Town of

AMHERST Massachusetts

AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK, AMHERST, MA 01002
(413) 256-4077

(413) 256-4033 ENVIRONMENTAL HEALTH SERVICES
(413) 256-4053 (FAX)

SUB-GRADE INSPECTION

Location: 318 LEVERETT RD.

Property Owner: WOOD LAND NOMINEE TRUST

I certify that I have inspected the excavation to sub-grade of the proposed septic system leaching area prior placement of any fill of stone, or construction of any portion of the system.

I further certify that:

✓ 1. All 'A' and 'B' horizon soils (topsoils and subsoils) were removed in the area of the system.
✓ 2. There was no evidence of ground water in the excavation.
✓ 3. There was no evidence of "mottles" that would be in conflict with the findings of the deep hole soil profile.
✓ 4. That the excavation was accomplished to the proper depth and in conformance with the approved plans.

DAVID E. KEATES
Designers Name

Designers Signature

116 MAIN ST
Street Address

HATFIELD, MA 01038
Town, State, Zip Code

864-918-8956
Telephone Number

page 1 of 2

September 26, 2003

Dave E. Keates, P.E.
102 Russell Street
Sunderland, MA 01375

To Whom It May Concern:

I hereby appoint K. Christian Boysen of Land Solutions to be my duly authorized agent regarding all Title-5 matters.

Sincerely,

David E. Keates

David E. Keates, P.E.

COMMONWEALTH OF MASSACHUSETTS
DAVID E. KEATES
NO. 31564
REGISTERED PROFESSIONAL ENGINEER

SUBGRADE INSPECTION
318 LEYFERETT RD.
PAGE 2 OF 2

AMHERST HEALTH DEPT.
TOWN OF AMHERST
HEALTH PERMITS

1287

Received of PARAFFIN COMPANIES (Name) of 312 LEVERETT RD AMHERST 548-9802 (Address)

For Property Located at: 318 (1) LEVERETT RD (Street Address) BARRE TURLOSKI (Owner)

HEA009	Bakery R6510 443509		HEA016	Septic Tank Permit-Installers R6510 443511	
HEA001	Bed & Breakfast R6510 443516		HEA017	Septic Tank Permit-Private R6510 443510	(1) 100.00
HEA002	Catering License R6510 443507		HEA018	Septic Tank Reinspection Fee R6510 432301	
HEA003	Food Handler R6510 443515		HEA019	Sub-Division Review Fee R6510 432306	
HEA004	Frozen Deserts R6510 443501		HEA012	Swimming Pool Permits R6510 443512	
HEA005	Health Dept. Housing Isp. R6510 432302		HEA020	Tanning License R6510 443509	
HEA006	Massage Therapy License R6510 443504		HEA034	Immunization Clinic R6510 432307	
HEA008	Motel License R6510 443506		HEA026	Smoking & Tobacco Reg. Violations R6510 443518	
HEA010	Removal of Offal R6510 443513		HEA022	Tobacco License R6510 443505	
HEA021	Removal of Rubbish R6510 443520		HEA042	Body Arts / Tatoo R6510 443521	
HEA011	Percolation Test Fees R6510 432300	(1) 175.00	HEA043	Food Service Plan Review R6510 432308	
HEA013	Recreation Camp License R6510 443503		HEA044	Porta Potties R6510 432309	
HEA014	Retail Store Permit R6510 443514		HEA045	Ice Rinks R6510 443522	
HEA015	Sanitary Code Booklets R6510 432305		HEA046	Rental Registration R6510 432310	
			HEA047	Fines R6510 48200	
			HEA		
			HEA		

TOTAL FEE: 275.00

Paid by

Amherst Health Department

11/1/04
Date

OFFICE USE ONLY

CHECK #	CASH
005105	

Must be Validated by the Collector's Office to be considered paid

WHITE – Applicant YELLOW – Collector PINK – Accounting GOLD – Health / Inspections

AMHERST HEALTH DEPT.
TOWN OF AMHERST
HEALTH PERMITS

1287

Received of PARAFFIN COMPANIES (Name) of 312 LOVETT RD Amherst (Address) 548-9802

For Property Located at: 318 LOVETT RD (Street Address) BARRY TURLUSKI (Owner)

HEA009	Bakery R6510 443509		HEA016	Septic Tank Permit-Installers R6510 443511	
HEA001	Bed & Breakfast R6510 443516		HEA017	Septic Tank Permit-Private R6510 443510	(1) 100.00
HEA002	Catering License R6510 443507		HEA018	Septic Tank Reinspection Fee R6510 432301	
HEA003	Food Handler R6510 443515		HEA019	Sub-Division Review Fee R6510 432306	
HEA004	Frozen Deserts R6510 443501		HEA012	Swimming Pool Permits R6510 443512	
HEA005	Health Dept. Housing Isp. R6510 432302		HEA020	Tanning License R6510 443509	
HEA006	Massage Therapy License R6510 443504		HEA034	Immunization Clinic R6510 432307	
HEA008	Motel License R6510 443506		HEA026	Smoking & Tobacco Reg. Violations R6510 443518	
HEA010	Removal of Offal R6510 443513		HEA022	Tobacco License R6510 443505	
HEA021	Removal of Rubbish R6510 443520		HEA042	Body Arts / Tatoo R6510 443521	
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HEA013	Recreation Camp License R6510 443503		HEA044	Porta Potties R6510 432309	
HEA014	Retail Store Permit R6510 443514		HEA045	Ice Rinks R6510 443522	
HEA015	Sanitary Code Booklets R6510 432305		HEA046	Rental Registration R6510 432310	
			HEA047	Fines R6510 48200	
			HEA		
			HEA		

TOTAL FEE: 275.00

Amherst Health Department

11/1/04
Date

OFFICE USE ONLY

CHECK #	CASH
005105	

Must be Validated by the Collector's Office to be considered paid

WHITE – Applicant YELLOW – Collector PINK – Accounting GOLD – Health / Inspections

DAVE Z,

Receipt # 1289

Land Solutions

Two Amherst Road
Sunderland, MA 01375
413/665-4777

LETTER OF TRANSMITTAL

TO: DAVE ZAROWINSKI
AMHERST HEALTH DEPT

JOB NO.
DATE 10/25/04
ATTENTION:
RE: 318 LEVERETT RD
SEPTIC DESIGN

WE ARE SENDING YOU

the following: ☒ Attached ☐ Under separate cover ☐ via _____

☐ Septic Designs ☐ Specifications ☐ Copy of letter
☐ Plans ☐ Contract ☐ Other _____

COPIES	DATE	NUMBER	DESCRIPTION
4			318 LEVERETT RD SEPTIC DESIGN
1	8·31·04		CHECK # 5105 $275.00 FOR DESIGN & PERC.

THESE TRANSACTIONS ARE:

☒ For your approval ☐ Approved as submitted ☐ Resubmit with __ copies for approval
☐ For your use ☐ Approved as noted ☐ Submit ____copies for distribution
☐ Per your request ☐ Corrections noted ☐ Return ____ corrected prints
☐ for your review and comment ☐ _____

Remarks: DAVE —
I'M OUT OF TOWN TODAY - IF YOU NEED ME
MY CELL IS 413. 221. 9669

Signature: CHRISTIAN

CC. TONY KOCOT w/ 1 COPY OF DESIGN.

PARAFFIN COMPANIES

312 Leverett Road
Amherst, MA 01002
(413) 548-9802

BANK OF WESTERN MASSACHUSETTS
SPRINGFIELD MASSACHUSETTS

53-248/118

005105

8/31/2004

PAY TO THE ORDER OF Town Of Amherst $ **275.00

Two Hundred Seventy-Five and 00/100********** DOLLARS

MEMO: PERC + PERMIT: 318 LEVERETT RD

⑈005105⑈ ⑆011802488⑆ ⑈0800215610⑈

SECURITY FEATURES: MICRO PRINT TOP & BOTTOM BORDERS - COLORED PATTERN - BLEED THROUGH NUMBERING - MISSING FEATURE INDICATES A COPY

~~Bruce~~
Barre Tozloski

Sewage Disposal System for

Wood Land Nominee Trust
318 Leverett Road
Amherst, MA

Note: Owner should have tank pumped and effluent filter cleaned every two years or as recommended by septic tank pumper. Board of Health approval of this plan required before a licensed contractor can be retained to install system. Contractor not to start work until approved Disposal Works Permit has been obtained. Contractor is to contact "Dig Safe" to have all existing utilities located and marked prior to any demolition, construction or excavation on the site. It is the responsibility of the contractor to review all the drawings and specifications associated with this project workscope prior to the initiation of construction. Should the contractor find a conflict with the documents relative to the surveyed topography, specifications or applicable codes, it is the contractor's responsibility to notify the engineer of record in writing prior to the start of construction. Failure by the contractor to notify the engineer shall constitute acceptance of full responsibility by the contractor to complete the scope of work as defined by the drawings and in full conformance with local regulations and codes.

REGISTERED ENGINEER
DAVID E. KEATES
No. 31564
COMMONWEALTH OF MASSACHUSETTS

David E. Keates
10/29/04

REV. 10/29/04

David E. Keates, P.E.
Consulting Civil Engineer
116 Main Street
Hatfield, MA 01038

Land Solutions

2 Amherst Rd. Sunderland, MA 01375

Voice/Fax (413) 665-4777

Land Planning, Environmental Consulting, Permit Processes

P.O. BOX 121 TWO AMHERST ROAD SUNDERLAND, MA 01375
Voice & Fax 413-665-4777

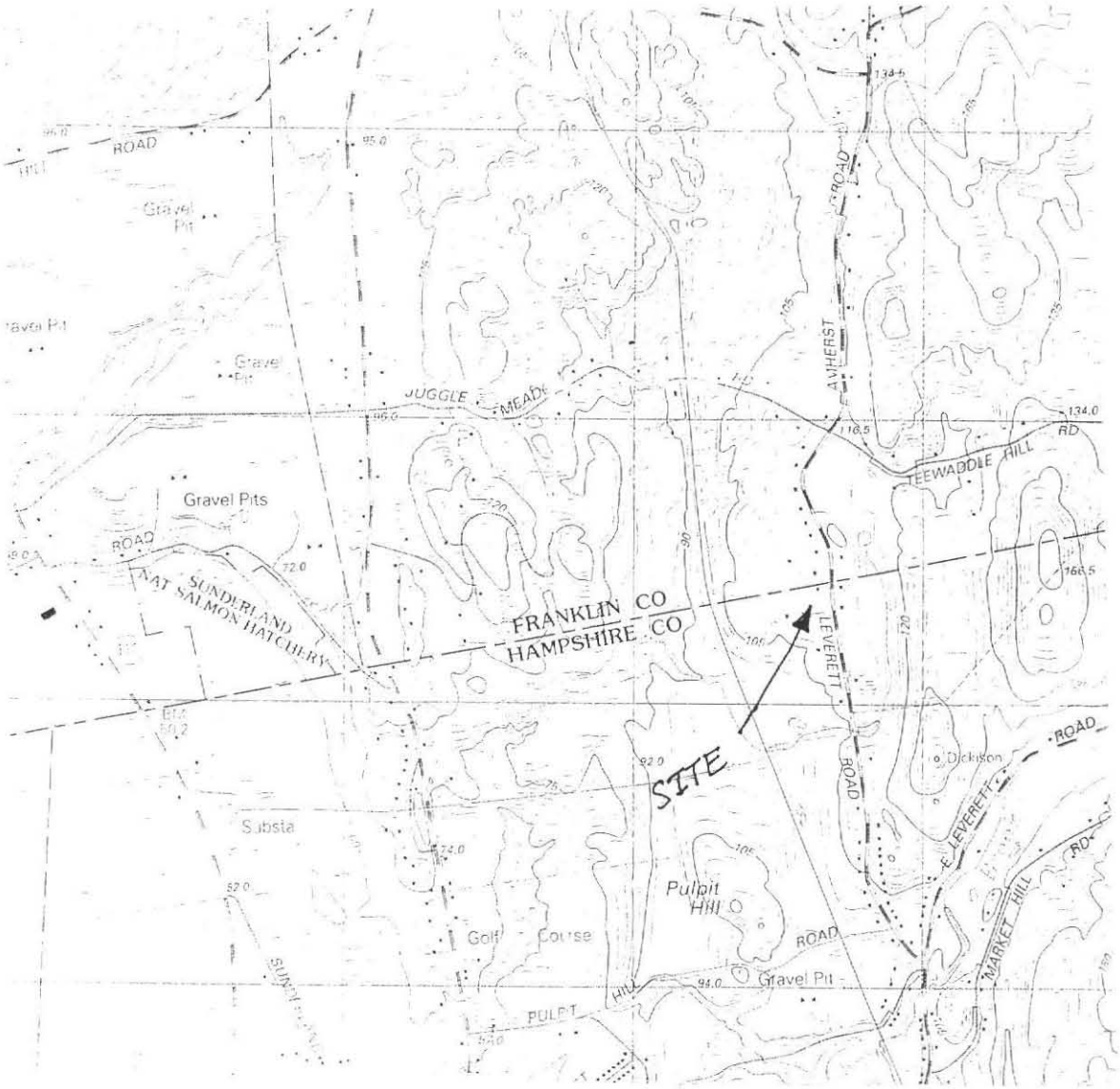
PLEASE NOTE THE FOLLOWING

- ☐ ALL PROPERTY LINES SHALL BE VERIFIED BY A SURVEYOR PRIOR TO CONSTRUCTION TO MAINTAIN PROPER SETBACKS.
- ☐ PROPERTY OWNER IS RESPONSIBLE FOR COMPLIANCE TO LOCAL ZONING REGS., CON. COMM., AND MASS WETLAND PROTECTION ACT.
- ☐ THIS SEPTIC DESIGN IS NOT INTENDED TO BE A SITE PLAN.
- ☐ DO NOT SCALE DRAWING.
- ☐ CONTRACTOR SHALL FIELD VERIFY ALL INFORMATION CONTAINED ON THESE PLANS AND SHALL NOTIFY THE ENGINEER OR ANY DISCREPANCIES PRIOR TO INITIATING THE WORK.
- ☐ INSTALLER SHALL NOTIFY LAND SOLUTIONS 72 HOURS IN ADVANCE FOR AN ENGINEER'S INSTALLATION INSPECTION.
- ☐ ANY ON SITE DEBRIS SHALL BE DISPOSED OF ACCORDING TO OWNER'S INSTRUCTIONS.
- ☐ EXCAVATING CONTRACTOR MUST CALL DIG SAFE FOR CLEARANCE BEFORE STARTING WORK: 1-800-344-7233.
- ☐ IF PLANS SPECIFY REUSE OF EXISTING SEPTIC TANK, IT MAY BE SAVED IF IT IS OFFICIALLY CERTIFIED TO BE STRUCTURALLY SOUND. BAFFLES MUST BE REPLACED WITH PVC TEE BAFFLES AND AN EFFLUENT FILTER TO BE INSTALLED ON THE OUTLET.
- ☐ IF EXISTING SEPTIC HAS NOT BEEN CERTIFIED AS STRUCTURALLY SOUND, THE INSTALLER SHALL CONTACT LAND SOLUTIONS 72 HOURS PRIOR TO PUMPING EXISTING SEPTIC SYSTEM TANK PRIOR TO REPAIR WORK. TANK SHALL BE INSPECTED FOR CAPACITY, STRUCTURE AND REPLACED IF NECESSARY.
- ☐ ANY DEBRIS ENCOUNTERED FROM EXISTING SEPTIC SYSTEM MUST BE DISPOSED OF IN A MANNER ACCEPTABLE TO THE BOH.

DEVELOPMENT DESIGN	LAND SOLUTIONS	PERMIT PROCESSES
SITE PLANNING		SEPTIC SYSTEMS
ENVIRONMENTAL CONSULTING		RESIDENTIAL

General Notes:

1. The contractor in the prosecution of this work shall adhere strictly to these plans and the provisions set forth in the State Environmental Code, Title 5, 310 CMR 15.000 and the more current update of this publication. Any deviation from these plans shall require prior approval from the design engineer and the local Board of Health.
2. If finish cover over the septic tank or D-box is greater than 6 inches provide access port with cover for future access for maintenance and inspection.
3. Should the contractor determine that existing field conditions are other than shown on these plans, contractor shall not commence work but shall immediately notify the owner and designer for direction.
4. All vegetation, boulders, organic and other deleterious material shall be removed from the existing ground surface throughout the effluent disposal area including the 15 foot extension and slope embankment prior to placing fill material.
5. This system has not been designed for vehicular traffic. System should be protected from any wheel traffic.
6. This is not a boundary survey. Property lines are determined by physical evidence in the field as depicted by the owner.
7. Seal all joints and openings with hydraulic cement.
8. The designer assumes no liability for the operation of design.
9. Finish grade to be sloped to drain off top of system at minimum 2 % slope.
10. All smeared or compacted surfaces including textural changes shall be raked to a depth of 1 inch or more before placing fill or crushed stone. This is essential in order to protect the natural absorption qualities of the soil by preventing an unrestricted transition between materials.
11. Massachusetts law requires that the contractor shall contact "Dig Safe Inc." at 1-800-322-4844 at least three full working days before starting any excavation work in order that all responsible parties can be notified so they can adequately mark out their buried pipe and cable locations.
12. Contractor shall have D-box filled with water prior to engineer's final inspection. Water shall be provided to test D-box pipe distribution at time of final inspection.
13. Contractor shall have ready for the final inspection the following information:
    a. The approved Disposal Works Permit.
    b. A dimensioned as-built plan showing two dimensions from permanent points to each of the following: septic tank invert-in and invert-out, all angles points in all piping, D-box, beginning and ends of each leaching trench, cleanouts, ports, the four corners of each leach field and any other items as deemed necessary.
    c. As-built elevations of all pipe inverts as shown on profile.
14. Property owner is responsible for compliance to local zoning regulations, Conservation Commission and MA Wetlands Protection Act.
15. The septic design is not intended to be a site plan.
16. The contractor shall notify the Engineer or Land Solutions at 413-665-4777 if the Engineer is not available at least 72 hours in advance for a final inspection.
17. If plans specify reuse of existing septic tank, it may be saved if it is officially certified to be structurally sound. Baffles should be replaced with PVC tee baffles and an effluent filter installed on the outlet if they will fit.
18. If existing septic tank has not been certified as structurally sound, the installer shall contact the Engineer and/or Land Solutions 72 hours prior to pumping existing septic tank to see what repair work will be involved. Tank shall be replaced if it cannot be adequately repaired.
19. Any debris encountered from existing septic system must be disposed of in a manner acceptable to the Board of Health.



Project #: 04-049
USGS Map: Mt Toby
Scale: 1:25,000
Date: 1990

Sheet __ of __

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA
Sheet 2 of 3

Land Solutions
2 Amherst Road
Sunderland, MA 01375
Tel/Fax: 413 665-4777

LAND SOLUTIONS, TWO AMHERST ROAD, P.O. BOX 121, SUNDERLAND, MA 01375
VOICE & FAX (413) 665-4777

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Soil Suitability Assessment For On-Site Sewage Disposal

Performed By: **K. Christian Boysen** Certification Date: **Nov. 1994**
Witnessed By: **Dave Zarozinski, Board of Health Agent** Performed on: **August 31, 2004**

Location Address: **318 Leverett Road**	Owner's Name: **Wood Land Nominee Trust**
Lot #	Address: **312 Leverett Road**
Job # **04-049**	Telephone:

NEW CONSTRUCTION REPAIR **X** Garbage grinder (No) **Yes**
Number of bedrooms: 5

Office Review:
Published Soil Survey Available: **Yes** **No**
Year Published: Publication Scale: Soil Map Unit:
Drainage class: Soil Limitations:

Surficial Geological Report Available: **No** **Yes**
Year Published: Publication Scale:
Geological Material
Landform:

Flood Insurance Rate Map:
Above 500 year flood boundary **No** (**Yes**)
Within 500 year flood boundary (**No**) **Yes**
Within 100 year flood boundary (**No**) **Yes**

Wetland Area:
National Wetland Inventory map (map unit) :
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS):
Range: Above Normal Normal Below Normal

Other References Reviewed: USGS

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA
Sheet of
REV 10.29.04

Location Address or Lot No. **318 Leverett Road, Amherst**

Name: **Wood Land Nominee Trust**
Date: **August 31, 2004**
Job #: **04-049**

ON-SITE REVIEW

Deep Hole No.: **1** Date: **08/31/04** Time **9:00** Weather: **85° overcast**

Location: *See Site Plan:* **66' South of Southwest house corner; ~~50'~~ 10' North of property line.**

Land Use: **Lawn** Slope **5%** Surface Stones: **None**

Vegetation **Grasses**
Landform TILL TERRACE
Position on Landform: MID. TERRACE
Distances from:

Open Water Body:	>150	feet	Drainage way:	>50	feet
Possible Wet Area:	>50	feet	Property Line:	50	feet (estimated)
Drinking Water Well:	>150	feet	Other:		

DEEP OBSERVATION HOLE LOG

Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, stones, Boulders, Consistency, % Gravel)
0-12"	**Ap**	**Fine sandy loam**	**10YR 3/3**	**None**	**Loose and crumb, many fine roots; 10% subangular gravel.**
12-24"	**Bw**	**Fine sandy loam**	**10YR 5/6**	**None**	**Massive and friable; 10% subangular gravel.**
24- 137"	**C**	**Fine sandy loam**	**10YR 5/4**	**10% 7.5YR 5/6**	**Massive and friable; 15% subangular gravel.**

* MINIMUM TWO HOLES REQUIRED AT EVERY DISPOSAL AREA

Parent Material: **Ablation till** Depth To Bedrock: **>137"**

Depth To Groundwater: 24" Standing Water in the hole: None 130" Weeping From Face: **122"**

Estimated Seasonal High Groundwater: 24"

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA
Sheet 8 of 23

Location Address or Lot No. **318 Leverett Road, Amherst**

Name: **Wood Land Nominee Trust**
Date: **August 31, 2004**
Job #: **04-049**

ON-SITE REVIEW

Deep Hole No.: **2** Date: **08/31/04** Time: **8:45** Weather: **75° Humid, overcast**

Location: ***See Site Plan*** **66' Southwest of Southwest house corner; 12' South of maple.**

Land Use: **Lawn** Slope: **5%** Surface Stones: **None**

Vegetation **Grasses**
Landform TILL TERRACE
Position On Landform: MID TERRACE
Distances from:

Open Water Body:	>150	feet	Drainage way:	>50	feet
Possible Wet Area:	>50	feet	Property Line:	~~50~~ 20	feet (estimated)
Drinking Water Well:	>150	feet	Other:		

DEEP OBSERVATION HOLE LOG

Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, stones, Boulders, Consistency, % Gravel)
0-9"	**Ap**	**Fine sandy loam**	**10YR 3/2**	**None**	**Loose and crumb; many roots, 2% gravel.**
9-24"	**Bw**	**Fine sandy loam**	**10YR 4/6**	**None**	**Massive and extremely friable; 10% subangular gravel; occasional roots, gradual boundary.**
24-144"	**C**	**Fine sandy loam**	**10YR 5/4**	**24"= 10% 7.5YR 4/6**	**Massive and friable 20% subangular gravel.**

* MINIMUM TWO HOLES REQUIRED AT EVERY DISPOSAL AREA

Parent Material: **Ablation till**
Depth To Groundwater:

Depth To Bedrock: **>144"**
Standing Water in the Hole: NONE 138"
Weeping From Face: **120"**

Estimated Seasonal High Groundwater: 24"

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA
Sheet 5 of 7

Location Address or Lot No. **318 Leverett Road, Amherst**

Name: **Wood Land Nominee Trust**
Date: **August 31, 2004**
Job #: **04-049**

DETERMINATION FOR SEASONAL HIGH WATER TABLE

METHOD USED:

	Depth observed standing in observation hole					inches
	Depth weeping from side of observation hole					inches
X	Depth to soil mottles	D.H. # 1	24	inches	D.H. # 2 **24**	inches
	Ground Water Adjustment					feet

Index well no. Reading date Index well level

Adjustment factor Adjusted ground water level

Depth of Naturally Occurring Pervious Material

Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? **YES**

If not, what is the depth of naturally occurring pervious material?

Certification
I certify that in November, 1994 I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature _____ Date 8·31·04
C:\My Documents\perc.doc

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA
Sheet 1 of 2

FORM 12 - PERCOLATION TEST

Location Address or Lot No. **318 Leverett Road, Amherst**

Name: **Wood Land Nominee Trust**
Date: **August 31, 2004**
Job #: **04-049**

COMMONWEALTH OF MASSACHUSETTS
Amherst, Massachusetts

PERCOLATION TEST		
Date: August 31, 2004		
Observation hole # :	**1**	**2**
Depth of perc:	**60"**	
Start pre-soak	**8:09**	
End pre-soak	**8:24**	
Time @ 12"	**8:24**	
Time @ 9"	**8:42**	
Time @ 6"	**9:08**	
Time (9"-6")	**26** min.	
Rate min/inch	**8 2/3 inches/minutes**	

SITE PASSED **X** SITE FAILED

Performed By: **Christian Boysen**

Witnessed By: **Dave Zarozinski, Health Agent & ASE**

Comments:

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA
Sheet 11 **of** 23
REV. 10/29/04

High Capacity Infiltrator [redacted]

Gravelless Leaching System Design Using [redacted]

Unit to be capable of withstanding H20 loading _____ H10 loading ✓

Structure House

Design Flow 110 gal/day/bedroom _____ gallons

Number of bedrooms 5 Other _____

Design flow 550 gallons per day

Garbage grinder to be used _____ yes ✓ no If yes, increase flow by 50%

Revised design flow _____ (1.5) = _____ gallons per day

Increase flow by _____ % per local B.O.H. regulations

Revised design flow _____ X _____ = gallons per day

Percolation rate from percolation tests = 8 2/3 & _____ minutes per inch

Design percolation rate chosen = 10 minutes per inch

Effluent loading rate for Class II soils = 0.60 gal/day/sq. ft.

Leaching area required = 550 gal./day / 0.60 gal./day/sq. ft. = 917 sq. ft.

Length required = 917 sq. ft. / 7.79 sq. ft./lin. ft. = 117.7 lin. Ft.

Number of units = 117.7 lin. ft. / 6.25 lin. ft./unit = 18.8 units

Use 2 trench/es 10 units long = 20 units > 18.8 units req'd

Single trench length = 10 units X 6.25 lin. ft. per unit = 62.5 lin. ft.

Actual gal./day provided = [illegible] g.p.d [illegible] = [illegible] g.p.d.

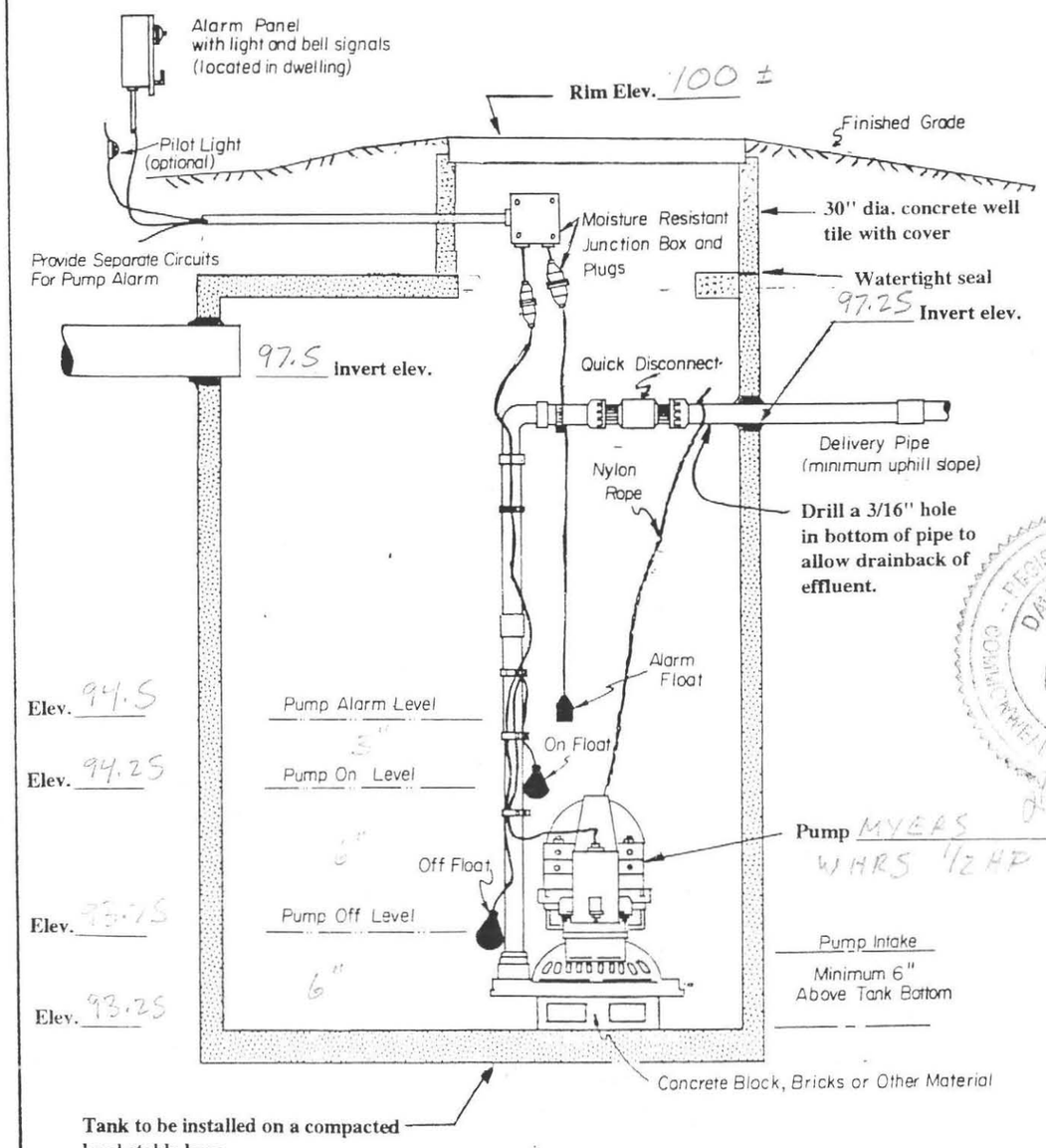
COMMONWEALTH OF MASSACHUSETTS
DAVID E. KEATES
NO. 31564
REGISTERED PROFESSIONAL ENGINEER

David E. Keates 10/22/04

PROJECT	Sheet [illegible] of [illegible]	
Sewage Disposal System **Wood Land Nominee Trust** **318 Leverett Road** **Amherst, MA**		David E. Keates, P.E. Consulting Civil Engineer 102 Russell Street Sunderland, MA 01375 Tel: 413-665-7670

PUMP CHAMBER NOTES

1. Pump chamber to be wired to main electrical panel.
2. Pump controls shall be mercury type switch only.
3. Force main to be 2 " PVC Pipe Schedule 40.
4. All equipment & fasteners in the pump chamber shall be resistent to hydrogen sulfide corrosion.
5. Inspect and maintain components as recommended by manufacturer and required by 310 CMR 15.254 (1) d.
6. This assumes dimensions of the pump chamber as shown on this sheet. Dimensions other than those shown will require the "pump down" to be recalculated. Contact the design engineer if a tank with different dimensions is used.
7. Pump the sludge from the bottom of the pump chamber whenever the septic tank is pumped.
8. When using manhole extensions, locate the quick disconnect as high as possible in the extension for ease of removal.
9. When possible, locate quick disconnect and electrical connections within arm's reach of the surface.
10. Maintain minimal uphill slope on delivery line to distribution box.
11. Provide a "pump pilot light" to indicate when pump is operating.
12. Provide a 20" rectangular opening with a watertight cover in top of tank.



Pump System Design

Use a 1000 GAL TANK

Length= 8.5', Width= 4.3', Depth= 5.4' (Inside Dimensions)

Use 2 " dia. sch. 40 pvc pipe. Length = 37 feet

Vol. of pipe = 3.14 (1) (1) (37 ft.) (7.48 gal/cu. ft.) / 144 = 6 gallons

Leaching area to be dosed 4 times per day (310 CMR 15.254(1) d.

Dose required = total design flow divided by 4 , equals 550 gal. per day/ 4 = 138 gal. per dose.

Increase dose by 6 gallons to allow for volume of 2 " diameter pressure line to distribution box.

Pump down = 144 gal. = .53 ft. = 6 inches
7.48 gal./cu.ft. (8.5) (4.3)

From inv. elev. 97.5 to high water alarm at elev. 94.5 , there will be 3 ft. of storage or (8.5 ft.)(4.3 ft.) (3 ft.) 7.48 gal./cu.ft. = 820 gallons. This will provide for 820 gal. / 550 gal./day = 1.5 days of storage should power go out.

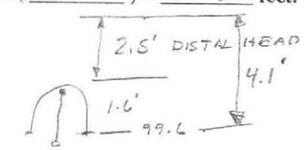
Static Head = discharge elev. ~~at Dbox~~ (99.6) minus pump off level (93.75) = 5.85 feet.

Friction Head Loss for 2 " pvc piping MANIFOLD

Discharge pipe equivalent length

fitting	feet
3 - 90° @ 9'	27
1 - 45°	4
1 - DISCONNECT	2
1 - TEE	11

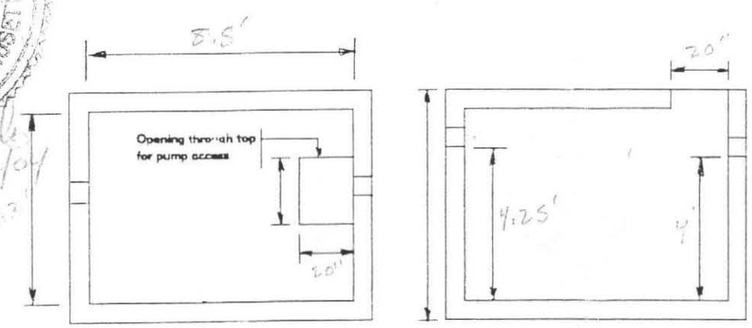
Total = 44 feet



Force main length = 37 feet

Total pipe length = 37 feet + 44 feet = 81 feet

GPM	H /100'	H for 81 ft.	Static Head	ADD DISTAL HEAD	Total Head
10	.2	.16	5.85	4.1	10.1
20	.9	.73			10.7
30	1.8	1.46			11.4
40	3.1	2.51			12.5
50	4.7	3.81			13.8



PLAN SECTION

PUMP CHAMBER FABRICATION DETAILS

NO SCALE

REGISTERED ENGINEER DAVID E. KEATES No. 31564 COMMONWEALTH OF MASSACHUSETTS
10/22/04

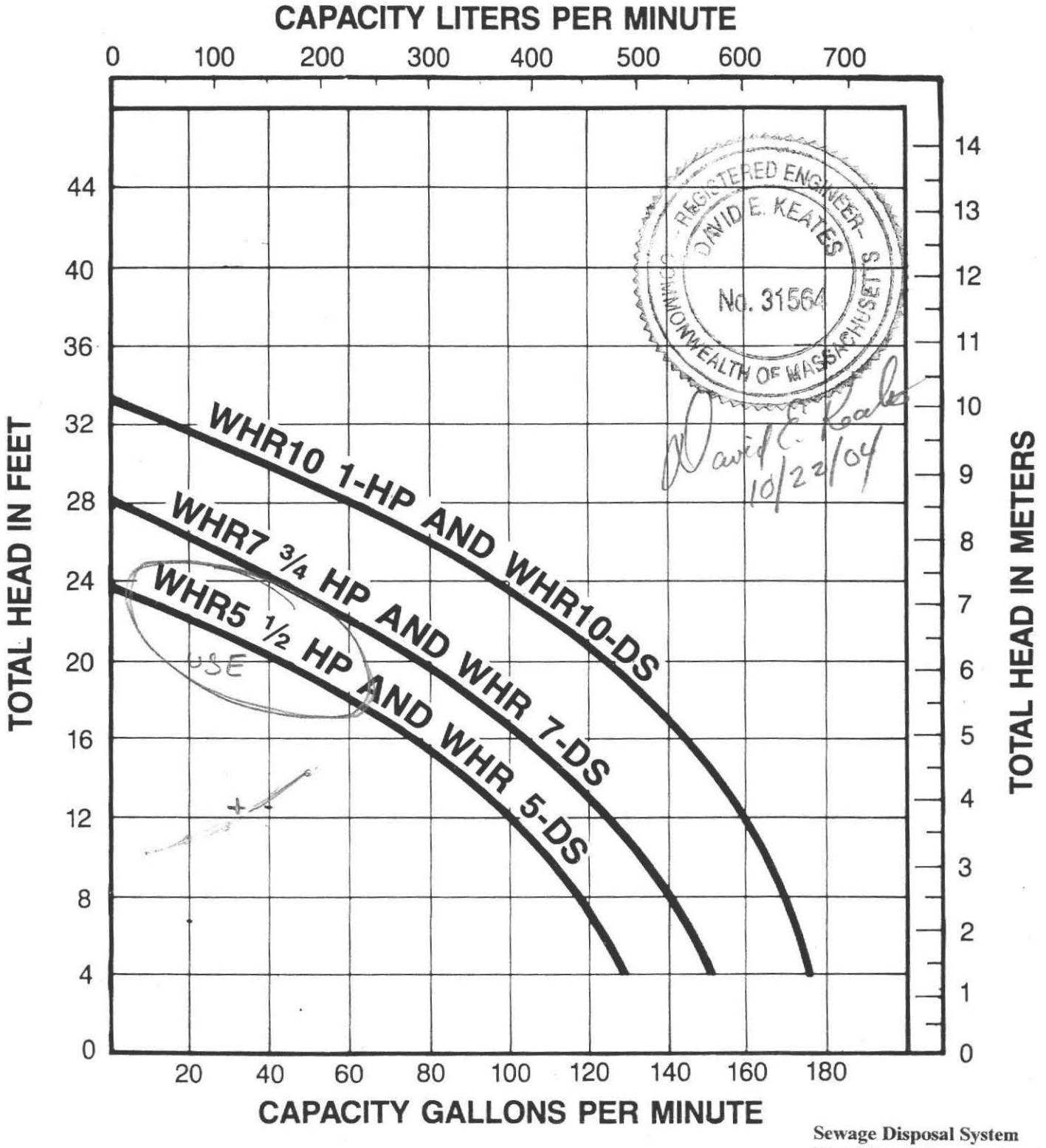
David E. Keates, P.E.
Consulting Civil Engineer
102 Russell Street
Sunderland, MA 01375
Tel: 413-665-7670

Project

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA

Initial Date 10/22/04	Revised	Project No.
Drawn By: DEK	Scale	Sheet No. 13 of 23

PERFORMANCE CURVE
WHR AND WHR-DS SERIES WASTE HANDLING PUMPS



Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA
Sheet 14 of 23

K3002
3/90

Myers

F.E. Myers, A Pentair Company, 1101 Myers Parkway, Ashland, Ohio 44805-1923 • 419/289-1144 • FAX 419/289-6658, TLX 98-7443

Pump Selection for a Pressurized System

Input Parameters

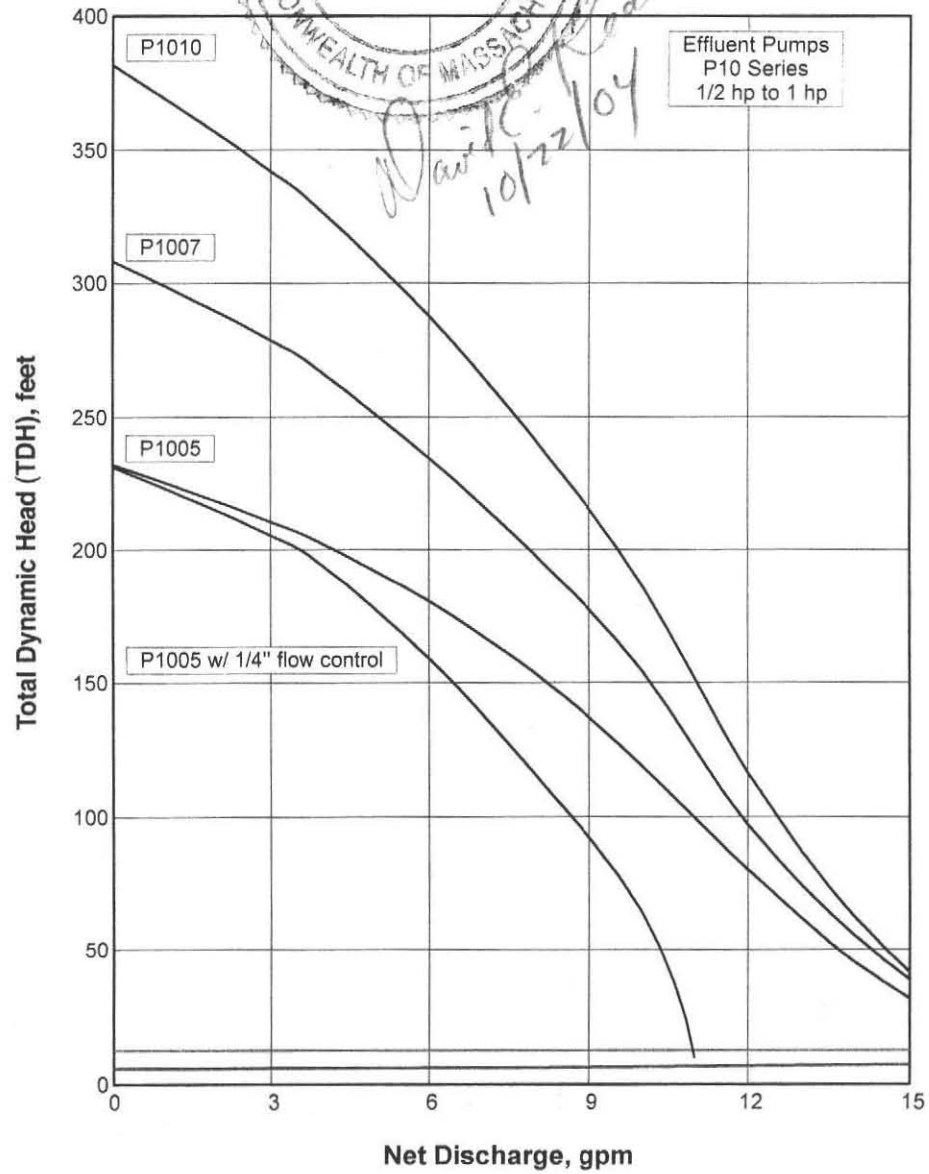
Orifice Size	1/4	inches
Residual Head at Last Orifice	3.0	feet
Orifice Spacing	5.00	feet
Number of Laterals per Cell	2	
Lateral Length	58.0	feet
Lateral Line Size	2.00	inches
Lateral Pipe Class/Schedule	40	
Distributing Valve Model	None	
Manifold Length	9.0	feet
Manifold Line Size	2.00	inches
Manifold Pipe Class/Schedule	40	
Lift to Manifold	5.8	feet
Transport Length	81.0	feet
Transport Line Size	2.00	inches
Transport Pipe Class/Schedule	40	
Discharge Assembly Size	2.00	inches
Flow Meter	None	inches
'Add-on' Friction Losses	0.0	feet

Calculations

Minimum Flow Rate per Orifice	1.34	gpm
Number of Orifices per Zone	24	
Total Actual Flow Rate	32.3	gpm
Number of Lines per Zone	2	
% Flow Differential 1st and Last Orifice	1.5	%
Lift to Manifold	5.8	feet
Residual Head at Last Orifice	3.0	feet
Head Loss in Laterals	0.1	feet
Head Loss Through Distributing Valve	0.0	feet
Head Loss in Manifold	0.0	feet
Head Loss in Transport Pipe	1.5	feet
Head Loss Through Discharge	2.1	feet
Head Loss Through Flow Meter	0.0	feet
'Add-on' Friction Losses	0.0	feet
Total Flow Rate	**32.3**	**gpm**
TDH	**12.5**	**feet**

REGISTERED ENGINEER
DAVID E. KEATES
No. 31564
COMMONWEALTH OF MASSACHUSETTS

David E. Keates 10/22/04



Orenco Systems
Incorporated

814 AIRWAY AVENUE
SUTHERLIN, OREGON
97479

TOLL FREE:
(800) 348-9843

TELEPHONE:
(541) 459-4449

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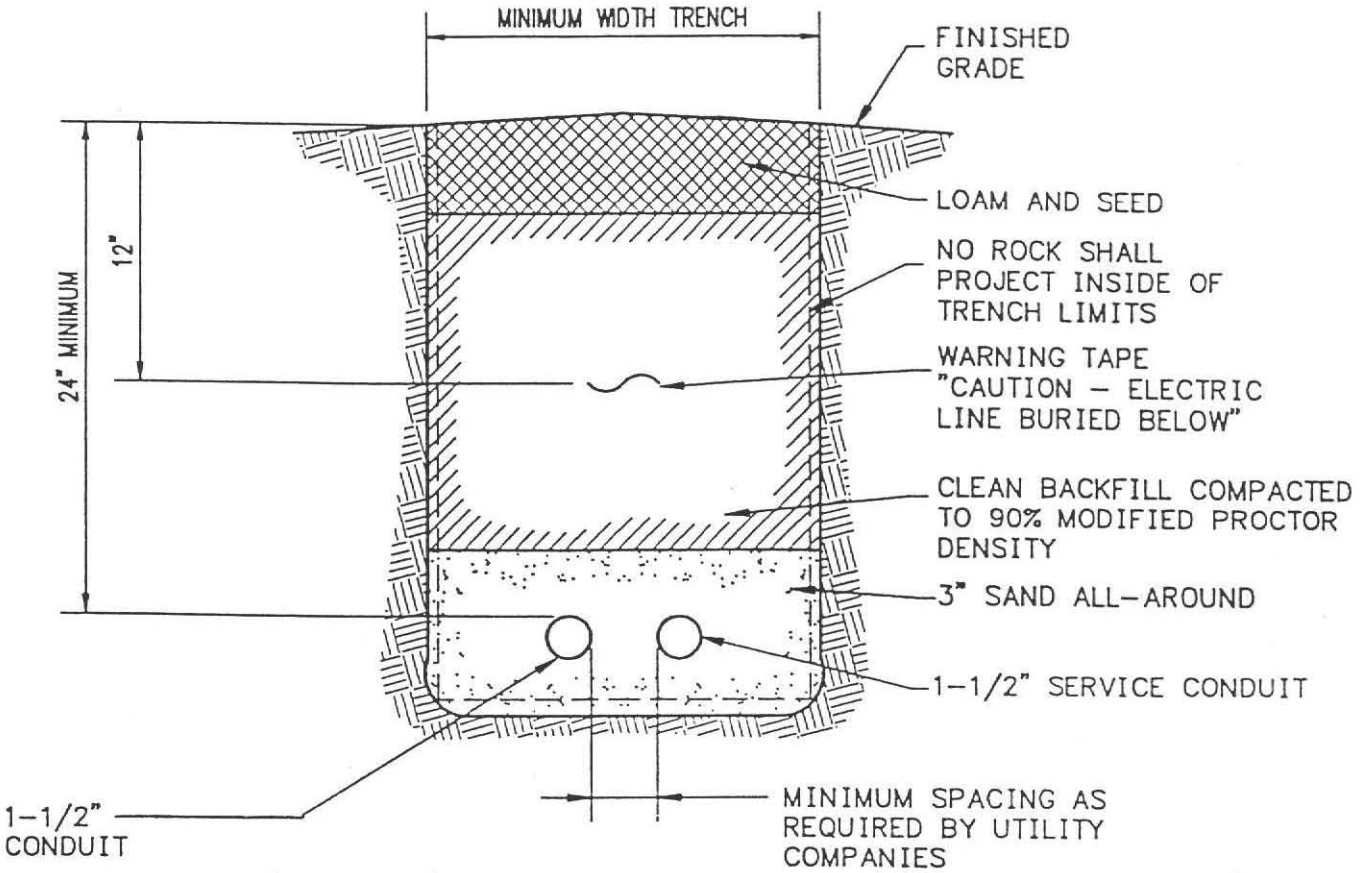
Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA
Sheet 15 of 23



TYPICAL TRENCH SECTION

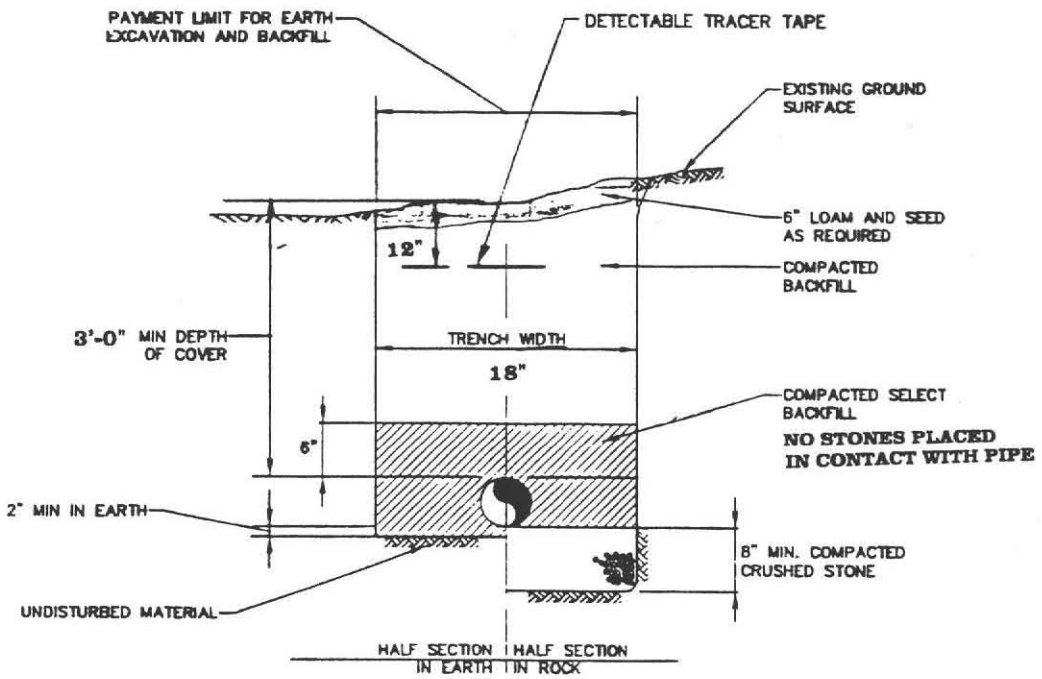
NOT TO SCALE

ELECTRICAL

REGISTERED ENGINEER
DAVID E. KEATES
No. 31564
COMMONWEALTH OF MASSACHUSETTS

David E. Keates 10/22/04

PROJECT	Sheet 16 of 23	David E. Keates, P.E.
Sewage Disposal System Wood Land Nominee Trust 318 Leverett Road Amherst, MA		Consulting Civil Engineer 102 Russell Street Sunderland, MA 01375 Tel: 413-665-7670



TYPICAL FORCE MAIN TRENCH DETAIL
N.T.S.

REGISTERED ENGINEER
DAVID E. KEATES
No. 31564
COMMONWEALTH OF MASSACHUSETTS

David E. Keates 10/22/04

PROJECT

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA

David E. Keates, P.E.
Consulting Civil Engineer
102 Russell Street
Sunderland, MA 01375
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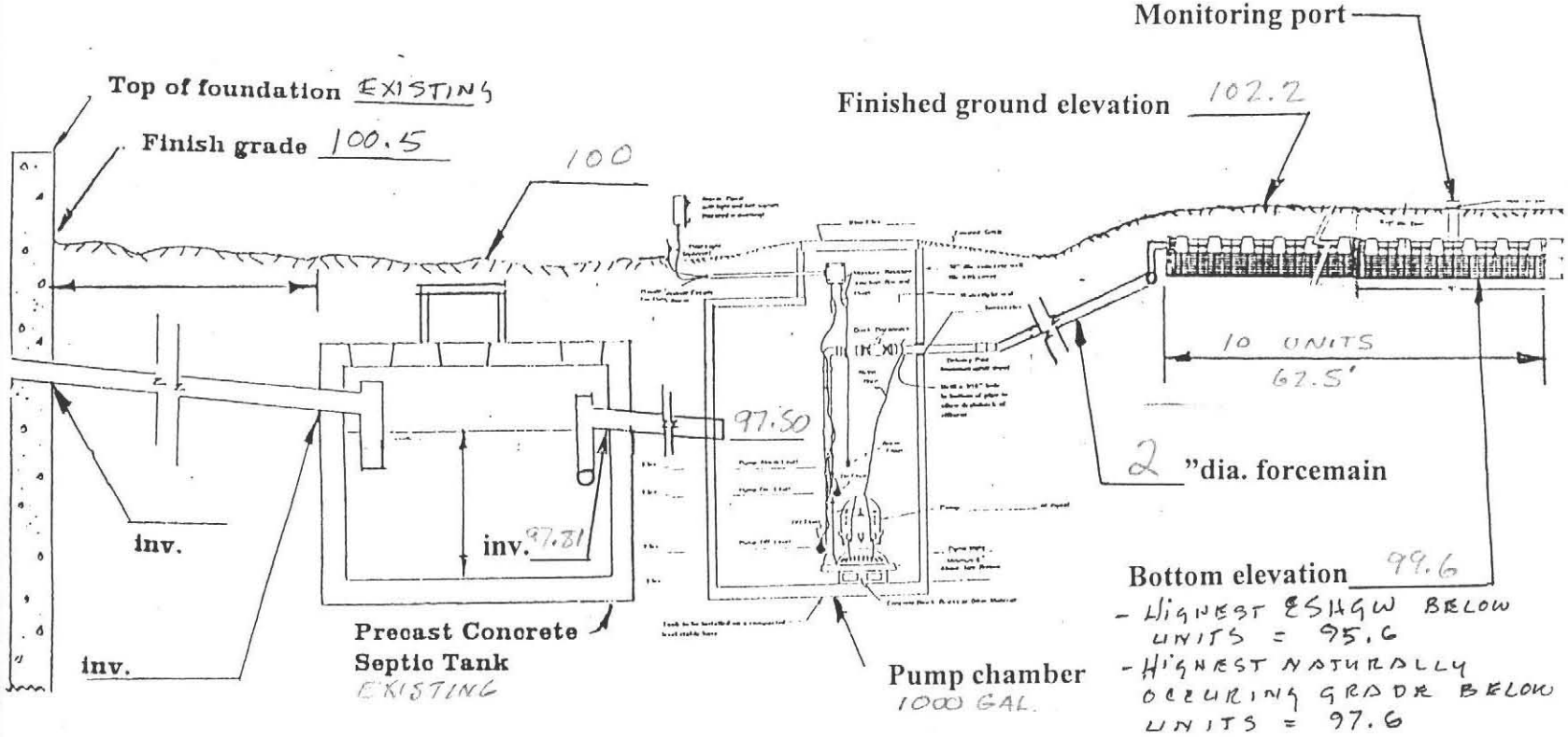
Septic System Profile



NOTES:

1. The grade above and adjacent to leaching trench shall slope at least 2.0% to prevent accumulation of surface water.
2. The bottom of each leaching trench shall be level at the elevation specified.
3. Pipe from foundation wall to septic tank shall be schedule 40 PVC or equivalent and have a minimum grade of 1/4" per foot.

COMMONWEALTH OF MASSACHUSETTS
DAVID E. KEATES
NO. 31564
REGISTERED PROFESSIONAL ENGINEER

David E. Keates 10/22/04
REV 10/29/04

PROJECT

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA

Sheet 18 of 23

David E. Keates, P.E.
Consulting Civil Engineer
102 Russell Street
Sunderland, MA 01375
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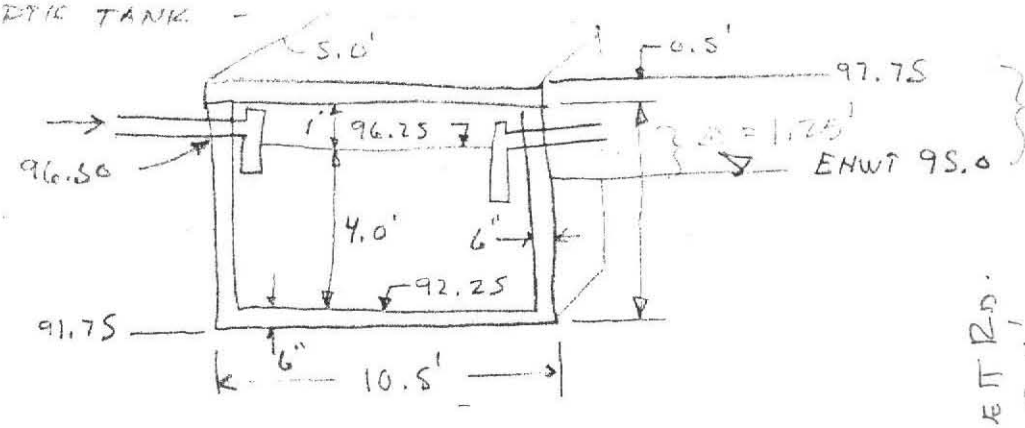
SEPTIC TANK -



WGT TANK -

TOP = 5.0(10.5)(0.5)(150) = 3937.5 # ↓

BOTTOM = " 3937.5 # ↓

(2) SIDES = 10.5(5.0)(0.5)(150)(2) = 7875 # ↓

(2) ENDS = 4.0(5.0)(0.5)(150)(2) = 3000 # ↓

18750 # ↓

TOP OF 318 LEVERETT RD. SUBJECT TANK IS 3.11' MINIMUM ABOVE ESHGW. THIS IS SAFER THAN TANK CALCED. (TOP S.TANK = 99.31 − INV. OUT = 97.81 − ESHGW MAX = 96.2)

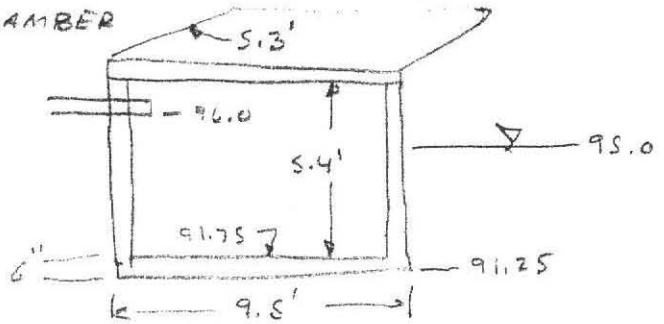
WGT DISPLACED WATER

10.5 × 5.0 × (95.0 − 91.75)(62.4) = 10647 # ↑ (3.25)

FACTOR OF SAFETY AGAINST FLOATING = 18750/10647 = 1.76

NOTE: DOES NOT INCLUDE WEIGHT OF SOIL ON TOP OF TANK

PUMP CHAMBER



REGISTERED ENGINEER DAVID E. KEATES No. 31564 COMMONWEALTH OF MASSACHUSETTS

David E. Keates 10/14/04 REV. 10/29/04 w/ permission of DEK.

WGT TANK TOP 9.5(5.3)(.5)(150) = 3776.25 # ↓

BOTTOM " 3776.25 # ↓

2 SIDES 5.4(9.5)(.5)(150)(2) = 7695.0 # ↓

2 ENDS 4.3(5.4)(.5)(150)(2) = 3483.0 # ↓

18730 # ↓

WGT DISPLACED WATER

9.5 × 5.3 × (95.0 − 91.25) 62.4 = 11781.9 # ↑ (3.75)

FACTOR OF SAFETY AGAINST FLOATING 18730 / 11782 = 1.58

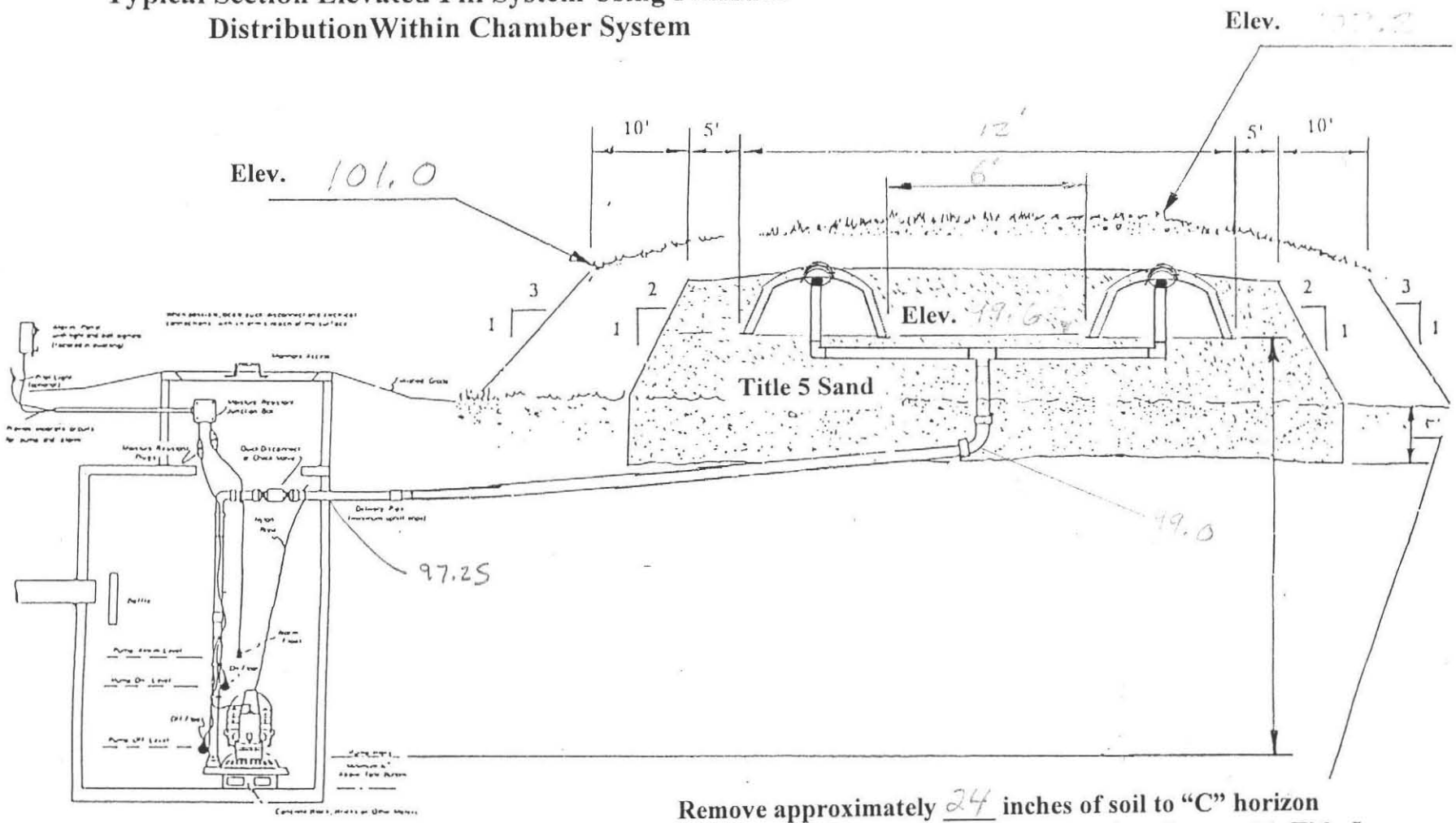
NOTE: NEW TANKS ARE PLACED BETWEEN EXISTING SEPTIC TANK & HOUSE. EXISTING SEPTIC TANK SHOULD SUFFICE THAT THESE CALCULATIONS UNNESSESARY AS THIS TANK IS DEEPER IN GROUND AND HAS NOT FLOATED.

PROJECT BUOYANCY CALCULATIONS, 318 LEVERETT RD - Amherst. Sheet of

NOTE: Bottom of Pump Chamber = ELEV. 93.0; MAX ESHGW @ CHAMB. = ELEV 94.25; NO CALCS REQUIRED.

David E. Keates, P.E.
Consulting Civil Engineer
102 Russell Street
Sunderland, MA 01375
Tel: 413-665-7670

Typical Section Elevated Fill System Using Pressure Distribution Within Chamber System



Note: Proposed pump capacity = MYERS WHRS 1/2 HP OR EQUAL

Remove approximately 24 inches of soil to "C" horizon within limits shown and backfill to section shown with Title 5 sand. Same fill section applies around entire leaching system.

PROJECT

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA

Sheet 17 of 23

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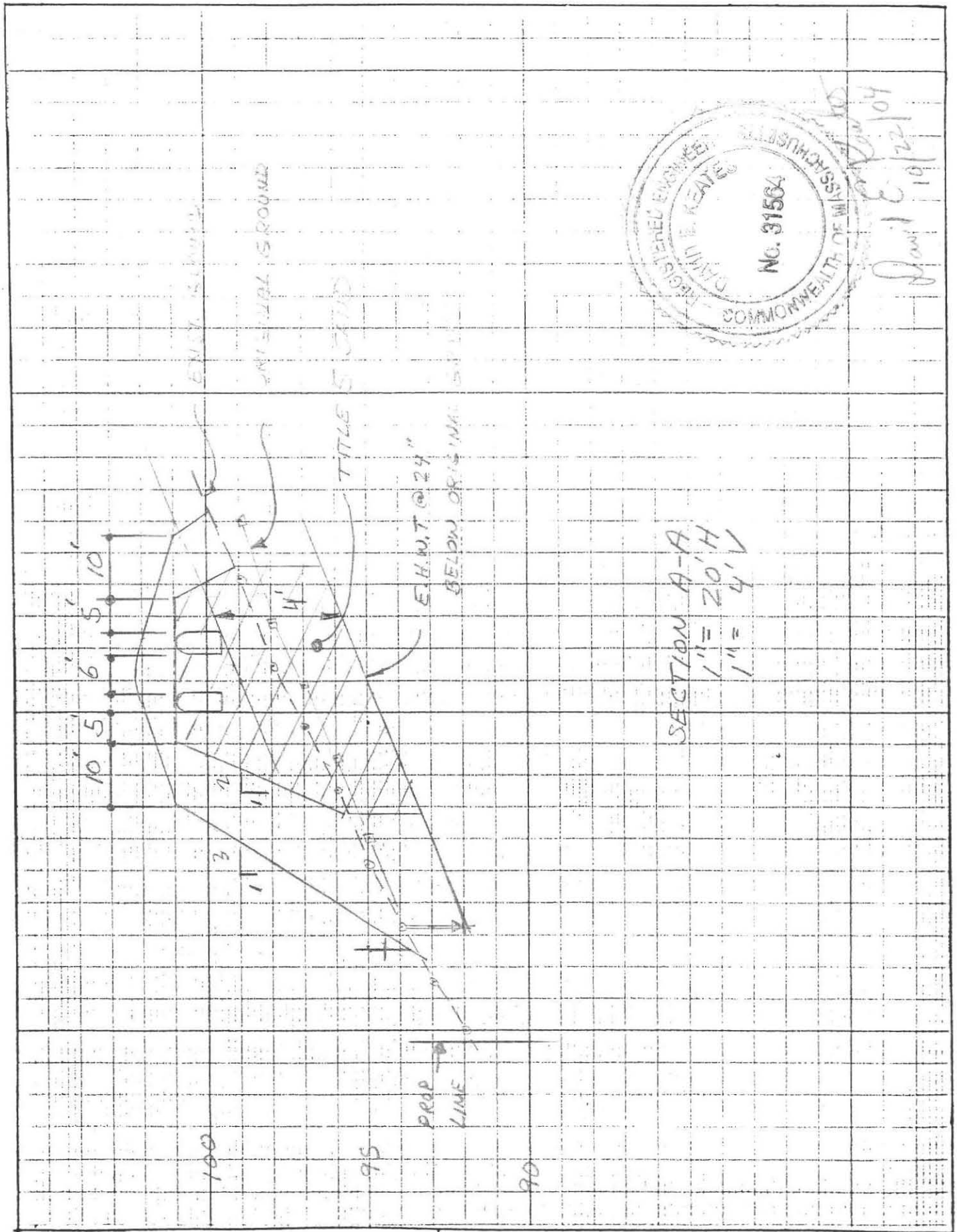
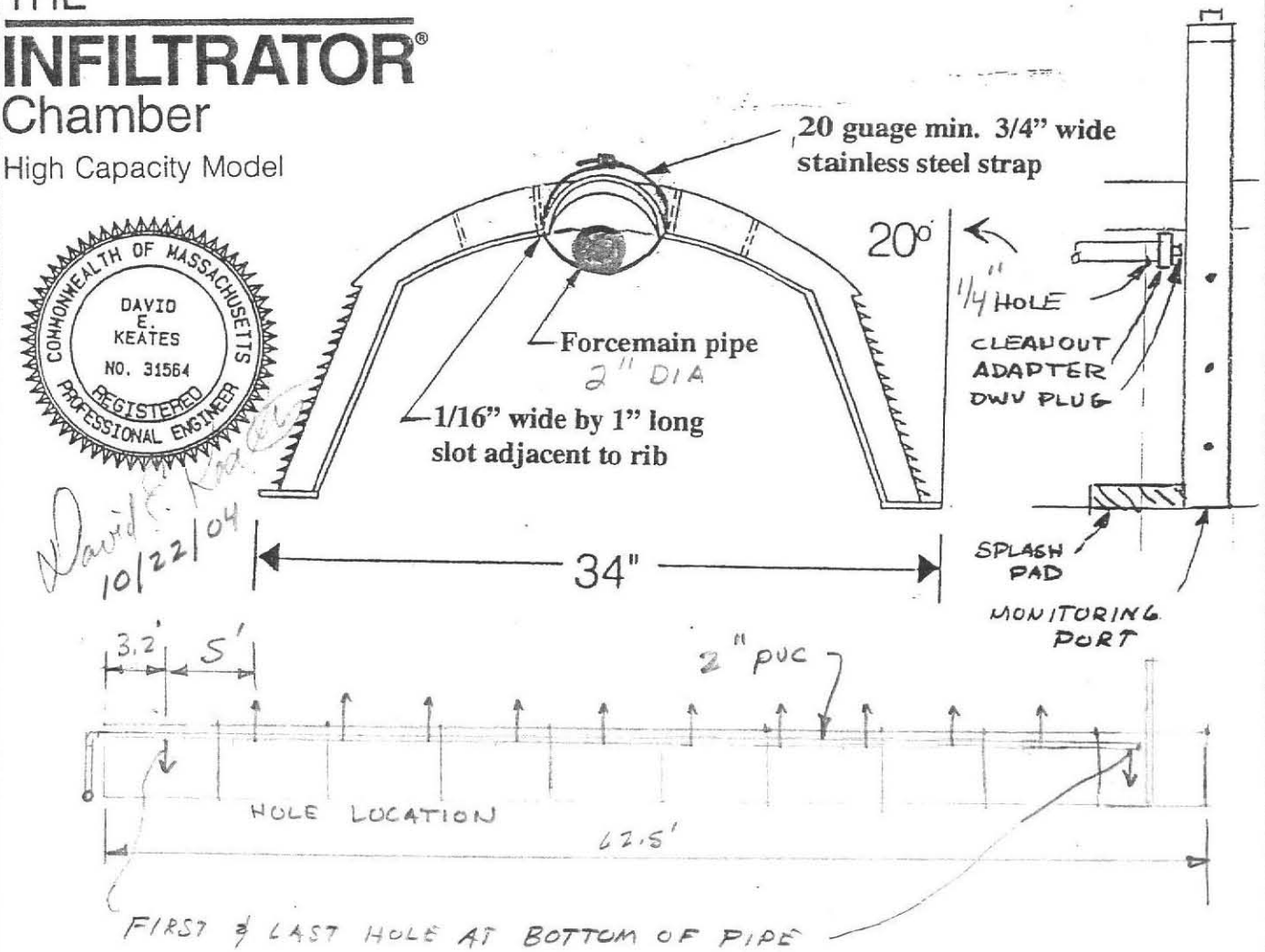


PROJECT

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA
Sheet 20 of 23

DAVID E. KEATES, P.E.
CONSULTING CIVIL ENGINEER
102 RUSSELL STREET
SUNDERLAND, MASSACHUSETTS 01375
Tel. 413-665-7670

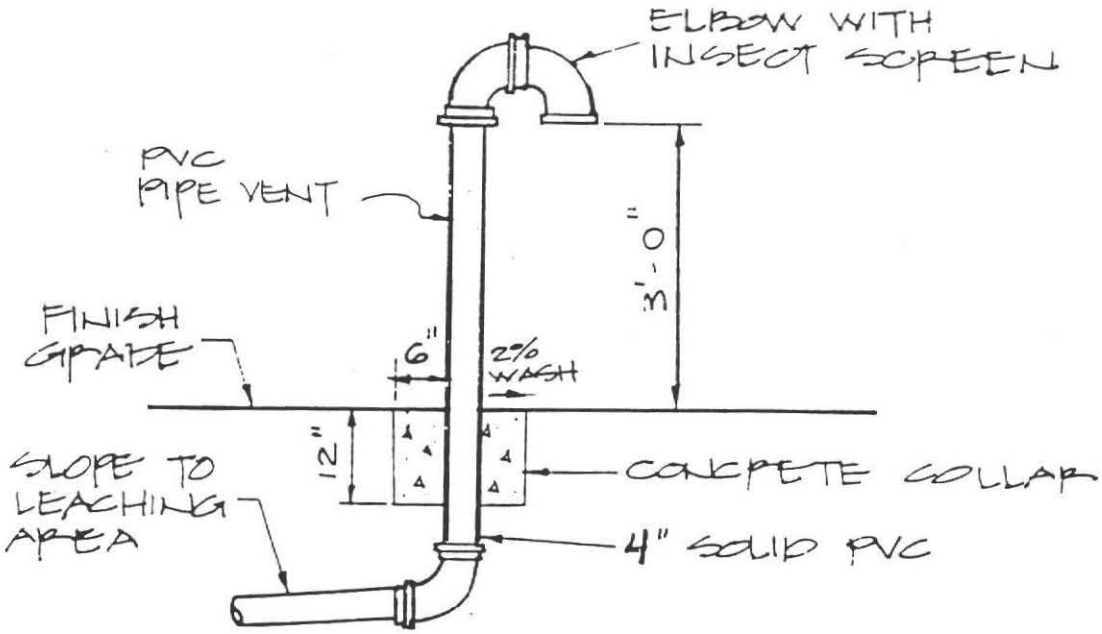
THE
INFILTRATOR®
Chamber
High Capacity Model



Pressure Distribution Pipe Installation

1. Remove round monitoring port in center of each unit.
2. Install stainless steel strap through slot adjacent to rib and port.
3. Slide pipe through straps or reach through opening and pull pipe up to strap.
4. Insure that the holes are in the proper position facing up and secure pipe with strap.
5. All perforations shall be carefully drilled to the specified diameter and deburred.
6. Install one strap per unit as close to monitoring port as possible.
7. Install PVC plug in each port when pipe in place and testing complete.
8. Seal straps on top of unit with silicone sealant or equal.
9. Drill ___in. diameter holes at the 2:00 and 10:00 positions in the pipe within the units. Space the holes _5_ feet on center on alternate sides of the pipe. Drill a _1/4_ in. diameter hole at the bottom of the pipe just in front of the cleanout adapter to insure pipe empties.
10. Install a 12 in. x 12 in. x 2 in. concrete or equal splash pad below the last hole in the bottom of the pipe and centered on the hole. AND AT THE FIRST HOLE

Project:	**Sewage Disposal System** **Wood Land Nominee Trust** **318 Leverett Road** **Amherst, MA**	**Sheet 21 of 25**	**David E. Keates, P.E.** **Consulting Civil Engineer** **102 Russell Street** **Sunderland, MA 01375** **Tel: 413-665-7670**



SANITARY VENT

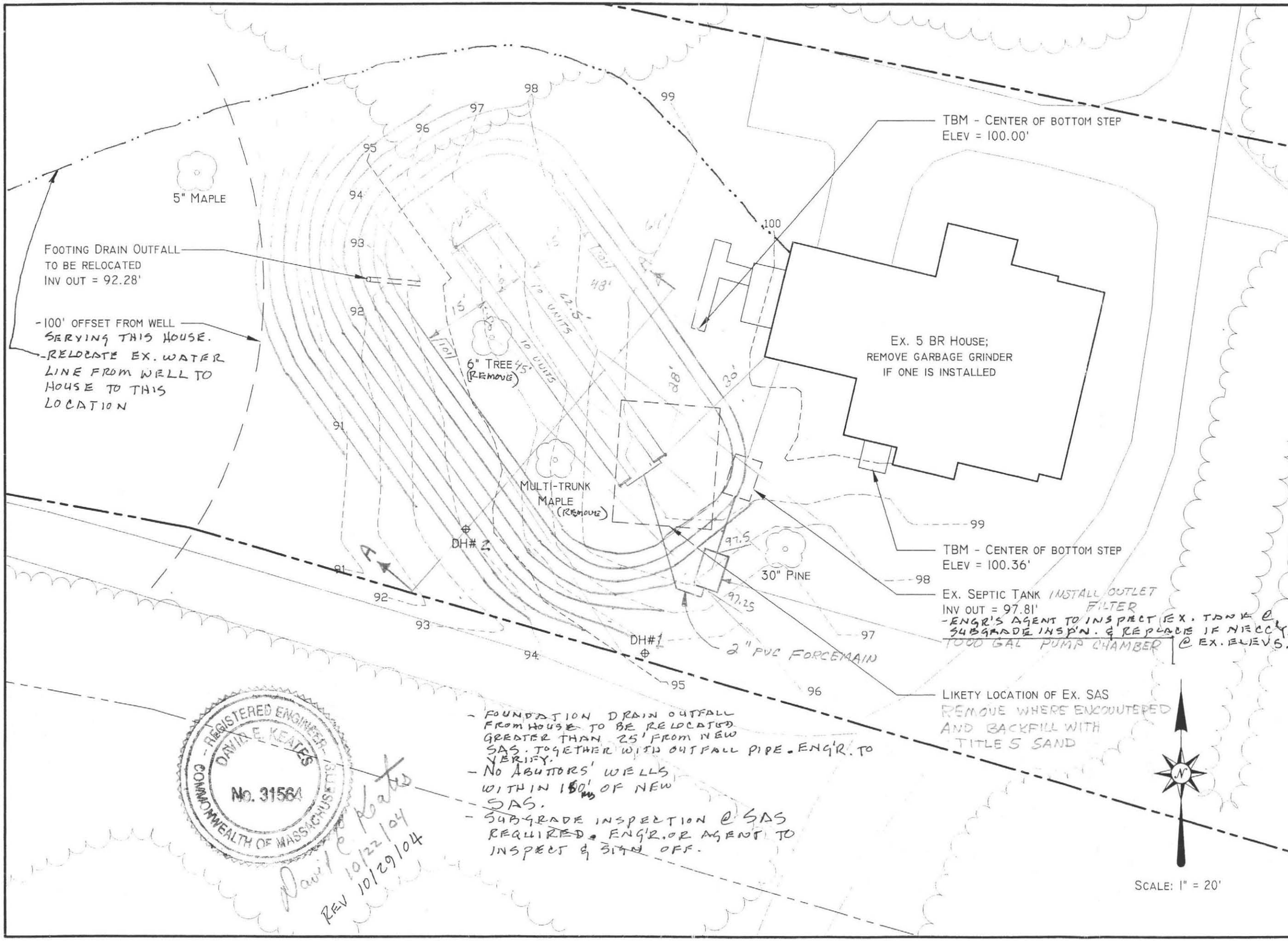
NO SCALE

PROJECT

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA

Sheet 3 of 3

David E. Keates, P.E.
Consulting Civil Engineer
102 Russell Street
Sunderland, MA 01375
Tel: 413-665-7670



LAND SOLUTIONS
TWO AMHERST ROAD
SUNDERLAND MA. 01375
413-665-4777
Sheet 2 of 2

SEPTIC DESIGN PLAN

FOR:
WOOD LAND NOMINEE TRUST

AT:
ASSESSOR'S PARCEL 90
318 LEVERETT ROAD, AMHERST, MA

JOB # : 04-001
DATE : OCTOBER 12, 2004
SCALE : 1" = 20'
DRAWN BY : PMB
REVISION :

WHITMAN & BINGHAM ASSOCIATES, ~~INC.~~ LLC
Professional Engineers and Land Surveyors
20 Pearson Blvd.
Gardner, Mass. 01440

(978) 632-5365 FAX (978) 632-7582

LETTER OF TRANSMITTAL

DATE 12/23/04	JOB NO.
ATTENTION	
RE: SAS As-Built #318 Leverett Rd For Woodland Nominee Trust	

TO DAVID ZAROZINSKI,
AMHERST BOARD of HEALTH
BANGS COMMUNITY CENTER
70 BOLTWOOD WALK
AMHERST MA 01002

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☒ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
4	12/22/04		SAS As-Built Plan

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval
☒ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints
☐ For review and comment ☐ _____
☐ FOR BIDS DUE _____ ☐ PRINTS RETURNED AFTER LOAN TO US

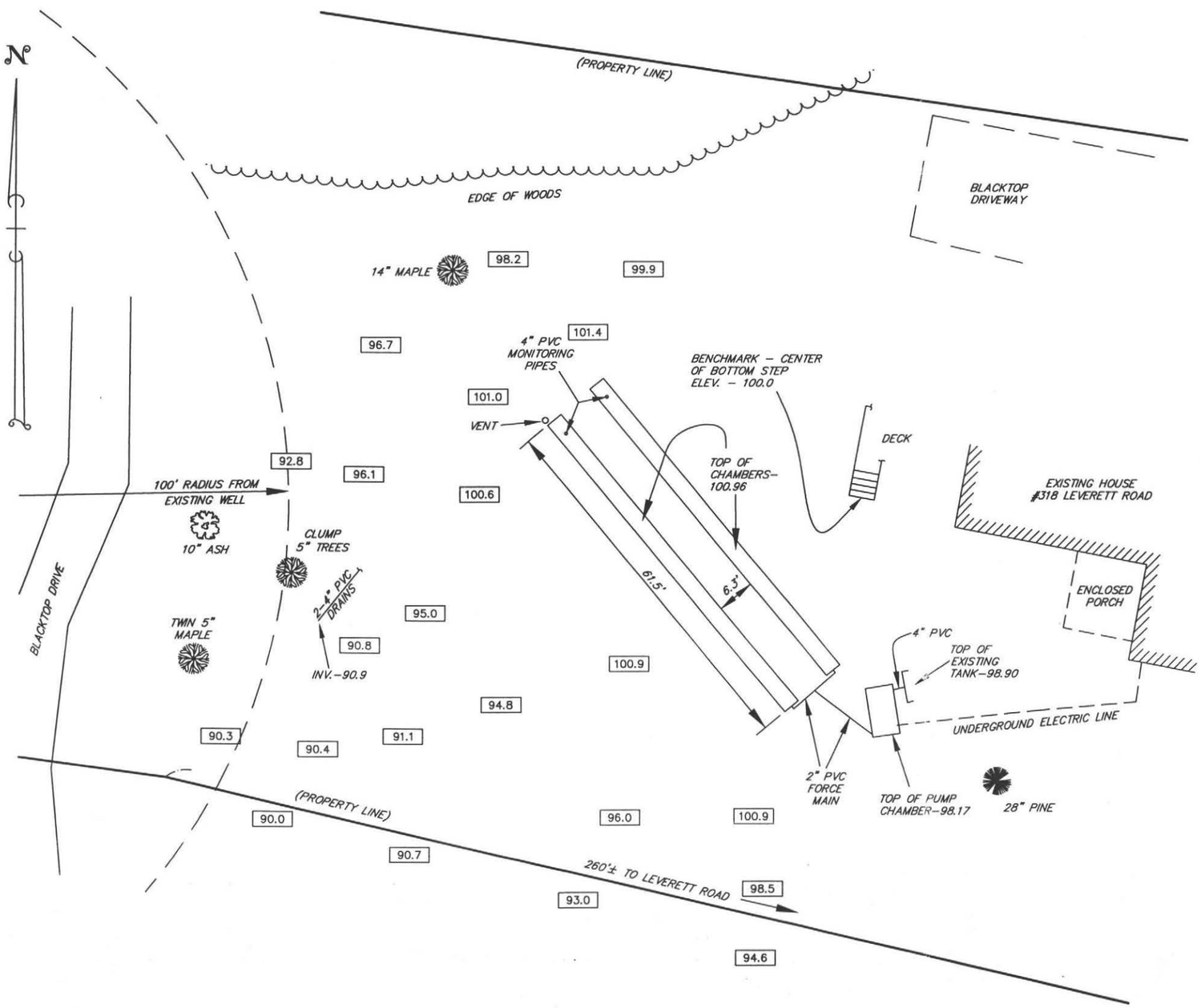
REMARKS PLEASE FIND ENCLOSED FOUR (4) COPIES OF THE SAS AS-BUILT FOR #318 LEVERETT ROAD AS PERFORMED BY WHITMAN & BINGHAM ASSOCIATES LLC. A COPY OF THE PLAN AND THIS TRANSMITTAL IS ALSO BEING SENT TO ANDREW LEONARD OF EMG ASSOCIATES.

CHRIS PERA
PROJECT SURVEYOR, GARDNER OFFICE

COPY TO ANDREW LEONARD - EMG ASSOCIATES

SIGNED: C. Pera

If enclosures are not as noted, kindly notify us at once.



SCHEDULE OF PROPOSED ELEVATIONS:

(SEE DESIGN PLAN NOTE)

INVERT 4" PVC OUT AT SEPTIC TANK: 97.81
INVERT 4" PVC IN AT PUMP CHAMBER: 97.5
INVERT 2" PVC OUT AT PUMP CHAMBER: 97.25
INVERT 2" PVC TEE (BOTTOM): 99.0
BOTTOM OF CHAMBERS (END, MIDDLE, END): 99.6

SCHEDULE OF AS–BUILT ELEVATIONS:

INVERT 4" PVC IN AT SEPTIC TANK: 97.84
TOP OF EXISTING SEPTIC TANK: 98.90
INVERT 4" PVC OUT AT SEPTIC TANK: 97.63
INVERT 4" PVC IN AT PUMP CHAMBER: 97.48
TOP OF PUMP CHAMBER: 98.19
INVERT 2" PVC OUT AT PUMP CHAMBER: 97.33
INVERT 2" PVC TEE (TOP): 99.12
INVERT 2" PVC TEE (BOTTOM): 99.63
TOP OF CHAMBERS (END, MIDDLE, END): 100.96
BOTTOM OF CHAMBERS (END, MIDDLE, END): 99.63

NOTE: DESIGN PLAN BY DAVID E. KEATES, P.E., CONSULTING CIVIL ENGINEER, 116 MAIN STREET, HATFIELD, MA 01038, DATED OCTOBER 22, 2004 (REVISED OCTOBER 29, 2004), PREPARED FOR WOOD LAND NOMINEE TRUST

101.9 *SPOT ELEVATIONS*

COMMONWEALTH OF MASSACHUSETTS
BRIAN F. MILISCI
CIVIL
#38102
REGISTERED PROFESSIONAL ENGINEER

12/22/04
AS-BUILT

318 LEVERETT ROAD

SAS AS–BUILT PLAN

LAND IN AMHERST, MASS.

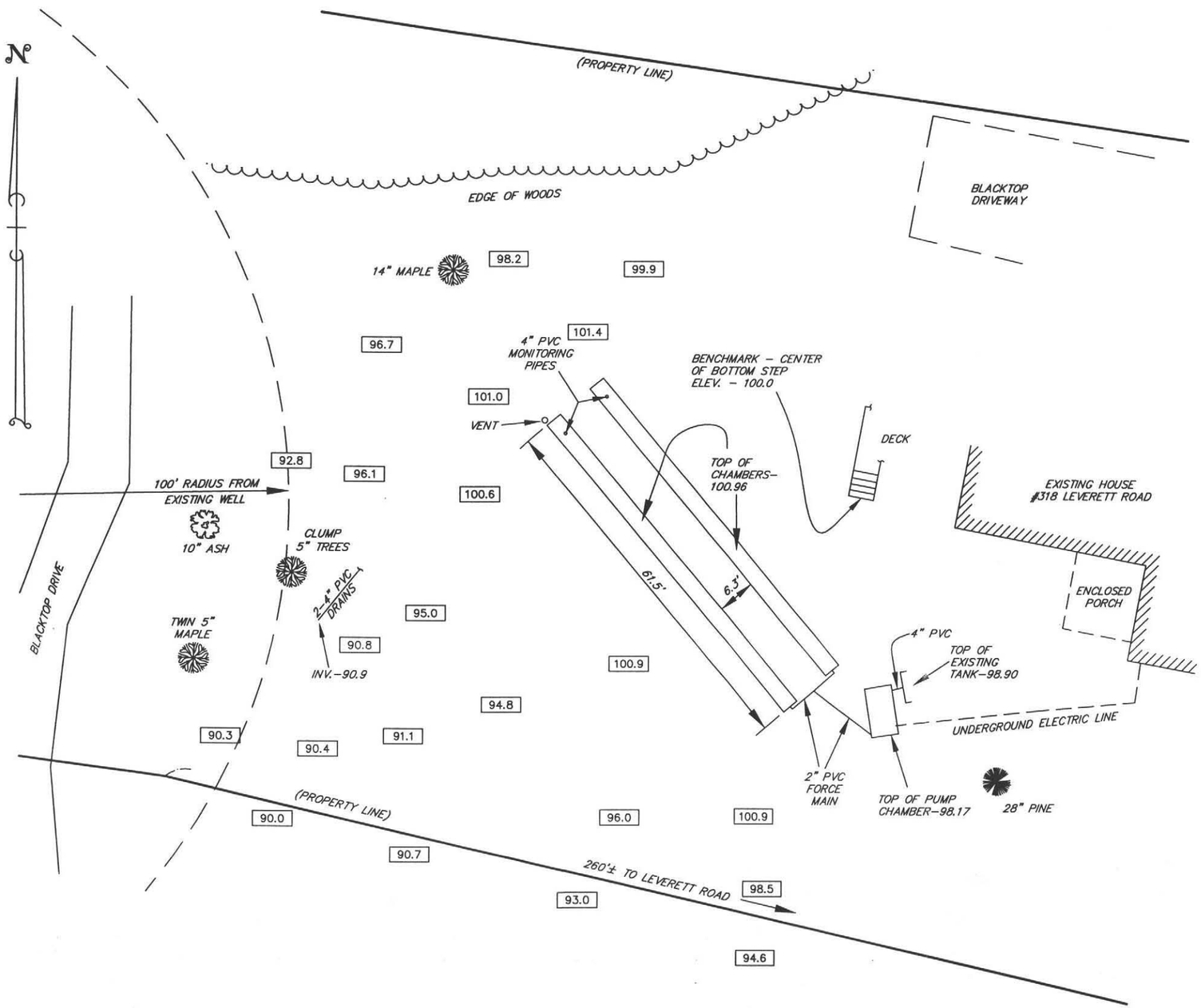
PREPARED FOR

WOOD LAND NOMINEE TRUST

DECEMBER 22, 2004

SCALE: 1" = 20'

WHITMAN & BINGHAM ASSOCIATES, LLC.
REGISTERED PROFESSIONAL ENGINEERS & LAND SURVEYORS
510 MECHANIC STREET – LEOMINSTER, MASSACHUSETTS 01453
20 PEARSON BLVD. – GARDNER, MASSACHUSETTS 01440



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101.9 SPOT ELEVATIONS

COMMONWEALTH OF MASSACHUSETTS
BRIAN F. MILISCI
CIVIL
#38102
REGISTERED PROFESSIONAL ENGINEER

12/22/04
AS-BUILT

318 LEVERETT ROAD

SAS AS–BUILT PLAN

LAND IN AMHERST, MASS.

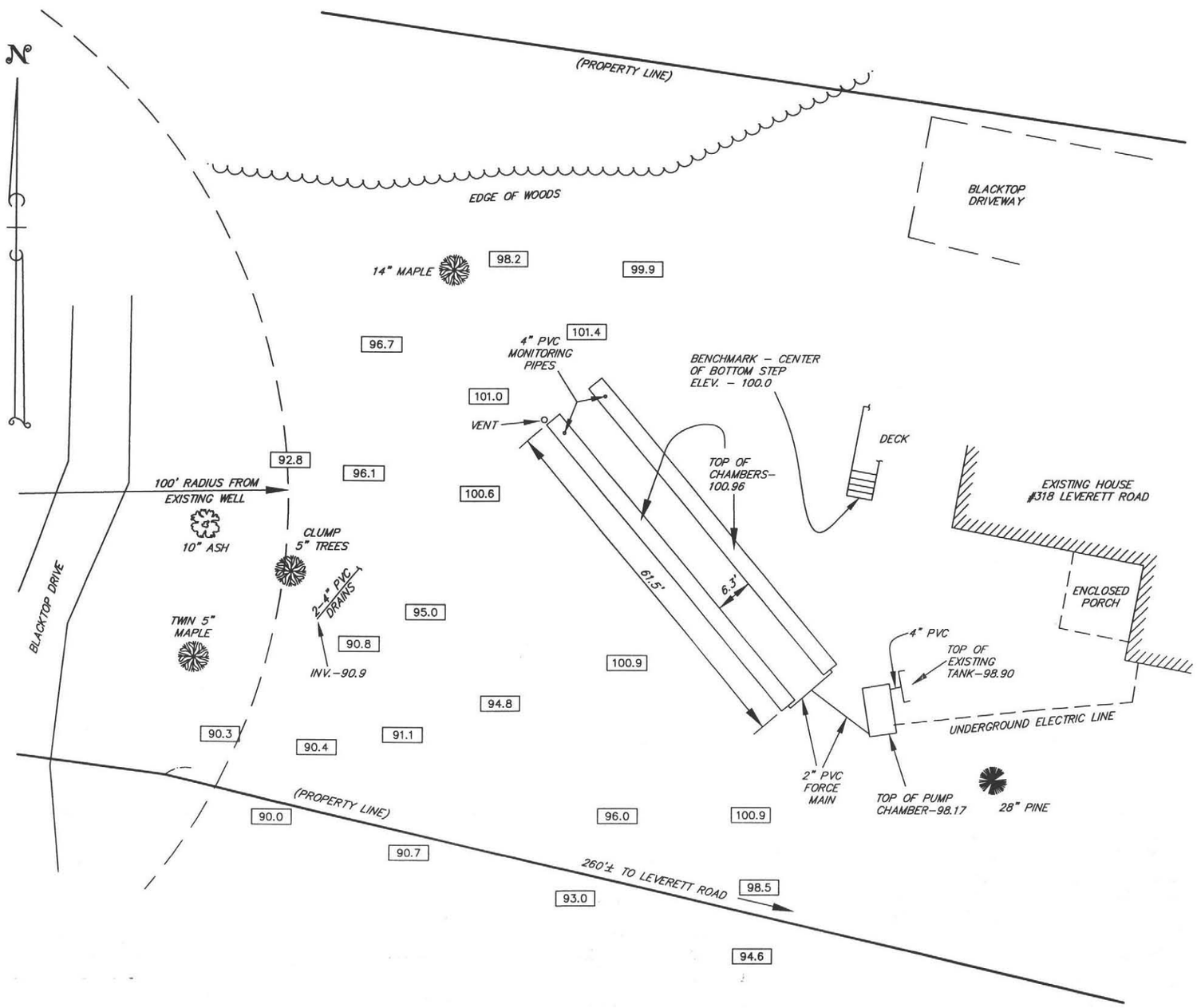
PREPARED FOR

WOOD LAND NOMINEE TRUST

DECEMBER 22, 2004

SCALE: 1" = 20'

WHITMAN & BINGHAM ASSOCIATES, LLC.
REGISTERED PROFESSIONAL ENGINEERS & LAND SURVEYORS
510 MECHANIC STREET – LEOMINSTER, MASSACHUSETTS 01453
20 PEARSON BLVD. – GARDNER, MASSACHUSETTS 01440



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101.9 *SPOT ELEVATIONS*

COMMONWEALTH OF MASSACHUSETTS
BRIAN F. MILISCI
CIVIL
#38102
REGISTERED PROFESSIONAL ENGINEER

12/22/04
AS-BUILT

318 LEVERETT ROAD

SAS AS–BUILT PLAN

LAND IN AMHERST, MASS.

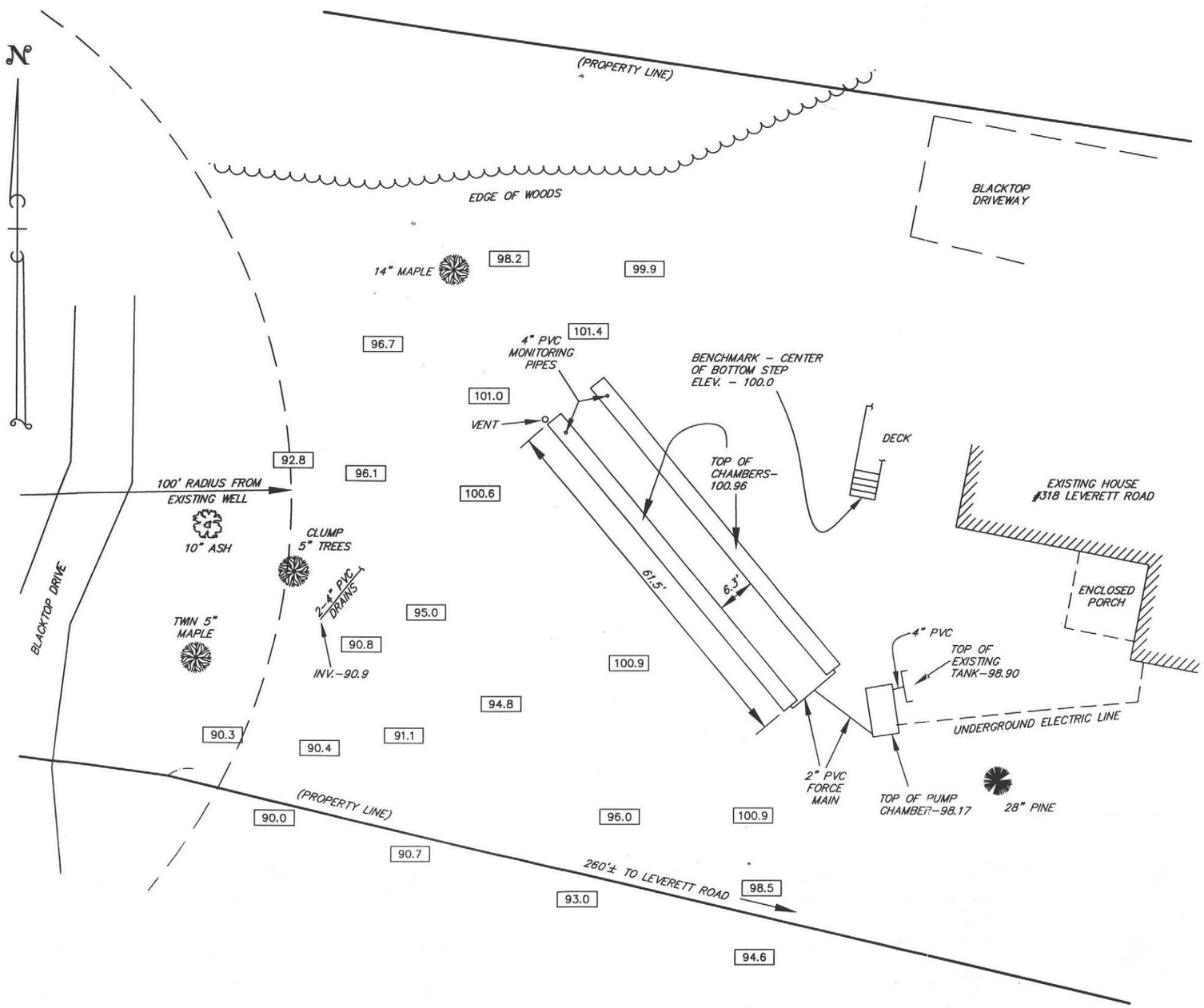
PREPARED FOR

WOOD LAND NOMINEE TRUST

DECEMBER 22, 2004

SCALE: 1" = 20'

WHITMAN & BINGHAM ASSOCIATES, LLC.
REGISTERED PROFESSIONAL ENGINEERS & LAND SURVEYORS
510 MECHANIC STREET – LEOMINSTER, MASSACHUSETTS 01453
20 PEARSON BLVD. – GARDNER, MASSACHUSETTS 01440



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101.9 SPOT ELEVATIONS

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BRIAN F. MILISCI
CIVIL
#38102
REGISTERED PROFESSIONAL ENGINEER

12/22/04
AS-BUILT

318 LEVERETT ROAD

SAS AS–BUILT PLAN

LAND IN AMHERST, MASS.

PREPARED FOR

WOOD LAND NOMINEE TRUST

DECEMBER 22, 2004

SCALE: 1" = 20'

WHITMAN & BINGHAM ASSOCIATES, LLC.
REGISTERED PROFESSIONAL ENGINEERS & LAND SURVEYORS
510 MECHANIC STREET – LEOMINSTER, MASSACHUSETTS 01453
20 PEARSON BLVD. – GARDNER, MASSACHUSETTS 01440

10/29/04

Woodland Nominee Trust – 318 Leverett Road

- Garbage grinder – says Yes and No – which is it – must be verified
- Deep holes not marked #1 and #2. Need to know which was used for elevations on page 18
- No well statements re: abutters wells
- Whose well is 100 foot offset? If homeowner's well, must note water line as it may cross system
- Remove "multi-trunk maple" and "6" pine" and all others near system
- Recommend replacing old tank.
- Page 1 – Soils eval. Form- HWT is listed as 26. Correct to 24
- Page 4 – "One perc waived" – remove statement or return and do second perc
- Pump chamber needs buoyancy calculations, as does new septic tank if installed.
- Page 18 – missing elevations at foundation
- Must be sure that foundation drain is removed/relocated – engineer to verify
- Bottom inspection to be done by engineer.
- If new tank is installed, provide profile and elevations.

978-342-7972

665-4777

NOT PD

FORM 11: Soil Evaluation Form NO: 8130

Commonwealth of Massachusetts
Town of: Amherst

Soil Suitability Assessment : On-Site Sewage Disposal

Performed By: _____ Date: _____
Witnessed By: Mike Mitrunge

Location Address of: Lot #
Owner's Name: Wood Inn New Trust
Address of: 318 Lowell Rd
Telephone:

New Construction ☐ Repair ☑

Office Review

Published Soil Survey Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____ Soil Map Unit _____
Drainage Class _____ Soil Limitations _____

Surficial Geologic Report Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____
Geologic Material (map unit) _____
Landform _____

Flood Insurance Rate Map:
Above 500 year flood boundary? No ☐ Yes ☐
Within 500 year flood boundary? No ☐ Yes ☐
Within 100 year flood boundary? No ☐ Yes ☐

Wetland Area:
National Wetland Inventory Map (map unit) _____
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS): month _____
Range: Above Normal ☐ Normal ☐ Below Normal ☐

Other Reference Reviewed:

Determination: Seasonal High Water Table

Methods Used:

☐ Depth observed standing in observation hole _____ inches
☐ Depth weeping from side of observation hole _____ inches
☐ Depth to soil mottles _____ inches
☐ Ground water adjustment _____ feet

Index Well No. _____ Reading Date _____ Index Well Level _____
Adjustment factor _____ Adjusted ground water level _____

Depth of Naturally Occurring Previous Material

Does at least four feed of naturally occurring previous materials exist in all areas observed throughout the area proposed for this soil absorption system? _____

If not, what is the depth of naturally occurring previous material?
_____

Certification

I certify that on _____ (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise, and experience described in 310 CMR 15.017.

Folder 9/13 - WAITING PILE

Enter - New
→ Repair to Septic System.

OTHERWISE IGNORE

On-Site Review

Deep Hole Number 1 Date: 8/31/04 Time 8:30
Weather Cloudy Rain
Location (identify on site plan)
Land Use Residential Slope (%) 5%
Surface Stone None
Vegetation: Grasses

Landform: Till Terrace

Position on Landscape (sketch on back)
Distances from:

Open Water Body	100+ feet	Drainageway	— feet
Possible Wet Ares	60' feet	Property Line	50± feet
Drinking Water Well	60' feet	Other	—

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
12	Ap	FSL	10YR 3/3		Loose Crumb many fine roots
24	Bw	FSL	10YR 5/6		Subangular gravel
137	C	FSL	10YR 5/4	10% 7.5YR 5/6	massive friable 10% subangular gravel massive friable 15% gravel

Parent Material (geologic) Ab Till
Depth to Bedrock
Depth to Groundwater :
Standing Water in the Hole —
Weeping from Pit Face 122
Estimated Seasonal High Water 24"

On-Site Review

Deep Hole Number 2 Date: 8/31/04 Time 8:30
Weather Cloudy Rain
Location (identify on site plan)
Land Use Residential Slope (%) 3%
Surface Stone None
Vegetation: Grasses

Landform: Till terrace

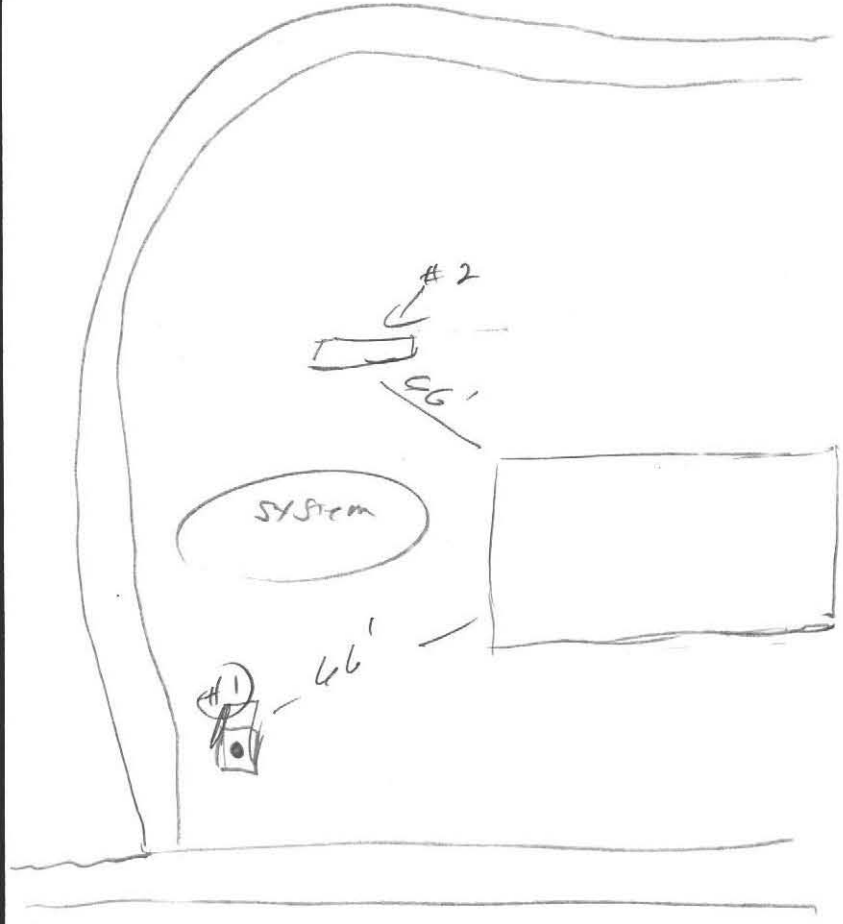
Position on Landscape (sketch on back)
Distances from:

Open Water Body	feet	Drainageway	feet
Possible Wet Ares	feet	Property Line	feet
Drinking Water Well	feet	Other	

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
9	Ap	FSL	—	—	Loose Crumb 2% gravel
24	Bw	FSL	—	—	Massive
144"	C	FSL	[illegible]	24" 10% 5YR 4/6	Friable roots Massive 20% subangular gravel

Parent Material (geologic) Ab Till
Depth to Bedrock 144
Depth to Groundwater :
Standing Water in the Hole —
Weeping from Pit Face 120
Estimated Seasonal High Water 24"



FORM 12: Percolation Test
Location Adrress or Lot # 318 A Leverett Rd

Commonwealth of Massachusetts
Town of Amherst

PERCOLATION TEST *		
DATE: 8/31/04		TIME:
Observation Hole #	4	
Depth of Perc	60"	
Start Pre-soak	8:09	
End Pre-soak	8:24	
Time at 12"	8:24	
Time at 9"	8:42	
Time at 6"	9:08	
Time (9"-6")	26	
Rate Min./Inch	8+ (10) 15	

**Minimum of one percolation test must be performed in both the primary area and reserve area.*

Site Passed ☑ Site failed ☐

Performed by C. Baysen Land Surveyors

Witnessed by David Zaczalski

Comments:

FORM 1A - APPLICATION FOR DSCP

No. 04-15

Fee 275 pd
chk# 005 105

REGISTERED ENGINEER - DAVID E. KEATES - No. 31564 - COMMONWEALTH OF MASSACHUSETTS

COMMONWEALTH OF MASSACHUSETTS

Board of Health, AMHERST, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

Application for a Permit to: Construct ( ) Repair (✓) Upgrade ( ) Abandon ( )

☐ Complete System ☑ Individual Components

David E. Keates 10/22/04 REV 10/29/04

Location 318 LEVERETT ROAD	Owner's Name WOOD LAND NOMINEE TRUST
Map/Parcel# MAP 3A Parcel 90	Address 312 LEVERETT ROAD AMHERST, MA
Lot#	Telephone# 548-9802
Installer's Name TONY ROCOT	Designer's Name DAVID E. KEATES, P.E.
Address 126 WHITLEY RD S. DEERFIELD	Address 116 MAIN ST. HATFIELD, MA
Telephone# 665-2735	Telephone# 665-4777

Type of Building: HOUSE

Lot Size 1.2 Ac ~~sq.ft.~~

Dwelling - No. of Bedrooms 5

Garbage grinder (NO

Other - Type of Building —

No. of persons — Showers ( ), Cafeteria ( )

Other Fixtures —

Design Flow (min. required) 550 gpd Calculated design flow _____ gpd

Design flow provided 585 gpd

Plan: Date 10/22/04 Number of sheets 23 Revision Date _____

Title SEWAGE DISPOSAL SYSTEM FOR WOOD LAND NOMINEE TRUST

Description of Soil(s) SEE LOGS SHEETS 8 & 9 OF 23

Soil Evaluator Form No. _____ Name of Soil Evaluator CHRISTIAN BOYSEN

Date of Soil Evaluation 8/31/04

DESCRIPTION OF REPAIRS OR ALTERATIONS _____

The undersigned agrees to install the above described Individual Sewage Disposal System in accordance with the provisions of TITLE 5 and further agrees to not to place the system in operation until a Certificate of Compliance has been issued by the Board of Health.

Signed [signature] PMB Date 10/25/04

Inspections _____

DEP APPROVED FORM 5/96

Septic System Installation
Certificate of Compliance

The undersigned engineer/inspector on 11.19.04, inspected a Title 5 septic system installed by KOCOT & SONS for, WOODLAND TRUST at 318 LEVERETT RD in the town of AMHERST, MA and certifies that, based upon field observation and supporting information provided by the installer, the disposal works as constructed generally satisfies the requirements of Title 5 and the design plan entitled

SYSTEM FOR WOODLAND TRUST (Plan Title) REV 10/29/04 (Plan Date)

With the following comments:

1. EFFLUENT FILTER INSTALLED.
2. BACKFILL SYSTEM PER PLANS
3. EXISTING SEPTIC TANK IS SOUND.

Engineer's/Inspector's Signature

11/19/04
Date

I am currently a licensed installer in the Town and have installed the above referenced septic system in accordance with the above referenced plan and have addressed any comments prepared by the inspector and/or B.O.H. representative made during their inspections. A dimensional as-built plan has been provided to the owner, Board of Health and the inspector showing two dimensions from permanent points to each of the following: septic tank invert-in and invert-out, all angle points in all piping, D-box, beginning and end of each leaching trench, cleanouts, the four corners of each leach field, center cover of each leach chamber, monitoring port in each leaching gallery and any other items as deemed necessary. As-built elevations have been recorded on the plans submitted to the owner, inspector and Board of Health. The above items shall be completed prior to the inspector's site visit for review at the time of inspections.

The installer shall fax copies of the following to Land Solutions at 413/665/4777 before calling to schedule final inspection:

1. Current Installer's license.
2. Approved Disposal Works Construction Permit.
3. As-built ties and elevations per above.
4. Certificate for T-5 sand utilized in this installation

Henry Kocot
Installer's Signature

H.C. KOCOT + SONS INC
Installer's Name

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA
Sheet 1 of 2

Date

Date

Disposal Works Construction Permit # _____

Approved for construction on _____
Date

Installer to send signed copy of this form to the owner, engineer/inspector and Board of Health. The original signature of both the inspector and the installer are to be on this form prior to sending to the above parties. Final payment will be made to the installer after the owner receives this form. The issuance of this certificate shall not be construed as a guarantee that the system will function as designed. Installer shall call the designer 72 hours in advance to schedule inspections and shall have the original signed Disposal Works Construction Works Permit in hand and a check for $_____ for the engineer's inspection.

PAGE 2 OF 2

FORM 3A - CERTIFICATE OF COMPLIANCE

No. 04-15

Fee _____

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

CERTIFICATE OF COMPLIANCE

Description of Work: ☒ **Individual Component(s)** ☐ **Complete System**

The undersigned hereby certify that the Sewage Disposal System;

Constructed ( ), Repaired ( ), Upgraded (X), Abandoned ( )

by: Wood Land Trust

at: 318 Leverett Rd

has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to application No. X

dated REV. 10/29/04. Approved Design Flow 585 (gpd)

Installer Kocot & Sons

Designer: David Krates

Inspector Carol Racozzi for

Date 11/18/04

PAGE 1 OF 2

O.K.

The issuance of this permit shall not be construed as a guarantee that the system will function as designed.

Sewage Disposal System
Wood Land Nominee Trust
318 Leverett Road
Amherst, MA
Sheet 1 of 2

DEP APPROVED FORM 5/96