

LAND APPLICATION SITE

CHARLES E. GREGORY

DWCEG 1 - 8

DINWIDDIE COUNTY

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on May 12, 2023 between Kate Gregory (804) 731.4325 referred to here as "Landowner", and Recyc Systems, Inc. referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Dinwiddie, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) with county documentation identifying owners, attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
25-4-12			
25-4-13			
25-4-14			

Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: The Landowner is the sole owner of the properties identified herein.
 The Landowner is one of multiple owners of the properties identified herein.

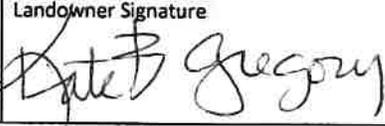
In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

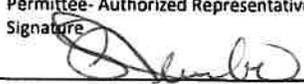
Class B biosolids Water treatment residuals Food processing waste Other industrial sludges
 Yes No Yes No Yes No Yes No

Printed name <u>Kate Gregory</u>	Mailing Address <u>Wilson's, VA. 8881 Hobbs Mill Rd. 23892</u>	Landowner Signature 
By: <u>owner</u>	Phone No. <u>804-731-4325</u>	
* <input type="checkbox"/> I certify that I have authority to sign for the landowner as indicated by my title as executor, Trustee or Power of attorney, etc.		
* <input type="checkbox"/> I certify that I am a responsible official [or officer] authorized to act on behalf of the following corporation, partnership, proprietorship, LLC, municipality, state or federal agency, etc.		

Permittee:

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

Printed name <u>Susan Trumbo</u>	Mailing Address <u>PO Box 562, Remington Virginia 22734</u>	Permittee- Authorized Representative Signature 
Title <u>Technical Manager</u>	Phone No. <u>540-547-3300</u>	

Permittee: Recyc Systems, Inc County or City: Dinwiddie

Landowner: Kate Gregory

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Kate B Gregory
Landowner's Signature

May 12, 2023
Date

Kate B Gregory 7881 Hobbs Mill Rd - May 12, 2023
Operator's Signature mailing address & phone Date
Williams, Va
(804) 731-4325

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Landowner Coordination Form

This form is used by the Permittee to identify properties (tax parcels) that are authorized to receive biosolids and/or industrial residuals, and each of the legal landowners of those tax parcels. A Land Application Agreement-Biosolids and Industrial Residuals from original signature must be attached for each legal landowner identified below prior to land application at the identified parcels.

Permittee: Recyc Systems, Inc.

Site Name: Charles E. Gregory

County or City: Dinwiddie Co.

Please Print

Signature not required on this page

Tax Parcel ID(s)	Landowner(s)
24-4-14	Charles E. and Kate B. Gregory (Charles E. Gregory is now deceased, his wife Kate inherited his share of the land)
25-4-12	Charles E. and Kate B. Gregory (Charles E. Gregory is now deceased, his wife Kate inherited his share of the land)
25-4-13	Charles E. and Kate B. Gregory (Charles E. Gregory is now deceased, his wife Kate inherited his share of the land)

RECYC SYSTEMS, INC

FIELD DATA SHEET

Field Identification	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #	FSA Field #
		Water Table	Bed Rock/ Shallow	Surf/ Leach	Freq Flood				
DWCEG 01	12.5	-	-	-	-	JA 37	25-4-12 25-4-13 25-4-14	5644B	0
DWCEG 02	13.0	-	-	-	-	JA 37	25-4-14	5644	6, 8
DWCEG 03	5.0	-	-	-	-	JA 37	25-4-14	5644	4, 17
DWCEG 04	9.1	-	-	-	-	JA 37	25-4-14	5644	5
DWCEG 05	13.8	-	-	-	-	JA 37	25-4-14	5644	20, 23
DWCEG 06	11.1	-	-	-	-	JA 37	25-4-14	5644	1, 15
DWCEG 07	16.4	-	-	-	-	JA 37	25-4-14	5644	2, 16
DWCEG 08	9.5	-	-	-	-	JA 37	25-4-14	5644	3, 15
TOTAL ACRES IN SITE	90.4								

NEW FIELD CHANGES
CHARLES E. GREGORY SITE
DINWIDDIE COUNTY

NEW FIELD 1 IS OLD FIELD 1.

NEW FIELD 2 IS OLD FIELD 2.

NEW FIELD 3 IS OLD FIELD 3.

NEW FIELD 4 IS OLD FIELD 4.

NEW FIELD 5 IS OLD FIELD 5.

NEW FIELD 6 IS PART OF OLD FIELD 6.

NEW FIELD 7 IS OLD FIELD 7.

NEW FIELD 8 IS PART OF OLD FIELD 6.

NUTRIENT MANAGEMENT PLAN IDENTIFICATION

Operator

Michael Gregory
8881 Hobbs Mill Road
Wilsons, VA 23894
804-690-3031

Integrator:None

Farm Coordinates

Easting: 0, Northing: 0, zone: 17

Watershed Summary

watershed: JA37
county: Dinwiddie

Nutrient Management Planner

John Doe
123 Main St.
Suite #5
Blacksburg, VA 24060

Certification Code: 892

Acreage Use Summary

Total Acreage in this plan: 90.4

Cropland: 0.
Hayland: 26.6
Pasture: 63.8
Specialty: 0.

Livestock Summary

Beef Cattle 0
Dairy Cattle 0
Poultry 0
Swine 0
Other 0

Manure Production Balance

	Imported	Produced	Exported	Used	Net
kgals	0.	0.	0.	0.	0.
tons	0.	0.	0.	0.	0.

Plan written 5/17/2023
Valid until 5/17/2025

Signature: _____
Planner date

Nutrient Management Plan Balance Sheet
(Spring, 2023-Summer, 2025)
Charles E. Gregory
Planner: John Doe (cert. No. 892)

Tract: 5644 Location: Dinwiddie
(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosid Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - applied N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes
6, 8/DWCEG 2(N)	13/13	2023	Grass Pasture	50-80-80	0/0				50-80-80	N/A		
4, 17/DWCEG 3(N)	5/5	2023	Fescue grass hay mt.	90-80-170	0/0				90-80-170	N/A		
5/DWCEG 4(N)	9/9	2023	Fescue grass hay mt.	90-80-170	0/0				90-80-170	N/A		
20, 23/DWCEG 5(N)	14/14	2023	Grass Pasture	50-30-40	0/0				50-30-40	N/A		
1, 15/DWCEG 6(N)	11/11	2023	Grass Pasture	50-80-80	0/0				50-80-80	N/A		
2, 16/DWCEG 7(N)	16/16	2023	Grass Pasture	50-30-40	0/0				50-30-40	N/A		
3, 15/DWCEG 8(N)	10/10	2023	Grass Pasture	50-80-80	0/0				50-80-80	N/A		

Commercial Application Methods:
br - Broadcast ba - Banded sd - Sidedress

Notes:

Tract: 5644B Location: Dinwiddie
 (N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
0/DWCEG 1(N)	13/13	2023	Fescue grass hay mt.	70-50-95	0/0				70-50-95	N/A			

Commercial Application Methods:
 br - Broadcast ba - Banded sd - Sidedress

Notes:

Soil Test Summary

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec. lime tons/Ac
5644	DWCEG 2	13	[No Test]						
5644	DWCEG 3	5	[No Test]						
5644	DWCEG 4	9	[No Test]						
5644	DWCEG 5	14	[No Test]						
5644	DWCEG 6	11	[No Test]						
5644	DWCEG 7	16	[No Test]						
5644	DWCEG 8	10	[No Test]						
5644B	DWCEG 1	13	[No Test]						

Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
5644	5644/6, 8	DWCEG 2	13	Cecil	IVa	II	III	II	High Slope
	5644/4, 17	DWCEG 3*	5	Cecil	IVb	III	III	III	
	5644/5	DWCEG 4	9	Cecil	IVa	II	III	II	
	5644/20, 23	DWCEG 5	14	Appling	IVa	II	III	III	
	5644/1, 15	DWCEG 6	11	Cecil	IVa	II	III	II	
	5644/2, 16	DWCEG 7	16	Appling	IVa	II	III	III	
	5644/3, 15	DWCEG 8	10	Cecil	IVa	II	III	II	
	5644B	5644B/0	DWCEG 1	13	Appling	IVa	II	III	

* Do not apply manure or biosolids more than 30 days prior to planting. Apply commercial fertilizer nitrogen to row crops in split spring applications.

Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA

Farm Summary Report

Plan: **New Plan** **Spring, 2023 - Summer, 2025**

Farm Name: **Charles E. Gregory**

Location: Dinwiddie

Specialist: John Doe

N-based Acres: 90.4

P-based Acres: 0.0

Tract Name: **5644**

FSA Number: 5644

Location: Dinwiddie

Field Name: **DWCEG 2**

Total Acres: 13.00 Usable Acres: 13.00

FSA Number: 6, 8

Tract: 5644

Location: Dinwiddie

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
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60	4C	Cecil
40	4B	Cecil

Field Warnings:

Field Name: DWCEG 3

Total Acres: 5.00 Usable Acres: 5.00

FSA Number: 4, 17

Tract: 5644

Location: Dinwiddie

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
	[NO TEST]			

Soils:

PERCENT	SYMBOL	SOIL SERIES
26	4B Cecil	
14	4C Cecil	
60	4D Cecil	

Field Warnings:

Environmentally Sensitive Soils due to:

Soils with percent slope in excess of 15%

Field Name: DWCEG 4
Total Acres: 9.10 Usable Acres: 9.10
FSA Number: 5
Tract: 5644
Location: Dinwiddie
Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
	[NO TEST]			

Soils:

PERCENT	SYMBOL	SOIL SERIES
79	4B	Cecil
21	2C	Appling

Field Warnings:

Field Name: DWCEG 5
Total Acres: 13.80 Usable Acres: 13.80
FSA Number: 20, 23
Tract: 5644
Location: Dinwiddie
Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
67	2C	Appling
33	4B	Cecil

Field Warnings:

Field Name: DWCEG 6

Total Acres: 11.10 Usable Acres: 11.10

FSA Number: 1, 15

Tract: 5644

Location: Dinwiddie

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
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[NO TEST]

Soils:

PERCENT	SYMBOL	SOIL SERIES
47	4B	Cecil
45	4C	Cecil
8	4D	Cecil

Field Warnings:

Field Name: DWCEG 7

Total Acres: 16.40 Usable Acres: 16.40

FSA Number: 2, 16

Tract: 5644

Location: Dinwiddie

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

PERCENT	SYMBOL	SOIL SERIES
45	4B	Cecil
55	2C	Appling

Field Warnings:

Field Name: DWCEG 8

Total Acres: 9.50 Usable Acres: 9.50

FSA Number: 3, 15

Tract: 5644

Location: Dinwiddie

Slope Class: C Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
	[NO TEST]			

Soils:

PERCENT	SYMBOL	SOIL SERIES
52	4B	Cecil
35	4C	Cecil
13	4D	Cecil

Field Warnings:

Tract Name: 5644B

FSA Number: 5644B

Location: Dinwiddie

Field Name: DWCEG 1

Total Acres: 12.50 Usable Acres: 12.50

FSA Number: 0

Tract: 5644B

Location: Dinwiddie
Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:
Pasture (>75% cover)

P-Index Summary
N-based
Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K	Lab
[NO TEST]				

Soils:

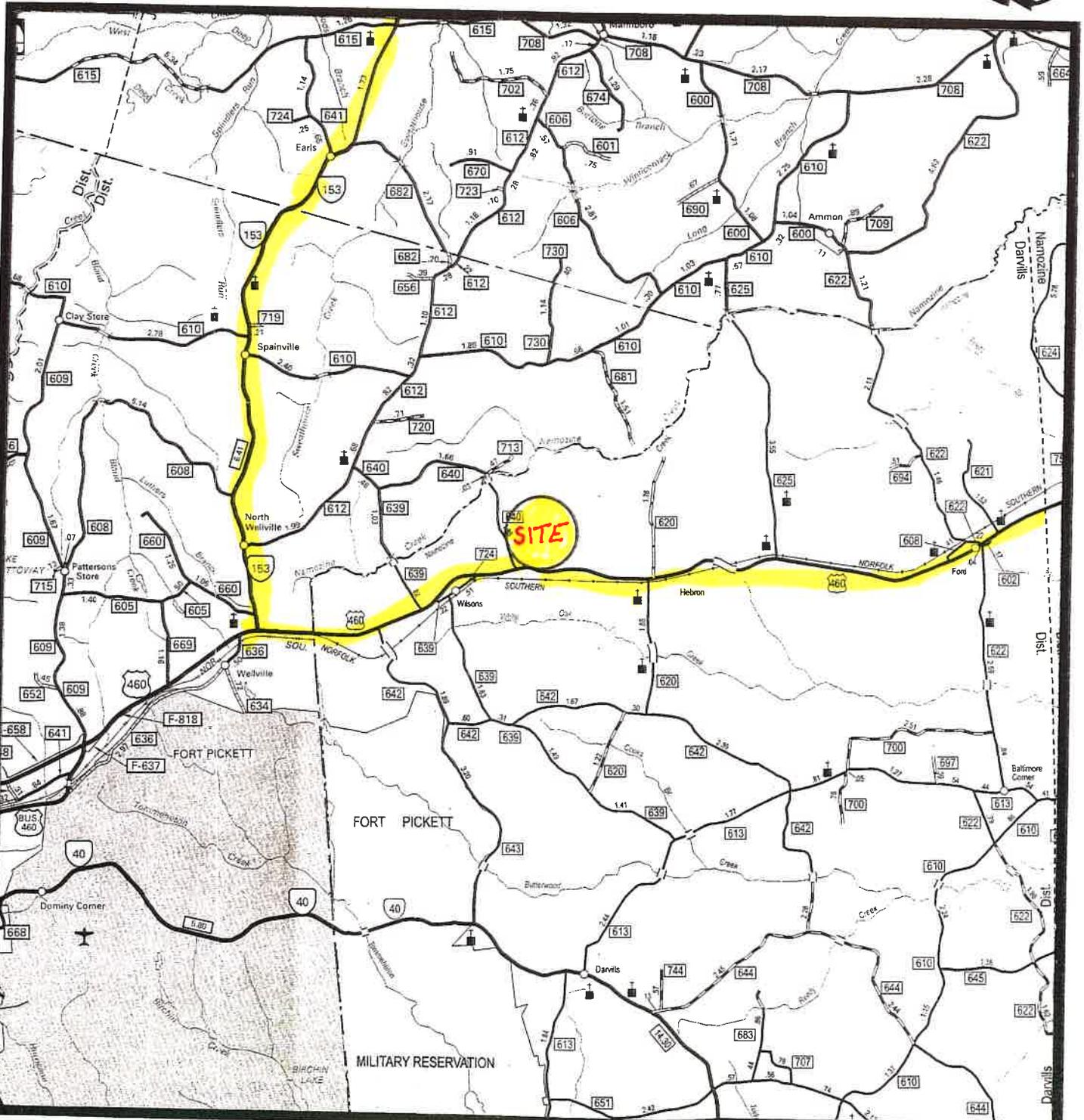
PERCENT	SYMBOL	SOIL SERIES
55	2B	Appling
45	2C	Appling

Field Warnings:

MAPS

Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 2 miles

DWCEG 1- 8

5-16-23

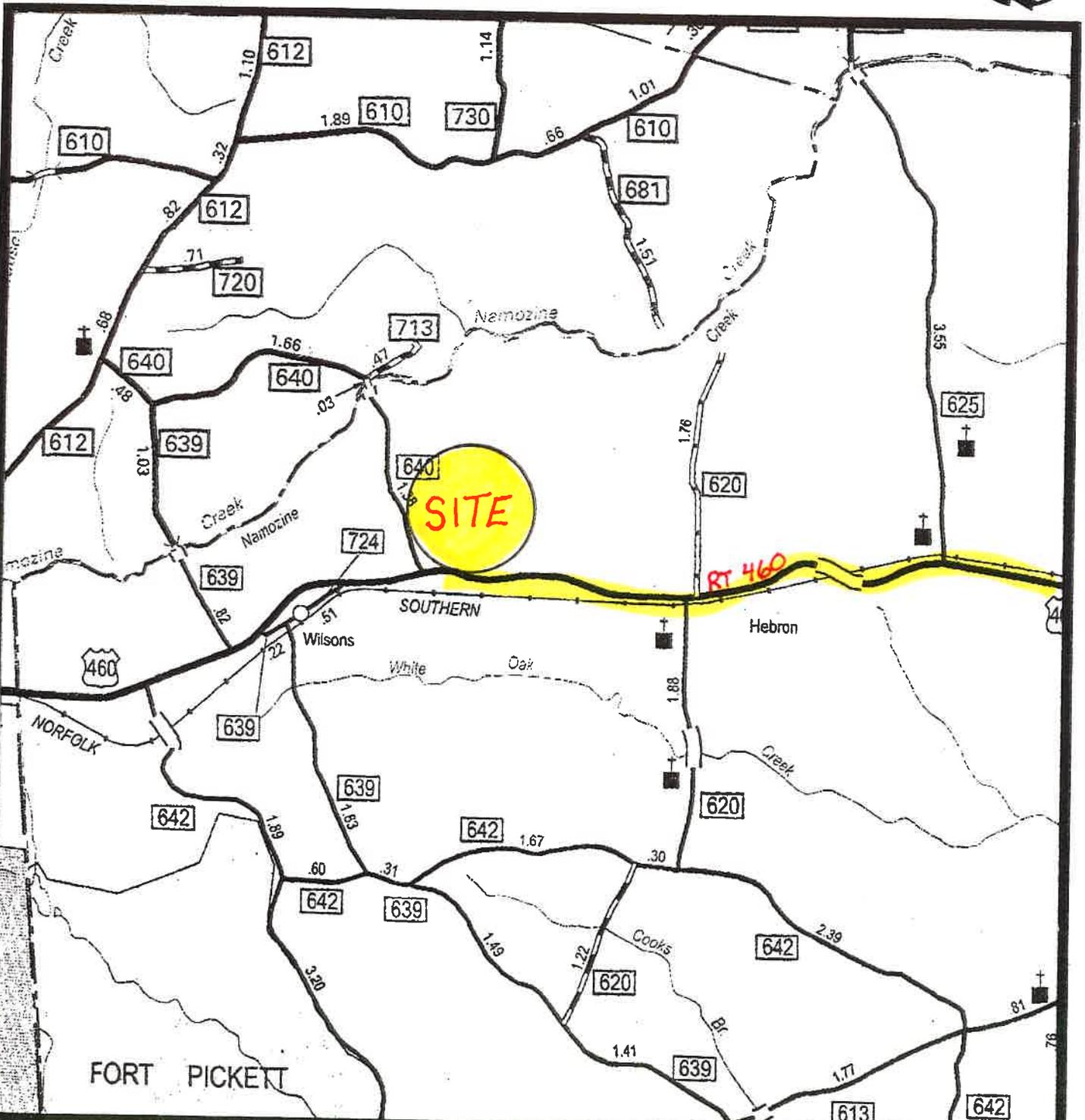
Truck
Route

VICINITY MAP



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1 inch = 1 mile

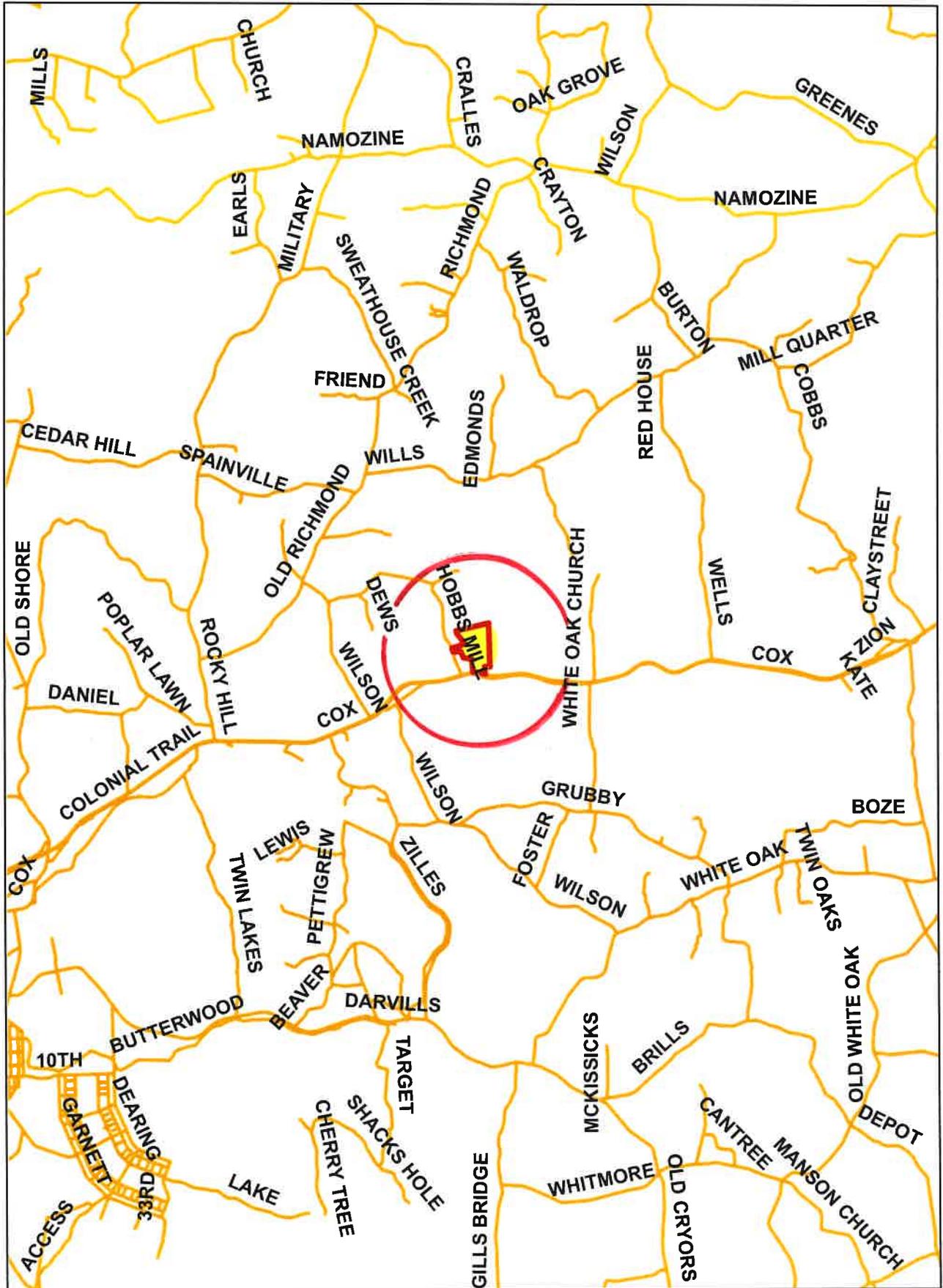
DWCEG 1- 8

5-16-23

Truck
Route

VICINITY MAP

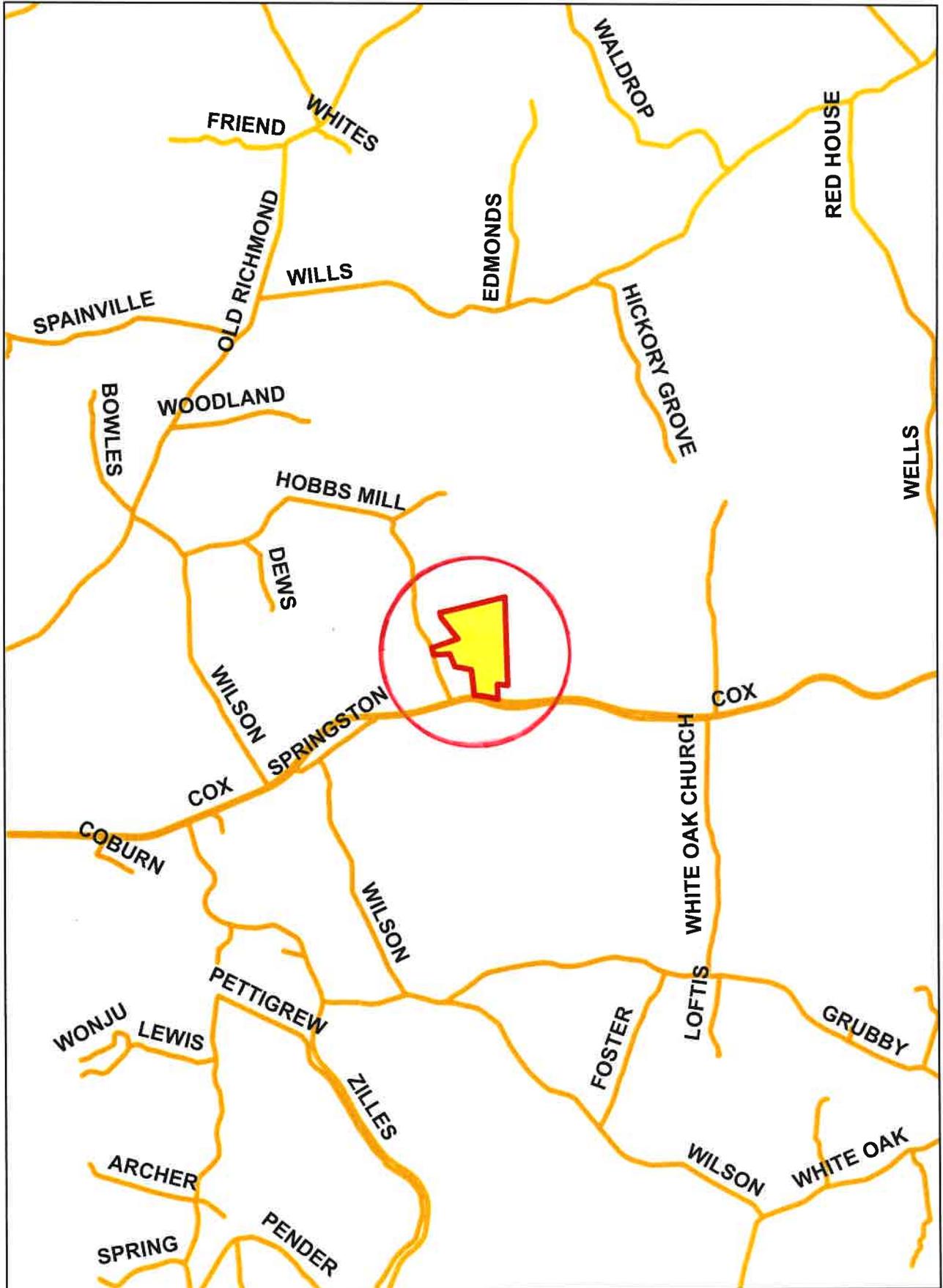




5-16-23

Vicinity Map

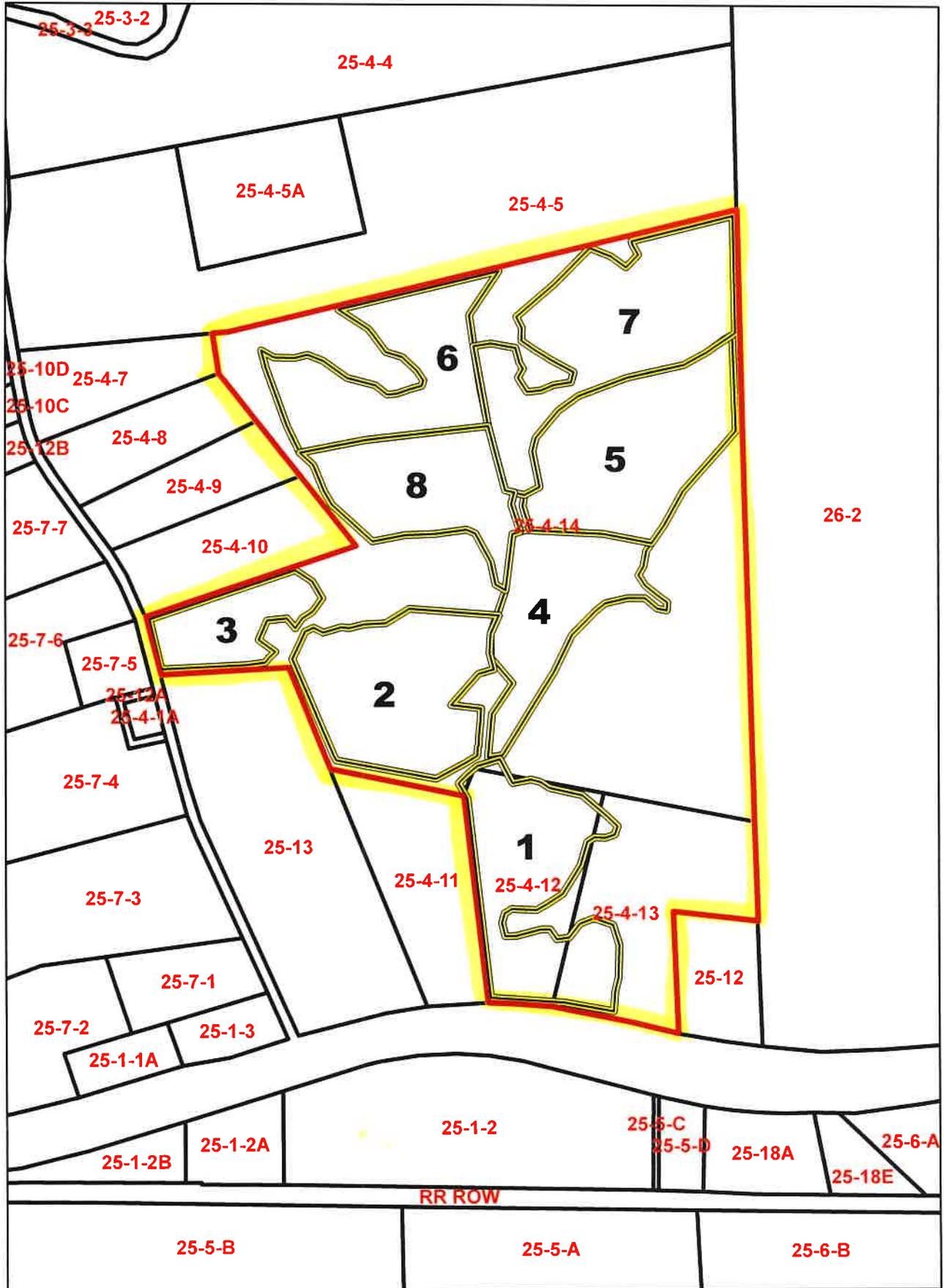
1 in = 2 miles



5-16-23

Vicinity Map

1 in = 1 miles



5-16-23

Tax Map

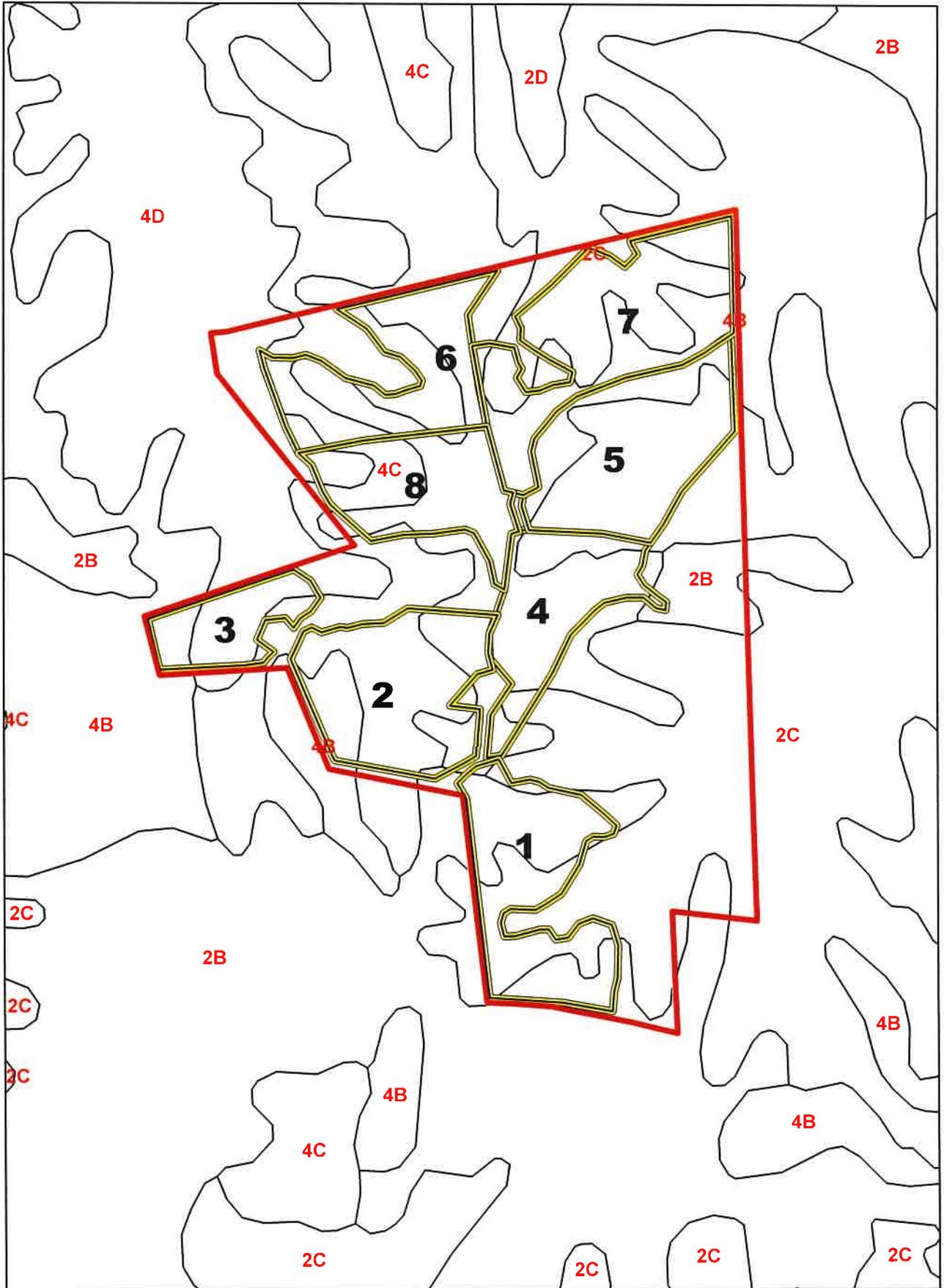
1 in = 660 feet

ADJOINING LANDOWNERS

CHARLES E. GREGORY

DINWIDDIE COUNTY

Tax Map	Parcel #	Owner Name(s)
25	12	Kaitlyn N. Coleman and River C. Gupton
	12A	Jacob Bottoms
	13	Richard N. Galbreath and Jo Diane Lippard
25-1	2	Rebecca P. Hudson
25-4	5	Jeanne H. Branch
	7	Jeanne H. Branch
	9	Robert D. and Willadean C. Harrison
	10	Robert D. and Willadean C. Harrison
25-5	11	Robert K. or Sharon R. Stafford
	D	Rebecca P. Hudson
25-7	5	James H. Jr. or Debra L. Bayles
	6	Tracy A. Henrich
26	2	Hobbs-Lewis LLC



5-16-23
Frequently
Flooded

Soil Map

1 in = 660 feet



Field Id	Gross Acres
DWCEG 1	12.5
DWCEG 2	13.0
DWCEG 3	5.0
DWCEG 4	9.1
DWCEG 5	13.8
DWCEG 6	11.1
DWCEG 7	16.4
DWCEG 8	9.5
TOTAL	90.4

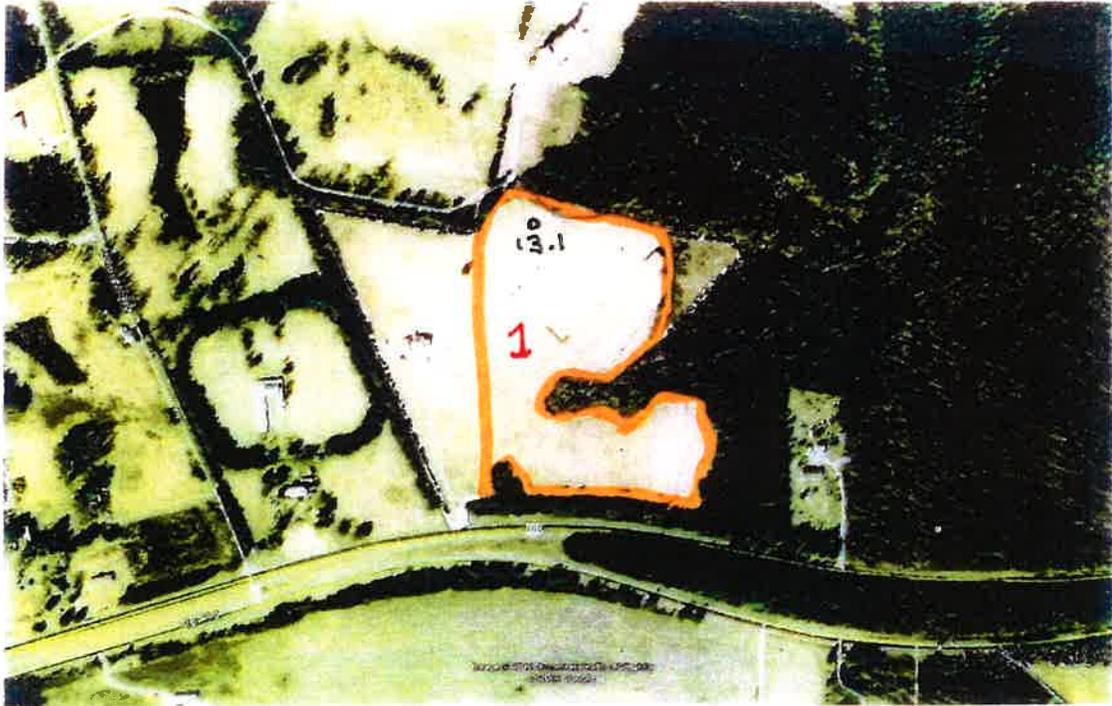


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

5-16-23

Aerial Map

1 in = 660 feet



T5644B

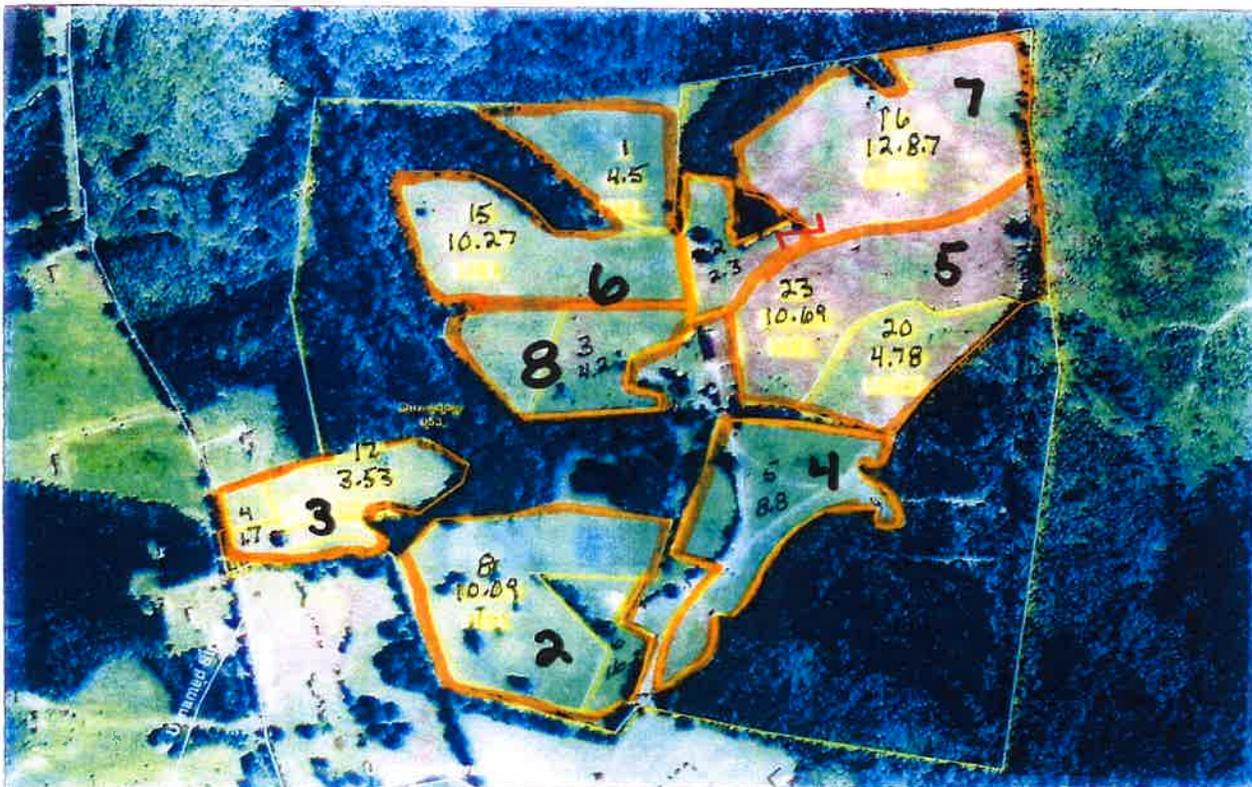
Scale: 1 inch = 660 feet

DWCEG 1

5-16-23

AERIAL MAP





T5644

Scale: 1 inch = 660 feet

DWCEG 2-8

5-16-23

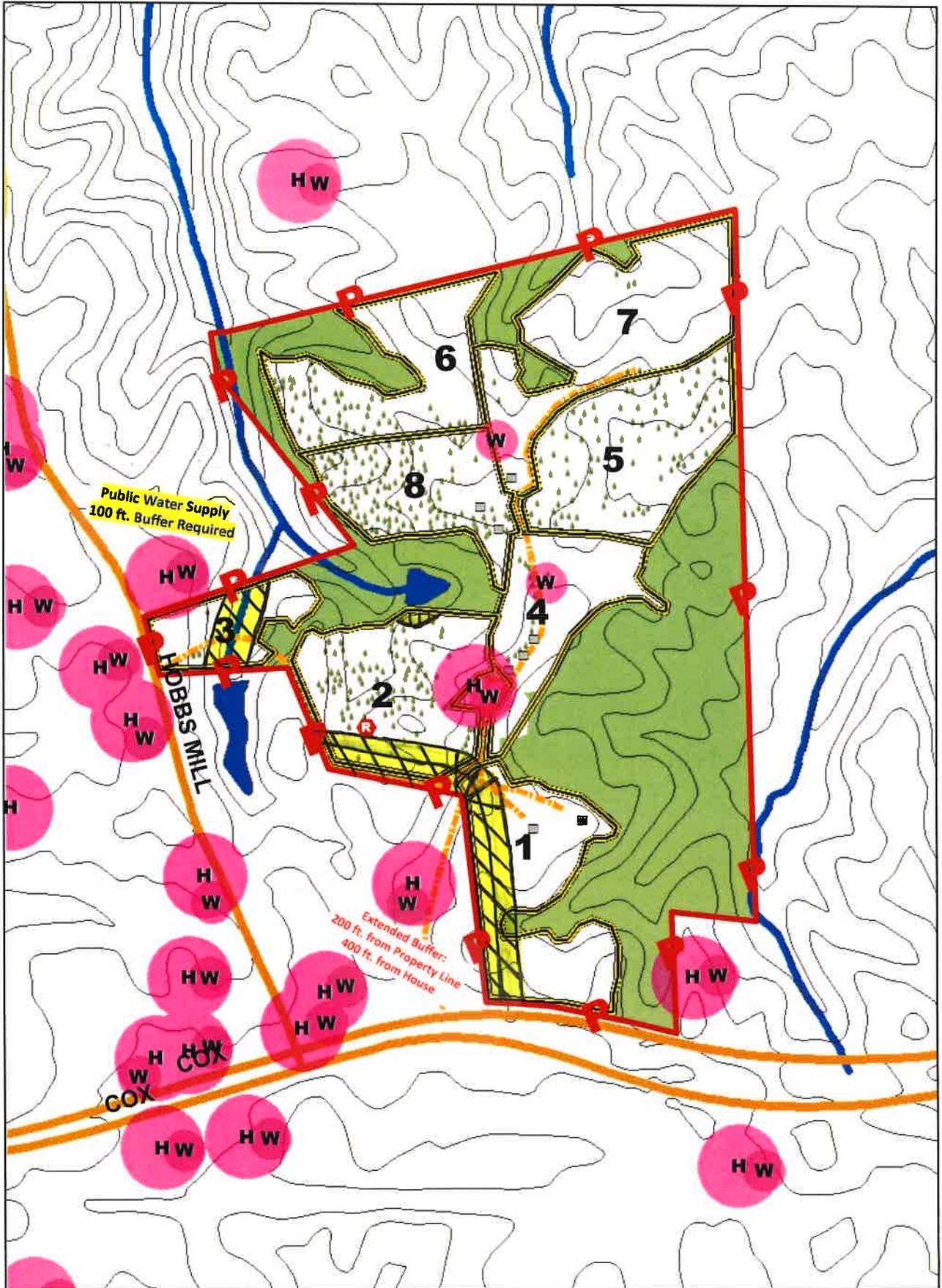
AERIAL MAP



Legend For Site Plan

Symbol	Feature	Minimum Setback
	House and Well	200 feet from occupied dwelling * 100 feet from water supply wells or springs
	Well or Spring	100 feet from water supply wells or springs
	Streams or Surface Water	35 feet with 35 foot vegetated buffer 100 feet without vegetated buffer
	Wet Spot	
	Trees and Woods	
	Private Drive	
	Rock Area/Rock Outcrop	25 feet from rock outcrops 50 feet from limestone rock outcrops
	Severely Eroded Spot	18 Inch minimum depth of soil
	Sink Hole	100 feet from open sinkholes 50 feet from closed sinkholes
	State Road	10 feet from side of roadway
	Fence / Field Boundary	
	Property Line	100 feet from property line *
	Slope	15% maximum
	Hashed out Area	No application

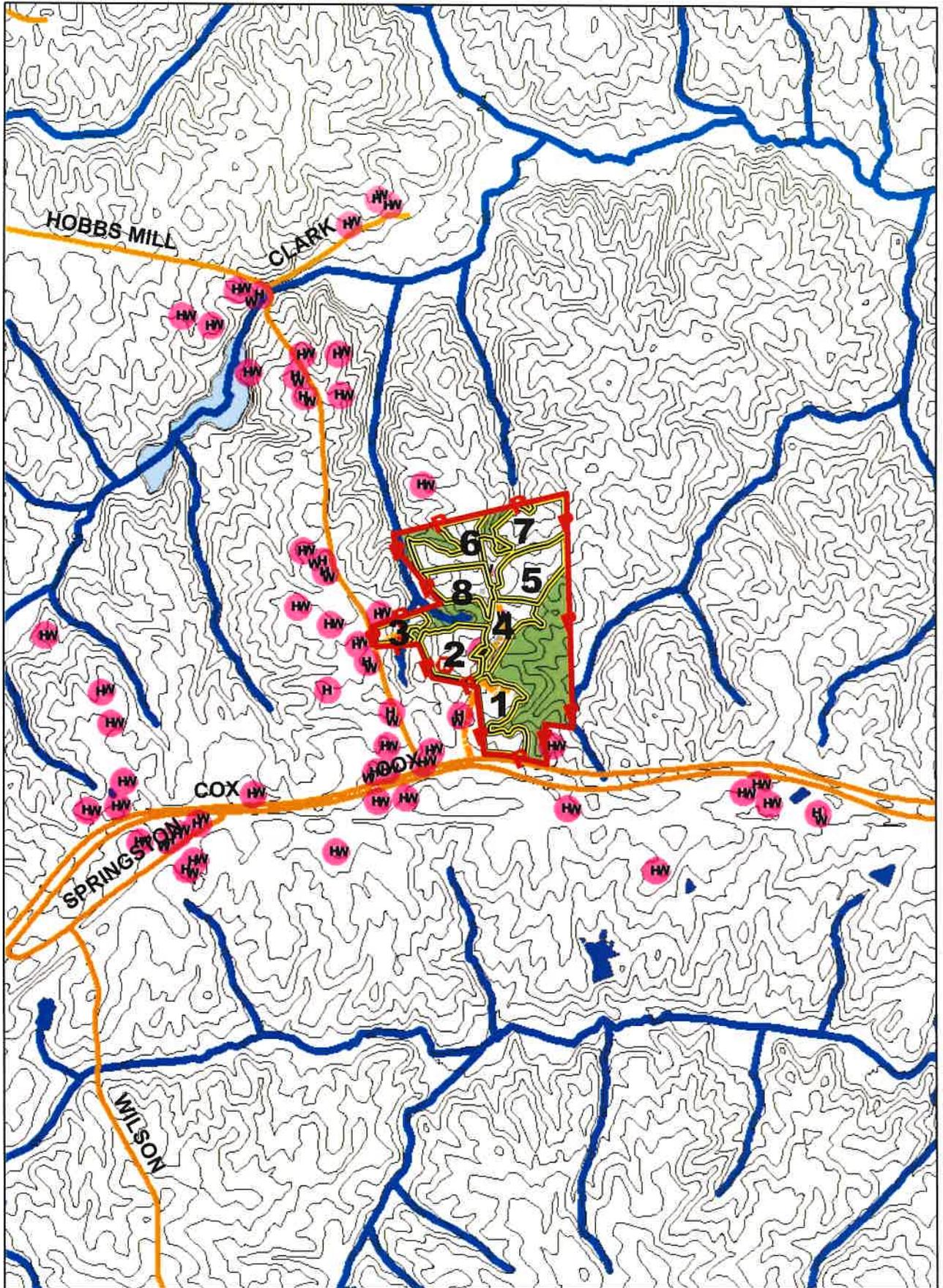
*Buffer can be reduced or waived upon written consent from landowner.



5-16-23

Site Map

1 in = 660 feet



5-16-23

Topographic Map

1 in = 2,000 feet