

Drainfield Designs of Virginia, LLC

P.O. Box 397 ~ Charles City, VA 23030

phone (804) 543-4377 email: aose1022.ddvllc@gmail.com

AOSE Report For: **Drainfield Construction Permit**

Location of Property: R V Wilson Estate, Parcel 6; TM# 64-2-6; 14.6 acres; located on a gravel road on the West side of Shands Road (Rt. 713), South of Sussex Drive (Rt. 40); Sussex County, VA

Applicant or Client and Address:

Jason Dancy
14255 Pole Run Road
Disputanta, VA 23842

Prepared by AOSE:

Scott Stowers, AOSE #1940 00 1022

Date of Report: September 13, 2019

AOSE Job Number: 1003

Revision Date: _____

Health Dept. ID No.: _____

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Page 2: Date, Owner, Location Info, Water Supply Info, General Info, Drainfield Construction Specs, Percolation Lines & Absorption Area
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Attachment of survey

Certification Statement(s):

I hereby certify that the evaluations and/or designs contained herein were conducted in accordance with the Sewage Handling and Disposal Regulations (12 VAC 5-610), the Private Well Regulations (12 VAC 5-615), and other applicable policies of the Virginia Department of Health. I further certify that I currently possess a professional license required by the laws and regulations of the Commonwealth of Virginia that has been duly issued by the applicable agency charged with licensure to perform the work contained herein.

☒ The work attached to this cover page has been conducted under an exemption to the practice of engineering, specifically the exemption in Code of Virginia Section 54.1-402.A.11

I recommend a Construction Permit be issued.



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AOSE Drainfield Construction Permit

Sussex County Health Department

Health Department ID Number: _____

DATE: September 13, 2019

OWNER/AGENT: Jason Dancy
14255 Polc Run Road
Disputanta, VA 23842

PROPERTY & LOCATION INFORMATION: R V Wilson Estate, Parcel 6;
TM# 64-2-6; 14.6 acres; located on a gravel road on the West side of Shands
Road (Rt. 713), South of Sussex Drive (Rt. 40); Sussex County, VA

WATER SUPPLY: To be installed: Private Class IIIC Well; Cased: 20'+ Grouted: 20'+

GENERAL INFORMATION:

Type of Use: New 3 Bedroom Single Family Home; No Basement
Daily Flow: 450 gpd
System Type: Type I, Conventional Gravity Septic Tank-Drainfield System

DRAINFIELD CONSTRUCTION SPECIFICATIONS:

Sewer Line: 3" or 4" ID PVC 40 or equivalent; minimum slope 1.25" per 10';
clean outs required at 50' to 60' intervals
Septic Tank: 1000 gallon concrete tank
Inlet Outlet Structure: 4" PVC40 or equivalent
Conveyance Line: 4" ID, 1500 lb crush strength, 6" per 100' minimum slope
Distribution Box: Precast Concrete with 10+ ports
Header Lines: 4" ID corrugated or smooth bore; 1500 lb crush strength; 2' into
ditch; 2" slope minimum (ADS Triple Wall Pipe Recommended)
Percolation Lines: 4" ID perforated ASTM plastic tubing, 1000 lb per foot
bearing load; 2"-4" per 100' slope maximum

PERCOLATION LINES & ABSORPTION AREA:

Total Number of Laterals: 6
Laterals shall be 70' long and 3' wide
Slope: 2"-4" per 100' maximum
Center to Center Spacing: 9'
Installation Depth: 18"
Depth of Aggregate: 13" Size of Aggregate: 1/2"-1 1/2" clean gravel
Total Square Footage of Drainfield to be installed: 1,260 square feet



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SITE & SOIL INFORMATION:

Parent Material: soils are sandy and clayey deposits of the Coastal Plain
Physiographic Province

Description of landscape: sideslope; linear-linear topo; pine trees

Slope: 6-8 %

Depth to Cr or Rock: 42"+

Depth to impervious strata: 42"+

Depth to Concentrations: 34" Depth to Depletions: 37"

Free Water Present: From to None X

Soil Percolation Rate: 50 min/in (estimated) Texture Group: III

Site Evaluated By: Scott Stowers, AOSE #1022; Date of Evaluation: April 29, 2019

ABBREVIATED DESIGN FORM:

Design Basis:

Estimated Percolation Rate: 50 mpi

Depth of Install: 18"

Square Feet Required Per Bedroom: 376

Number of Bedrooms: 3

Total Square Footage Required: 1,128

Design Calculations:

Number of Trenches: 6

Length of Trenches: 70'

Width of Trenches: 3'

Center to Center Spacing: 9'

Total Square Footage in Design: 1,260

Area Documented (total footprint): $80' \times 70' = 5,600$ sq. ft.

Area Required (total footprint): $48' \times 70' = 3,360$ sq. ft.

Reserve Drainfield Required: Yes X No

Proposed Reserve: Type II; In-Ground; TL-2 Drainfield System

Estimated Percolation Rate: 50 mpi

Design Basis:

Depth of Install: 18"

Hydraulic Loading Rate: 0.8

Number of Bedrooms: 3

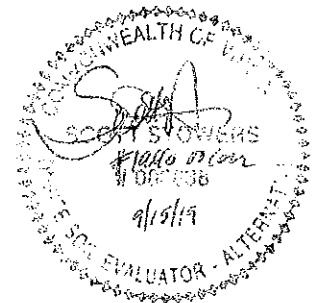
Total Square Footage Required: $450 / .8 = 563$

Design Calculations:

$3 \times 70' \times 3' = 630$ sq. ft.

Area Documented (total footprint): $80' \times 70' = 5,600$ sq. ft.

Area Required (total footprint): $21' \times 70' = 1,470$ sq. ft.



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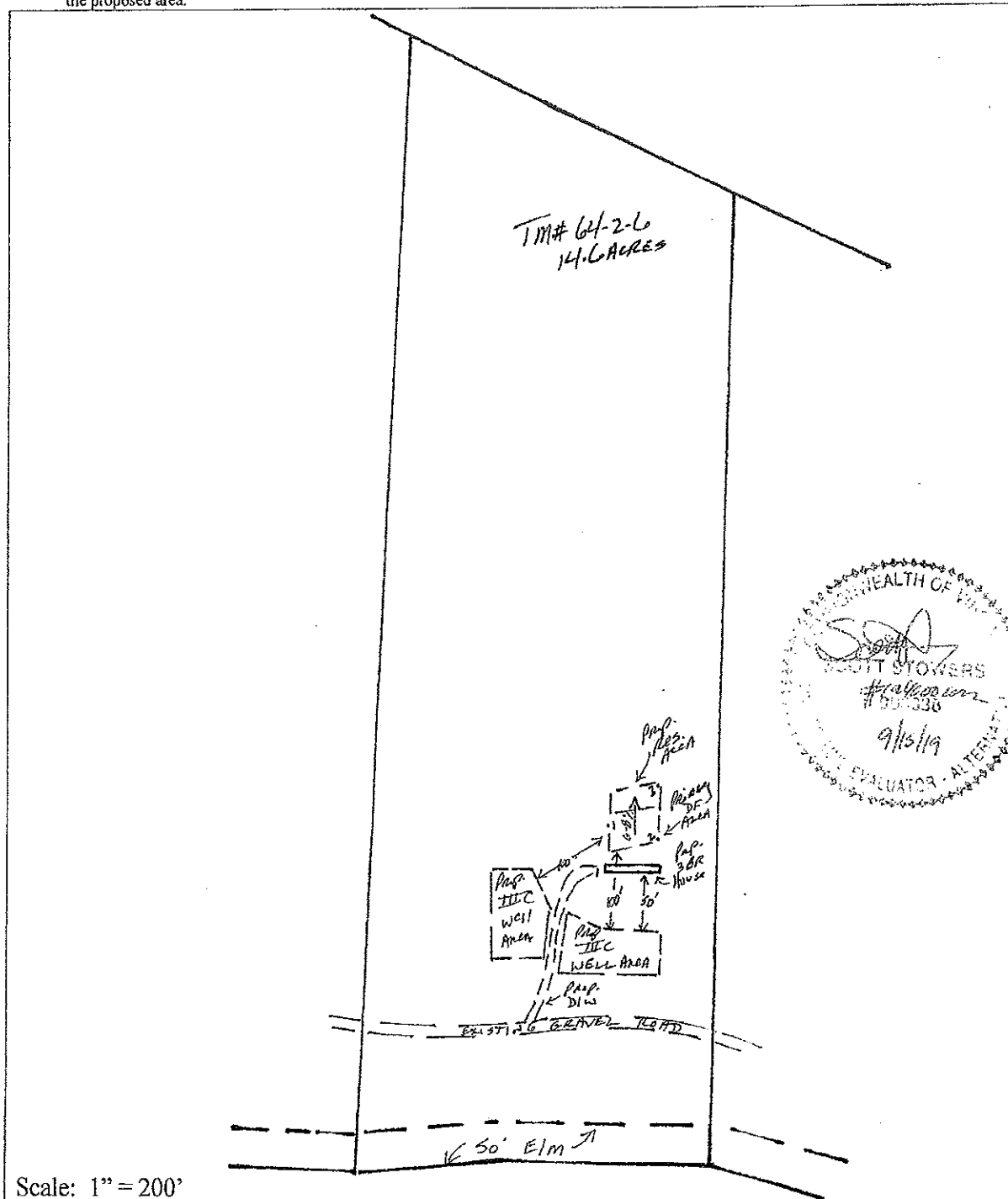
SOIL PROFILE DESCRIPTIONS:

HOLE	HORIZON	DEPTH	DESCRIPTION	TEXTURE
#1 BSS	AE	0-24	brown 7.5yr 4/3 and light yellowish brown 10yr 6/4; friable; sandy loam	Ila
	Bt1	24-34	yellowish-brown 10yr 5/6; friable; sandy clay loam	IIf
	Bt2	34-37	yellowish-brown 10yr 5/6 with few red 2.5yr 5/8 concentrations; friable; sandy clay loam to heavy sandy clay loam	IIf
	Bt3	37-42	yellowish-brown 10yr 5/6 with few red 2.5yr 5/8 concentrations and few faint gray 10yr 6/1 depletions; friable; heavy sandy clay loam	IIf
#2 BSS	AE	0-21	brown 7.5yr 4/3 and light yellowish brown 10yr 6/4; friable; sandy loam	Ila
	Bt1	21-41	yellowish-brown 10yr 5/6; friable; sandy clay loam	IIf
	Bt2	41-42	yellowish-brown 10yr 5/6 with few red 2.5yr 5/8 concentrations and few faint gray 10yr 6/1 depletions; friable; heavy sandy clay loam	IIf
#3 BSS	AE	0-17	brown 7.5yr 4/3 and light yellowish brown 10yr 6/4; friable; sandy loam	Ila
	Bt1	17-34	yellowish-brown 10yr 5/6; friable; sandy clay loam	IIf
	Bt2	34-38	yellowish-brown 10yr 5/6 with few red 2.5yr 5/8 concentrations; friable; sandy clay loam to heavy sandy clay loam	IIf
	Bt3	38-42	yellowish-brown 10yr 5/6 with few red 2.5yr 5/8 concentrations and few gray 10yr 6/1 depletions; friable; heavy sandy clay loam to gritty clay loam	IIf-III



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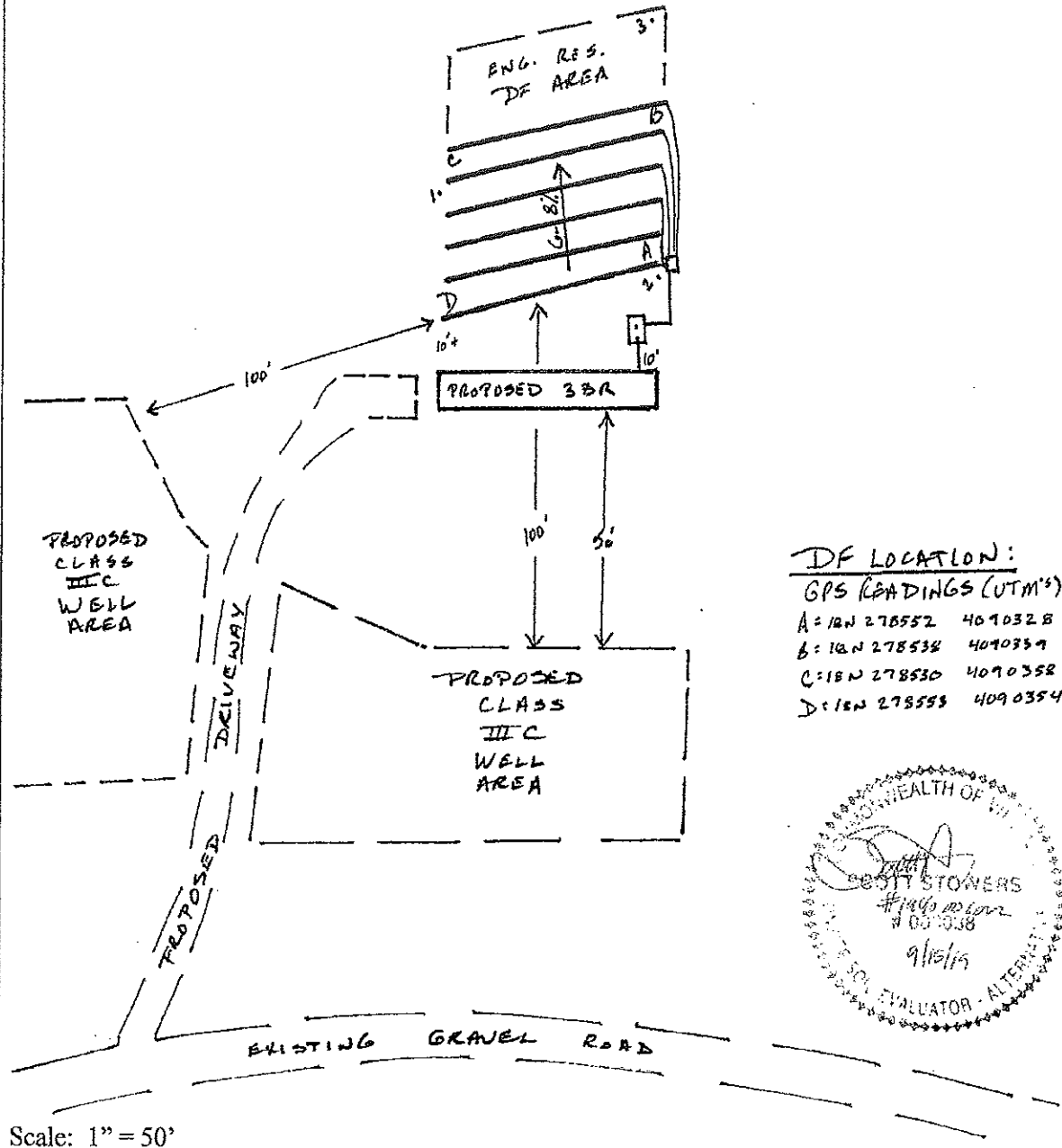
This site sketch includes existing and/or proposed property lines, primary and reserve drainfield areas, proposed building location, driveway, well and soil evaluation borings. This site sketch also includes any observed structures, wells or drainfields within 200' of the proposed area.



phone (804) 543-4377 email: aose1022.davllc@gmail.com

6 x 10' x 3' @ 18" DEEP
~ ON 9' CENTERS
~ ON CONTOUR

TM# 64-2-6
14.6 ACRES



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IMPORTANT NOTES FOR VDH, PROPERTY OWNER, BUILDING CONTRACTOR, CLEARING CONTRACTOR, WELL INSTALLER AND DRAINFIELD INSTALLER:

Drainfield Installer / Homeowner:

DRAINFIELD INSTALLER MUST HAVE DPOR ISSUED INSTALLER LICENSE

*Inspection requests must be called in a minimum of 48 hours prior to the time and date of inspection. It would be beneficial to give as much notice as possible because of scheduling conflicts i.e. vacation, illness, etc... The drainfield installer is responsible for paying Drainfield Designs of Virginia, LLC the inspection fee of \$250.00 at the time of inspection. This inspection fee applies to all inspections required until the drainfield is deemed satisfactory and the completion statement can be issued. The completion statement will not be issued until the inspection fee is paid in full. The drainfield installer is required to have an As Built Drawing prepared at the time of inspection. **Maximum 25% reduction on gravel-less substitutes. Call for approval prior to using any gravel-less substitute.***

Well Installation Contractor:

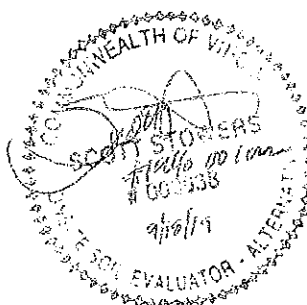
DDVLLC recommends that the well be installed and tested prior to construction of the house to ensure an acceptable water supply. IIB and IIC Wells must be 50'+ from a chemically termite treated dwelling foundation. IIB Wells must be a minimum of 50' from any component of the septic tank and drainfield. IIC Wells must be a minimum of 50' from the septic tank and sewer line and a minimum of 100' from the drainfield. If any Well type is located downslope of a pollution source then you must add either 25' of additional standoff distance or 5' of additional casing and grout to the well per 5% of slope. The Well Head must extend 12" or more above finished grade. It is the property owner's/permit holder's responsibility to ensure that the well is installed on the correct property and does not encroach upon easements or interfere with utilities.

Building Contractor:

Work shall be performed in the drainfield area only during dry weather and soil conditions. This permit is void if any detrimental changes occur to the area evaluated for the drainfield and reserve areas. This permit is also void if the house location interferes with the proposed well or drainfield/reserve locations. Do not allow underground utilities to be buried within 10' of the drainfield or reserve areas. Do not allow construction traffic to travel over the drainfield. Do not alter the topography of the drainfield area in any manner. Damage or changes to the drainfield area may lead to the permit being Null and Void.

These services have been provided at your request. Acceptance and use of this report infers acceptance of the following terms: Services rendered by Drainfield Designs of Virginia, LLC (DDVLLC) are specifically limited to twenty-four (24) months and are provided without warranty or representation other than the warranty that such services were rendered in accordance with §32.1-163.5 of the Code of Virginia. Any claim for any damages, whatsoever, shall be waived unless asserted within twenty-four (24) months of the date the design services were rendered. The limit of any damages shall be the total amount of the design services paid to DDVLLC only.

If these terms are not acceptable please return all original copies to Drainfield Designs of Virginia, LLC



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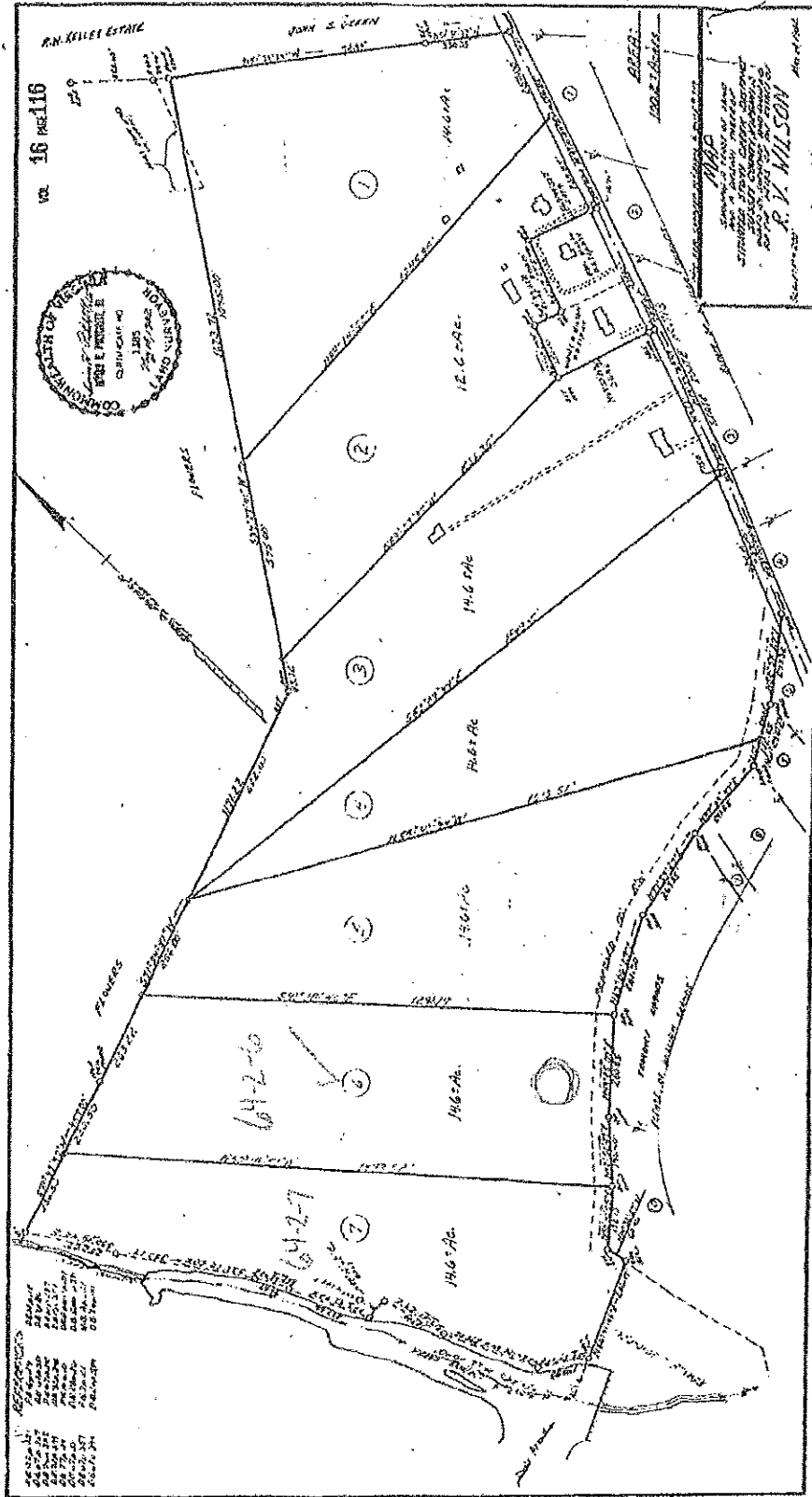
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Addendum to AOSE Certification Statement For Private Well Construction Permit

The proposed well site shown herein,

- ☒ 1. Is located a minimum of 50' from all property lines.
- ☐ 2. Is located within 50' of the adjacent property line(s) but I have determined that the adjacent property is not used for an agricultural operation.
 - ☐ i. Written affirmation from the adjacent property owner(s) that their property is not used as an agricultural operation.
 - ☐ ii. Other confirmation that land use is not an agricultural operation, please describe:
- ☐ 3. Is located within 50 feet of an adjacent property line where the property is used for and agricultural operation. For confirmation, I have attached the appropriate documentation pursuant to § 32.1-176.5:2 of the *Code of Virginia*
 - ☐ i. Written permission from the adjacent property owner(s) for the well construction
 - ☐ ii. I certify that no other site on the property complies with the Board's Regulations for the construction of a private well





IN the Clerk's Office of the Circuit Court of Sumner County, The foregoing instrument was this day presented to the Clerk for recording and he thereupon caused the same to be recorded in the office of the Clerk of the Court, and the same is hereby certified to be a true and correct copy of the original as the same appears from the records of the Clerk of the Court.

TESTE: *[Signature]* Clerk

RECORDED IN DEED BOOK 100, PAGE 120, AT 1:00 P.M., JULY 10, 1982.

Mailed: December 10, 1982
 Williams & Guppell, Attys.
 Winchester, Virginia 22601-0055