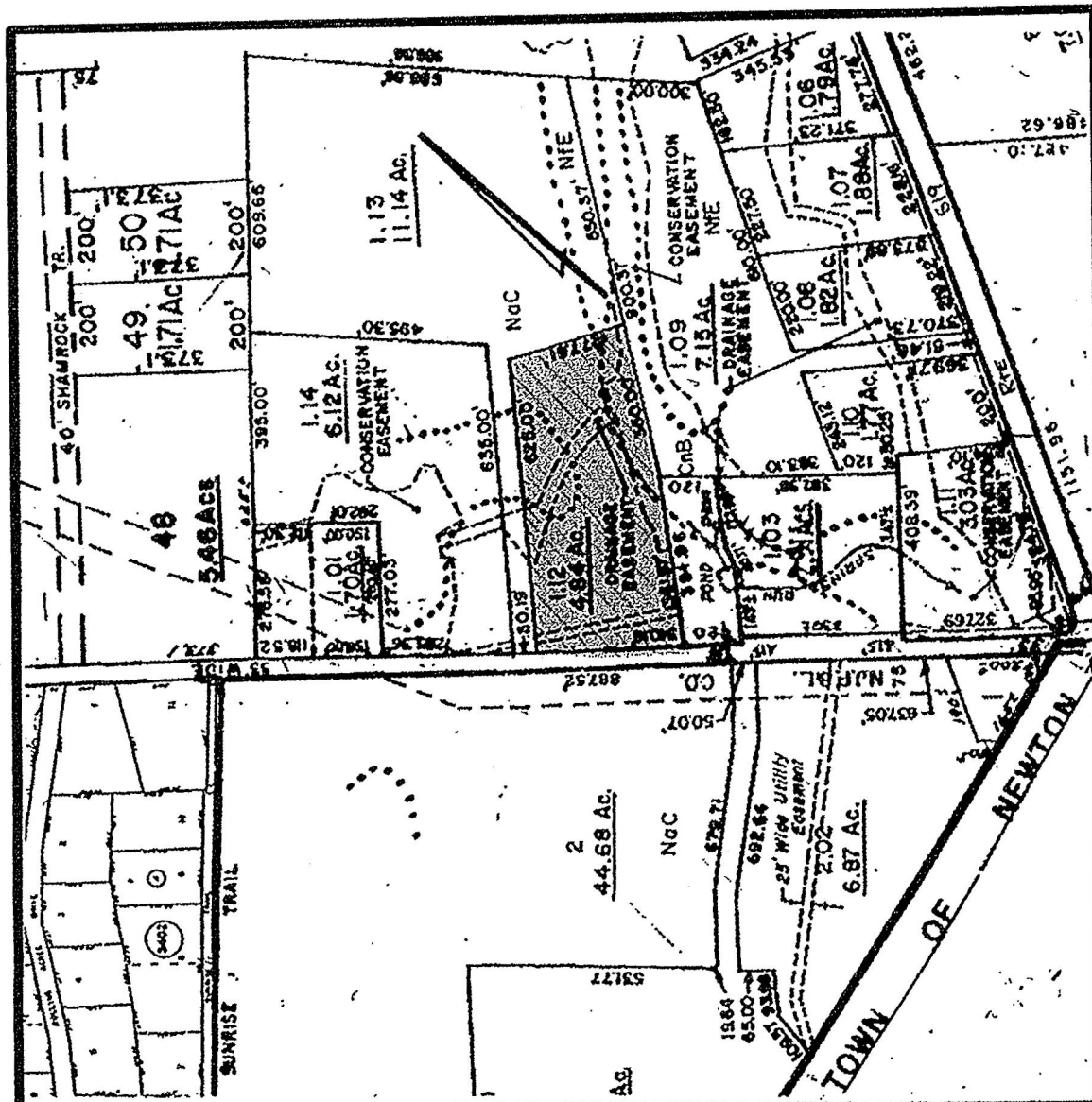




KEY MAP

SCALE 1" = 400'

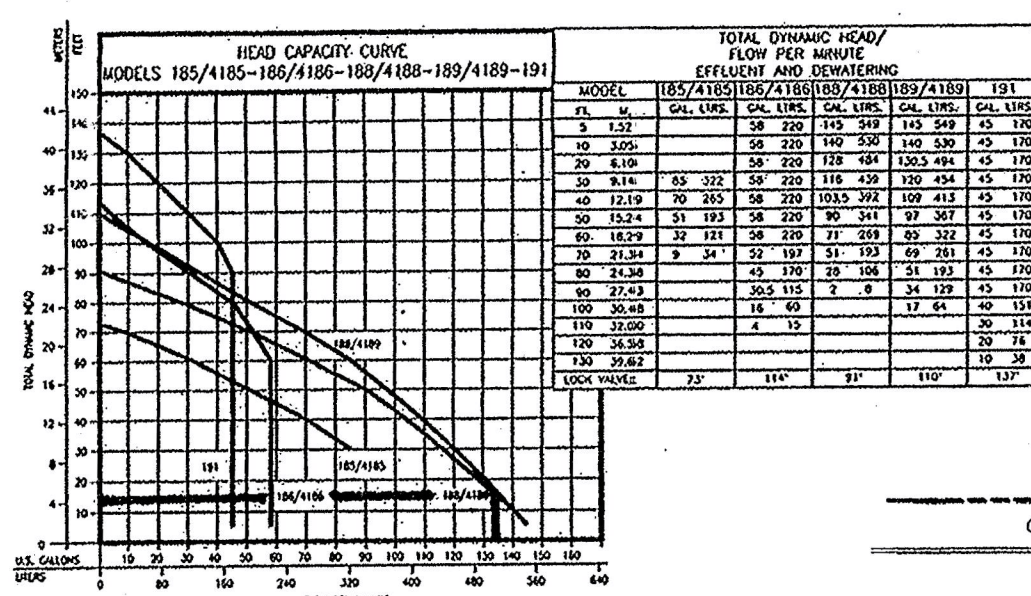
GENERAL NOTES FOR PRESSURE DOSED SYSTEMS

- Specifications and design for this septic system were made in accordance with codes in effect as of the date of these plans. No guarantee of operation or performance liability is made or implied by designer unless an as-built certification for physical compliance of these plans is given, in writing, to the builder or property owner by the County Health Department and the design engineer.
- CONSTRUCTION: All construction, excavation and materials shall be in accordance with New Jersey Standards for the Construction of Subsurface Sewage Disposal Systems as amended by the N.J.D.P.E. in January 1990, and further supplemented by regulations.
- All side walls of trenches and beds shall be hand reamed.
- Site grading shall provide that no off-site drainage be permitted into the disposal area.
- Septic and pump tanks shall be sealed, and shall have a manhole which extends to the finished grade, with a watertight, locking cover. The manhole is to be a minimum of 24" in diameter. Watertight, locking inspection ports shall be installed at all compartments, inlets and outlets which are not directly below the manhole. Backfill around septic tanks shall be free of large stones, roots or foreign objects.
- No portion of the disposal area is within:
 - 50 feet of any water course
 - 50 feet of any existing septic system
 - 100 feet of any existing or proposed well
 - 10 feet of any property line or road right of way line
 - 25 feet of any foundation
 - 15 feet of any slab portion of a building
- The surface grade of the disposal area is at least 10 feet above any impervious formation.
- The bottom of the disposal area is at least 4 feet above the seasonal high water table elevation as determined by Soil Logs.
- All joints and connections shall be water tight. Solvent weld joints shall be used. Holes shall be spaced evenly, in a straight line along the invert of each lateral. Hole diameter may vary from one quarter to one half inch, and spacing from 30 to 60 inches, and shall be chosen in conformance with N.J.A.C. 7:26A (1.7) (a) 2. In bed systems, holes in adjacent laterals shall be offset by one half the hole spacing so that the distance between holes in adjacent laterals is maximized. "All holes shall be deburred."
- The ends of the laterals shall be capped. A small hole shall be drilled horizontally into the end cap of each lateral, near the crown, to facilitate venting at the beginning of each dosing cycle.
- Each individual distribution line shall be approximately level. In no case shall the slope of the distribution lines be greater than two inches per one hundred feet. Inspection ports shall be installed near the end of each lateral or near the corners of the distribution network. Inspection ports shall consist of a perforated pipe from the level of infiltration to the top of stone, then solid pipe to finished grade, with a removable cap.
- Pressure dosing networks shall be constructed of PVC plastic (ASTM D-2682) schedule 40, SDR-21 or SDR-26, or ABS plastic (ASTM 2881) pipe.

DISPOSAL BED DETAIL

N.T.S.

NO VEHICLE OR RUBBER TIRE EQUIPMENT IS TO BE DRIVEN IN OR ON THE SEPTIC DISPOSAL AREA



ZOELLER
F4188
11/2 HP

TEST PIT DATA

T.P. 1:

- 0 - 12" Top soil.
 - 12 - 30" Silt loam, 10yr, 7/4, 10% gravel, 2% cobble, sub-angular blocky, moist and friable.
 - 30 - 44" Loam, 10yr, 5/4, 5% gravel, 2% cobble, sub-angular blocky, moist and friable.
 - 44 - 120" Sandy loam, fractured shale, 10yr, 5/6, 25% gravel, 2% cobble, sub-angular blocky, moist and friable.
- Mottling 44" through 120", 10yr, 7/1, 7.5yr, 6/6, common, medium and distinct.
- Total depth 120"
Roots at 36"

T.P. 2:

- 0 - 12" Top soil.
- 12 - 25" Silt loam, fractured shale, 10yr, 6/6, 20% gravel, 2% cobble, sub-angular blocky, moist and friable.
- 25 - 60" Silty clay loam, 10yr, 5/4, 15% gravel, 2% cobble, sub-angular blocky, moist and friable.
- Mottling 25" through 60", 10yr, 6/1, 7.5yr, 6/1, many, coarse and prominent.
- 60 - 114" Loam, fractured shale, 10yr, 4/4, 25% gravel, 10% cobble, sub-angular blocky, moist and friable.
- Mottling 60" through 114", 10yr, 6/1, 7.5yr, 6/6, common, medium and distinct.
- Total depth 114"
Depth to water 108"
Seepage at 100"
Est. SHWT 27"
Roots at 36"
Sample taken at 36"

T.P. 3:

- 0 - 12" Top soil.
- 12 - 27" Silt loam, 10yr, 6/6, 20% gravel, 2% cobble, sub-angular blocky, moist and friable.
- 27 - 112" Loam, fractured shale, 10yr, 4/4, 25% gravel, 10% cobble, sub-angular blocky, moist and friable.
- Mottling 27" through 112", 10yr, 6/1, 7.5yr, 6/6, common, medium and distinct.
- Total depth 112"
Depth to water 106"
Seepage at 104"
Est. SHWT 27"
Roots at 36"
Sample taken at 36"

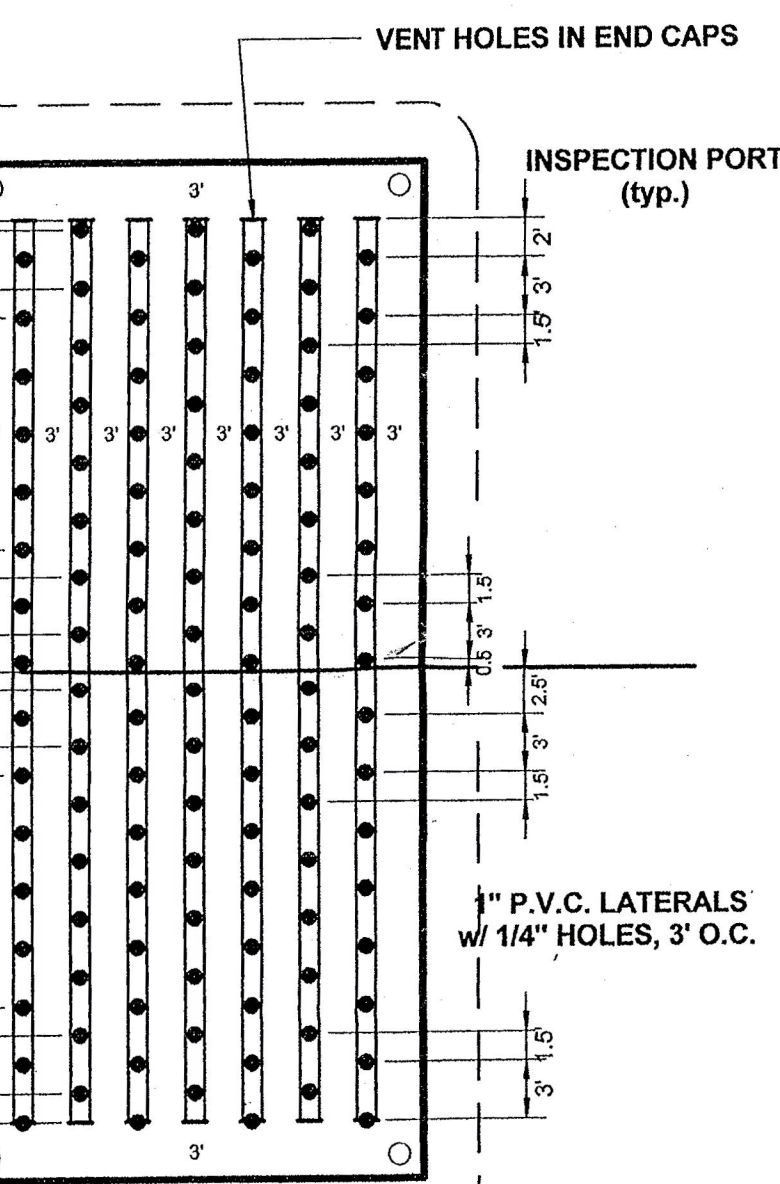
NOTE:

DESIGN OF SEPTIC DISPOSAL BED IS BASED UPON TEST HOLES AS SHOWN ABOVE. IT IS RECOMMENDED THAT THE DISPOSAL AREA IS EXCAVATED PRIOR TO ANY LOT IMPROVEMENTS TO VERIFY THAT SOILS ARE CONSISTENT WITH SOIL LOGS.

CONDITIONS ENCOUNTERED DURING EXCAVATION OF BED AREA MAY REQUIRE REVISION OF ORIGINAL DESIGN.

IF ENGINEER'S CERTIFICATION IS REQUIRED FOR SEPTIC SYSTEM, NOTIFY ENGINEER PRIOR TO BEGINNING CONSTRUCTION FOR A SCHEDULE OF ON SITE INSPECTIONS.

(973)-293-3914



EXISTING
2200 GAL. CONCRETE
SEPTIC TANK

EXISTING
2200 GAL. CONCRETE
PUMP TANK
2007 INSTALL NEW
PUMP, FLOAT AND
SWITCHES

CONSTRUCTION FENCE

1" P.V.C. LATERALS
w/ 1/4" HOLES, 3' O.C.

FILL ENCLOSURE

INSPECTION PORT (typ.)

3" MANIFOLD

VENT HOLES IN END CAPS

UTILITY EASEMENT

BURY AREA

CONSTRUCTION ENTRANCE (Tracking Apron)

S. 35°-39'-41" W. 340.16'

Asphalt Drive 50.19'

Gas Valve

Sign Post

Speed Limit 30 m.p.h.

Stop Sign

Pole (typ.)

Gas Valve

Sign Post

Speed Limit 30 m.p.h.

Stop Sign

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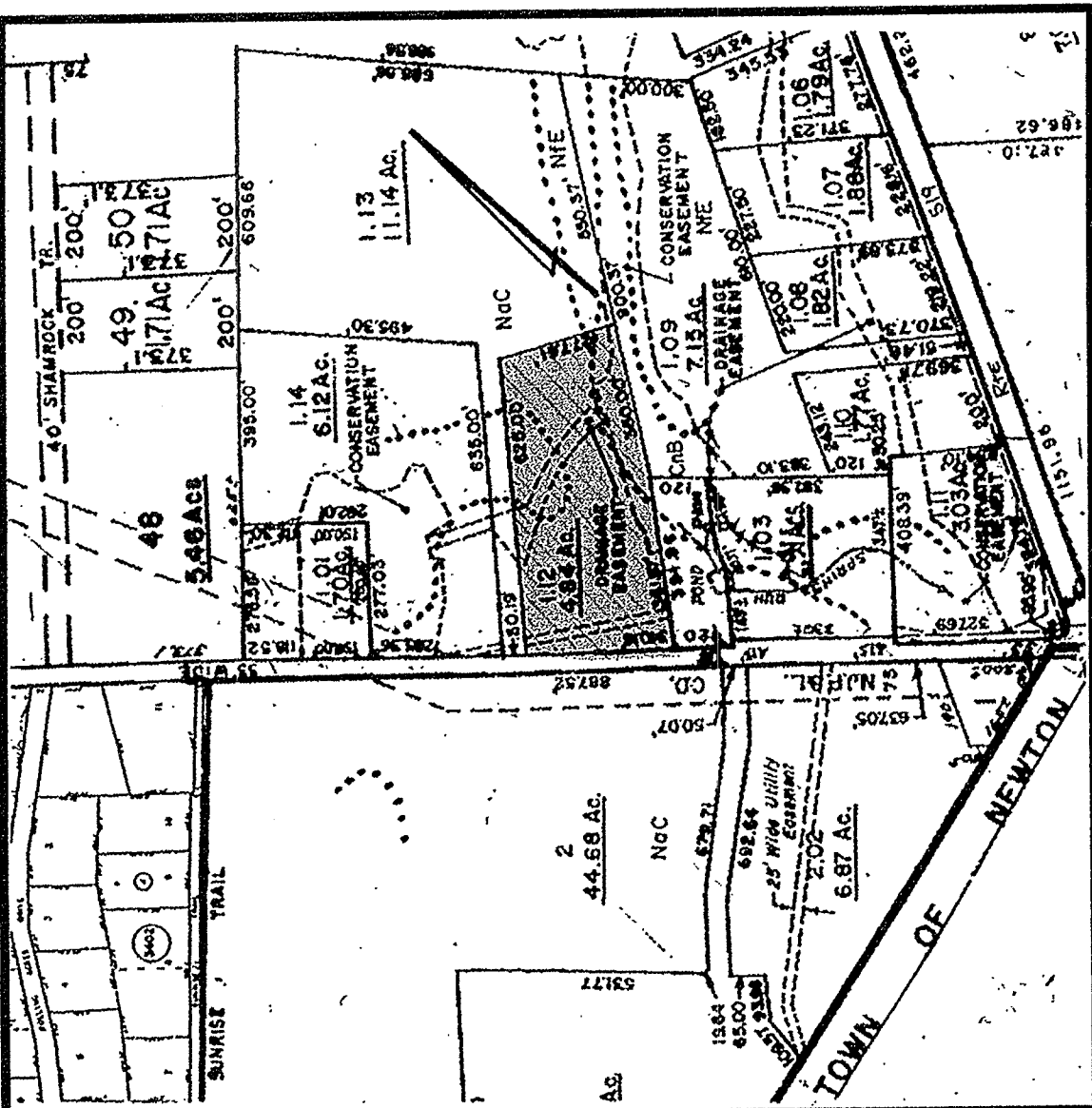
Pole (typ.)

Gas Valve

Sign Post

Speed Limit 30 m.p.h.

B36102
L1.12



KEY MAP

SCALE 1" = 400'

TAX MAP SHEET 32,33 & 34

GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL

- All sediment and erosion control practices are to be installed prior to any major soil disturbance, in their proper sequence, and maintained until permanent protection is established. (See Sequence of Construction)
- All disturbed areas not scheduled for construction activities within 30 days of disturbance shall be temporarily stabilized by applying the following:
 - Ground limestone at the rate of 135 lbs/1000 square feet
 - Fertilizer at the rate of 14 lbs/1000 square feet, using a 10-20-10 analysis or an equivalent
 - Perennial ryegrass seed applied at not less than one lb. per 1000 square feet
 - Mulch all newly seeded areas with 80 lbs. of salt hay or small grain straw per 1000 square feetMulch anchoring shall be accomplished immediately after mulch placement. All mulch shall be anchored.
- Between October 15th and March 15th, or when disturbed areas are scheduled for immediate landscaping, applying the aforementioned "T" will be adequate. If soil is frozen, when thawing occurs, area should be seeded according to permanent seeding plan.
- Permanent vegetation to be seeded or sodded on all topsoil area within ten days after final grading.
 - Spreading Fescue Red Fescue 0.3 lbs/1000 square feet Kentucky Bluegrass 0.3 lbs/1000 square feet Perennial Ryegrass 0.2 lbs/1000 square feet
 - Lime 300 lbs of 3000 slow release nitrogen topdressing 3 tons per Acre Ground Limestone incorporated 4 inches into soil
 - Fertilizer 500 lbs. per acre 10-20-10 incorporated 4 inches into soil
- Permanent stabilization with sod. Prepare sod prior to sod placement with fertilizer @ 11 lbs/1000 square feet of 10-20-10 limestone (Clay, clay loam & highly organic soil @ 160 lbs/1000 square feet. Sandy loam, loam, silt loam @ 135 lbs/1000 s.f. Coarse sand, sand @ 90 lbs/1000 square feet). Work line and fertilizer into soil to a depth of 4 inches. Remove all objects from surface that would prevent good sod to soil contact. Place sod. Spring installation requires an application of 10-20-10 fertilizer @ 10 lbs/1000 square feet between September 1st and October 15th. Fall installation of sod will require the above between March 15th and May 1st.
- All work to be done in accordance with the "Standards for Soil Erosion and Sediment Control in New Jersey".
- A crushed stone vehicle wheel clearing blanket will be installed wherever a construction access drive intersects a paved roadway. The blanket will be of sufficient size to reduce offsite tracking of sediment by construction traffic and will be maintained in good order until all driveway areas are stabilized. Minimum dimensions shall be 50' x 12' x 6". The blanket shall be composed of 2 1/2" crushed stone and shall be underlain with Mink, Typar or equal filter fabric.
- All disturbed areas shall be lined and fertilized prior to either temporary or permanent seeding. Exposed areas will be treated with 6" of topsoil prior to final stabilization. Disk topsoil to a depth of 4", remove stone and roll firm.
- Mulching shall be done at the rate of 80 lbs/1000 square feet with an rotted salt hay and anchored immediately after placement.
- Fill material shall be free from debris, perishable or combustible material, and frozen or wet earth or stone larger than specified by the Engineer.
- All violations, after District certification has been granted, shall be forwarded to the Sussex County Soil Conservation District for review. A letter of explanation shall accompany all violations.
- The Sussex County SCD must be notified at least 48 hours in advance of any land disturbing activity.
- The owner/applicant will obtain the District Issued Report of Compliance prior to any occupancy. The District requires at least one week's notice before issuance.
- All topsoil stripped and stockpiled for use in final grading shall receive temporary seeding.
- Total disturbed area = 20,000 S.F. (0.46) acres
- During land disturbing activities and construction, any additional control measures as deemed necessary to prevent erosion and control of sediment, beyond those shown on the approved plans shall be installed as directed by the Municipal Engineer or Sussex County Soil Conservation District.

TEST PIT DATA

T.P. 1:

- 0 - 12" Top soil.
- 12 - 30" Silt loam, 10yr, 7/4, 10% gravel, 2% cobble, sub-angular blocky, moist and friable.
- 30 - 44" Loam, 10yr, 5/4, 5% gravel, 2% cobble, sub-angular blocky, moist and friable.
- 44 - 120" Sandy loam, fractured shale, 10yr, 5/6, 25% gravel, 2% cobble, sub-angular blocky, moist and friable.
- Mottling 44" through 120", 10yr, 7/1, 7.5yr, 6/6, common, medium and distinct.
- Total depth 120"
Roots at 36"

T.P. 2:

- 0 - 12" Top soil.
- 12 - 25" Silt loam, fractured shale, 10yr, 6/6, 20% gravel, 2% cobble, sub-angular blocky, moist and friable.
- 25 - 60" Silty clay loam, 10yr, 5/4, 15% gravel, 2% cobble, sub-angular blocky, moist and friable.
- Mottling 25" through 60", 10yr, 6/1, 7.5yr, 6/1, many, coarse and prominent.
- 60 - 114" Loam, fractured shale, 10yr, 4/4, 25% gravel, 10% cobble, sub-angular blocky, moist and friable.
- Mottling 60" through 114", 10yr, 6/1, 7.5yr, 6/6, common, medium and distinct.
- Total depth 114"
Depth to water 108"
Seepage at 100"
Roots at 36"

NOTE:

DESIGN OF SEPTIC DISPOSAL BED IS BASED UPON TEST HOLES AS SHOWN ABOVE. IT IS RECOMMENDED THAT THE DISPOSAL AREA IS EXCAVATED PRIOR TO ANY LOT IMPROVEMENTS TO VERIFY THAT SOILS ARE CONSISTENT WITH SOIL LOGS.

CONDITIONS ENCOUNTERED DURING EXCAVATION OF BED AREA MAY REQUIRE REVISION OF ORIGINAL DESIGN.

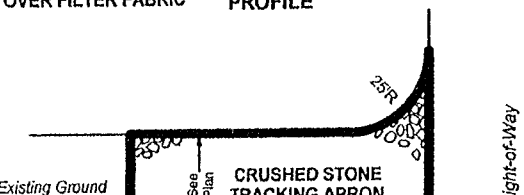
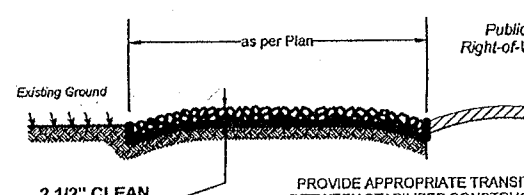
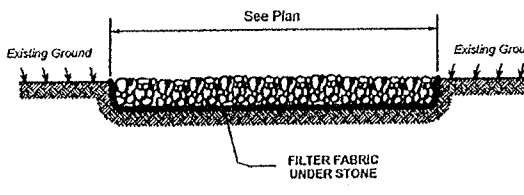
NOTES:

- Boundary, Location and Topography by ROBERT L. CAMPBELL ASSOCIATES.
 - 592 Existing Contour
x 592.4 Existing Elevation
100 Proposed Contour
x 100.0 Proposed Elevation
 - Soil logs by Allen J. Campbell, N.J.P.E., were witnessed by the Sussex County Health Department on May 12, 2000
 - Potable water by Existing Well
- EXISTING 6 BEDROOM DWELLING**
SEPTIC TANK REQUIREMENTS:
250 Gallons / Day / Bedroom
Tank Size Required: 6 x 250 = 1500 Gallons
SEPTIC TANK PROVIDED: 2200 GALLONS
- DISPOSAL AREA REQUIREMENTS:**
Disposal bed type: Pressure Dose, Soil Replacement, Fill Enclosed
Design Factor: 1.33
6 Bedrooms @ 200 + 5 (150) = 960 Gallons / Day
Bed Size Required: 1.33 x 960 = 1,263.5 s.f.
BED SIZE PROVIDED: 24' x 53' = 1,272 S.F.

AS-BUILT TIES

	A	B	
1	43.2'	50.8'	C.O.
2	46.7'	53.2'	M.H.
3	49.5'	55.5'	M.H.
4	51.9'	57.6'	C.O.
5	52.9'	58.6'	M.H.
6	56.6'	61.9'	C.O.
7	100.2'	78.6'	M.H.
8	126.8'	146.6'	INSPECTION PORT
9	178.5'	192.3'	INSPECTION PORT
10	180.4'	182.7'	INSPECTION PORT
11	126.7'	78.6'	INSPECTION PORT

PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	Coarse Grained Soils	Fine Grained Soils
0 to 2%	50 feet	100 feet
2 to 5%	100 feet	200 feet
> 5%	Entire surface stabilized with FPMC base course	



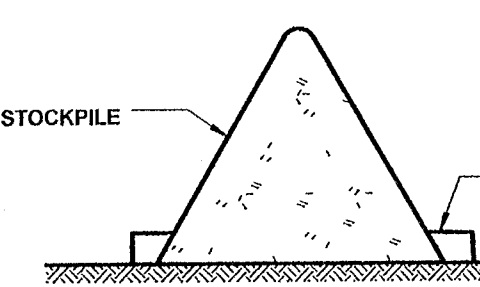
STABILIZED CONSTRUCTION ACCESS

N.T.S.

The construction entrance shall be maintained to prevent tracking or flowing sediment onto public rights-of-way. All sediment spilled, dropped, washed or tracked onto a public right of way must be removed immediately.

NO VEHICLE OR RUBBER TIRE EQUIPMENT IS TO BE DRIVEN IN OR ON THE SEPTIC DISPOSAL AREA

Stockpile to receive temporary seeding if it remains in place for more than 30 days.

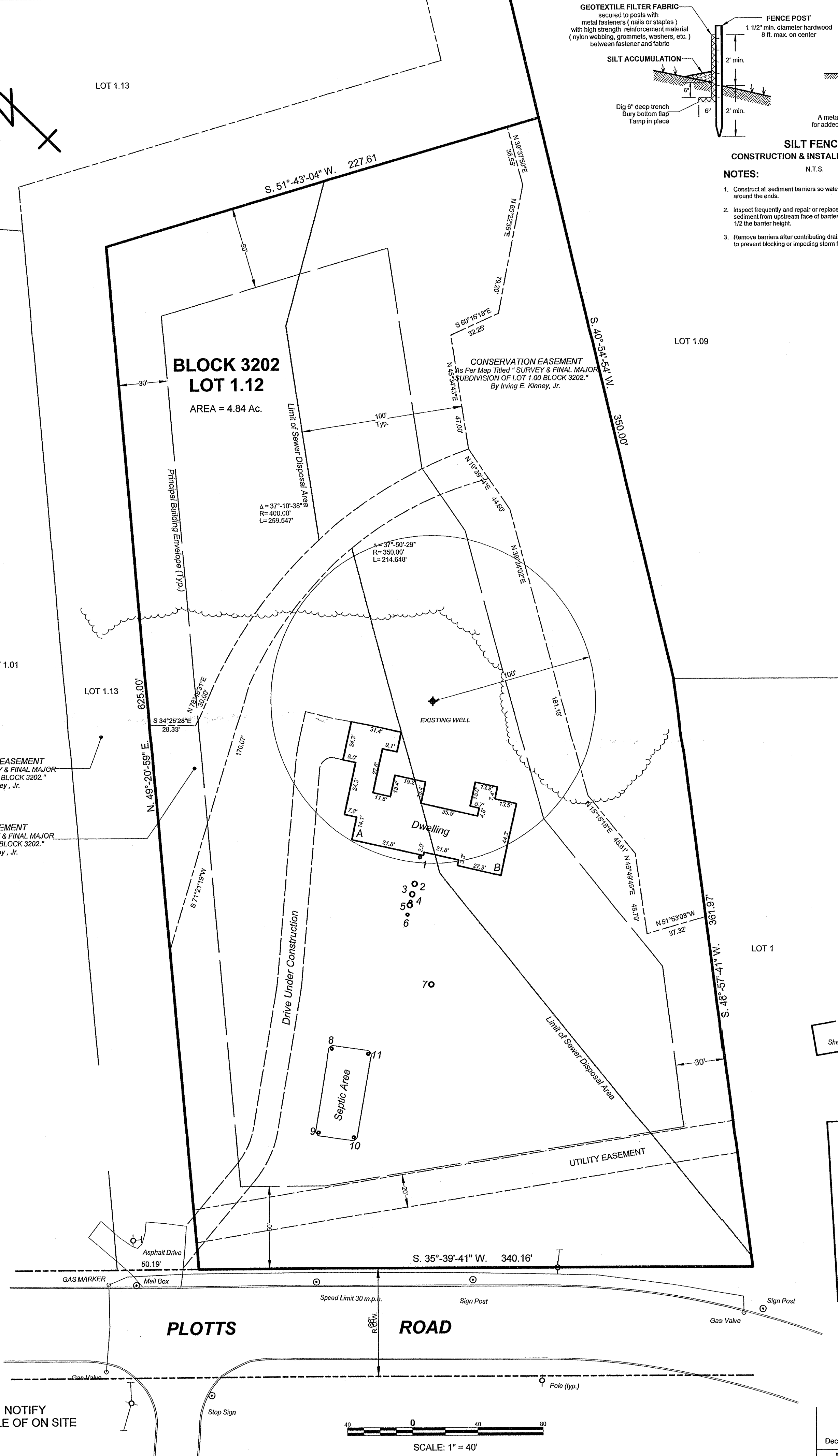


SOIL STOCKPILE

N.T.S.

- Top soil.
- Silt loam, 10yr, 6/6, 20% gravel, 2% cobble, sub-angular blocky, moist and friable.
- Loam, fractured shale, 10yr, 4/4, 25% gravel, 10% cobble, sub-angular blocky, moist and friable.
- Mottling 27" through 112", 10yr, 6/1, 7.5yr, 6/6, common, medium and distinct.
- Total depth 112"
Depth to water 108"
Seepage at 104"
Est. SHWT 27"
Roots at 36"
Sample taken at 36"

IF ENGINEER'S CERTIFICATION IS REQUIRED FOR SEPTIC SYSTEM, NOTIFY ENGINEER PRIOR TO BEGINNING CONSTRUCTION FOR A SCHEDULE OF ON SITE INSPECTIONS.
(973)-293-3914



GEOTEXTILE FILTER FABRIC secured to posts with metal fasteners (nails or staples) with high strength reinforcement material (nylon webbing, grommets, washers, etc.) between fastener and fabric

SILT ACCUMULATION

Dig 6" deep trench Bury bottom flap Tamp in place

FENCE POST 1 1/2" min. diameter hardwood 6 ft. max. on center

Dewatering running through fabric along top of fence

A metal fence with 6" max. openings may be fastened to the fence posts for added reinforcement to the fabric where space for other devices is limited and heavy sediment loading is anticipated.

SILT FENCE

CONSTRUCTION & INSTALLATION DETAIL

NOTES:

- Construct all sediment barriers so water cannot bypass the barrier around the ends.
- Inspect frequently and repair or replace promptly as needed. Remove sediment from upstream face of barrier when it has reached a depth of 1/2 the barrier height.
- Remove barriers after contributing drainage area has been stabilized to prevent blocking or impeding storm flow or drainage.

N.J.A.C. 7-9A-10.3(e) Filter Material:

- Filter material shall cover the distribution lines and extend the full width of the trench or bed, shall extend between 12 and 18 inches deep beneath the bottom of the distribution lines and shall extend at least two inches above the top of the lines.
- The filter material shall be washed gravel or crushed stone, free of fines, dust, ashes or clay. NJDOT Standard Size 4 (1 1/2 to 2 1/2" stone; Percentage by weight: 2" - 100%; 1 1/2" - 90%; 1" - 20%; 3/4" - 0%; 1/2" - 0%)
- The filter material shall be covered with drainage fabric, untreated building paper or a four to eight inch thickness of salt hay or straw, as the laying of the distribution lines progresses. When drainage fabric or untreated building paper is used, the following requirements shall be met:
 - Edges of adjacent sheets shall be overlapped by a minimum of six inches.
 - Drainage fabric shall be specified in the engineering design and shall have adequate tensile strength to prevent ripping during installation and backfilling, adequate air permeability to allow free passage of gases, and adequate particle retention to prevent downward migration of soil particles into the filter material.
 - Use of water-proof paper is prohibited.
- The filter material may be laid into the excavation using a backhoe, front-end loader or dump truck provided that this operation is carried out from sides of the system rather than driving out onto the exposed disposal field infiltrative surface. In the case of large beds, tracked equipment may be operated within the disposal bed provided that the equipment does not exert a ground pressure in excess of eight pounds per square inch and provided that the filter material is pushed out in front of the vehicle while maintaining a minimum thickness of one foot of filter material below the vehicle tracks at all times

NOTE:

Topsoil sample to be provided to Engineer for approval prior to being distributed on site.

909.10 Topsoil.

Topsoil shall not contain stones, lumps, roots, or similar objects larger than 2 inches in any dimension and shall have not less than a 5.8 pH value. When the topsoil has less than a 5.8 pH value, it shall be increased by applying pulverized limestone at a rate necessary to attain a 6.5 pH value. When the topsoil has greater than a 7.0 pH value, it shall be decreased to attain a 6.8 pH value. The method to decrease the soil pH shall be submitted for approval before work.

- Unacceptable Topsoil Sources.** Material stripped from the following sources shall not be considered suitable for use as topsoil:
 - Soils having less than 4.1 pH value, or greater than 3.0 pH value.
 - Chemically contaminated soils.
 - Areas from which the original surface has been stripped and/or covered over such as borrow pits, open mines, demolition sites, dumps, and sanitary landfills.
 - Wet excavation.
- Topsoil furnished from sources outside the limits of the Project shall have a minimum organic content of not less than 2.75 percent by weight. When the organic content is less than 2.75 percent, it shall be increased by adding peat or composted sewerage sludge, conforming to Subsection 909.07, at a rate necessary to attain this minimum organic content. The organic content of soils will be determined according to ASTM T 194 except that the sample is to be taken from oven-dried soil passing a No. 10 sieve. The organic content of all topsoil used for planting shall conform to the requirements specified above.

- Gradation of Topsoil Sources.** The gradation of the topsoil furnished from sources outside the limits of the Project will be determined using the Bouyoucos Hydrometer Analysis conforming to ASTM T 88. The gradation of the topsoil shall be within the following:
 - Not more than 20 percent of the material submitted from an off-site sample shall be retained on a No. 10 sieve.
 - If more than one-half of the sand is smaller than 20 mils:

	Percent
Sand (80 mils to 2 mils)	40 - 80
Silt (2 mils to 0.2 mils)	0 - 30
Clay (0.2 mils and smaller)	0 - 30

- If more than one-half of the sand is larger than 20 mils:

	Percent
Sand (80 mils to 2 mils)	40 - 75 or 40 - 75
Silt (2 mils to 0.2 mils)	0 - 30 or 0 - 30
Clay (0.2 mils and smaller)	15 - 30 or 0 - 30

Material outside these ranges is not suitable for use as topsoil.

Construction Specifications

- Install silt fence and construction access
- Strip and stockpile top soil
- Excavate bury hole
- Stockpile borrow from hole
- Pump out solids and pump tank
- Pump out disposal bed
- Remove and dispose manifold/laterals and 15' of supply line
- Excavate and bury stone and select fill
- Install replacement bank run, stone, piping system, install new pump and float switches
- Cover bury hole, disposal area, re-grade disposal area perimeter with surplus borrow materials
- Spread top soil over all disturbed areas, rake, seed and mulch
- Remove silt fence and re-grade areas
- Remove construction access, top soil, seed and mulch disturbed areas

Quantities

(Contractor is responsible to review original plans and establish their own quantities. Quantities listed are approximate.)

- Stone removal and replacement 24 x 63 x 1.5' = 1908 ft³ = 71 c.y.
- Select fill removal 28 x 57 x 4' = 6384 ft³ = 237 c.y.
- Bank run replacement 237 c.y.
- Borrow hole 308 c.y.
- Disturbed area 20,000 ft²
- Top soil stripped (4") 245 c.y.
- Top soil brought to site 40 c.y. (requires sample approved by engineer)

SEPTIC REPAIR DECEMBER 2007 AS BUILT SEPTIC DESIGN

FOR

LOT 1.12 in BLOCK 3202

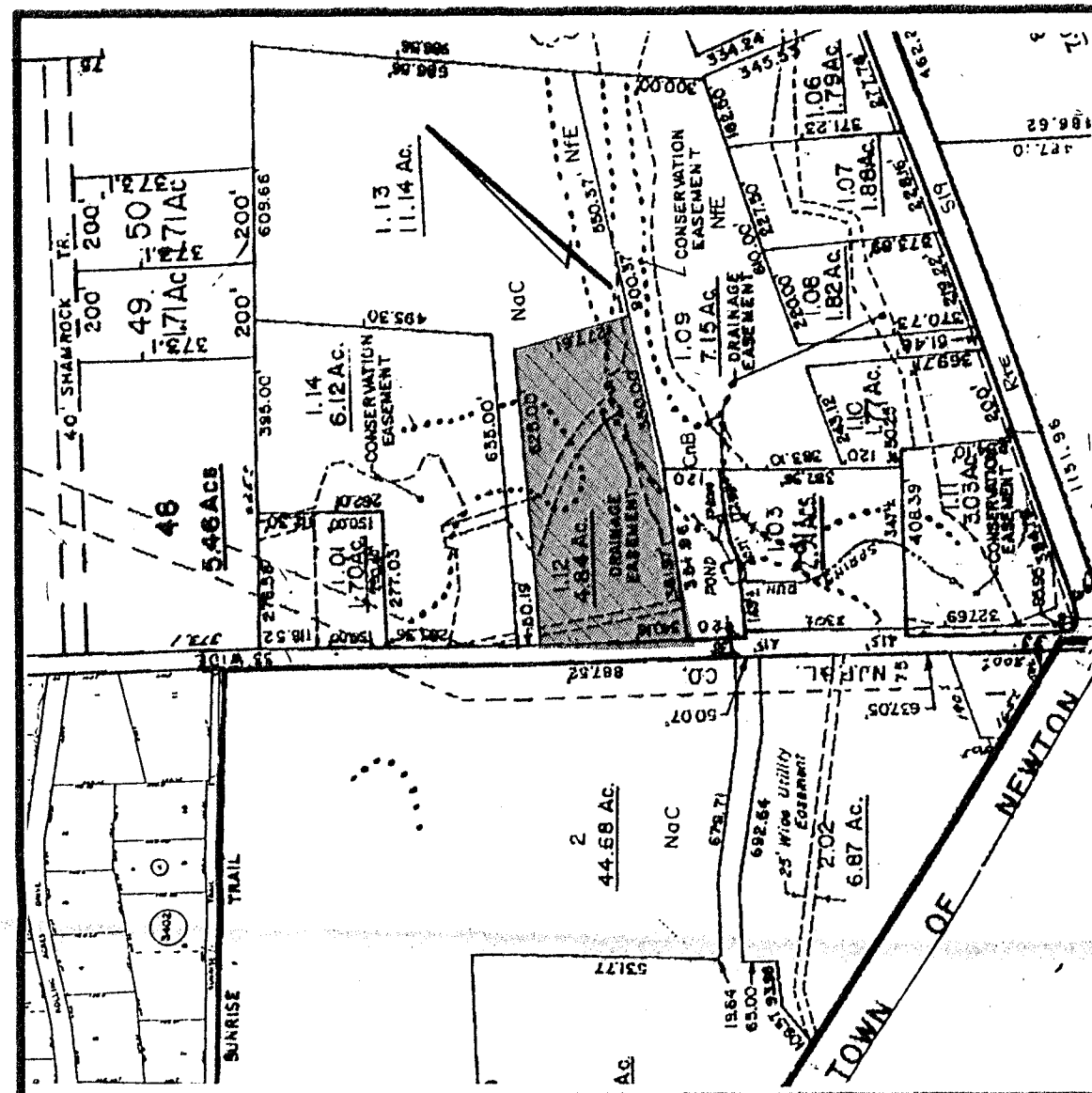
HAMPTON TOWNSHIP - SUSSEX COUNTY - NEW JERSEY
SCALE : 1" = 40' NOVEMBER 2001

ROBERT L. CAMPBELL ASSOCIATES ENGINEERS AND SURVEYORS

1408 HILLSIDE DRIVE
NEWTON, NEW JERSEY 07860

ALLEN J. CAMPBELL, Professional Engineer
N.J.P.E. No. 54332, N.J.S.P. No. 04497

Dec. 4, 2007
DATE
Plan for Repair Permit and Reconstruction
REVISION



KEY MAP
SCALE 1" = 400'

- GENERAL NOTES FOR PRESSURE DISPOSED SYSTEMS
- Specifications and design for this septic system were made in accordance with codes in effect as of the date of these plans. No guarantee of operation or performance liability is made or implied by designer unless an approved certification for physical compliance of these plans is given, in writing, to the builder or property owner by the County Health Department and the design engineer.
 - CONSTRUCTION: All construction, excavation and materials shall be in accordance with New Jersey Standards for the Construction of Subsurface Sewage Disposal Systems as amended by the N.J.D.P.E. in January 1990 and further supplemented by regulations.
 - All sidevents of trenches and beds shall be hand raked.
 - Site grading shall provide that no off-site drainage be permitted into the disposal area.
 - Septic and pump tanks shall be sealed and shall have a manhole which extends to the finished grade with a watertight, locking cover. The manhole is to be a minimum of 24" in diameter. Watertight, locking inspection ports shall be installed at all compartments, inlets and outlets which are not directly below the manhole. Backfill around septic tanks shall be free of large stones, roots or foreign objects. No portion of the disposal area is within:
 - (a) 50 feet of any water course
 - (b) 50 feet of any existing septic system
 - (c) 100 feet of any existing or proposed well
 - (d) 10 feet of any property line or road right of way line
 - (e) 25 feet of any foundation
 - (f) 15 feet of any side portion of a building
 - The surface grade of the disposal area is at least 10 feet above any impervious formation.
 - The bottom of the disposal area is at least 4 feet above the seasonal high water table elevation as determined by Soil Logs.
 - All joints and connections shall be water tight. Solvent weld joints shall be used.
 - Holes shall be spaced evenly, in a straight line along the invert of each lateral. Hole diameter may vary from one quarter to one half inch, and spacing from 30 to 60 inches, and shall be chosen in conformance with N.J.A.C. 7:9A (13) (a) (2) "9" (a) 2. In bed systems, holes in adjacent laterals shall be offset by one half the hole spacing so that the distance between holes in adjacent laterals is maximized. "All holes shall be disburied".
 - The ends of the laterals shall be capped. A small hose shall be drilled horizontally into the end cap of each lateral, near the crown, to facilitate venting at the beginning of each dosing cycle.
 - Each individual distribution line shall be approximately level. In no case shall the slope of the distribution lines be greater than two inches per one hundred feet. Inspection port shall be installed near the end of each lateral or near the corners of the distribution network. Inspection ports shall consist of a perforated pipe from the level of infiltration to top of stone, then solid pipe to finished grade with a removable cap.
 - Pressure dosing networks shall be constructed of PVC plastic (ASTM D-2682) schedule 40, 30R-21 or 30R-26 or ABS plastic (ASTM 2861) pipe.

TEST PIT DATA

T.P. 1:	
0 - 12"	Top soil
12 - 30"	Silt loam, 10yr, 7/4, 10% gravel, 2% cobble, sub-angular blocky, moist and friable
30 - 44"	Loam, 10yr, 5/4, 5% gravel, 2% cobble, sub-angular blocky, moist and friable
44 - 120"	Sandy loam, fractured shale, 10yr, 5/6, 25% gravel, 2% cobble, sub-angular blocky, moist and friable
	Mottling 44" through 120": 10yr, 7/1, 7.5yr, 6/6, common, medium and distinct
	Total depth 120" Roots at 36"
T.P. 2:	
0 - 12"	Top soil
12 - 25"	Silt loam, fractured shale, 10yr, 6/6, 20% gravel, 2% cobble, sub-angular blocky, moist and friable
25 - 60"	Silty clay loam, 10yr, 5/4, 15% gravel, 2% cobble, sub-angular blocky, moist and friable
	Mottling 25" through 60": 10yr, 6/1, 7.5yr, 6/1, many, coarse and prominent
60 - 114"	Loam, fractured shale, 10yr, 4/4, 25% gravel, 10% cobble, sub-angular blocky, moist and friable
	Mottling 60" through 114": 10yr, 6/1, 7.5yr, 6/6, common, medium and distinct
	Total depth 114" Depth to water 108" Seepage at 100" Roots at 36"

NOTE:
DESIGN OF SEPTIC DISPOSAL BED IS BASED UPON TEST HOLES AS SHOWN ABOVE. IT IS RECOMMENDED THAT THE DISPOSAL AREA IS EXCAVATED PRIOR TO ANY LOT IMPROVEMENTS TO VERIFY THAT SOILS ARE CONSISTENT WITH SOIL LOGS.

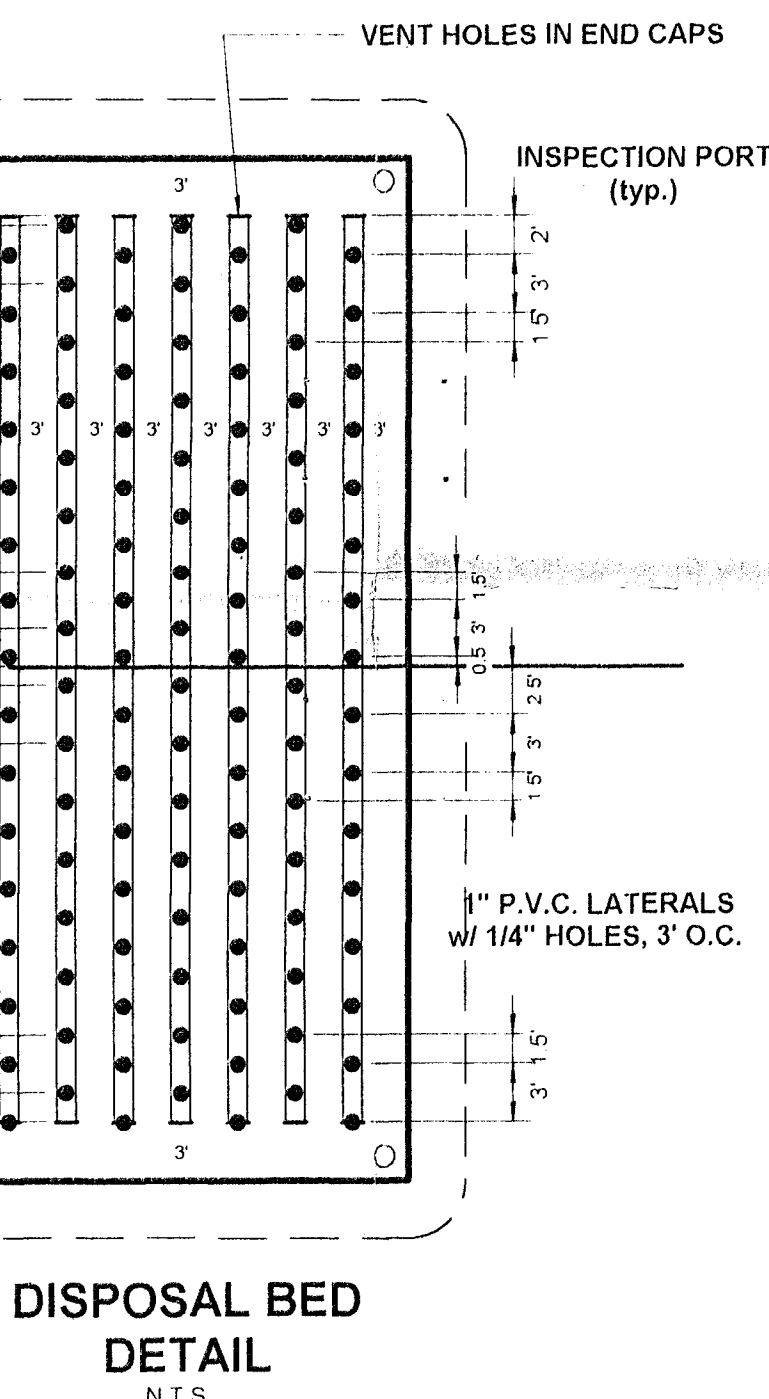
CONDITIONS ENCOUNTERED DURING EXCAVATION OF BED AREA MAY REQUIRE REVISION OF ORIGINAL DESIGN.

- NOTES:
- Boundary, Location and Topography by ROBERT L. CAMPBELL ASSOCIATES
 - 592 Existing Contour
x 592.4 Proposed Contour
x 100.0 Proposed Elevation
 - Soil logs by Allen J. Campbell, N.J.P.E., were witnessed by the Sussex County Health Department on May 12, 2000.
 - Potable water by Proposed Well
- PROPOSED 5 BEDROOM DWELLING
SEPTIC TANK REQUIREMENTS:
250 Gallons / Day / Bedroom
Tank Size Required: 6 x 250 = 1500 Gallons
SEPTIC TANK PROVIDED: 2200 GALLONS
- DISPOSAL AREA REQUIREMENTS:
Disposal bed type: Pressure Dose, Soil Replacement, Fill Enclosed
Design Factor: 1.33
6 Bedrooms @ 200 = 5 (150) = 950 Gallons / Day
Bed Size Required: 1.33 x 950 = 1,263.5 s.f.
BED SIZE PROVIDED: 24' x 53' = 1,272 S.F.

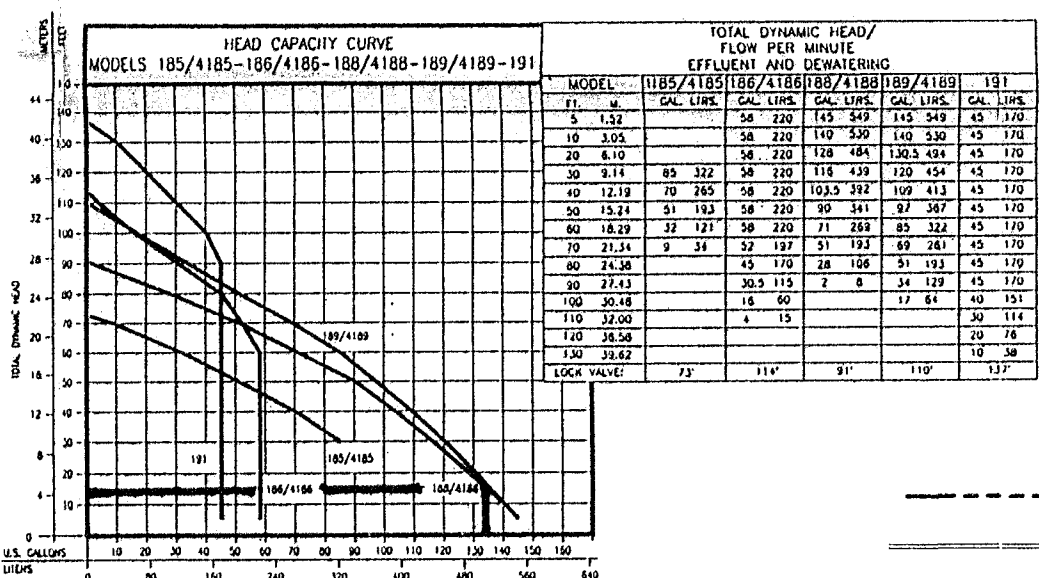
SOIL CLASSIFICATIONS

Soil Classifications are from "Soil Survey of Sussex County, New Jersey" page 33

- A/B Albion gravelly loam, 3 to 8 percent slopes
CnB Chippewa silt loam, 3 to 8 percent slopes
NaC Nassau rocky silt loam, 8 to 15 percent slopes
NIE Nassau-Rock outcrop complex, 25 to 45 percent slopes

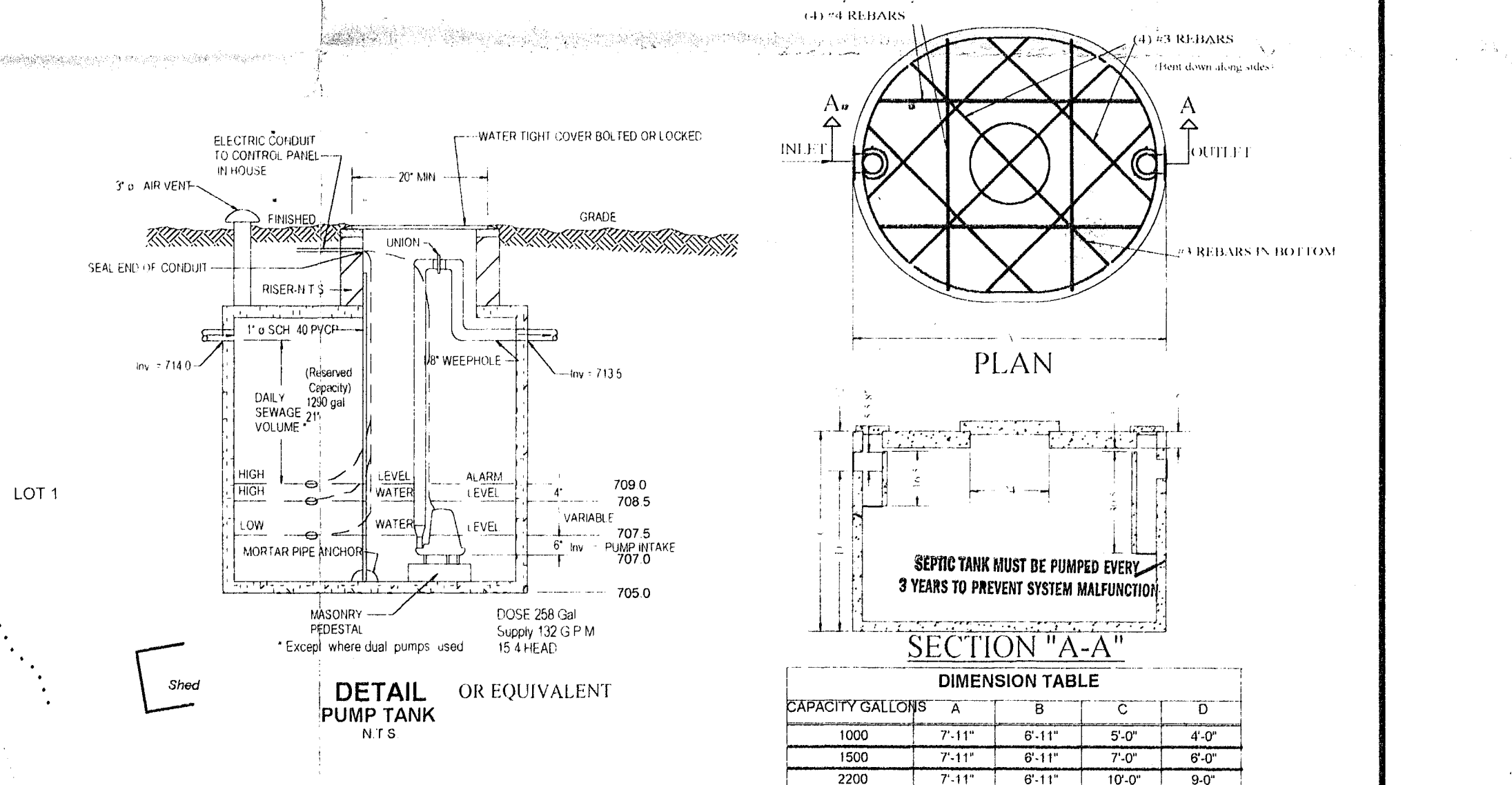
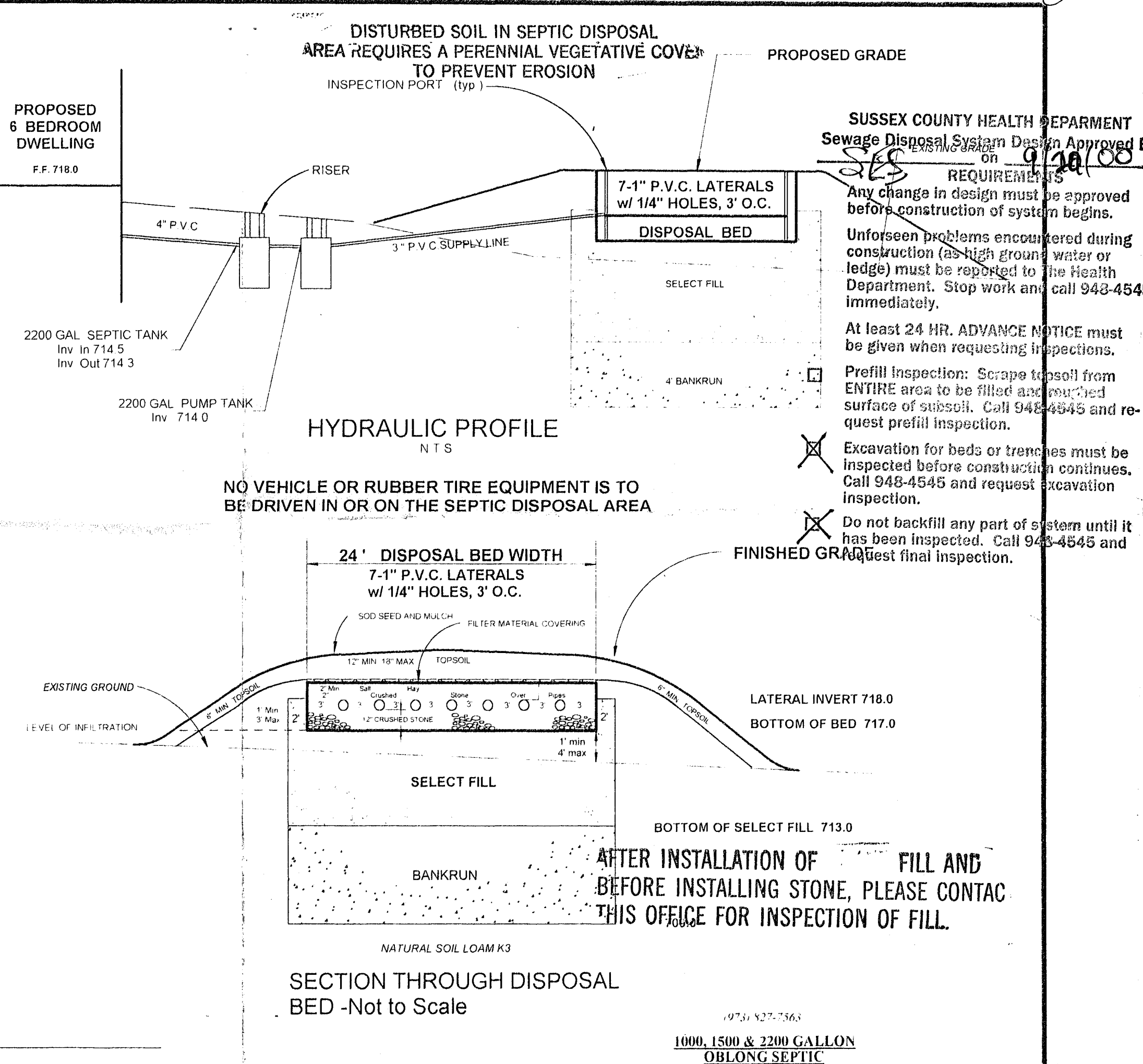
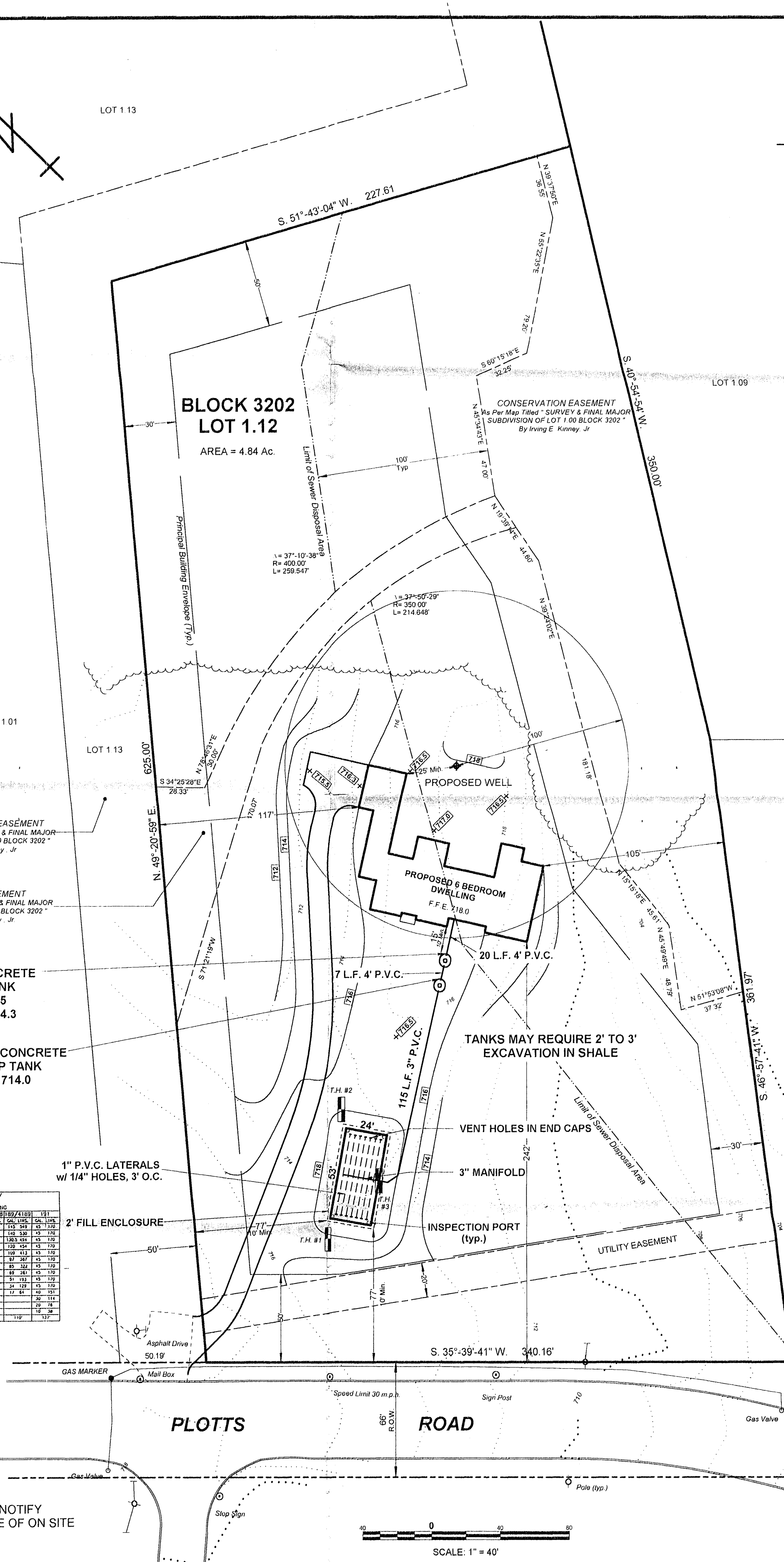


NO VEHICLE OR RUBBER TIRE EQUIPMENT IS TO BE DRIVEN IN OR ON THE SEPTIC DISPOSAL AREA



ZOELLER
F4188
1/2 HP

IF ENGINEER'S CERTIFICATION IS REQUIRED FOR SEPTIC SYSTEM, NOTIFY ENGINEER PRIOR TO BEGINNING CONSTRUCTION FOR A SCHEDULE OF ON SITE INSPECTIONS.
(973)-293-3914

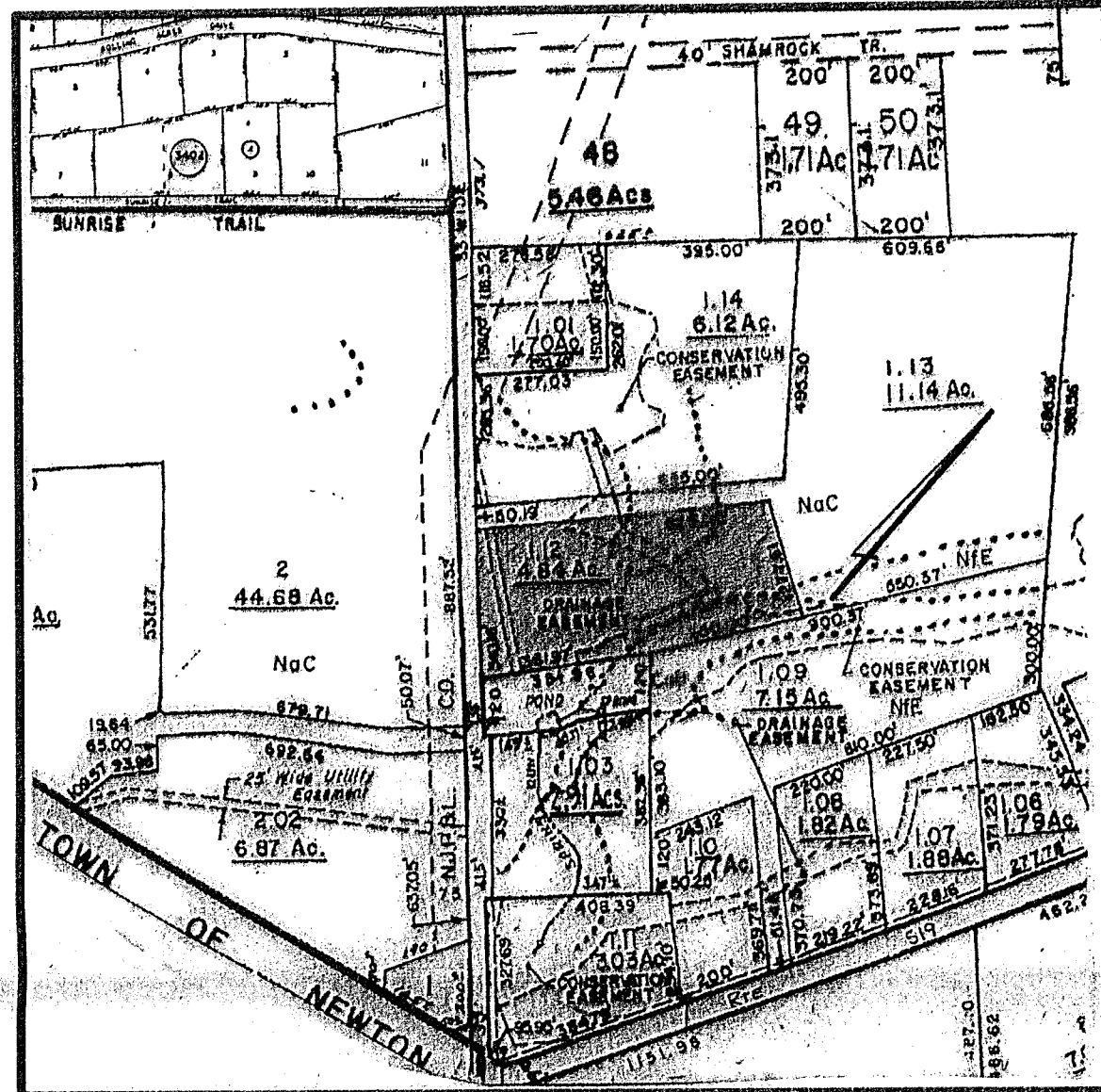


ENGINEER MUST CERTIFY ALL ELEVATIONS A LOCATIONS ARE IN CONFORMANCE WITH THE APPROVED PLAN WITH REVISED DRAWING.

SEPTIC DESIGN
FOR
LOT 1.12 in BLOCK 3202
HAMPTON TOWNSHIP - SUSSEX COUNTY - NEW JERSEY
SCALE: 1" = 40'
SEPTEMBER 2000

ROBERT L. CAMPBELL ASSOCIATES
ENGINEERS AND SURVEYORS
103 HILLSIDE DRIVE
NEWTON, NEW JERSEY 07860

ALLEN J. CAMPBELL, Professional Engineer
N.J.P.E. No. 34332, N.J.P.E. No. 34497



KEY MAP

SCALE 1" = 400'

GENERAL NOTES FOR PRESSURE DOSED SYSTEMS

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TEST PIT DATA

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- 30 - 44" Loam, 10yr, 5/4, 5% gravel, 2% cobble, sub-angular blocky, moist and friable
- 44 - 120" Sandy loam, fractured shale, 10yr, 5/6, 25% gravel, 2% cobble, sub-angular blocky, moist and friable
- Mottling 44" through 120": 10yr, 7/1, 7.5yr, 6/6, common, medium and distinct
- Total depth 120"
Roots at 36"

T.P. 2:

- 0 - 12" Top soil
- 12 - 25" Silt loam, fractured shale, 10yr, 6/6, 20% gravel, 2% cobble, sub-angular blocky, moist and friable
- 25 - 60" Silty clay loam, 10yr, 5/4, 15% gravel, 2% cobble, sub-angular blocky, moist and friable
- Mottling 25" through 60": 10yr, 6/1, 7.5yr, 6/1, many, coarse and prominent
- 60 - 114" Loam, fractured shale, 10yr, 4/4, 25% gravel, 10% cobble, sub-angular blocky, moist and friable
- Mottling 60" through 114": 10yr, 6/1, 7.5yr, 6/6, common, medium and distinct
- Total depth 114"
Depth to water 108"
Seepage at 100"
Roots at 36"

T.P. 3:

- 0 - 12" Top soil
- 12 - 27" Silt loam, 10yr, 6/6, 20% gravel, 2% cobble, sub-angular blocky, moist and friable
- 27 - 112" Loam, fractured shale, 10yr, 4/4, 25% gravel, 10% cobble, sub-angular blocky, moist and friable
- Mottling 27" through 112": 10yr, 6/1, 7.5yr, 6/6, common, medium and distinct
- Total depth 112"
Depth to water 106"
Seepage at 104"
Est. SH-WT 27"
Roots at 36"
Sample taken at 36"

NOTE:

DESIGN OF SEPTIC DISPOSAL BED IS BASED UPON TEST HOLES AS SHOWN ABOVE. IT IS RECOMMENDED THAT THE DISPOSAL AREA IS EXCAVATED PRIOR TO ANY LOT IMPROVEMENTS TO VERIFY THAT SOILS ARE CONSISTENT WITH SOIL LOGS.

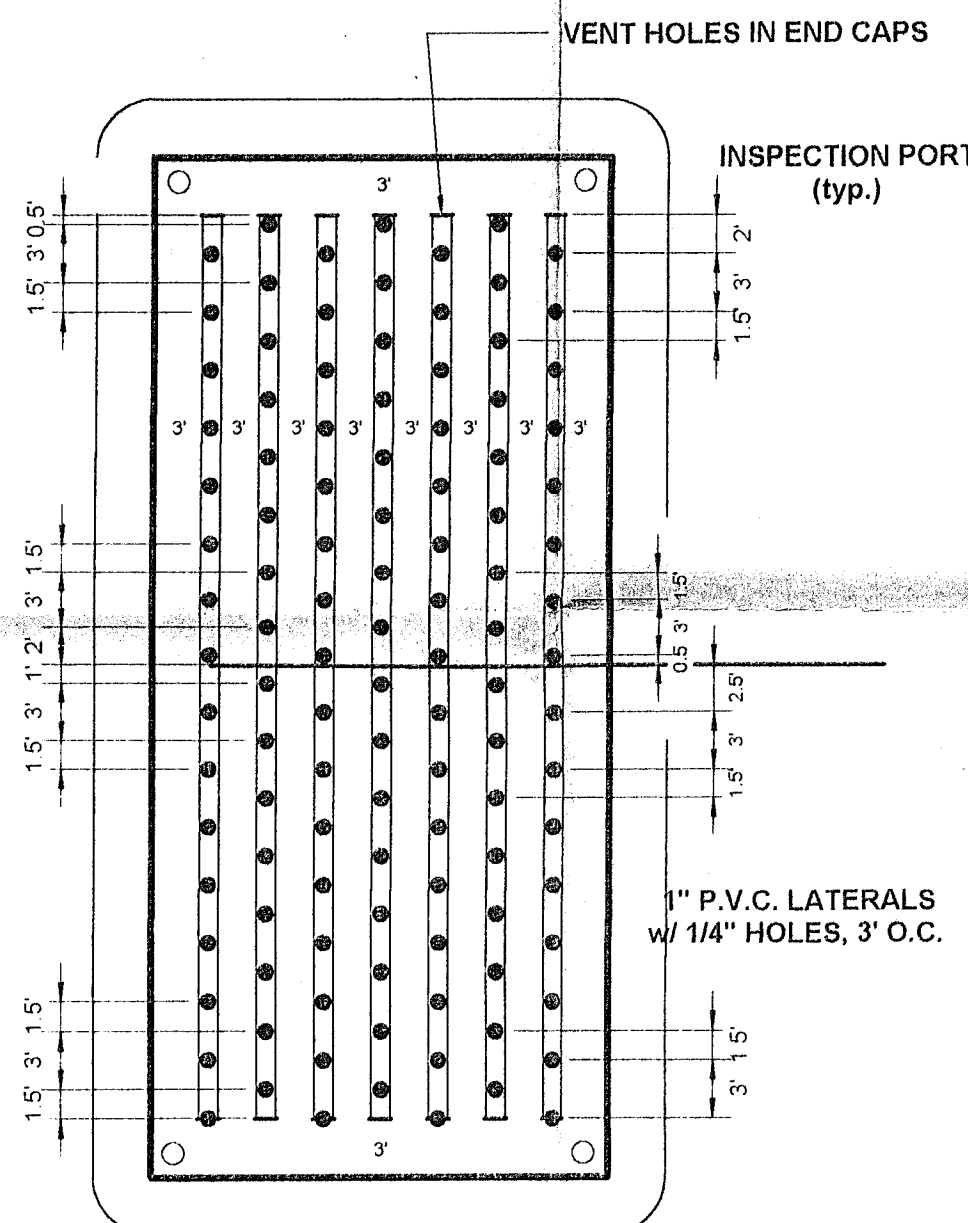
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Design Factor: 1.33
6 Bedrooms @ 200 + 5 (150) = 950 Gallons / Day
Bed Size Required: 1.33 x 950 = 1,263.5 s.f.
BED SIZE PROVIDED: 24' x 53' = 1,272 S.F.

AS-BUILT TIES

	A	B	
1	43.2'	50.8'	C.O.
2	46.7'	53.2'	M.H.
3	49.3'	55.5'	M.H.
4	51.3'	57.6'	C.O.
5	52.9'	58.6'	M.H.
6	56.3'	61.9'	C.O.
7	100.2'	78.6'	M.H.
8	126.8'	146.6'	INSPECTION PORT
9	178.5'	192.3'	INSPECTION PORT
10	180.4'	182.7'	INSPECTION PORT
11	126.7'	78.6'	INSPECTION PORT



DISPOSAL BED DETAIL

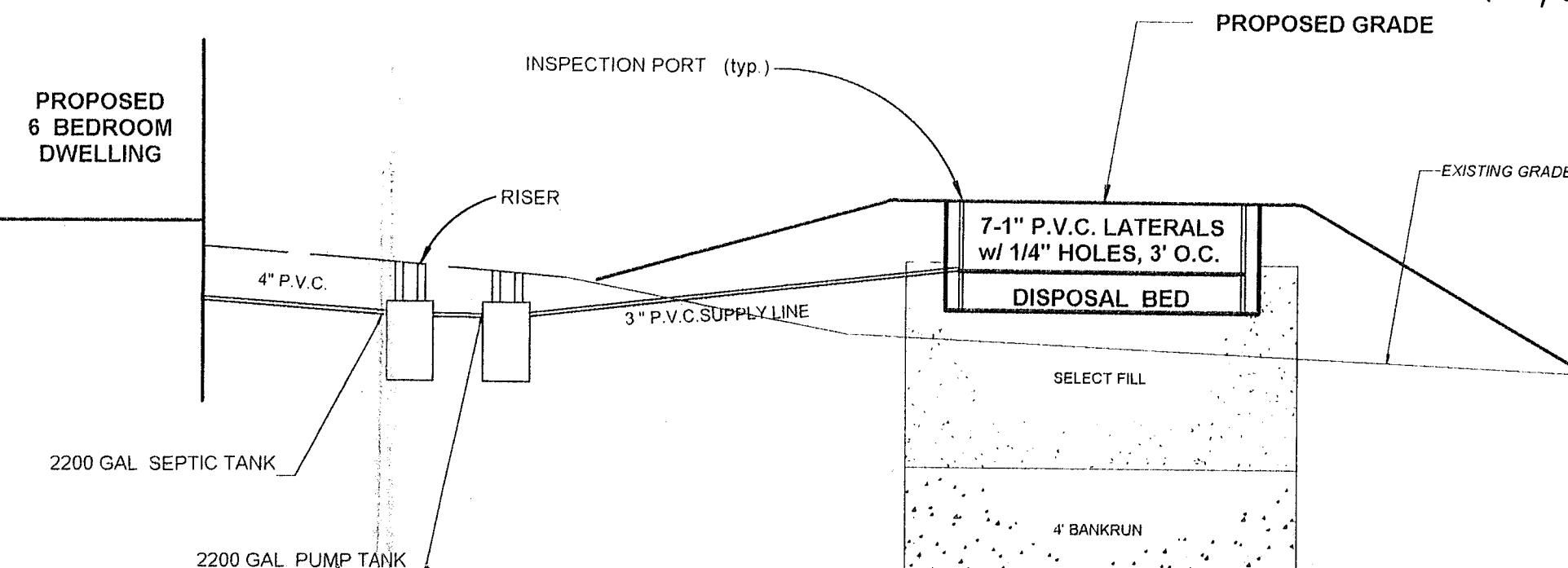
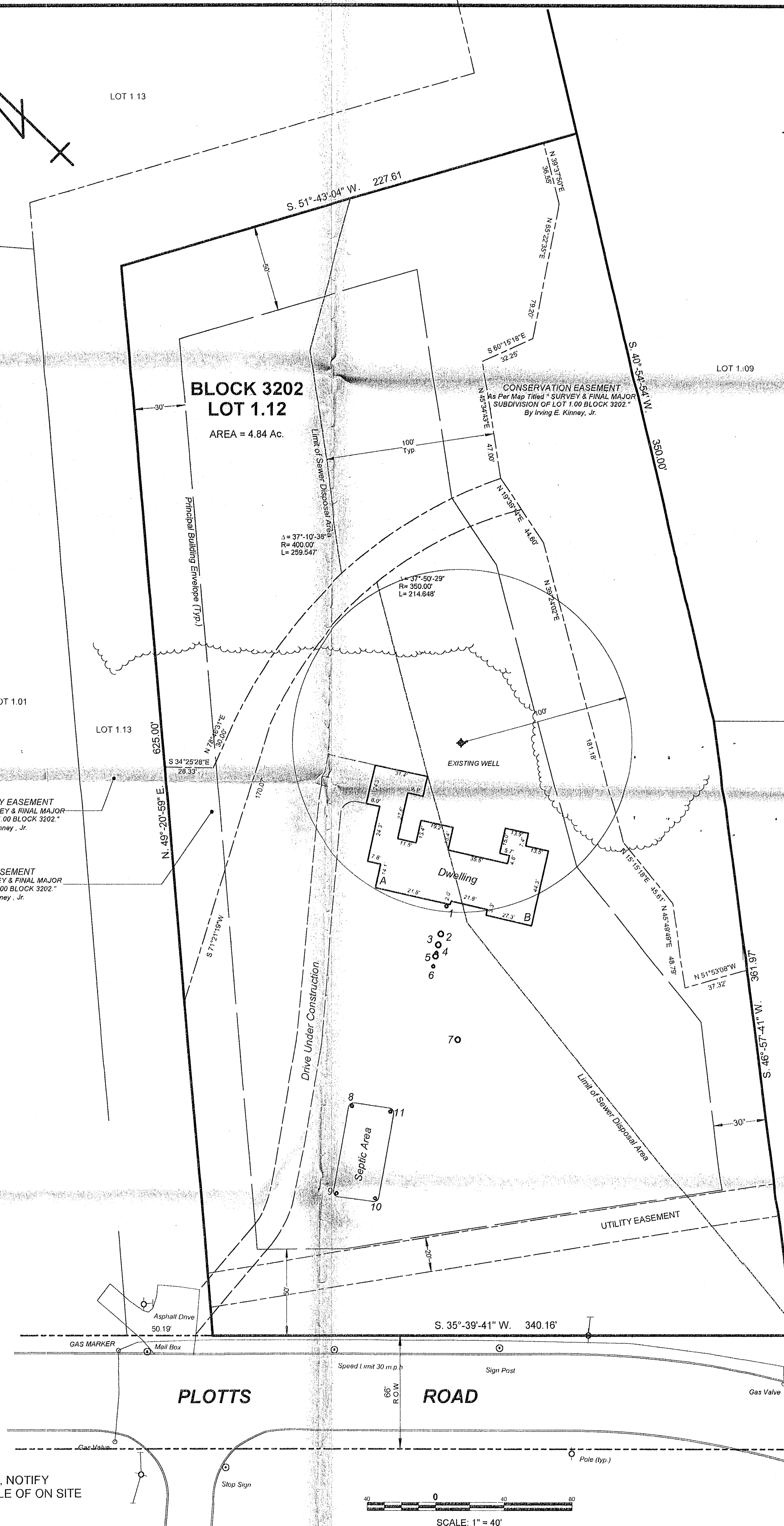
N.T.S.

NO VEHICLE OR RUBBER TIRE EQUIPMENT IS TO BE DRIVEN IN OR ON THE SEPTIC DISPOSAL AREA

EXCAVATOR:

VANDER PLOEGS EXCAVATING
211 HWY. 206 South
Branchville, N.J. 07826
973-948-2937

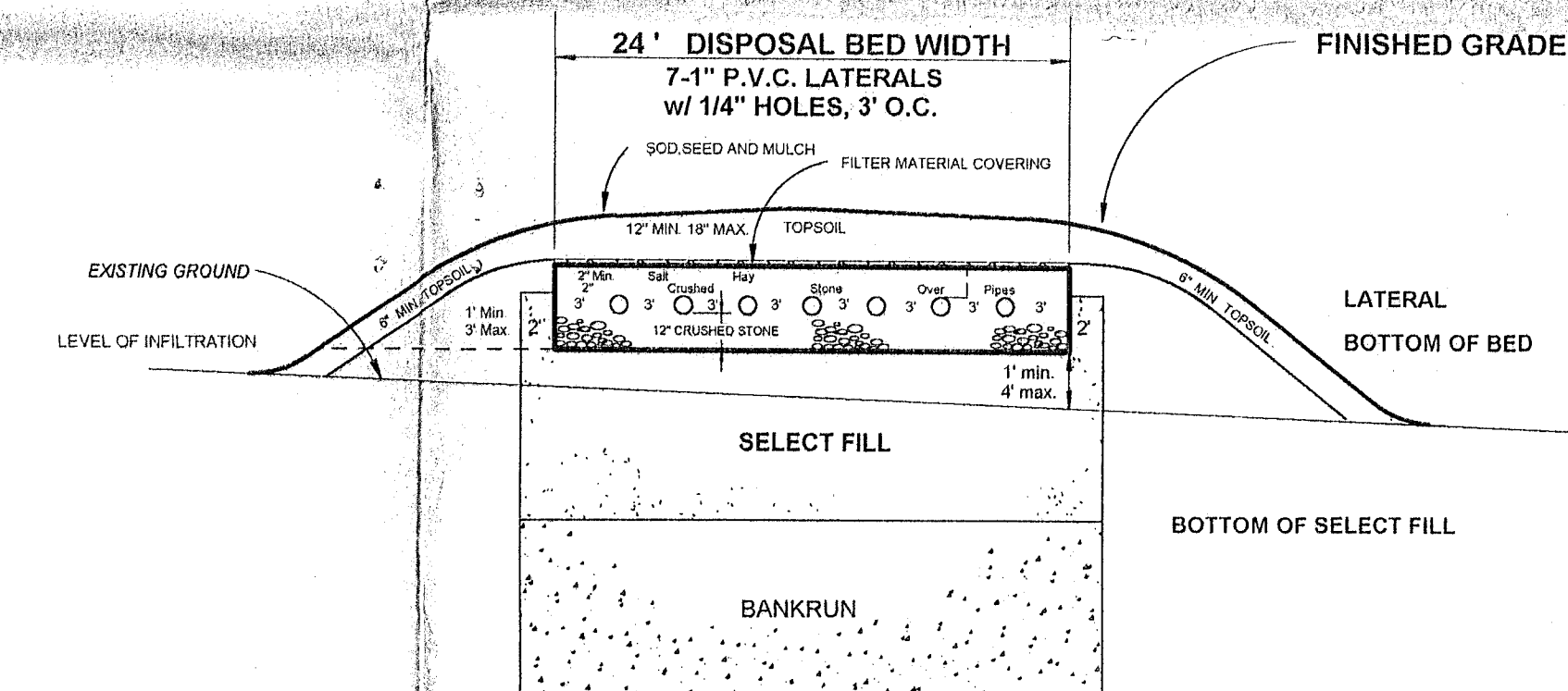
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HYDRAULIC PROFILE

N.T.S.

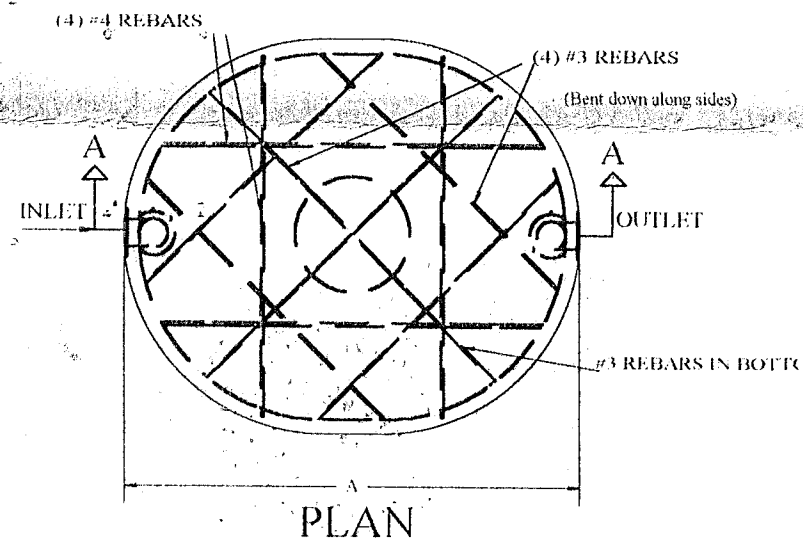
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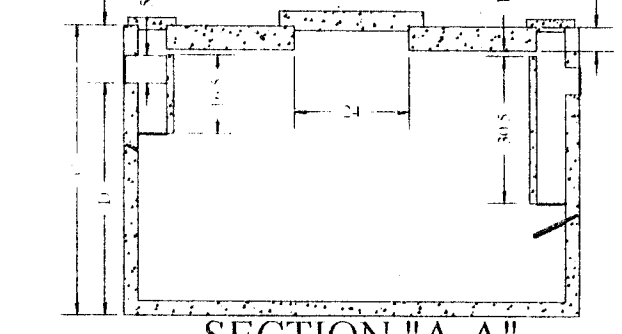
SECTION THROUGH DISPOSAL BED - Not to Scale

(73) 827-7563

1000, 1500 & 2200 GALLON
OBLONG SEPTIC



PLAN



SECTION "A-A"

DIMENSION TABLE				
CAPACITY GALLONS	A	B	C	D
1000	7'-11"	6'-11"	5'-0"	4'-0"
1500	7'-11"	6'-11"	7'-0"	6'-0"
2200	7'-11"	6'-11"	10'-0"	9'-0"

OR EQUIVALENT
SEWAGE SYSTEM DESIGN APPROVED BY:
SUSSEX COUNTY DEPT.
SIGNED: [Signature]
DATE: 11/14/01

AS BUILT SEPTIC DESIGN

FOR

LOT 1.12 in BLOCK 3202

HAMPTON TOWNSHIP - SUSSEX COUNTY - NEW JERSEY
SCALE: 1" = 40'
NOVEMBER 2001

ROBERT L. CAMPBELL ASSOCIATES
ENGINEERS AND SURVEYORS

103 HILL SIDE DRIVE
NEWTON, NEW JERSEY 07854

