOULD BE PUMPED.
- 12. CONTRACTOR TO CONTACT THE LOCAL BOARD OF HEALTH AND LOCAL CONSERVATION COMMISSION PRIOR TO CONSTRUCTION AND OBTAIN ALL PROJECT RELATED DOCUMENTATION REGARDING ADDITIONAL REQUIREMENTS.
- 13. COMPONENTS NOT TO BE BACKFILLED WITHOUT INSPECTION BY BOARD OF HEALTH AND PERMISSION OBTAINED BY BOARD OF HEALTH.
- 14. SEWER LINES WHICH HAVE LESS THAN 1/4 BENDS INSTALLED SHALL ALSO
- HAVE CLEANOUTS INSTALLED IN AN ACCESSIBLE LOCATION.
- 15. NO KNOWN WELLS EXIST WITHIN 100 FT. OF THE PROPOSED SYSTEM.
- 16. THERE ARE NO PUBLIC WATER SUPPLIES WITHIN 400 FT. OF PROPOSED SYSTEM.
- 17. THERE ARE NO TRIBUTAIRES TO PUBLIC WATER SUPPLIES WITHIN 200 FT. OF PROPOSED SYSTEM.
- 18. THE PROPOSED SYSTEM DOES NOT LIE WITHIN A NITROGEN SENSITIVE AREA.
- 19. ENGINEER TO PROVIDE PERMANENT BENCHMARK ON AS-BUILT DRAWING.
- 20. CONTRACTOR TO PROVIDE SIEVE ANALYSIS OF SAND INSTALLED WITHIN SYSTEM.
- 21. THE SITE IS NOT LOCATED IN THE LYNNFIELD GROUNDWATER PROTECTION DISTRICT.

LOCAL UPGRADE REQUEST:

- UNDER SECTION 15.405(1) OF MDEP REGULATION 310 CMR 15.00 - A REQUEST IS ASKED FOR A VARIANCE FOR A REDUCTION OF THE SAS FROM THE TRIBUTARY TO SURFACE WATER SUPPLY FROM 200 FT. TO 146 FT.
- A REQUEST IS ASKED FOR A VARIANCE FOR A REDUCTION OF THE SEPTIC TANK FROM THE TRIBUTARY TO SURFACE WATER SUPPLY FROM 200 FT. TO 173 FT.
- A REQUEST IS ASKED FOR A VARIANCE FOR A REDUCTION OF THE SAS FROM THE WETLANDS BORDERING TRIBUTARY TO SURFACE WATER SUPPLY FROM 100 FT. TO 83 FT.

Design

Design Flow: 3 Bedrooms Design Flow: 3 Bedrooms @ 110 gpd = 330 gpd LTAR = 0.74 gpd/sq.ft.(CLASS | SOIL)

Design of Soil Absorption System : Field Effective Width = 20 Feet

Overall Capacity = 14.8 gpd/ft.

Effective Depth = 6 inches Bottom Capacity = $20 \text{ sq.ft./ft.} \times 0.74 \text{ gpd/sq.ft.} = 14.8 \text{ gpd/ft.}$

330 gpd / 14.8 gpd/ft. = 23 ft. of Field Needed(446 s.f.) DESIGN FIELD SIZE 17 WIDE BY 30 LONG = 510 S.F.

Septic Tank Design

200% for Design factor: 2 X330 gpd = 660 gpd Use (Min. req'd.) 1500 Gal. Septic Tank

SOIL EVALUATOR STATEMENT :

I(JAMES M. KAVANAUGH) CERTIFY THAT ON JULY 26,1995 I HAVE PASSED THE EXAMINATION APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE ABOVE ANALYSIS HAS BEEN PERFORMED BY ME CONSISTENT WITH THE REQUIRED TRAINING, EXPERTISE AND EXPERIENCE DESCRIBED IN 310 CMR 15.018(2).

James M. Kavanaugh, P.E.

Environmental Consultant

14 Shady Hill Drive N. Reading Mass. 01864

Tel.(978)664-2925

SUBSURFACE DISPOSAL SYSTEM PREPARED FOR

Carmen Gaeta 5 Winchester Drive

Map No. 51

Parcel No. 2557

