

BLOCK 84, LOT 9.03
S31°36'40"E 214.98

LEGEND

96.0 X
94.2 X
95
96
EXISTING GRADE
PROPOSED GRADE
PROPOSED CONTOUR
EXISTING CONTOUR

BLOCK 8420
LOT 3

LOT 4

LOT 2

* ACCORDING TO N.J.A.C. 7:9A-3.3(C)(2) "ALTERATIONS ARE MADE IN SUCH A WAY THAT THOSE COMPONENTS OF THE SYSTEM ALTERED ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THIS CHAPTER OR ARE CLOSER TO BEING IN CONFORMANCE WITH THIS CHAPTER THAN ORIGINAL COMPONENTS PRIOR TO THE ALTERATION". NO WARRANTIES OR GUARANTEES ARE ASSOCIATED WITH THIS PLAN.

NOTE: PRIOR TO EXCAVATION, CONTRACTOR TO CALL FOR A UTILITY MARK OUT FOR ALL UNDERGROUND UTILITIES.

NOTE: PRIOR TO EXCAVATION, CONTRACTOR TO CONTACT OWNER TO VERIFY LOCATION OF ALL UNDERGROUND SPRINKLERS, ELECTRICAL CONDUITS AND PRIVATE UTILITIES.

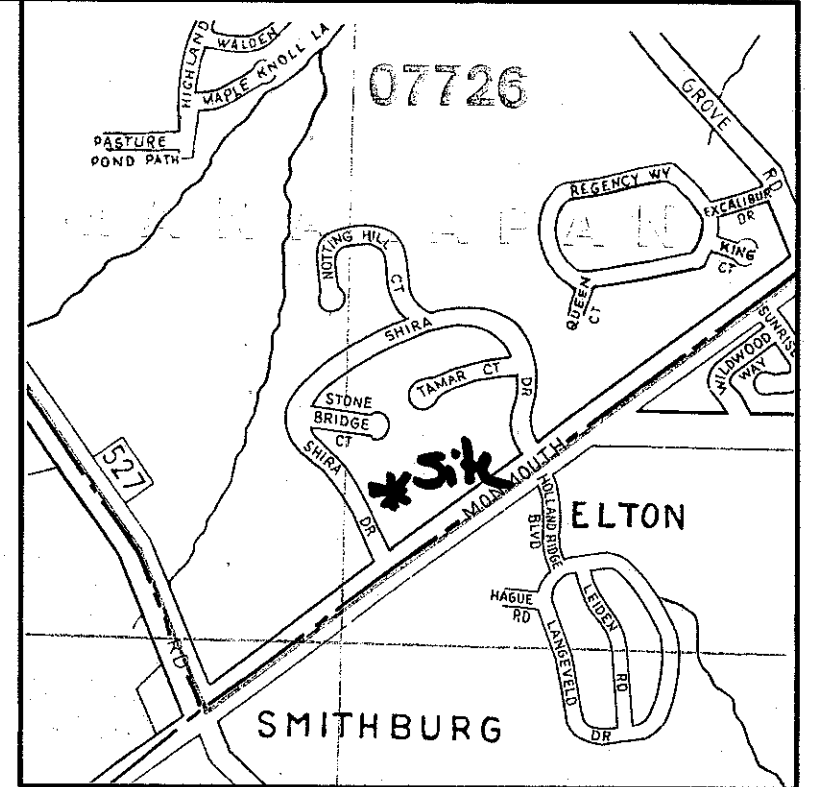
** PROPOSED DISPOSAL FIELD TO BE NO CLOSER TO EXISTING WELL OR DRAINAGE IN SHIRA LANE THAN EXISTING SYSTEM.

DISPOSAL BED AND SOIL EXCAVATION NOTES

- PER SOIL LOGS 1 & 2 DESCRIBED ON THIS SHEET, SOILS TO BE REMOVED TO ELEV. 83.50 AND REPLACED WITH K-4 SUITABLE FILL.
- EXCAVATION SHALL BE CARRIED OUT IN A MANNER THAT WILL AVOID UNNECESSARY COMPACTION OF THE DISPOSAL FIELD BOTTOM AND SIDEWALLS. HEAVY EQUIPMENT SUCH AS BULLDOZERS OR FRONT END LOADERS SHALL BE NOT DRIVEN OVER THE EXPOSED INFILTRATIVE SURFACE OF THE DISPOSAL FIELD.
- THE HEALTH OFFICER AND DESIGN ENGINEER SHALL BE NOTIFIED UPON EXCAVATION TO INSURE THAT "UNSUITABLE" MATERIALS HAVE BEEN SUFFICIENTLY REMOVED.
- THE EXCAVATION SHALL BE MADE TO THE REQUIRED DEPTH EXTENDING THROUGHOUT THE AREA TO BE OCCUPIED BY THE DISPOSAL FIELD.
- EXCAVATION PRIOR TO THE REPLACEMENT OF FILL MATERIAL SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF NJAC 7:9A-10.3(c) 2 THROUGH 5.
- EXISTING GROUND SURFACES ARE TO THOROUGHLY ROUGHENED BY PLOWING, DISKING OR ANOTHER METHOD WHICH SERVES TO ADEQUATELY PREPARE EXISTING SURFACES.
- BACKFILL OF SUITABLE MATERIAL SHALL HAVE A PERMEABILITY RATE OF 6-20 INCHES PER HOUR, AND MEET THE MINIMUM REQUIREMENTS SET FORTH IN THE STANDARDS FOR THE CONSTRUCTION OF INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEMS (NJAC 7:9A ET. SEQ.)
- ONCE THE EXCAVATION HAS BEEN COMPLETED, THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IN WRITING APPROXIMATELY 48 HOURS PRIOR TO COMPLETION OF BACKFILL.
- A PERMEABILITY TEST SHALL BE PERFORMED BY A LICENSED PROFESSIONAL ENGINEER TO INSURE THE BACKFILL MATERIAL WILL HAVE AN ACCEPTABLE PERMEABILITY RATE AND MEET THE MINIMUM STANDARDS OF REPLACEMENT SOILS.

GENERAL CONSTRUCTION NOTES

- BOUNDARY INFORMATION TAKEN FROM A PLAN ENTITLED: "SURVEY OF LOT 3, BLOCK 8420, TOWNSHIP OF MANALAPAN, MONMOUTH COUNTY, NEW JERSEY," PREPARED BY FRANK L. TRAFFORD, N.J.P.L.S. LIC. NO. 12818, DATE: FEB. 22, 1990.
- DO NOT SCALE DRAWINGS. ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC., ARE SCHEMATIC ONLY EXCEPT WHERE DIMENSIONS ARE SHOWN THEREON.
- THIS PLAN IS NOT A SURVEY OR PLOT PLAN. IT IS TO BE UTILIZED FOR THE CONSTRUCTION OF THE INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM ONLY.
- BOTTOM OF THE BED AND DISTRIBUTION LINES SHALL HAVE A RELATIVELY LEVEL GRADE. MAXIMUM SLOPE OF 2" IN 100 FEET.
- STONE SHALL BE WASHED GRAVEL OR CRUSHED STONE, FREE OF FINES, DUST, ASHES OR CLAY. THE FILTER MATERIAL SHALL CONFORM TO NJDOT STANDARD SIZES FOR COARSE AGGREGATES IN SIZE AND GRADATION TO SIZE NO. 24, SIZE NO. 3 OR SIZE NO.4.
- UNDER NO CONDITION SHALL MECHANICAL EQUIPMENT BE USED TO BACKFILL THE BED.
- BED SHOULD BE CONSTRUCTED AFTER ALL DANGER FROM MECHANICAL EQUIPMENT HAS PASSED.
- CONSTRUCTION OF THIS BED SHALL TAKE PLACE WHEN SOIL IS DRY.
- MINIMUM DIAMETER OF DISTRIBUTION LINES IS 4 INCHES.
- SEEPAGE AREA REQUIREMENTS MUST CONFORM TO THE CURRENT NEW JERSEY D.E.P. MANUAL "STANDARDS FOR THE CONSTRUCTION OF INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEMS."
- SEPTIC TANK SHALL BE A MINIMUM OF 10 FEET FROM DWELLINGS.
- DISPOSAL FIELD SHALL BE A MINIMUM OF 25 FEET FROM THE DWELLING AND 10 FEET FROM PROPERTY LINES.
- THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IF ANY TOPOGRAPHIC OR OTHER FEATURES DIFFER IN THE FIELD THAN WHAT IS SHOWN ON THE PLAN.
- PERMANENT MARKERS SHALL BE PROVIDED OVER THE DISTRIBUTION BOX.
- MARK 4 CORNERS OF DISPOSAL FIELD TO PREVENT MACHINERY RUNNING OVER INSTALLED AREAS.
- CONTRACTOR TO MULCH DISPOSAL FIELD TO PREVENT SOIL EROSION OVER WINTER MONTHS. DISPOSAL FIELD TO BE SEEDED BY OWNER AFTER SPRING THAW.
- SOIL LOGS 1 & 2 SHOWN HEREON ARE BASED UPON ON-SITE FIELD INSPECTION BY CARA L. SMITH, P.E., ON APRIL 22, 2002.
- THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE PRESENTED HEREON. THE UNDERSIGNED PROFESSIONAL SHALL BE GRANTED ACCESS TO REVIEW SAID CONDITION, AND/OR RENDER THE DESIGN SHOWN HEREON TO THE APPROPRIATE MUNICIPAL, COUNTY OR STATE OFFICIAL'S AND/OR THE UNDERSIGNED PROFESSIONAL'S SATISFACTION.
- THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IN WRITING APPROXIMATELY 48 HOURS PRIOR TO COMPLETION OF THE EXCAVATION OF THE DISPOSAL FIELD AND GRANT THE UNDERSIGNED PROFESSIONAL ACCESS TO THE SITE DURING ALL CONSTRUCTION PHASES TO VERIFY SITE CONDITIONS AND OBSERVE CONSTRUCTION. THE CONTRACTOR SHALL NOT POSTPONE, ALTER, AND/OR DELAY THE CONSTRUCTION SCHEDULE OF THE DISPOSAL FIELD PENDING SITE VISITATION FROM THE UNDERSIGNED PROFESSIONAL.
- THIS SYSTEM HAS BEEN DESIGNED TO ACCOMMODATE FLOWS FROM A 4 BEDROOM PRIVATE RESIDENTIAL BUILDING WITHOUT AN EXPANSION ROOM OR A DOMESTIC GARBAGE GRINDER.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND UTILITIES.
- THE SEPTIC SYSTEM INSTALLER IS TO BE FULLY AWARE OF ALL REQUIREMENTS AND SPECIFICATIONS WITHIN THE CURRENT STANDARDS FOR INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEMS (NJAC 7:9A ET. SEQ.).



KEY MAP
SCALE: 1"=2400'±

COMPACTION NOTES

COMPACTION OF FILL MATERIAL SHALL BE REQUIRED WHENEVER FILL MATERIAL IS USED BELOW THE DISPOSAL FIELD AND SHALL BE CARRIED OUT IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

- COMPACTION OF FILL SHALL BE CARRIED OUT AS DIRECTED BY A PROFESSIONAL ENGINEER AND AS INDICATED ON THE APPROVED ENGINEERING DESIGN.
- BASED UPON A FINAL INSPECTION, A PROFESSIONAL ENGINEER SHALL CERTIFY BY SIGNATURE AND SEAL THAT COMPACTION OF THE FILL HAS BEEN PERFORMED ADEQUATELY TO PREVENT FAILURE OF ANY COMPONENT OF THE SYSTEM DUE TO EXCESSIVE SETTLEMENT OR DIFFERENTIAL SETTLEMENT.
- FILL MATERIAL SHALL BE SPREAD AND COMPACTED IN LAYERS ONE FOOT OR LESS IN THICKNESS.
- COMPACTION MAY BE ACCOMPLISHED MANUALLY OR MECHANICALLY, BY TAMPING OR ROLLING, OR BY DRIVING OVER THE FILLED AREA IN A CONTROLLED PATTERN USING TRACKED OR RUBBER-TIRED VEHICLES. COMPACTION MAY ALSO BE ACCOMPLISHED BY PUDDLING.
- WHEN HEAVY EXCAVATING EQUIPMENT IS OPERATED WITHIN THE EXCAVATION FOR THE PURPOSE OF PLACEMENT OR COMPACTION OF THE FILL MATERIAL, THIS EQUIPMENT SHALL NOT BE DRIVEN DIRECTLY ON THE EXPOSED BOTTOM OF THE EXCAVATION. A MINIMUM OF ONE FOOT OF FILL MATERIAL SHALL BE MAINTAINED BELOW THE VEHICLE TRACKS OR WHEELS AT ALL TIMES.

DISPOSAL BED CALCULATIONS

NO. OF BEDROOMS = 4
DESIGN PERMEABILITY = K-4 (6-20 IN./HR.)
FIRST BEDROOM = 200 GALS./DAY
ADDITIONAL 3 BEDROOM = 450 GALS./DAY
TOTAL VOLUME = 650 GALS./DAY
650 GALS./DAY X 1.61 SQ. FT./GAL./DAY = 1047 SQ. FT.
TOTAL BED SIZE REQUIRED = 1047 SQUARE FEET
TOTAL BED SIZE PROVIDED = 1632 SQUARE FEET (16' X 102')

NOTE: CALCULATIONS ARE BASED ON A 4 BEDROOM DWELLING WITH NO PROVISIONS FOR ADDITIONAL BEDROOMS AND NO GARBAGE GRINDER.

SEPTIC TANK CALCULATIONS

NO. OF BEDROOMS = 4
250 GALS. PER BEDROOM
4 X 250 = 1000 GALLONS
USE EXISTING SEPTIC TANK

USE EXISTING SEPTIC TANK. CONTRACTOR TO VERIFY THAT THE EXISTING SEPTIC TANK IS IN ACCORDANCE WITH CURRENT REGULATIONS AND NOTIFY UNDERSIGNED IF NOT. ENGINEERING DID NOT INSPECT SAID SEPTIC TANK. CONTRACTOR TO REPLACE WITH APPROVED 1500 GALLON SEPTIC TANK IF SAID TANK IS TOO DEEP OR NOT IN ACCORDANCE WITH CURRENT REGULATIONS.

PLAN PREPARED FOR:
MRS. RANDI DROUTMAN
5 SHIRA LANE
MANALAPAN, NJ 07726
(732) 303-9317

REV.	DATE	DESCRIPTION
2	9-24-04	REVISED DISPOSAL FIELD DIMENSIONS
1	5-12-02	REVISED DISPOSAL FIELD DIMENSIONS
REV.	DATE	DESCRIPTION

SEPTIC DESIGN PLAN

FOR
BLOCK 8420
LOT 3

TOWNSHIP OF MANALAPAN
MONMOUTH COUNTY
NEW JERSEY

SCALE: AS SHOWN
DATE: APRIL 16, 2002
PROJECT NO.: 02056
DRAWING NO.: 02056
CLIENT: DROUTMAN
SHEET NO. 1 OF 1

TRE
TWO RIVER
ENGINEERING

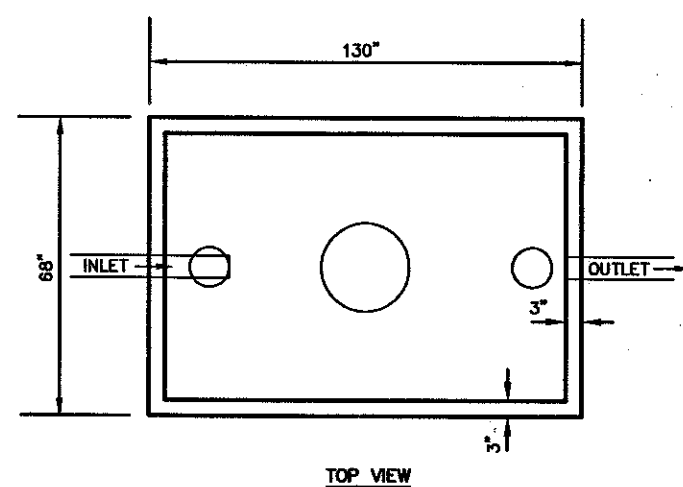
- Engineers
- Environmental Consultants
- Surveyors
- Planners

P.O. BOX 155
Cotts Neck, N.J. 07722
(732) 886-0111

CARA L. SMITH
N.J. P.E. LIC. NO. 37929

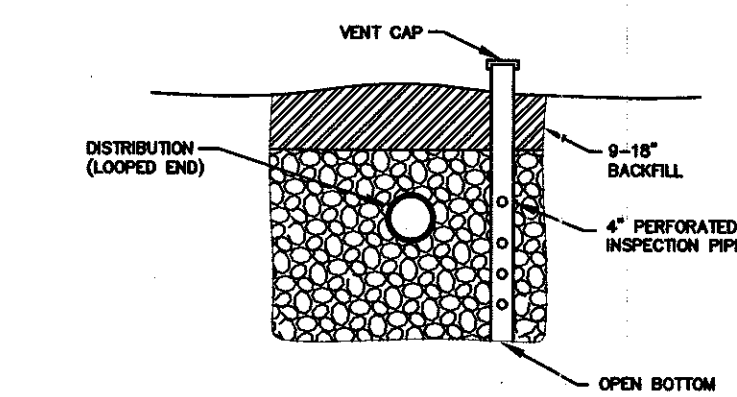
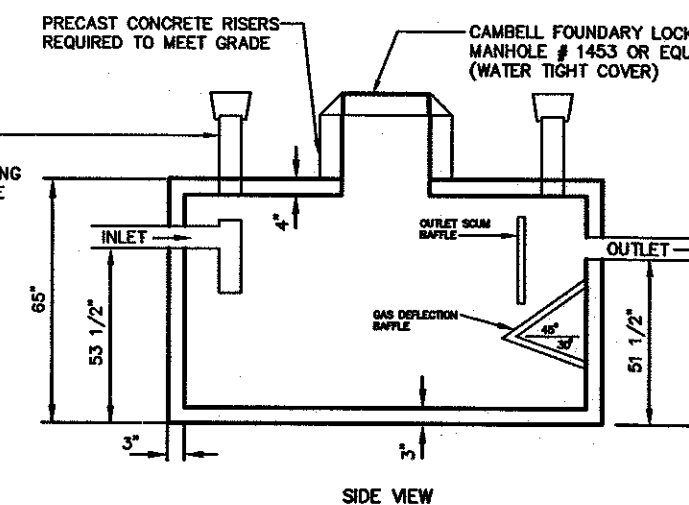
DISPOSAL BED CROSS-SECTION

N.T.S.
EXCAVATE SOILS TO AN ELEVATION OF 83.50 AND REPLACED WITH (K-4) SUITABLE FILL.
CONTRACTOR TO NOTIFY HEALTH OFFICER AND UNDERSIGNED PROFESSIONAL ENGINEER AT THE TIME OF EXCAVATION SO THE BOTTOM OF THE BED CAN BE WITNESSED AND APPROVED



1500 GALLON SEPTIC TANK

N.T.S.
(IF REQUIRED)



DISPOSAL BED INSPECTION PIPE DETAIL

N.T.S.

BLOCK 8420, LOT 3
APRIL 22, 2002
SITE EVALUATOR: CARA L. SMITH, P.E.
SITE INSPECTOR: DANA SCOTTO

SOIL LOG #1 (ELEV. 94.0)

SOIL LOG #2 (ELEV. 94.1)

0-60" FILL
60"-91" SANDY CLAY LOAM, OLIVE GRAY (5Y 4/2), FRIABLE, MOIST, SUB ANGULAR BLOCKY.
91"-108" SANDY LOAM, OLIVE GRAY (5Y 4/2), FRIABLE, MOIST, SUB ANGULAR BLOCKY.
108"-144" LOAMY SAND, DARK RED BROWN (5YR 3/4), SINGLE GRAIN, LOOSE, MOIST.

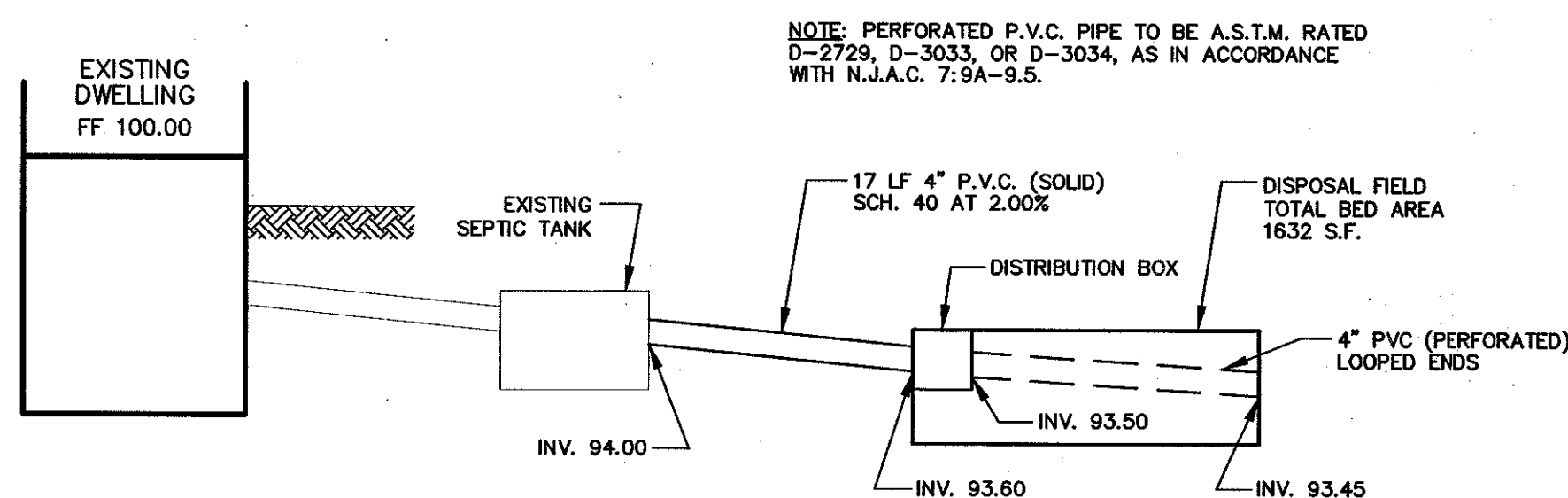
0-40" FILL
40"-156" SANDY CLAY LOAM, OLIVE BROWN (2.5Y 4/1), WITH DARK REDDISH BROWN (5YR 3/4) MOTTLES AT 120", FRIABLE, MOIST, SUB ANGULAR BLOCKY.

NOTE: GROUNDWATER ENCOUNTERED AT 120" (ELEV. 84.1)

NOTE: GROUNDWATER ENCOUNTERED AT 126" (ELEV. 83.5)

SEPTIC SYSTEM PROFILE

N.T.S.



DISPOSAL FIELD

N.T.S.

