VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

Madison County Health Department
400-A North Main Street PO Box 67
Madison, Virginia 22727
(540) 948-5481 Voice
(540) 948-3841 Fax

Sewage Disposal System Operation Permit

Property Owner
Stephen Smith
2422 Silver Fox Lane
Reston, Virginia 20191
Phone: (571) 331-6503

Health Dept. ID: **SD-07-40**
Tax Map: **9-33H**

Locality: Madison

Property Location
Property Address: Champe Plain Road
Etlan, Virginia 22719

Directions: Take rt 231 towards Etlan. Turn left on rte 646, a dirt road on the left shortly after the intersection with rte 644 leads to the lot

==========

Stephen Smith is hereby granted permission to operate a septic tank effluent and drainfield Sewage System at the above referenced location, having a design capacity of **360** gallons per day, or **3** bedrooms maximum.

This permit is issued based on the following use condition(s):
Reduced water flow based on permanent water saving plumbing devices.

This permit is issued in accordance with the provisions of Title 32.1, Chapter 6 of the Code of Virginia as Amended, and Section 12VAC 5-610-340 of the Sewage Handling and Disposal Regulations of the Virginia Department of Health. The issuance of an operation permit does not denote or imply any guarantee by the department that the sewage disposal system will function for any specified period of time. It shall be the responsibility of the owner or any subsequent owner to maintain, repair, or replace any sewage disposal system that ceases to operate in accordance with the regulations.

June 12, 2008
Effective Date

Suzanne Haldin-Coates
EHS

Suzanne Haldin-Coates
Signed June 12, 2008

AOSE/PE Inspection Report and Completion Statement

Commonwealth of Virginia
State Department of Health

Health Department Identification Number: _____ Tax Map: 9-33H

Madison Co Health Department

Name of AOSE/PE: Thomas A. Warby Certification Number: 257

Address: 13235 Matts Lane; Culpeper, VA 22701 Telephone: 540-937-6623

Contractor's Name: JT's Backhoe

Owner's Name: Mr. Stephen Smith

Owner's Address: 2422 Silver Fox Lane Reston, Va 20191

Location of Installation: Subdivision: _____ Section: _____ Block: _____ Lot: _____

Other: 1319 Champ Plain Road, Etlan, Va

Inspection Results

Component	Comments, Materials, Etc. Deficiencies Observed, Date Deficiencies Observed Corrective Action Required	Date Approved
Water Supply Location and Construction	Bey Health Dept TMW	6-08
Building Sewer	4" SCH40 ALL - OK 2 - 45° Ells	
Septic Tank	1050 gal Allied mid seam	12-21-07
Inlet-Outlet Structure	5' 9 1/4" 5' 11 1/4"	12-21-07
Pump and Pump Station	1000 gal Allied mid seam 6" Drawdown	6-3-08
Conveyance Method	pumped 2" SCH40	12-21-07
Distribution Box or Pressure Manifold	16 into 1 in 11 out	12-21-07
Header, Conveyance, Return, etc. Lines	4" SCH20 1'-2' into trenches	12-21-07
Percolation Lines, Drip, Chambers, etc.	gravel, 15" install completed ; 35' long, 3' wide 9' centers	12-21-07
Absorption Trenches and Dispersal Field	① 1'8 1/4" 1'10 1/4" ② 2'6 1/2" 2'8 1/4"	
(Other Components: treatment unit, etc.)	③ 3'4" ④ 4'9 3/4" 4'11 3/4"	
	⑤ 5'8" 5'10 1/4" ⑥ 6'11 1/4" 7'1 1/2"	
	⑦ 7'4" 7'11 1/2" ⑧ 8'6 3/4" 8'9 1/2"	
	⑨ 9'6" 9'8 1/4" ⑩ 10'4 3/4" 10'6 1/2" ⑪ 11'2 1/2" 11'4 1/2"	

Attach observed deficiencies and corrective actions taken on a separate completion statement as necessary.

AOSE/PE Completion Statement: As-Built Drawing

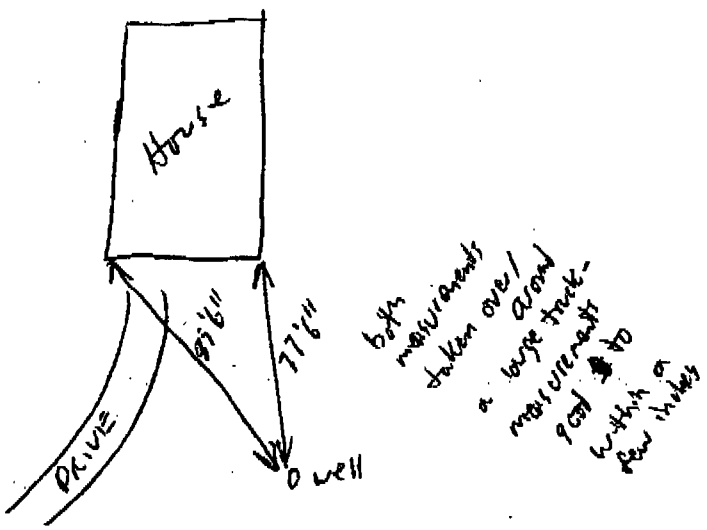
Commonwealth of Virginia
State Department of Health

Health Department Identification Number: _____ Tax Map: 9-37H

Triangulate critical system components to fixed reference points.

SEE ALSO DRAWING BY CONTRACTOR

COMMONWEALTH OF VIRGINIA
THOMAS A. WARBY
No. 257
AUTHORIZED ON-SITE SOIL EVALUATOR



☐ Check here if as-built drawing is on a separate page attached to this form
(Attachment must display Health Dept. Identification Number, tax map number, and must be signed and dated by AOSE/PE)

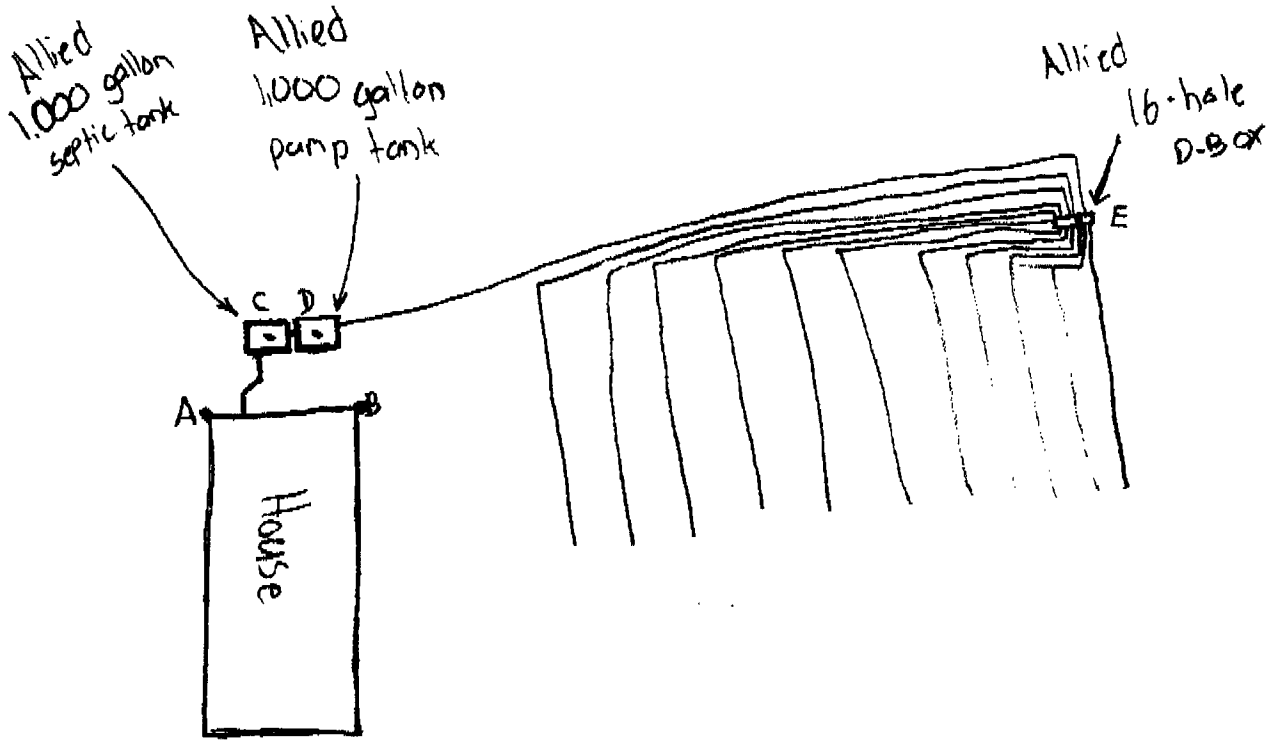
I hereby certify that on 6-3-08 (date), I, or an employee under my direct supervision, inspected this sewage system's construction. The onsite sewage system has been installed and completed in accordance with the construction permit issued on _____ (date) and is in compliance with the *Sewage Handling and Disposal Regulations* (12 VAC 5-610 et seq), *Private Well Regulations* (12 VAC 5-630 et seq), when applicable, and the plans and specifications for the project.

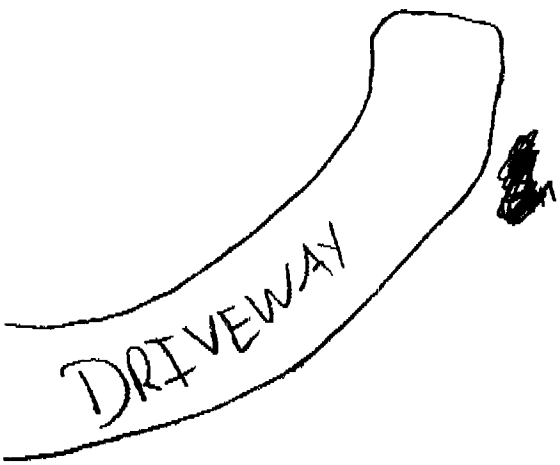
AOSE/PE Signature: T Thomas A. Warby Date: 6-4-08

Print Name: Thomas A. Warby

AOSE Form BB: Revised 04/28/06

As Built By Contractor TM 9-33H (Madison Co)
12-21-07





11-ditches 3' wide 18" deep 35' long

A to C =

A to D =

B to C =

B to D =

B to E =

1. 1'8" to 1'10"
2. 2'6½" to 2'8¾"
3. 3'9" to 3'11"
4. 4'9¾" to 4'11½"
5. 5'7¾" to 5'10"
6. 6'11¼" to 7'1½"
7. 7'4" to 7'11¾"
8. 8'¾" to 8'4"
9. 9'5¾" to 9'8"
10. 10'4¾" to 10'6½"
11. 11'2½" to 11'4¾"

Completion Statement

Commonwealth of Virginia
State Department of Health

Health Department Identification Number 07-40

Madison Co. Health Department

Name of Company/Corporation/Individual: J. T.'s Backhoe Service

Address: 11201 Drogheda Mtn. Rd. Rixeyville VA 22737 Telephone: 540-937-7121

Owner's Name Stephen Smith

Owner's Address 2422 Silver Fox Ln. Reston, VA 20191

Location of Installation: Lot _____ Block _____

Section: _____ Subdivision: _____

Other: TM 9-33 H

I hereby certify that the onsite sewage disposal system has been installed and completed in accordance with the construction permit issued (date) 2-26-07 and is in compliance with Part D of the Sewage Handling and Disposal Regulations and when appropriate the plans and specifications for the project.

12-21-07
Date

Jimmie Southard
Signature and Title

H.S. 223 Rev. 4/89

Commonwealth of Virginia
Uniform Water Well Completion Report

Owner: Stephen Smith
Address: c/o [illegible] Construction
Phone:
Location: Champe Plain Road

Tax Map ID 9-33H Grid C-13
VDH Permit [illegible]
VWCB Permit
VWCB ID
County Madison

About 40' Static per Shane Foster on 6-13-08 [illegible] = 390 gallons of Storage.

* Well Data *

General Information		
Drilling Method Air Rotary	Date Completed 7-26-01	Total Depth of Well (300)
Depth to Bedrock [illegible]	Yield [redacted] (GMP)	Length of Test
Static Water Level [illegible]	Stabilized Water Level	Natural Flow (Rate)
Well Disinfected (Y or N)	Disinfectant Used	Amount Used

Casing		
From +2 To 56'	From ___ To ___	From ___ To ___
Size 6-1/4 Material Steel	Size ___ Material ___	Size ___ Material ___
Weight/Schedule .188	Weight/Schedule	Weight/Schedule

Gravel Pack		
From ___ To ___	From ___ To ___	From ___ To ___

Grout		
From 0 To 50	From ___ To ___	From ___ To ___
Bore Hole Size 10	Bore Hole Size	Bore Hole Size
Type Bentonite	Type	Type
Method Pump	Method	Method

Water Zones ~~or Screened Intervals~~		
From 110 To 111	From ___ To ___	From ___ To ___
Mesh Size ___ Diam ___	Mesh Size ___ Diam ___	Mesh Size ___ Diam ___
From 149 To 155	From ___ To ___	From ___ To ___
Mesh Size ___ Diam ___	Mesh Size ___ Diam ___	Mesh Size ___ Diam ___

* Use Data *

Private Well: Domestic ___ Agricultural ___ Industrial ___ Monitoring ___
Public Well: Community ___ Non-community ___

* Abandonment Information *

Bored or Dug Wells
Casing Removed, Y or N? ___
If Y, Depth to which casing was removed: ___
Depth and Type of Fill: ___
Source of Fill ___
Bentonite Plugs: From ___ to ___ From ___ to ___

Wells other than Bored Wells
Casing removed, Y or N? ___
Depth to which casing was removed: ___
Applicable, depth(s), and type of gravel/sand fill: ___
Source of gravel or sand: ___
Cement: From ___ to ___ From ___ to ___

Method of permanently marking location: ___

390 gallons of storage.

SD-07-40

*** Drillers Log ***

Depth	Description of Formation or Sediment	Remarks
0-40	gravel, sand	
40-50	weathered granite	
50-149	granite	
149-155	soft brown granite	
155-300	granite	

(Use Additional Sheets if necessary)

I certify that the information contained here is true and that this well was installed and constructed in accordance with the permit and further that the well complies with all applicable state and local regulations, ordinances and laws.

Name FOSTER WELL & PUMP CO INC
Address P O BOX 260
EARLYSVILLE VA 22936
Phone (434) 973-9079

Drillers Signature James A. DeLude, Esq
Date 4/27/07 Representing Foster Well & Pump Co Inc

Virginia Contractors License Number 2705015945A

ENVIRONMENTAL SYSTEMS SERVICE, LTD.

JOSEPH KEYSER CONSTRUCTION
P.O. BOX 484
WASHINGTON, VA 22747

ANALYSIS REPORT

1319 CHAMPE PLAIN RD., ETLAN, VA.

ESS WO NUMBER: 82010

ESS ID NUMBER: 14110

SAMPLE LOCATION: SD# 07-40

SAMPLE SOURCE KITCHEN

DATE SAMPLED: 06/09/2008
TIME SAMPLED: 12:30

PARAMETER	RESULT	METHOD	DATE	TIME	INT
Total Coliform Bacteria	ABSENT	SM 9223 (18 hr)	06/09/08	16:00	TF
E. coli	ABSENT	SM 9223 (18 hr)	06/09/08	16:00	TF

THIS WATER SAMPLE HAS MET THE MINIMUM POTABLE WATER TEST
REQUIREMENTS AS ESTABLISHED BY THE VIRGINIA DEPARTMENT OF HEALTH

Reviewed by: _____
ESS LAB SERVICES

Report Date: June 10, 2008
VA LAB ID# 00115

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

Madison County Health Department
400-A North Main Street PO Box 67
Madison, Virginia 22727
(540) 948-5481 Voice
(540) 948-3841 Fax

March 21, 2007
Stephen Smith
2422 Silver Fox Lane
Reston, Virginia 20191

Re: **Conditional Permit - HDID # SD-07-40**
Tax Map: 9-33H Grid C-13
Located at: Champe Plain Road
Etlan, Virginia 22719
Lot Size: 7.0621 Acre(s):
Directions: Take rt 231 towards Etlan. Turn left on rte 646, a dirt road on the left shortly after the intersection with rte 644 leads to the lot

Dear Stephen Smith,

Your application for a conditional sewage disposal system construction permit filed on March 7, 2007 with the Madison County Health Department, has been evaluated in accordance with the requirements contained in Section 32.164.1 of the *Code of Virginia* , 12 VAC 5-610-250 of the *Sewage Handling and Disposal Regulations* , and current agency policies and procedures for processing applications for Conditional Permits.

This letter, in conjunction with the approved plans (12 pages) dated February 26, 2007, which are

attached, constitutes your permit to install a sewage disposal system [and well]. The application for a permit was submitted pursuant to §32.1-163.5 of the Code of Virginia which requires the Health Department to accept private soil evaluations and designs from an Authorized Onsite Soil Evaluator (AOSE) or a Professional Engineer working in consultation with an AOSE for residential development. The permitted site was certified as being in compliance with the Board of Health's regulations (and local ordinances if the locality has authorized the local health department to accept private evaluations for compliance with local ordinances) by: Warby, Thomas A., AOSE # 257, (540) 937-6623. This letter is issued in reliance upon that certification.

Based on information filed with your application, and the site and soil evaluations conducted by the AOSE, this is to inform you that your application for a Conditional Permit is hereby approved. The items listed below are part of the permit and constitute the conditions that are and have been applied to the approval, installation, and usage of the sewage disposal system:

A. This letter is a part of the conditional sewage disposal system construction permit issued for the above referenced location.
B. This letter shall be recorded and indexed in the grantor index under your name in the land records of the Clerk of the Circuit Court that has proper jurisdiction over this property.
C. You must furnish the Madison County Health Department certification from the Clerk of

the Circuit Court which indicates the deed book number and page number (or instrument number) upon which the permit and all conditions have been recorded. A copy of this certification shall be attached to all copies of the permit prior to giving validation to the Building Official for issuance of a building permit.

****** CONDITIONS INCLUDE ******

Reduced water flow based on permanent water saving plumbing devices (Low Flow Toilet Fixtures)

In accordance with the Virginia Administrative Process Act, the Health Laws of Virginia, Section 32.1-164.1 of the *Code of Virginia* , and 12 VAC 5-610-200 & 220 of the *Sewage Handling and Disposal Regulations* , this letter is to further inform you of your right of appeal to obtain a modification or elimination of the conditions established in and for the issuance of this permit.

If you desire to pursue this right, in which you may at your discretion be represented by counsel, the first step in the appeal process is to submit your written request for an informal fact-finding conference to Lilian Peake, M.D., M.P.H., Acting Director, Rappahannock/Rapidan Health District, 1138 Rose Hill Drive, Charlottesville, Virginia 22903. Your request should state the basis for the appeal and should outline all the facts and such other data or other information which would support your appeal of the decisions establishing the conditions outlined above.

If this office may be of further service to you, please let us know.

DJ Dixon

Dwayne Dixon, EHS

Reviewed by: _____

Environmental Health Manager/Supervisor

I authorize that this permit and letter be recorded in the grantor index of the Clerk of the Circuit Court of _____ County (City) under my name.

_____

Stephen Smith

Subscribed, acknowledged, and sworn to before me this _____day of _____20___ in the City/County of _____, Commonwealth of Virginia.

_____

Notary Public

My commission expires _____.

Cc: Building Inspection

OFFICE COPY

190 00

Z2218206

MAR 2007 RECEIVED

Commonwealth of Virginia
Application for a Sewage Disposal and/or Water Supply Permit

Health Department ID# 07-40 (VDH Use)

Owner Mr. Stephen Smith Address 2422 Silver Fox Ln Phone (571) 331-6503.
Reston, VA 20191.
Agent Mr. Thomas Warby Address 13235 Matts Lane Phone (540) 937-6623.
Culpeper, VA 22701.
Directions to Property From Madison, take Rte 231 toward Etlan. Turn left on Rte 646. A dirt road on the left shortly after the intersection with Rte 644 leads to the lot.
Subdivision _____ Section _____ Block _____ Lot _____.
Other Property Identification _____ Map Reference TM 9-33H.
Dimension/Size of Lot/Property 7.0621 Acres.
Residential Use X Yes ___ No
Termite Treatment X Yes ___ No
X Single Family ___ Multi-Family
Number of Bedrooms 3 Number of Units 1.

Basement X Yes ___ No
Fixtures in Basement X Yes ___ No

Proposed Sewage Disposal Method:

Onsite Sewage Disposal System: X Septic Tank Drain Field ___LPD ___Mound ___Other: _____.

Water Supply: ___ Public ___ New ___ Existing
X Private X New ___ Existing

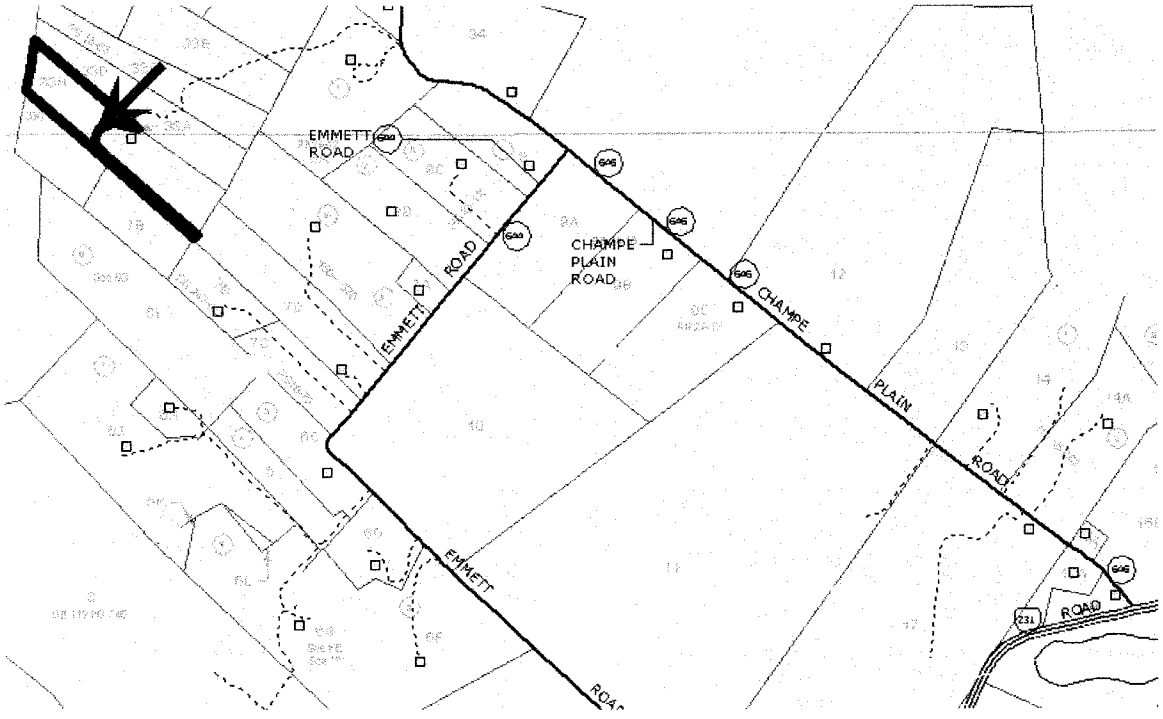
Describe: IIIB Well.

The property lines, building location and sewage disposal system site are clearly marked and the property is sufficiently visible to see the topography. I give permission to the Department to enter onto the property described for the purpose of processing this application and to perform quality assurance checks as necessary until the sewage disposal system has been constructed and approved.

T Thomas A. Warby 2-26-07
Signature of Owner/Agent Date

MAR 2007 RECEIVED

COMMONWEALTH OF VIRGINIA
THOMAS A. WARBY
No. 257
AUTHORIZED ON-SITE SOIL EVALUATOR

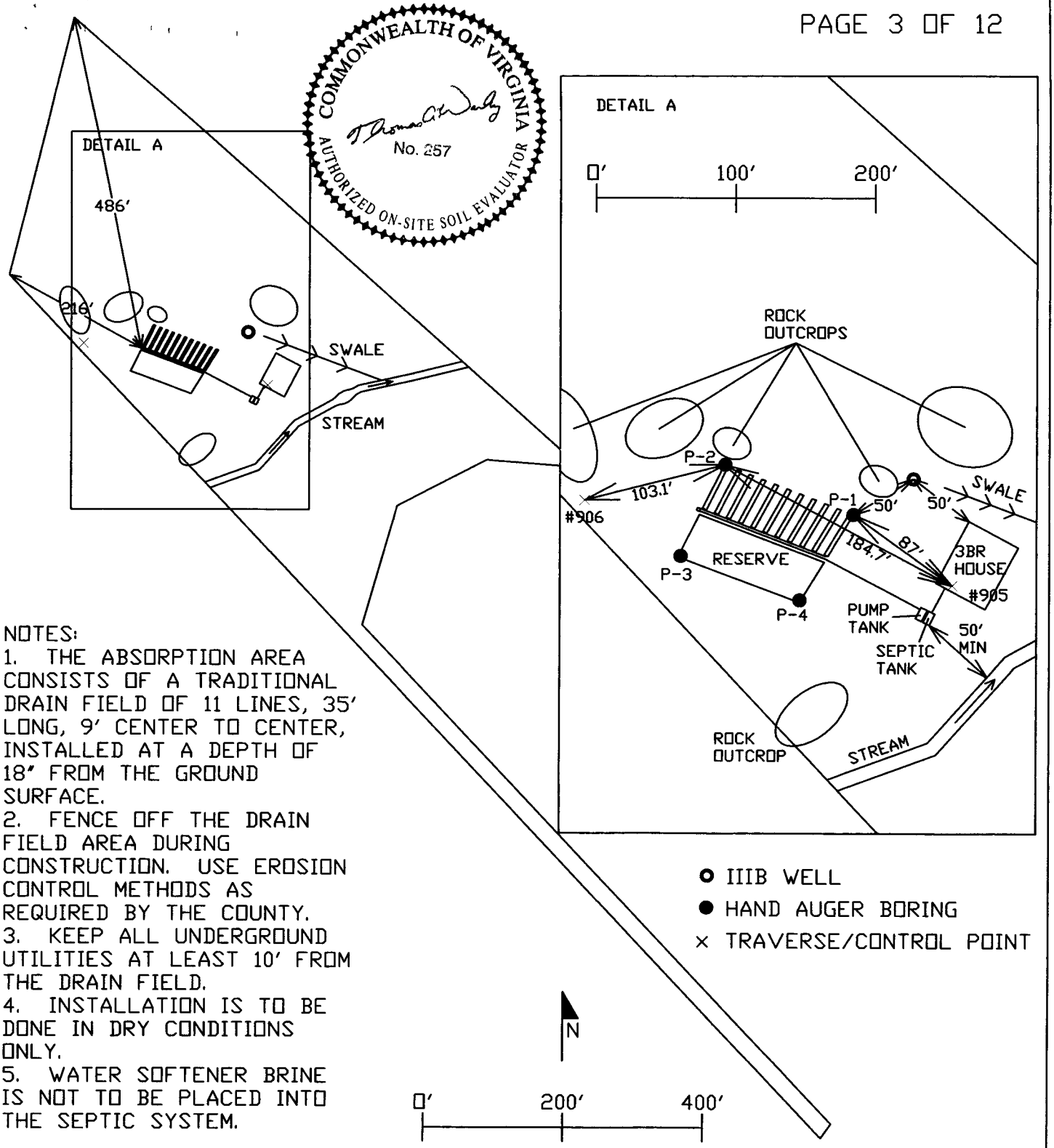


SITE LOCATION MAP
TM 9-33H
MADISON COUNTY, VIRGINIA

CMW, LLC PROJECT NO. C952

COMMONWEALTH OF VIRGINIA
No. 257
AUTHORIZED ON-SITE SOIL EVALUATOR

COMMONWEALTH OF VIRGINIA
No. 257
AUTHORIZED ON-SITE SOIL EVALUATOR



NOTES:
1. THE ABSORPTION AREA CONSISTS OF A TRADITIONAL DRAIN FIELD OF 11 LINES, 35' LONG, 9' CENTER TO CENTER, INSTALLED AT A DEPTH OF 18" FROM THE GROUND SURFACE.
2. FENCE OFF THE DRAIN FIELD AREA DURING CONSTRUCTION. USE EROSION CONTROL METHODS AS REQUIRED BY THE COUNTY.
3. KEEP ALL UNDERGROUND UTILITIES AT LEAST 10' FROM THE DRAIN FIELD.
4. INSTALLATION IS TO BE DONE IN DRY CONDITIONS ONLY.
5. WATER SOFTENER BRINE IS NOT TO BE PLACED INTO THE SEPTIC SYSTEM.

- ○ IIIB WELL
- ● HAND AUGER BORING
- × TRAVERSE/CONTROL POINT

C.M.W., LLC - 13235 MATTS LANE
CULPEPER, VIRGINIA 22701
TEL: (540) 937-6623
FAX: (540) 937-6624

DATE: 2-15-07
SCALE: 1" = 200'
DRWN: CMP | C952

SITE DEVELOPMENT PLAN
TM 9-33H - MADISON COUNTY, VIRGINIA

DWG. NO:

SOIL EVALUATION SUMMARY
TM 9-33H
MADISON COUNTY, VIRGINIA

EVALUATION PERFORMED BY CRAIG M. PAUL
JANUARY 30, 2007

Position in Landscape: Side slope

Slope: 6-8 %

Depth to rock/impervious strata: 36"+

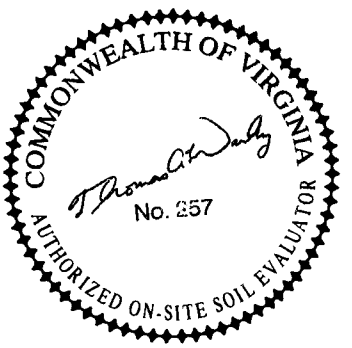
Depth to seasonal water table (gray mottling): Not found.

Free water present: No.

Percolation Rate Estimated: Yes
Texture group at installation depth: 2
Estimated percolation rate: 60 min./in.

Percolation Test Performed: No

Recommended installation depth: 18"



SOIL PROFILES
TM 9-33H
MADISON COUNTY, VIRGINIA

HAND AUGER BORINGS PERFORMED BY CRAIG M. PAUL
JANUARY 30, 2007

Hole	Horizon	Depth, in.	Soil Description	Group
P-1	A	0-3	10YR3/2 Very dark grayish brown loam	2
	E	3-6	10YR5/6 Yellowish brown sandy clay loam	2
	B	6-37	7.5YR5/6 Strong brown sandy clay loam with 10YR6/8 Brownish yellow mottles.	
			10YR4/3 Brown parent starts at 36"	2
			Auger refusal at 37"	
P-2	A	0-5	10YR3/2 Very dark grayish brown loam	2
	E	5-16	10YR5/8 Yellowish brown sandy clay loam	2
	B	16-36	7.5YR5/6 Strong brown sandy clay loam	2
			Auger refusal at 36"	
P-3	A	0-3	10YR3/3 Dark brown loam	2
	B	3-37	10YR5/8 Yellowish brown sandy clay loam	2
			Auger refusal at 37"	
P-4	A	0-2	10YR3/2 Very dark grayish brown loam	2
	E	2-8	10YR5/6 Yellowish brown sandy clay loam	2
	B	8-38	7.5YR5/8 Strong brown sandy clay loam with	
			10YR6/6 Brownish yellow parent	2

Abbreviated Design Form
Traditional Septic System – TM 9-33H

Design basis

A. Estimated Percolation Rate 60 mpi .

B. Absorption area square feet required per bedroom (from Table 5.4 based on X Gravity __ LPD) 452(.8*)=362 .

C. Number of Bedrooms 3 .

Area Calculations

D. Length of trench 35' . Length of available area 35' .

E. Width of trench 3' .

F. Number of Trenches 11 .

G. Center-to-center spacing 9' .

H. Width required 10(9)+3=93' Width of available area 93'+ .

I. Total square footage required (B X C) 1086 .

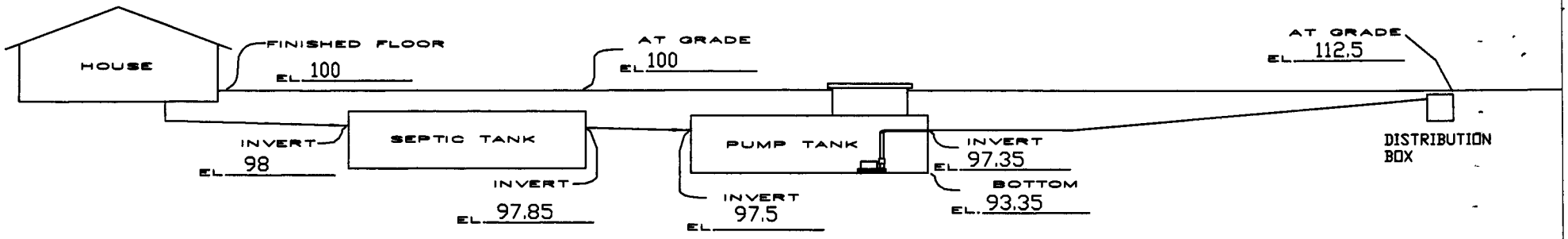
J. Square footage in design (D X E X F) 1155 .

K. Is a reserve required: X Yes __ No A 100% reserve is provided.

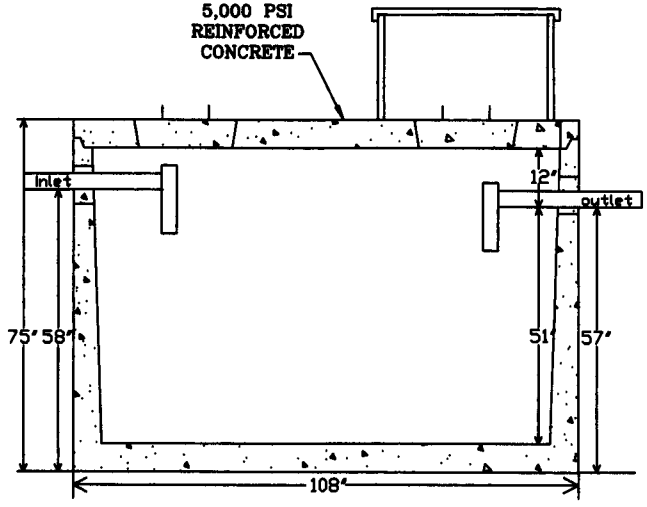
* Water saving devices are required for this system.

Property Identification: TM 9-33H; Madison County, Virginia .

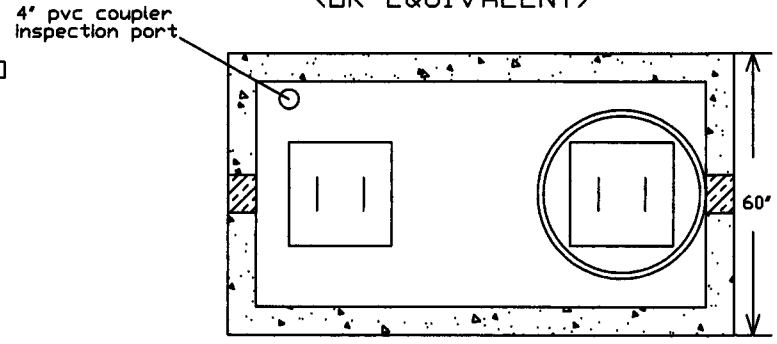
NOTE: Elevations shown are approxiamate and not intended to be exact.



CLEAR FLOW CO.
SEPTIC TANK - 1000 GAL
CAPACITY (MINIMUM)
(OR EQUIVALENT)



SECTION VIEW



PLAN VIEW

NOT TO SCALE

INLET AND OUTLET ARE 4" WATER TIGHT SEALS. THE MANHOLE HANDELS ARE NO RUST PLASTIC. REINFORCING WIRE ON SIDES. TOP HAS REBAR REINFORCEMENT.

COMMONWEALTH OF VIRGINIA
AUTHORIZED ON-SITE SOIL EVALUATOR
No. 257

C.M.W., LLC - 13235 MATTS LANE
CULPEPER, VIRGINIA 22701
TEL: (540) 937-6623
FAX: (540) 937-6624

DATE: 2-17-06

SCALE: NTS

DRWN: BTWI

C952

HYDRAULIC PROFILE AND SEPTIC TANK DETAIL
TM 9-33H - MADISON COUNTY, VIRGINIA

DWG. NO:

HYDRAULIC CALCULATIONS
TM 9-33H
MADISON COUNTY, VIRGINIA

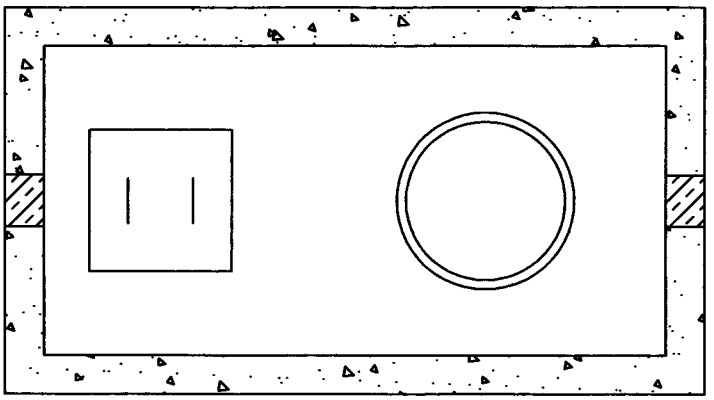
I. Septic Tank Size:
- Daily Flow - 360 GPD
- Detention Time - 48 hrs.
- Required Capacity - 720 Gal.
- Recommend - 1000 Gal.

II. Pump Tank Float Settings (1000 Gal. Pump Tank from Clear Flow):
- Tank Properties:
  - Liquid Depth - 51"
  - Gallons per inch – 21.1
- Low Water Cut Off Float Level - 24" (To keep fluid above the pump)
- Required Storage above Alarm Float (1/4 day storage) = 1/4(360) = 90 Gallons
- Alarm Float set 6 inches below invert of pump pipe out of tank provides 6"(21.1 Gal./in.) = 126.6 Gal.

III. Pump Sizing and Specifications:
- Static Lift (2' above bottom of tank to the distribution box) 112.5' – 95.35' = 17.15
- Assume flow of 30 gallons per minute (2.87 feet/sec. for 2" pipe)
- Friction Head Loss
  - 185 feet of 2" dia. pipe
  - Assume 50' extra for minor losses
  - Friction coefficient = 1.82/100 feet of pipe
  - Friction Head Loss = (1.82) (1.85) = 3.37
- Total Head Loss = Static Lift + Friction Head Loss = 17.15 + 3.37 = 20.52
- Use Zoeller Model 137 Pump (see attached pump curve)
- Pump Specifications - See Attached Drawings for Control Panel, Float and Alarm Details. Pump controls to be housed in NEMA 4X weatherproof enclosure. Alarm to be located within the house.

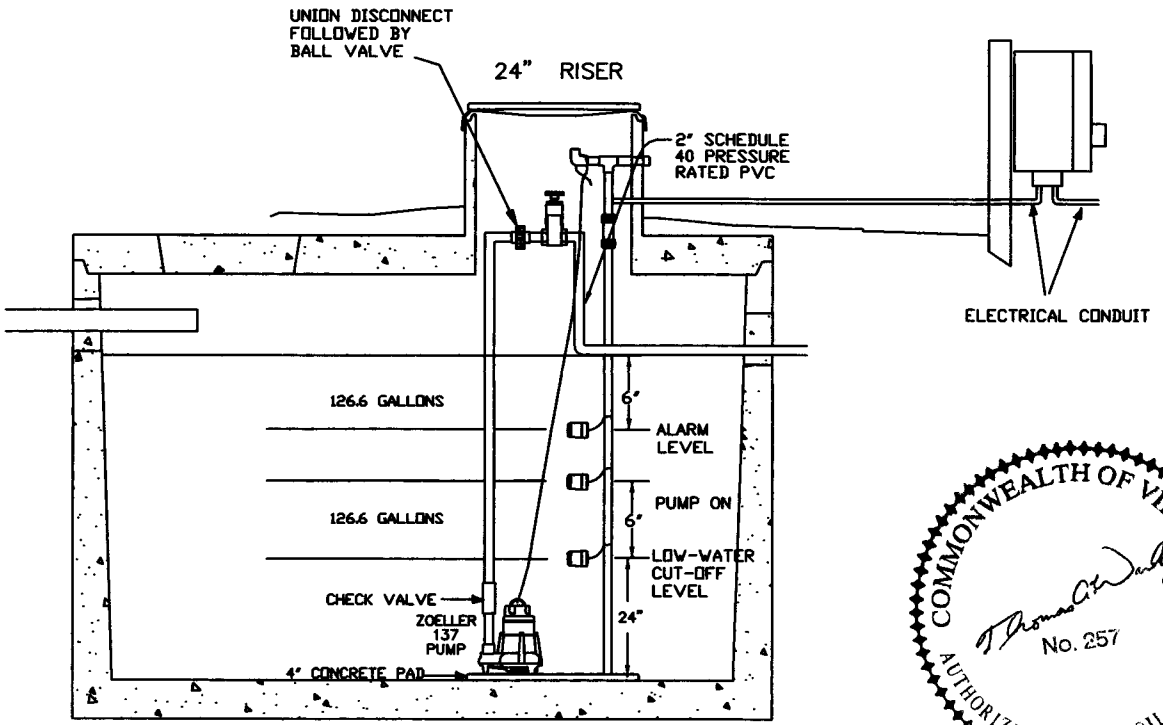
IV. Demand Dosing Requirements (1/4 to 1 days flow) = 90 to 360 Gal.
- Flow volume per pump event: 6"(21.1) = 126.6 Gal.

PUMP TANK - 1000 GAL FROM CLEAR FLOW PRODUCTS, INC. (21.1 GAL/INCH)



PLAN VIEW

Simplex Control Panel with Alarm. The pump and alarm are to be wired on separate breakers.



SECTION VIEW

COMMONWEALTH OF VIRGINIA
No. 257
AUTHORIZED ON-SITE SOIL EVALUATOR

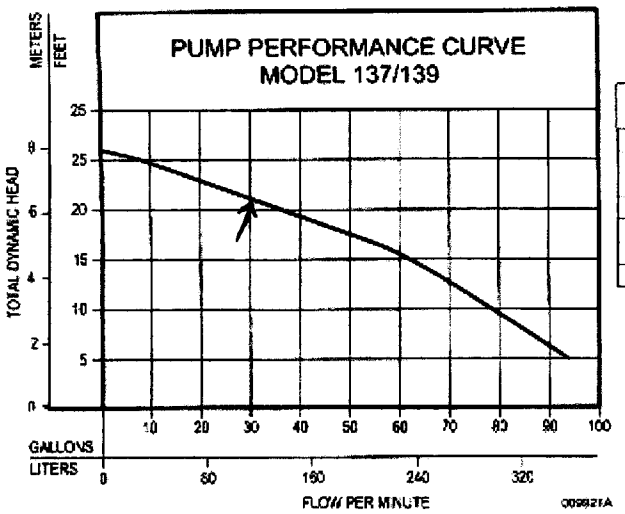
NOT TO SCALE

C.M.W., LLC - 13235 MATTS LANE
CULPEPER, VIRGINIA 22701
TEL: (540) 937-6623
FAX: (540) 937-6624

DATE:	2-17-07	
SCALE:	NTS	
DRWN:	BTWI	C952

PUMP TANK DETAILS
TM 9-33H - MADISON COUNTY, VIRGINIA

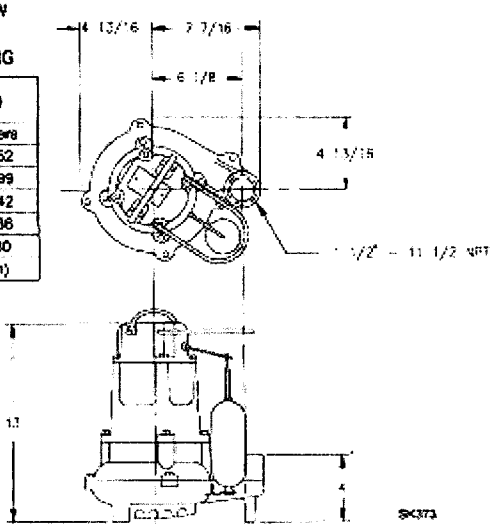
DWG. NO:



TOTAL DYNAMIC HEAD/FLOW
PER MINUTE
EFFLUENT AND DEWATERING

MODEL	137/139		
Feet	Meters	Gal.	Liters
5	1.5	93	352
10	3.1	79	299
15	4.6	64	242
20	6.1	36	136
25	7.6	8	30
Shut-off Head		26 ft.(8.0m)	

0099218



CONSULT FACTORY FOR SPECIAL APPLICATIONS

- Three phase pumps are available in 200/208V, 230V or 460V.
- Electrical alternators, for duplex systems, are available and supplied with an alarm.
- Mechanical alternators, for duplex systems, are available with or without alarm switches.
- Simplex Panels are available for 3 phase pumps.
- Control alarm systems are available for 1 phase pumps.
- Variable level control switches are available for controlling single and three phase systems.
- Double piggyback variable level float switches are available for variable level long cycle controls.
- Over 130°F (54°C) special quotation required.
- Refer to FM1922 and FM0606 for temperatures over 130°F.

137 Series - 47 lbs. 139 Series - 51 lbs.

Single Seal			Control Selection				Listings	
Model	Volts-Ph		Mode	Amps	Simplex	Duplex	CSA	UL
M137/139	115	1	Auto	10.7	1	4	Y	Y
N137/139	115	1	Non	10.7	2 or 3	2 or 4	Y	Y
** BN137	115	1	Auto	10.7	**	4	Y	Y
O137/139	230	1	Auto	5.8	1	4	Y	Y
E137/139	230	1	Non	5.8	2 or 3	4	Y	Y
* H137/139	200-208	1	Auto	6.2	3	4	Y	N
* I137/139	200-208	1	Non	6.2	3	4	Y	N
* J137/139	200-208	3	Non	2.6	3	4	Y	Y
* F137/139	230	3	Non	2.6	3	4	Y	Y
* G137	460	3	Non	1.4	3	4	N	N
* G139	460	3	Non	1.4	3	4	N	N

* No molded plug **Single piggyback switch included.

Pumps must be operated in upright position.

Three phase units require a control switch to operate an external magnetic contactor.

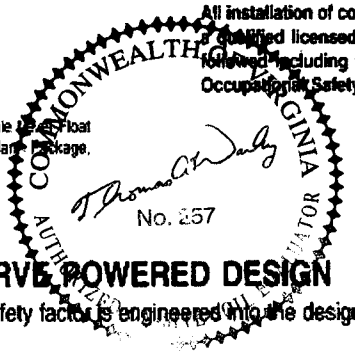
For information on additional Zoeller products refer to catalog on Piggyback Variable Level Float Switches, FM0477; Electrical Alternator, FM0486; Mechanical Alternator, FM0495; Alarm Package, FM0732; and Sump/Sewage Basins, FM0487.

SELECTION GUIDE

1. Integral float operated mechanical switch, no external control required.
2. For automatic use single piggyback variable level float switch or double piggyback variable level float switch. Refer to FM0477.
3. See FM1228 for correct model of simplex control panel.
4. See FM0712 for correct model of duplex control panel or FM1663 for a residential alternator system.

CAUTION

All installation of controls, protection devices and wiring should be done by a qualified licensed electrician. All electrical and safety codes should be followed including the most recent National Electric Code (NEC) and the Occupational Safety and Health Act (OSHA).



RESERVE POWERED DESIGN

For unusual conditions a reserve safety factor is engineered into the design of every Zoeller pump.

http://www.zoeller.com

ZOELLER PUMP CO.

MAIL TO: P.O. BOX 16347
Louisville, KY 40256-0347
SHIP TO: 3649 Cane Run Road
Louisville, KY 40211-1961
(502) 778-2731 • 1 (800) 928-PUMP
FAX (502) 774-3624

Manufacturers of . .
"Quality Pumps Since 1939"

Sewage Disposal System Construction Specifications

General Information

New X Repair ___ Expanded ___.
Owner Mr. Stephen Smith Telephone (571) 331-6503.
Address 2422 Silver Fox Ln; Reston, VA 20191.
For a Type II Sewage disposal system which is to be constructed on/at TM 9-33H; Madison County, Virginia.
Subdivision _____ Section _____ Block _____ Lot _____.
Actual or estimated water use 360 GPD.

Design	Notes
Water supply, existing: (describe) _____. To be installed: class IIIB Well cased 50' grouted 50'.	
Building sewer: 4" I.D. PVC 40, or equivalent. Slope 1.25" per 10' (minimum). ___ Other _____.	
Septic tank: Capacity 1000 gals (minimum) ___ Other _____.	
Inlet-Outlet structure: PVC 40, 4" tees or equivalent. ___ Other _____.	
Pump and pump station: No ___ Yes X Describe and show design if yes: See page 9 of 12. _____.	
Gravity mains: 3" or larger I.D., minimum 6" fall per 100', 1500 lb. Crush strength or equivalent. ___ Other _____.	
Distribution box: Precast concrete with 12 ports. ____ Other _____.	
Header lines: Material: 4" I.D. 1500 lb. Crush strength plastic or equivalent from distribution box to 2'into absorption trench. Slope 2" minimum. ____ Other _____.	
Percolation Lines: Gravity 4" plastic 1000 lb. Per foot bearing load or equivalent, slope 2"-4" (min.-max.) per 100'. ____ Other _____.	
Absorption Area: Square ft. required 1155; depth from ground surface to bottom of trench 18"; Trench Width 3'; depth of aggregate 13"; trench length 35'; number of trenches 11.	

COMMONWEALTH OF VIRGINIA
No. 257
AUTHORIZED ON-SITE SOIL EVALUATOR

Certification Statement

County: Madison Date: February 26, 2007.

Property Identification: TM 9-33H.

Submitted by: Thomas A. Warby, A.O.S.E.

This is to certify according to §32.1-163.5 of the *Code of Virginia* that work submitted for the referred property is in accordance to and complies with the *Sewage Handling and Disposal Regulations* of the Virginia Department of Health. I recommend a permit [1] be approved [2].

AOSE Thomas A. Warby Date: 2-26-07.

[1] This blank must be filled in with one of the following terms: 'permit', 'certification letter', or 'subdivision approval'.
[2] This blank must be filled in either the term 'approved' or 'denied'.

COMMONWEALTH OF VIRGINIA
THOMAS A. WARBY
No. 257
AUTHORIZED ON-SITE SOIL EVALUATOR

TAG SHEET

SD-07-40

NAME: Smith, Stephen + Renee Jakobs TAX MAP ID_____

Application For Construction Permit ___ Certification ___

	INITIALS	DATE
Application Received:	SAy	3/7/07
Application Reviewed:		
Fee Determined:		
Assigned To:		
Site Visit Scheduled:		
Initial Site Visit Made:	DN	3-21-07
Application Deactivated:		
Purpose:		
Reactivation:		
Follow Up Visit:		
Follow Up Visit:		
Follow Up Visit:		
Issue/Deny Drafted:	DN	3-21-07
Issue/Deny Reviewed:	CEB	3-22-07
Issue/Deny Countersigned:		
Issue/Deny Mailed:		

MADISON
COUNTY, VA.
DEED No. 070001804

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

Madison County Health Department
400-A North Main Street PO Box 67
Madison, Virginia 22727
(540) 948-5481 Voice
(540) 948-3841 Fax

March 21, 2007

Return To: Stephen Smith
2422 Silver Fox Lane
Reston, Virginia 20191

Re: **Conditional Permit - HDID # SD-07-40**
Tax Map: 9-33H Grid C-13
Located at: Champe Plain Road
Etlan, Virginia 22719
Lot Size: 7.0621 Acre(s):
Directions: Take rt 231 towards Etlan. Turn left on rte 646, a dirt road on the left shortly after the intersection with rte 644 leads to the lot

Dear Stephen Smith,

Your application for a conditional sewage disposal system construction permit filed on March 7, 2007 with the Madison County Health Department, has been evaluated in accordance with the requirements contained in Section 32.164.1 of the *Code of Virginia* , 12 VAC 5-610-250 of the *Sewage Handling and Disposal Regulations* , and current agency policies and procedures for processing applications for Conditional Permits.

This letter, in conjunction with the approved plans (12 pages) dated February 26, 2007, which are

attached, constitutes your permit to install a sewage disposal system [and well]. The application for a permit was submitted pursuant to §32.1-163.5 of the Code of Virginia which requires the Health Department to accept private soil evaluations and designs from an Authorized Onsite Soil Evaluator (AOSE) or a Professional Engineer working in consultation with an AOSE for residential development. The permitted site was certified as being in compliance with the Board of Health's regulations (and local ordinances if the locality has authorized the local health department to accept private evaluations for compliance with local ordinances) by: Warby, Thomas A., AOSE # 257, (540) 937-6623. This letter is issued in reliance upon that certification.

Based on information filed with your application, and the site and soil evaluations conducted by the AOSE, this is to inform you that your application for a Conditional Permit is hereby approved. The items listed below are part of the permit and constitute the conditions that are and have been applied to the approval, installation, and usage of the sewage disposal system:

A. This letter is a part of the conditional sewage disposal system construction permit issued for the above referenced location.
B. This letter shall be recorded and indexed in the grantor index under your name in the land records of the Clerk of the Circuit Court that has proper jurisdiction over this property.
C. You must furnish the Madison County Health Department certification from the Clerk of

the Circuit Court which indicates the deed book number and page number (or instrument number) upon which the permit and all conditions have been recorded. A copy of this certification shall be attached to all copies of the permit prior to giving validation to the Building Official for issuance of a building permit.

****** CONDITIONS INCLUDE ******

Reduced water flow based on permanent water saving plumbing devices (Low Flow Toilet Fixtures)

In accordance with the Virginia Administrative Process Act, the Health Laws of Virginia, Section 32.1-164.1 of the *Code of Virginia* , and 12 VAC 5-610-200 & 220 of the *Sewage Handling and Disposal Regulations* , this letter is to further inform you of your right of appeal to obtain a modification or elimination of the conditions established in and for the issuance of this permit.

If you desire to pursue this right, in which you may at your discretion be represented by counsel, the first step in the appeal process is to submit your written request for an informal fact-finding conference to Lilian Peake, M.D., M.P.H., Acting Director, Rappahannock/Rapidan Health District, 1138 Rose Hill Drive, Charlottesville, Virginia 22903. Your request should state the basis for the appeal and should outline all the facts and such other data or other information which would support your appeal of the decisions establishing the conditions outlined above.

If this office may be of further service to you, please let us know.

INSTRUMENT #070001804
RECORDED IN THE CLERK'S OFFICE OF
MADISON ON
AUGUST 17, 2007 AT 02:32PM
CAROLINE WATTS, CLERK
M.E. Smith, D.C.
RECORDED BY: MES

Dwayne Dixon, EHS

Reviewed by: _____
Environmental Health Manager/Supervisor

I authorize that this permit and letter be recorded in the grantor index of the Clerk of the Circuit Court of Madison County (City) under my name.

Stephen Smith

Subscribed, acknowledged, and sworn to before me this 15th day of AUGUST 2007 in the City/County of FAIRFAX, Commonwealth of Virginia.

Notary Public

My commission expires MARCH 31, 2008.

Cc: Building Inspection

[illegible]
Notary Public
Commonwealth of Virginia
[illegible]
My Commission Expires Mar 31, 2008

Commonwealth of Virginia
Application for a Sewage Disposal and/or Water Supply Permit

Health Department ID 05-190

To Be Completed By The Applicant

Type of Sewage system: ✓ New ___ Repair ___ Expanded ___ Conditional
FHA/VA yes ___ no ___ Case No ___

Owner ___ Address ___ Phone ___

Agent Trish Bartholomew Address 311 Gay St Washington VA 22747 Phone 675-1190

Directions of Property 231 N Left on 646 to Jeffarron Land Realty Sign Left Follow Signs and Orange Flagging Tape along Right of Way Make Left Before Stream Follow to End

Subdivision ___ Section ___ Block ___ Lot ___

Other Property Identification ___

Dimension/size of Lot/Property Tax Map 9-33H

Other Application Information

I. Building/facility ✓ New ___ Existing
Intermittent Use ___ Yes ___ No If yes, describe ___

II. Residential Use ✓ Yes ___ No
Termite Treatment ✓ Yes ___ No
✓ Single Family (Number of Bedrooms 3) ___ Multi-family (Number of Units ___)

Basement ✓ Yes ? ___ No
Fixtures in Basement ✓ Yes ___ No

III. Commercial Use ___ Yes ___ No Describe: ___

Commercial/Wastewater ___ Yes ___ No Number of Patrons ___ Number of Employees ___

If yes, give volumes and describe ___

IV. Water Supply: ___ Public ___ New ___ Existing
✓ Private ✓ New ___ Existing
Describe: ___

V. Proposed Sewage Disposal Method:

Onsite Sewage Disposal System: ___ Septic Tank Drainfield ✓ LPD ___ Mound ___ Other

Public Sewerage System

Attach a site plan (rough sketch) showing dimensions of property, proposed and/or existing structures and driveways, underground utilities, adjacent soil absorption system, bodies of water, drainage ways, and wells and springs within 200 feet radius of the center of the proposed well or drainfield. Distances may be paced or estimated.

The property lines and building location are clearly marked and the property is sufficiently visible to see the topography. I give permission to the Department to enter onto the property described for the purpose of processing this application.

Signature of Owner/Agent 8-22-05 **Date**

CHS 200

Commonwealth of Virginia
Application for a Sewage Disposal and/or Water Supply Permit

Health Department ID 05-190

To Be Completed By The Applicant

Type of Sewage system: ✓ New ___ Repair ___ Expanded ___ Conditional
FHA/VA yes ___ no ___ Case No ___

Owner ___ Address ___ Phone ___

Agent Trish Bartholomew Address 311 Ga. St Phone 625-1190
Waynesboro Va 22947

Directions of Property 291 N Left on 616 to Jefferson Land Realty Sign Left
Follow Signs and Orange Flags to Top of Hill Right of Way Mark Left Before Stream Follow to End

Subdivision ___ Section ___ Block ___ Lot ___

Other Property Identification ___

Dimension/size of Lot/Property Tax Map 9-33H

Other Application Information

I. Building/facility ___ New ___ Existing
Intermittent Use ___ Yes ___ No If yes, describe ___

II. Residential Use ___ Yes ___ No
Termite Treatment ✓ Yes ___ No
___ Single Family ___ Multi-family
(Number of Bedrooms 3) (Number of Units ___)

Basement ✓ Yes ___ No
Fixtures in Basement ✓ Yes ___ No

III. Commercial Use ___ Yes ___ No Describe: ___

Commercial/Wastewater ___ Yes ___ No Number of Patrons ___
Number of Employees ___

If yes, give volumes and describe ___

IV. Water Supply: ___ Public ___ New ___ Existing
___ Private ✓ New ___ Existing

Describe: ___

V. Proposed Sewage Disposal Method:

Onsite Sewage Disposal System: ___ Septic Tank Drainfield ✓ LPD ___ Mound ___ Other

Public Sewerage System

Attach a site plan (rough sketch) showing dimensions of property, proposed and/or existing structures and driveways, underground utilities, adjacent soil absorption system, bodies of water, drainage ways, and wells and springs within 200 feet radius of the center of the proposed well or drainfield. Distances may be paced or estimated.

The property lines and building location are clearly marked and the property is sufficiently visible to see the topography. I give permission to the Department to enter onto the property described for the purpose of processing this application.

Signature of Owner/Agent

2-22-05
Date

CHS 200

Commonwealth of Virginia
Application for a Sewage Disposal and/or Water Supply Permit

Health Department ID 05-190

To Be Completed By The Applicant

Type of Sewage system: ✓ New ___ Repair ___ Expanded ___ Conditional
FHA/VA yes ___ no ___ Case No ___

Owner ___ Address ___ Phone ___

Agent Trish Bartholomew Address 311 Ga. St. Washington, Va 22747 Phone 675-1190

Directions of Property 211 N Left on 646 to Jefferson Ln. Right Sign Left Follow Signs ... Orange Flags ...

Subdivision ___ Section ___ Block ___ Lot ___

Other Property Identification ___

Dimension/size of Lot/Property Tax Map 9-23H

Other Application Information

I. Building/facility ✓ New ___ Existing
Intermittent Use ___ Yes ___ No If yes, describe ___

II. Residential Use ✓ Yes ___ No
Termite Treatment ✓ Yes ___ No
✓ Single Family ___ Multi-family
(Number of Bedrooms 3) (Number of Units ___)

Basement ✓ Yes ___ No
Fixtures in Basement ✓ Yes ___ No

III. Commercial Use ___ Yes ___ No Describe: ___

Commercial/Wastewater ___ Yes ✓ No Number of Patrons ___
Number of Employees ___

If yes, give volumes and describe ___

IV. Water Supply: ___ Public ___ New ___ Existing
✓ Private ✓ New ___ Existing
Describe: ___

V. Proposed Sewage Disposal Method:
Onsite Sewage Disposal System: ___ Septic Tank Drainfield ✓ LPD ___ Mound ___ Other

Public Sewerage System

Attach a site plan (rough sketch) showing dimensions of property, proposed and/or existing structures and driveways, underground utilities, adjacent soil absorption system, bodies of water, drainage ways, and wells and springs within 200 feet radius of the center of the proposed well or drainfield. Distances may be paced or estimated.

The property lines and building location are clearly marked and the property is sufficiently visible to see the topography. I give permission to the Department to enter onto the property described for the purpose of processing this application.

[signature] 2-2-05

Signature of Owner/Agent **Date**

CHS 200

Important Notice

PLEASE READ BEFORE FILING YOUR APPLICATION
AND PAYING YOUR FEE

TYPE OF APPLICATION

Section 12 VAC 5-610-225-A of The Sewage Handling and Disposal Regulations reads; An applicant for a sewage disposal system who does not intend to build within 18 months of application shall apply for a certification letter. The process shall be the same as for a system application made in accordance with 12 VAC 5-610-250. The fees charged for the certification letter shall be the same as prescribed in § 32.1-164 C of the Code of Virginia. With this understanding I am making the following type of application:

☐ I plan to build within 18 months and am making application for a sewage disposal construction permit. Building Permit application is required.

☑ I do *not* plan to build now so I am making application for a certification letter.

FEE REFUNDS

This is to inform you that fees for Environmental Health permits mandated by the State, cannot be refunded once the application has been filed and the fee paid except for the following reasons:

1. If you, as the applicant, withdraw your application before the Environmental Health Specialist makes a visit to evaluate the property.

2. The Health Department is unable to issue a permit or certification letter and only if you are the property owner and are seeking to construct your principal place of residence on the property, and you provide written notification to the Health Department that you are foregoing your right to appeal the denial of your request for a permit.

In order for you to then appeal at a later date, the above refunded fee would need to be paid before a hearing date would be scheduled.

BEFORE YOU PAY THE FEE FOR A SEPTIC SYSTEM PERMIT
PLEASE READ THE FOLLOWING CAREFULLY

It is your responsibility to make it clear to the Environmental Health Specialist which area on the property you want tested, although he/she will advise you which areas on the property appear to be more suitable for a septic system. One alternate site can be examined if the first site fails to meet the regulations. The permit will be issued showing the location of the system in only one suitable site. The site cannot be changed later without additional expense on your part (You will need to hire a private soil consultant to test another site and submit their report, along with a new application and fee to the Health Department). If you do not intend to build now, but only need the soil tested before a sale is made, we recommend you hire a soil consultant to do the test and apply for a Health Department permit when you know where you want to build.

I have read and understand the above application notice.

Signature 8-22-05
Date

Note that the back of this form may be used for your site plan sketch.

Rec. # 213580
Ropp Pool
Estate
Resources

TAG SHEET

SD- 05-190

NAME: Trish Bartholomew TAX MAP ID 9-33H

Application For Construction Permit ___Certification___

	INITIALS	DATE
Application Received:	GK	8/24/05
Application Reviewed:	GK	8/24/05
Fee Determined:	SA	8/24/05
Assigned To:		
Site Visit Scheduled:		
Initial Site Visit Made:	DN	9-7-05
Application Deactivated:	DN	9-7-05
Purpose:	need DF plat	
Reactivation:		
Follow Up Visit:		
Follow Up Visit:		
Follow Up Visit:		
Issue/Deny Drafted:		
Issue/Deny Reviewed:		
Issue/Deny Countersigned:		
Issue/Deny Mailed:		

plat never recorded

Soil Evaluation Form

PAGE _____ OF _____

Commonwealth of Virginia
Department of Health

Health Department
Identification Number _____
Tax Map Number _____

General Information

Date 9-7-05 Madison Co Health Department

Applicant Trish Bartholomew Telephone No. _____

Address _____

Owner _____ Address _____

Location Rt 641

Subdivision _____ Block/Section _____ Lot _____

Soil Information Summary

1. Position in landscape satisfactory Yes ☑ No ☐ Describe foot slope

2. Slope 6-8 %

3. Depth to rock/impervious strata Max. 150 Min. _____ None _____

4. Depth to seasonal water table (gray mottling or gray color) No ☒ Yes ☐ _____ inches

5. Free water present No ☒ Yes ☐ _____ range in inches

6. Soil percolation rate estimated Yes ☒ Texture group I II (III) IV
No ☐ Estimated rate 51 min/inch

7. Percolation test performed Yes ☐ Number of percolation test holes _____
No ☐ Depth of percolation test holes _____
Average percolation rate _____

Name and title of evaluator: DT Dixon

Signature: DT Dixon

Department Use

☒ Site Approved: Drainfield to be placed at 30 depth at site designated on permit.

☐ Site Disapproved:

Reasons for rejection:

1. ☐ Position in landscape subject to flooding or periodic saturation.
2. ☐ Insufficient depth of suitable soil over hard rock.
3. ☐ Insufficient depth of suitable soil to seasonal water table.
4. ☐ Rates of absorption too slow.
5. ☐ Insufficient area of acceptable soil for required drainfield, and/or Reserve Area.
6. ☐ Proposed system too close to well.
7. ☐ Other Specify _____

75'
75'
45'
25'
50'
OUT CROP
OUT CROP
Rock wall
Road

Date of Evaluation _____

Profile Description
SOIL EVALUATION REPORT

Health Department
Identification No._____

Page _____ of _____

Where the local health department conducts the soil evaluation the location of profile holes may be shown on the schematic drawing on the construction permit or the sketch submitted with the application. If soil evaluations are conducted by a private soil scientist, location of profile holes and sketch of the area investigated including all structural features i.e., sewage disposal systems, wells, etc., within 100 feet of site (See section 4) and reserve site shall be shown on the reverse side of this page or prepared on a separate page and attached to this form.

☐ See application sketch ☐ See construction permit ☐ See sketch on reverse side or page attached to this form.

Hole #	Horizon	Depth (Inches)	Description of, color, texture, etc.	Texture Group
1	O	0-1	10YR 2/1 ORGANIC MATTER	
	A	1-6	7.5YR 3/4 L	
	E	6-13	10YR 4/6 L	
	B	13-50	5YR 4/6 CL	
2	A	0-3	7.5YR 3.5/2 L MANY MED ROOTS	
	C	3-13	7.5YR 4/6 L	
		13-36	2.5YR 4/6 CL	
		36-50	5YR 4/6 SCL w/ 15% GRANITE FRAGMENTS	
3	A	0-4	7.5YR 2.5/2 L	
	E	4-10	7.5YR 5/6 L	
	B	10-32	2.5YR 4/6 CL	
		32-51	5YR 4/6 SCL w/ 25% GRANITE FRAGMENTS	

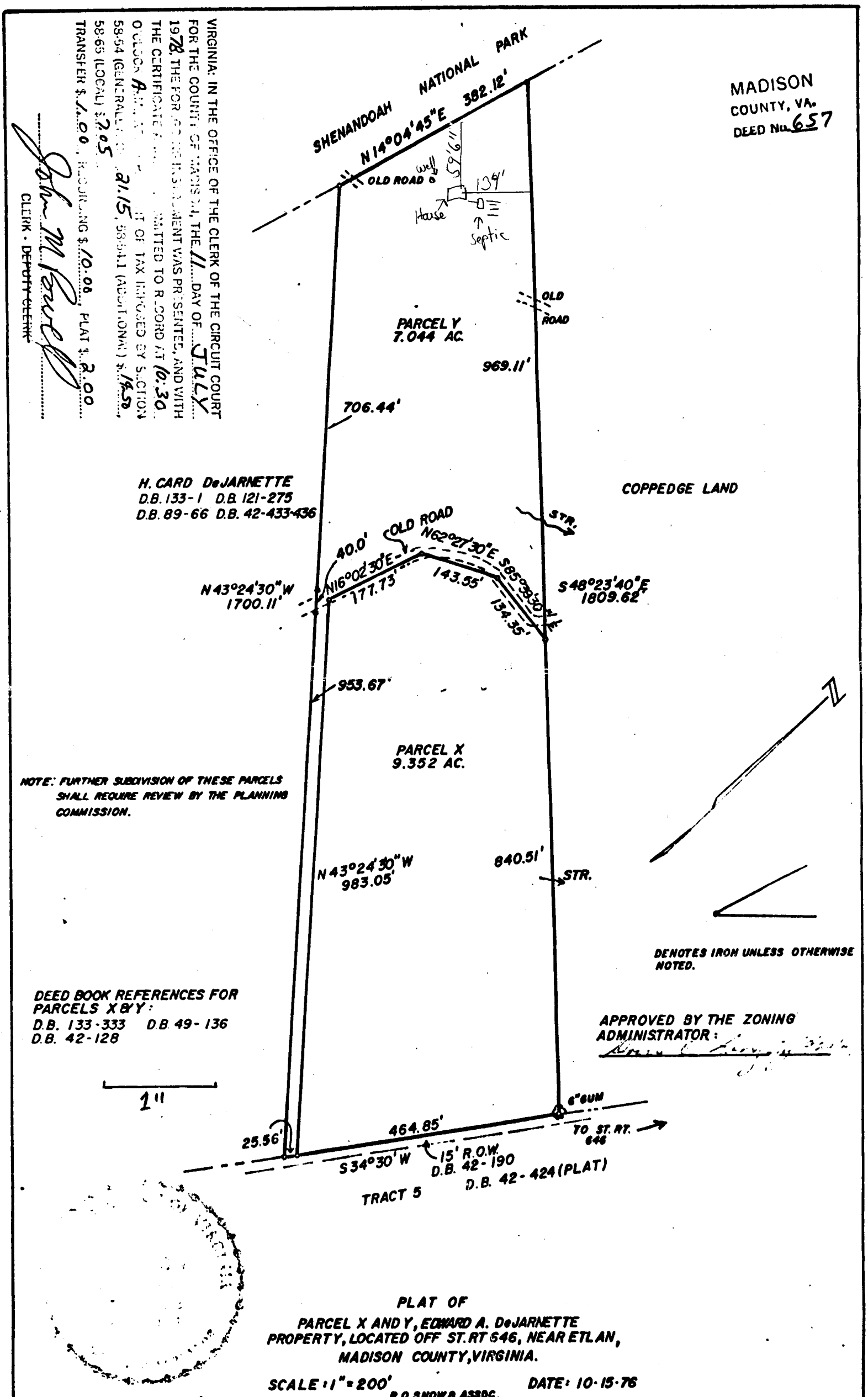
Remarks

VIRGINIA: IN THE OFFICE OF THE CLERK OF THE CIRCUIT COURT FOR THE COUNTY OF MADISON, THE 11 DAY OF JULY 1978. THE FOREGOING INSTRUMENT WAS PRESENTED, AND WITH THE CERTIFICATE ANNEXED, ADMITTED TO RECORD AT 10:30 O'CLOCK A.M. IN PAYMENT OF TAX IMPOSED BY SECTION 58-54 (GENERAL) $1.15, 58-54.1 (ADDITIONAL) $.50, 58-65 (LOCAL) $2.05.

TRANSFER $1.00, RECORDING $10.00, PLAT $2.00

John M Rucker
CLERK - DEPUTY CLERK

MADISON
COUNTY, VA.
DEED No. 657



PLAT OF
PARCEL X AND Y, EDWARD A. DeJARNETTE PROPERTY, LOCATED OFF ST. RT 646, NEAR ETLAN, MADISON COUNTY, VIRGINIA.

SCALE: 1" = 200' DATE: 10-15-76

R.O. SNOW & ASSOC.
CHARLOTTESVILLE, VIRGINIA

2571-A