

**LAND APPLICATION SITE**

**MARY T KINCHELOE**

**CRMTK 1 & 2**

**CAROLINE 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 8-8-2015 between MARY TURNER KINCHELOE, Trustee 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 CAROLINE County Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) 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
<u>97-A-2</u>			

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.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

MARY TURNER KINCHELOE, Trustee Mary Turner Kinchele 7821 Kinchele Rd  
 Landowner - Printed Name, Title Signature Judith Mailing Address & Phone Number Clifton, VA, 20124  
Tel # 703-273-2300

**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.

I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

[Signature] [Signature] PO Box 562 Remington, Virginia 22734  
 Permittee - Authorized Representative Printed Name Signature Mailing Address

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

Permittee: Recyc Systems, Inc County or City: CAROLINE  
Landowner: MARY TURNER KINCHELOP, Trustee

**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).

Mary Turner Kincheloe, Trustee 8-8-2015  
Landowner's Signature Date



# RECYC SYSTEMS, INC

## FIELD DATA SHEET

Field Identification	DEQ Control ID	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
			Water Table	Bed Rock/ Shallow	Surf/ Leach	Freq Flood			
CRMTK 1	51033-00365-0000	17.7	-	-	-	-	YO 50	97-A-2	T 1130 F 1
CRMTK 2	51033-00366-0000	70.1	-	-	-	-	YO 50	97-A-2	T 1130 F 4
TOTAL ACRES IN SITE		87.8							

8-5-19

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: Mary T. Kincheloe

County or City: Caroline Co.

Please Print

Signature not required on this page

<u>Tax Parcel ID(s)</u>	<u>Landowners (s)</u>
97-A-2	Mary Turner Kincheloe Trustee

Report Number: 18-016-0507

Account Number: 70594



"Every acre...Every year."™

7621 Whitepine Road, Richmond, VA 23237

Main 804-743-9401 ° Fax 804-271-6446

www.waypointanalytical.com

Send To: Recyc Systems Inc  
Susan Trumbo  
8455 Whiteshop Road  
Culpeper VA 22701

Grower: Mary Kincheloe  
Caroline Co.

### SOIL ANALYSIS REPORT

Analytical Method(s): SMP Buffer pH Mehlich 3 Loss On Ignition Water pH

Date Received: 01/16/2018

Date Of Analysis: 01/17/2018

Date Of Report: 01/17/2018

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus				Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g	
1	17950	1.8 L		79	66 H			51 L	79 M	788 H		6.8		0.1	4.8	
2-A	17952	2.1 L		85	119 VH			93 M	58 L	787 H		6.3	6.88	0.5	5.2	
2-B	17953	2.1 L		84	114 VH	116	8A	88 L	51 L	829 H	6.3	6.86	0.7	5.5		
2-C	17954	2.2 L		86	116 VH			86 L	52 L	833 H		6.3	6.87	0.6	5.4	

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts
	K %	Mg %	Ca %	Na %	H %	NO <sub>3</sub> N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate
1	2.7	13.7	82.1		2.1			3.0 M	19 M				
2-A	4.6	9.3	75.7		9.6			2.9 M	28 H				
2-B	4.1	7.7	75.4		12.7			3.0 M	24 H				
2-C	4.1	8.0	77.1		11.1			3.3 M	26 H				

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Paucic McGeary*

Paucic McGeary

THE PLANNER IS NOT STATE CERTIFIED

**Nutrient Management Plan Balance Sheet**  
**(Fall, 2019-Winter, 2021)**  
**Mary T. Kincheloe**  
**Planner: John Doe**

Tract: 1130      Location: Caroline  
 (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
1/CRMTK 1(N)	18/18	2019 2020	Wheat (grain) ... ..	100-60-60 -- --	20/0				80-60-60	N/A		
4/CRMTK 2(N)	70/70	2019 2020	Wheat (grain) ... ..	100-60-60 -- --	20/0				80-60-60	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
1130	CRMTK 1	18	[No Test]						
1130	CRMTK 2	70	[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
1130	1130/1	CRMTK 1*	18	Kempsville	IIIa	II	Not Suited	III	High Leaching, High Slope
	1130/4	CRMTK 2*	70	Bojac1	IVa	II	Not Suited	III	High Leaching

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

### **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 Fall, 2019 - Winter, 2021

**Farm Name:** Mary T. Kincheloe

**Location:** Caroline

**Specialist:** John Doe

**N-based Acres:** 87.8

**P-based Acres:** 0.0

**Tract Name:** 1130

**FSA Number:** 1130

**Location:** Caroline

**Field Name:** CRMTK 1

**Total Acres:** 17.70 **Usable Acres:** 17.70

**FSA Number:** 1

**Tract:** 1130

**Location:** Caroline

**Slope Class:** C **Hydrologic Group:** B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

### *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
29	10E	Emporia Kempsville Remlik
36	11A	Emporia Kempsville
35	11B	Emporia Kempsville

**Field Warnings:**

*Environmentally Sensitive Soils due to:*

*Soils with potential for leaching based on soil texture or excessive drainage*

*Soils with perent slope in excess of 15%*

**Field Name: CRMTK 2**

Total Acres: 70.10 Usable Acres: 70.10

FSA Number: 4

Tract: 1130

Location: Caroline

Slope Class: B Hydrologic Group: B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

*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
13	1B	Altavista
87	5B	Bojac1

**Field Warnings:**

*Environmentally Sensitive Soils due to:*

*Soils with potential for leaching based on soil texture or excessive drainage*

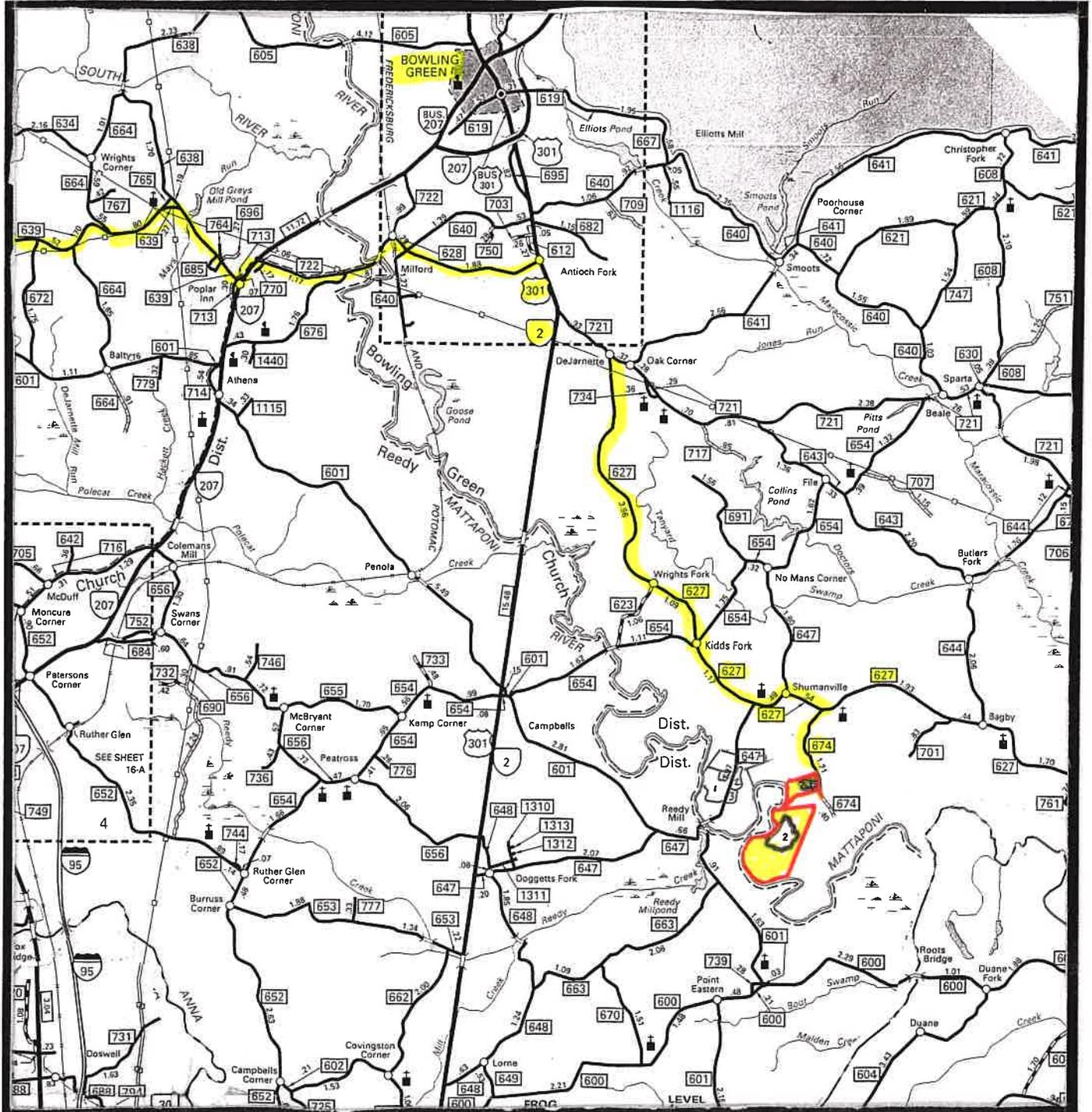


# MAPS

# Recyc Systems™

Inc.

(Biosolids Land Application)



Scale: 1"=2 Miles

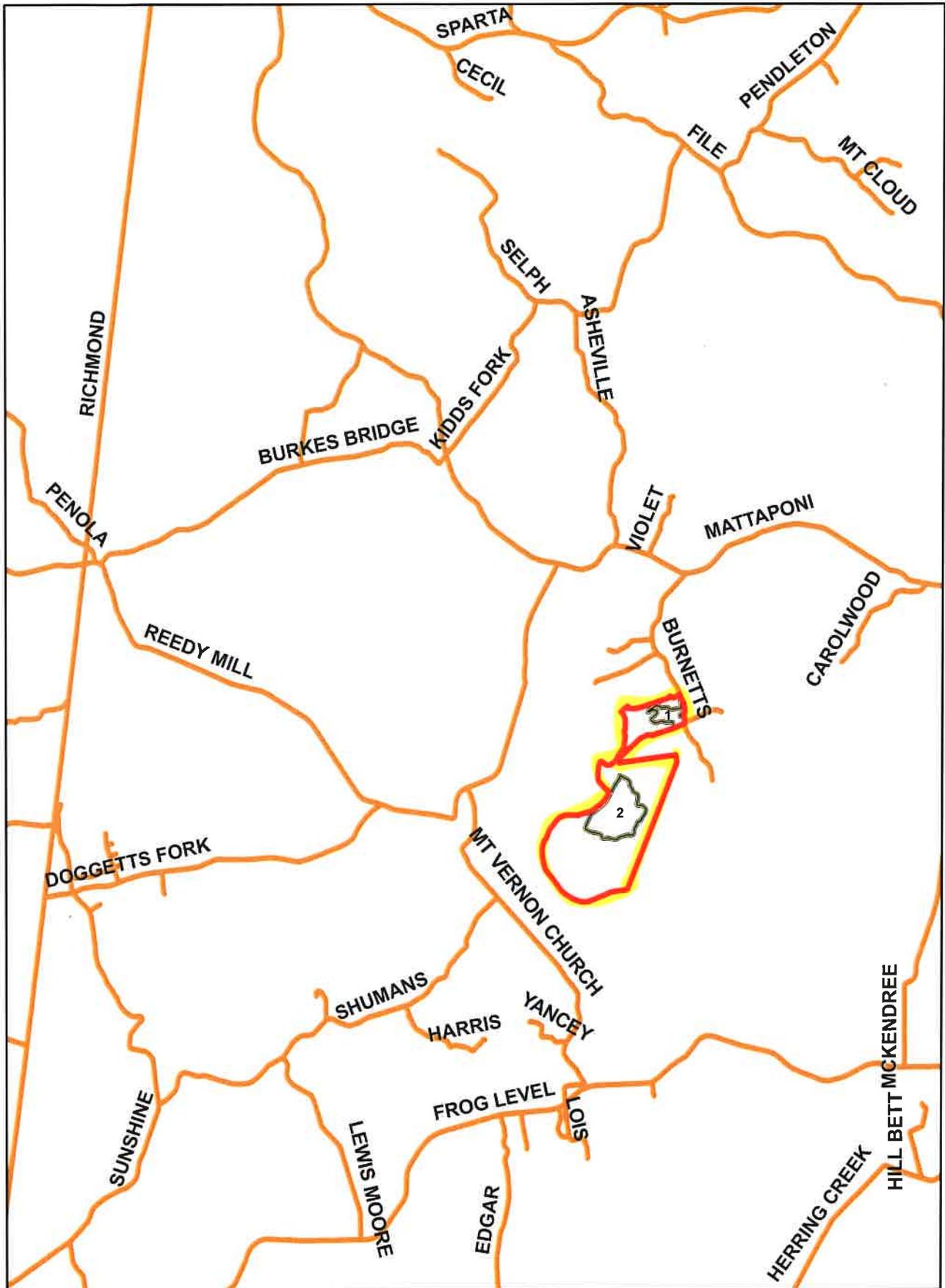
Truck Route marked in Yellow

VICINITY MAP



8-5-19



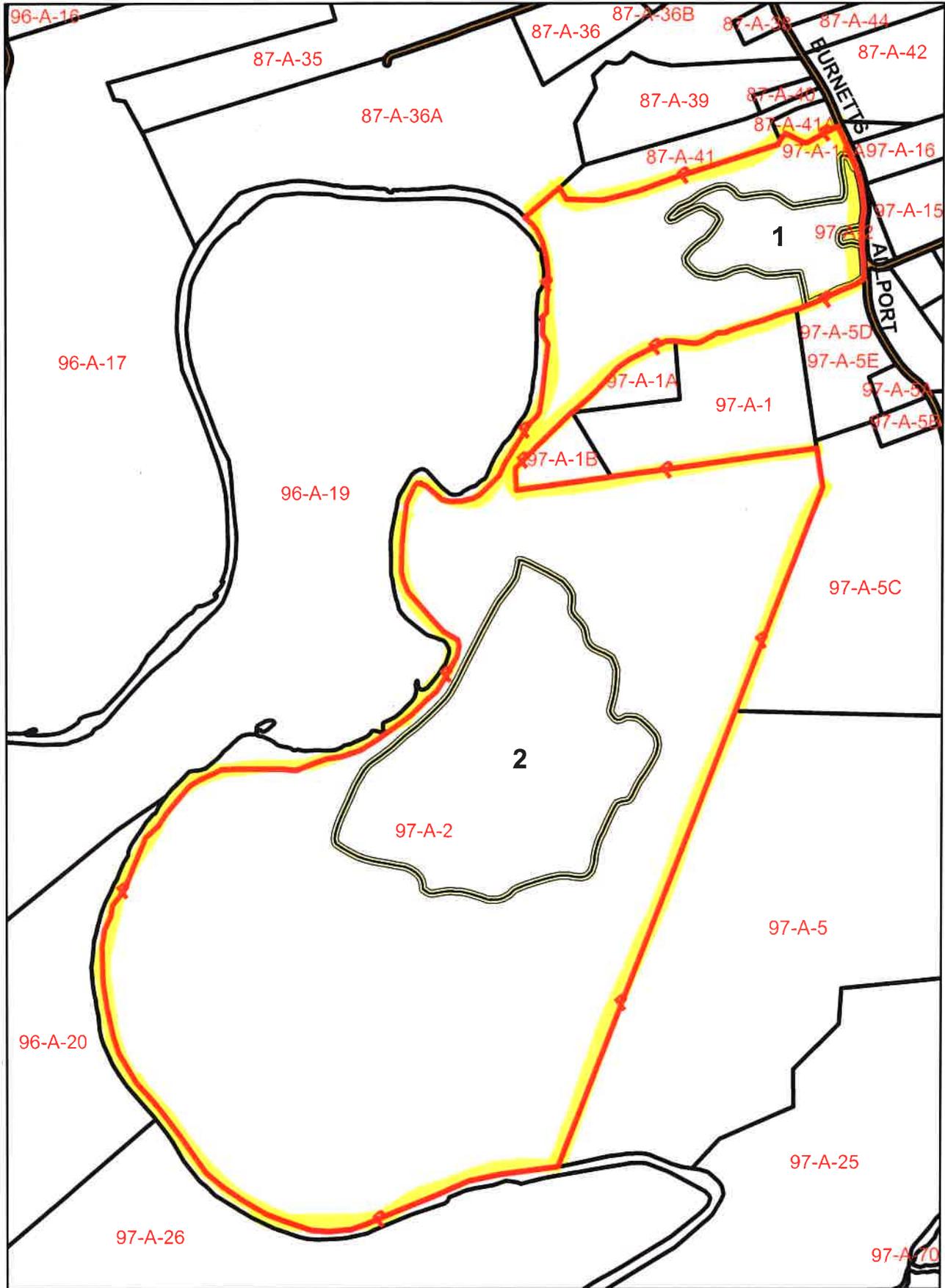


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**VICINITY MAP**

1 in = 1 mile



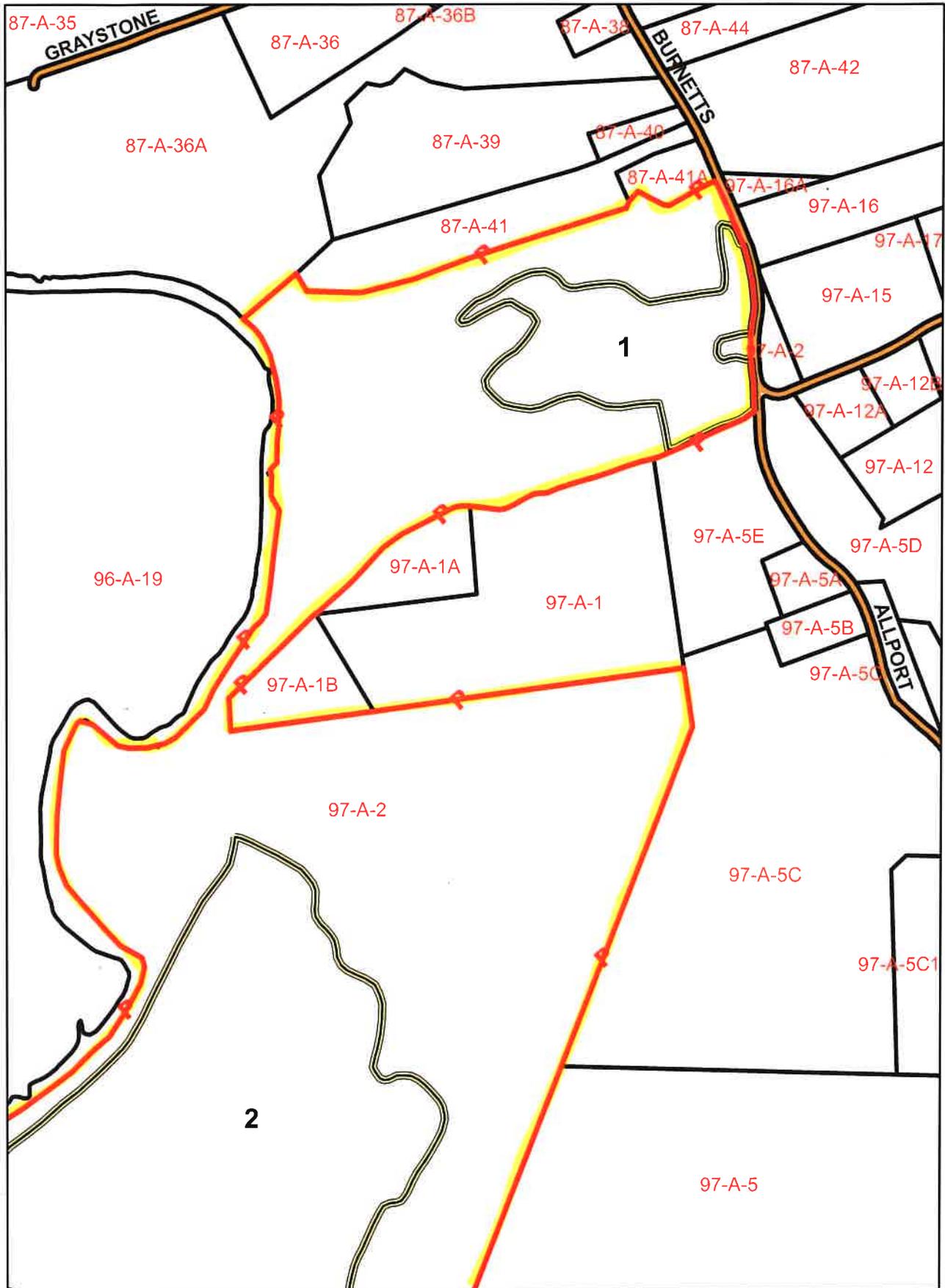


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**TAX MAP**

1 in = 1,000 feet



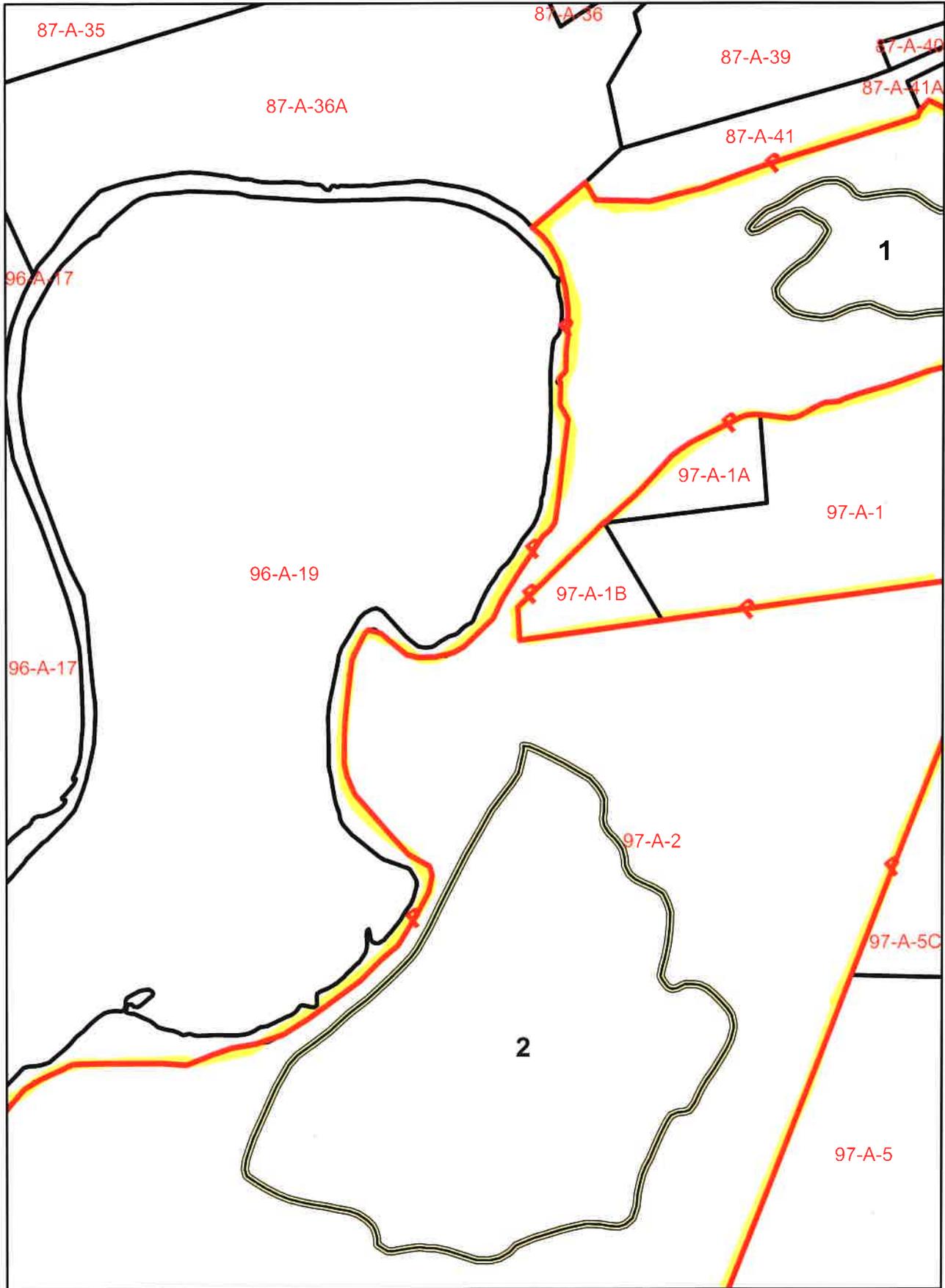


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**TAX MAP**

1 in = 660 feet



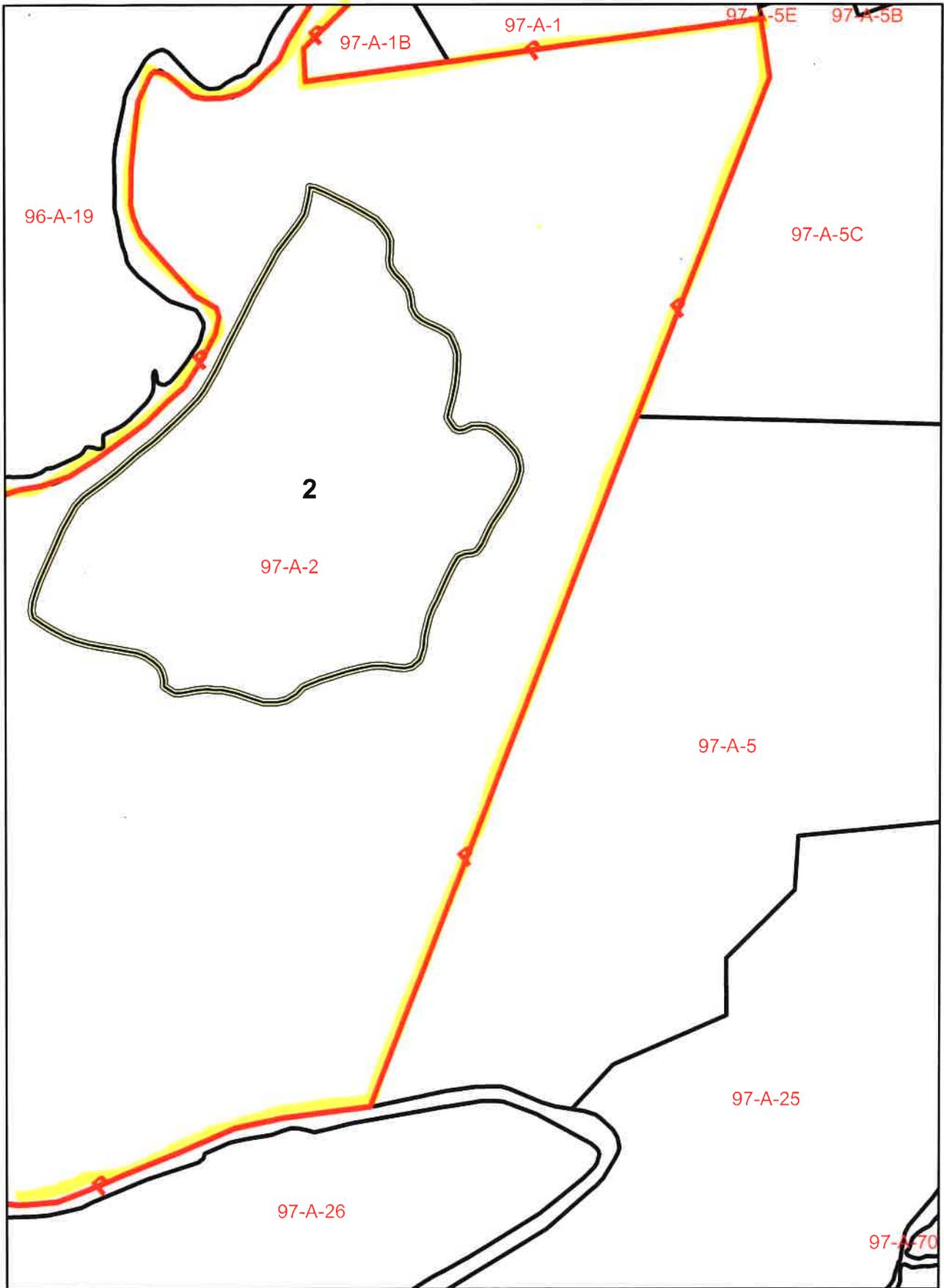


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TAX MAP

1 in = 660 feet

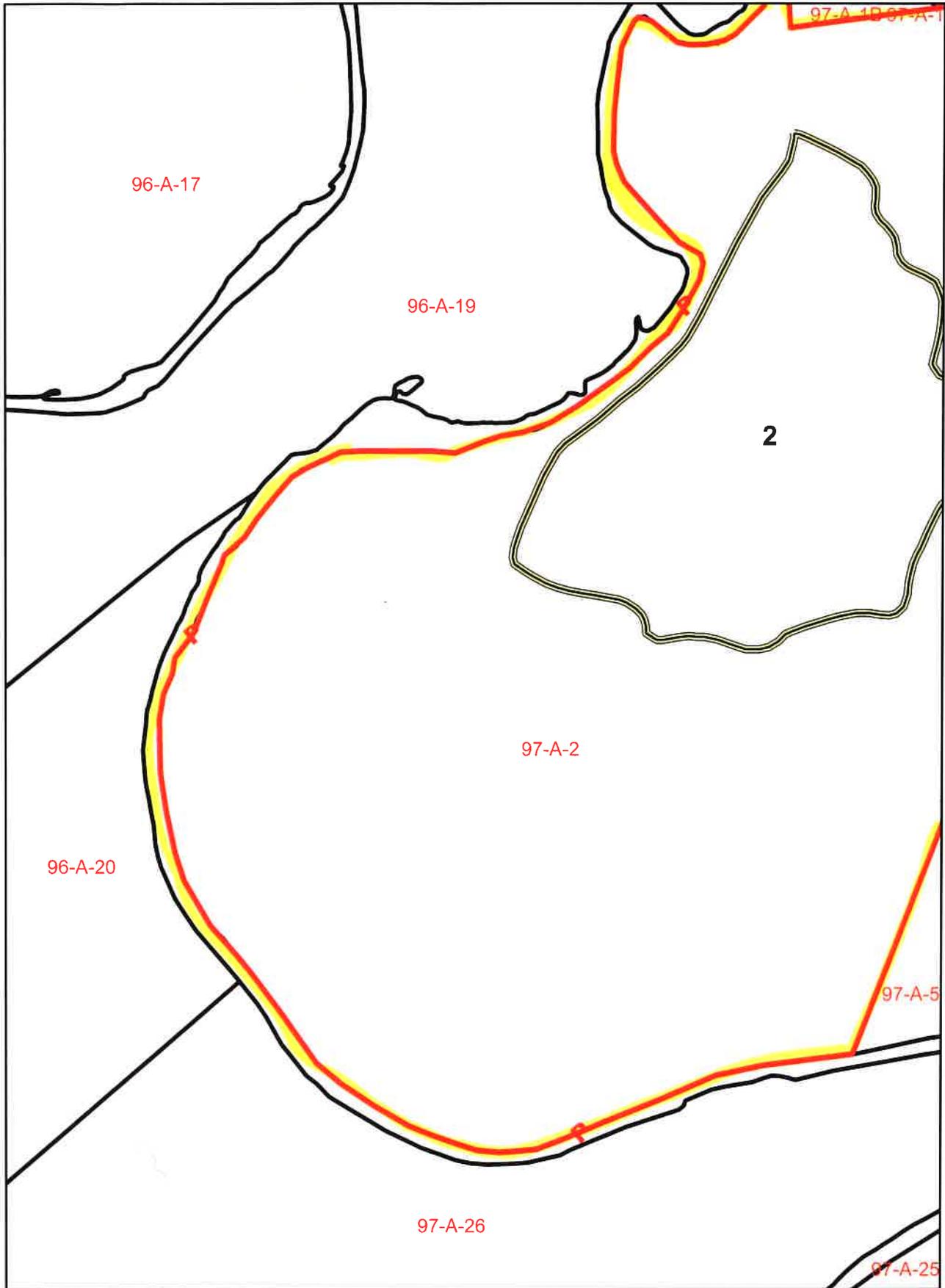




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TAX MAP

1 in = 660 feet



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**TAX MAP**

1 in = 660 feet

# ADJOINING LANDOWNERS

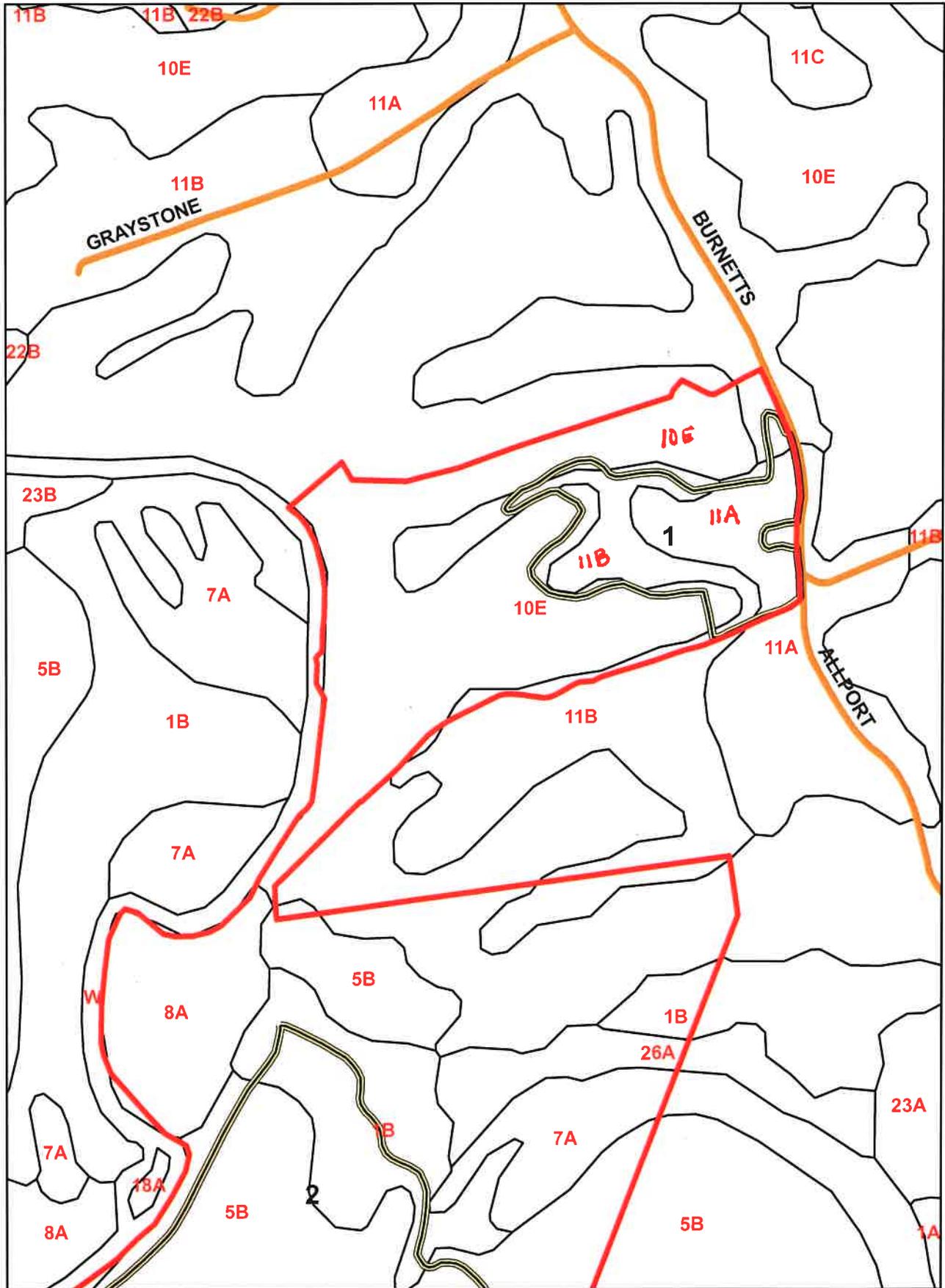
MARY T. KINCHELOE

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## CAROLINE COUNTY

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Tax Map	Parcel #	Owner Name(s)
87-A	36A	Briar Hill Holdings LLC
	41	Thomas W. and Jean G. Upshaw
	41A	Ada W. Harris et. als.
	42	Willie S. Moore, Jr. and Charlotte B.
96-A	19	Carolyn S. Gwinn
	20	Guy David Chenault
97-A	1	Margaret Johnson Weis
	1A	Katherine L. Davis and Daniel J. Lee
	1B	Mohammed A. and Maha A. Awadallah
	2	Mary Turner Kincheloe Tr.
	5	Emmett M. Coleman III and Joan C.
	5C	Kathryn C. McVay
	5D	Emmett M. Coleman III and Joan C.
	5E	Kathryn C. McVay
	12A	Charles R. and Alica E. Osborne
	15	Mary T. Kincheloe Tr.
	16	Thomas W. and Jean G. Upshaw
16A	Thomas W. and Jean G. Upshaw	
26	Guy David Chenault	

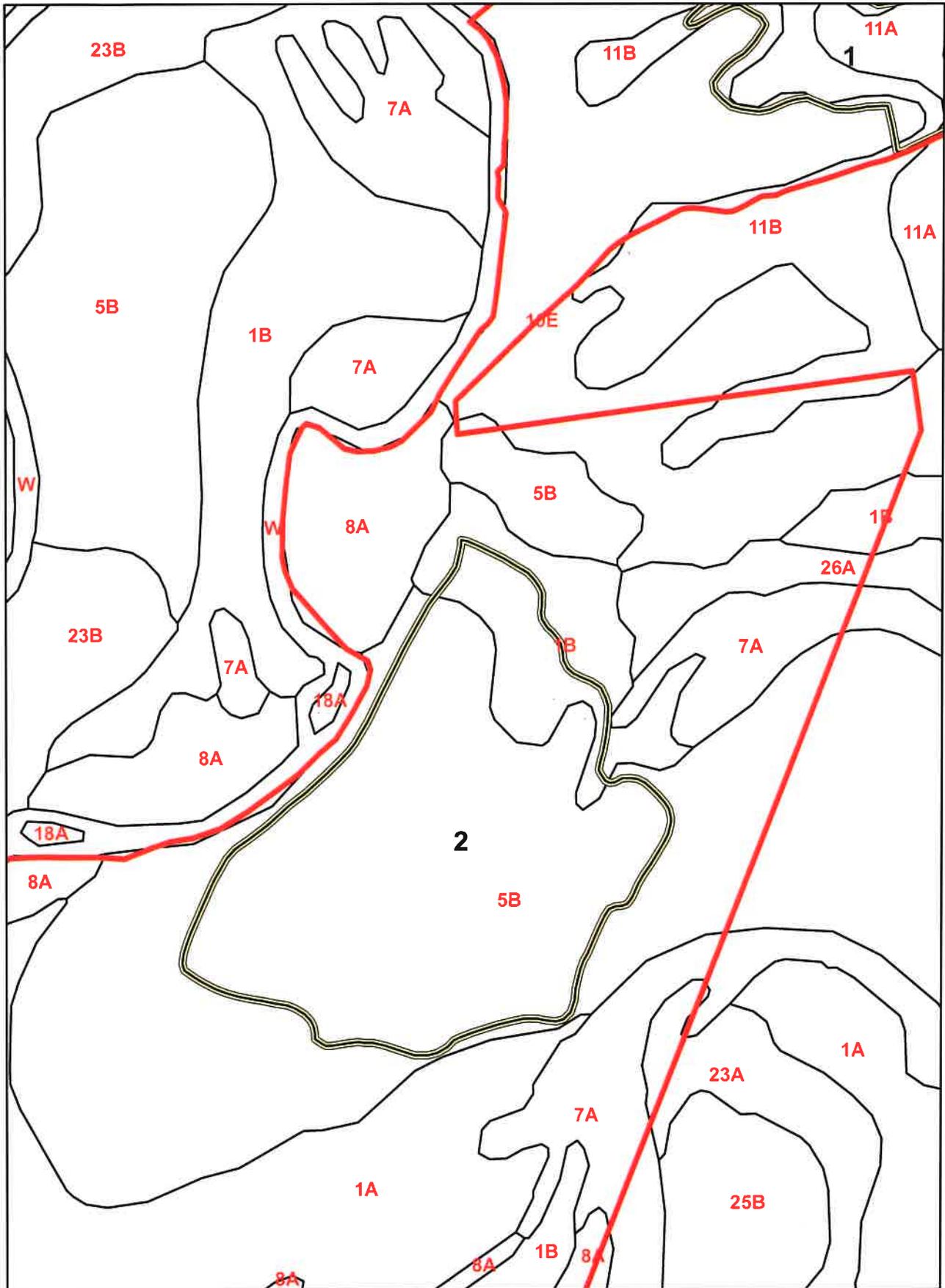


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**SOIL MAP**

1 in = 660 feet

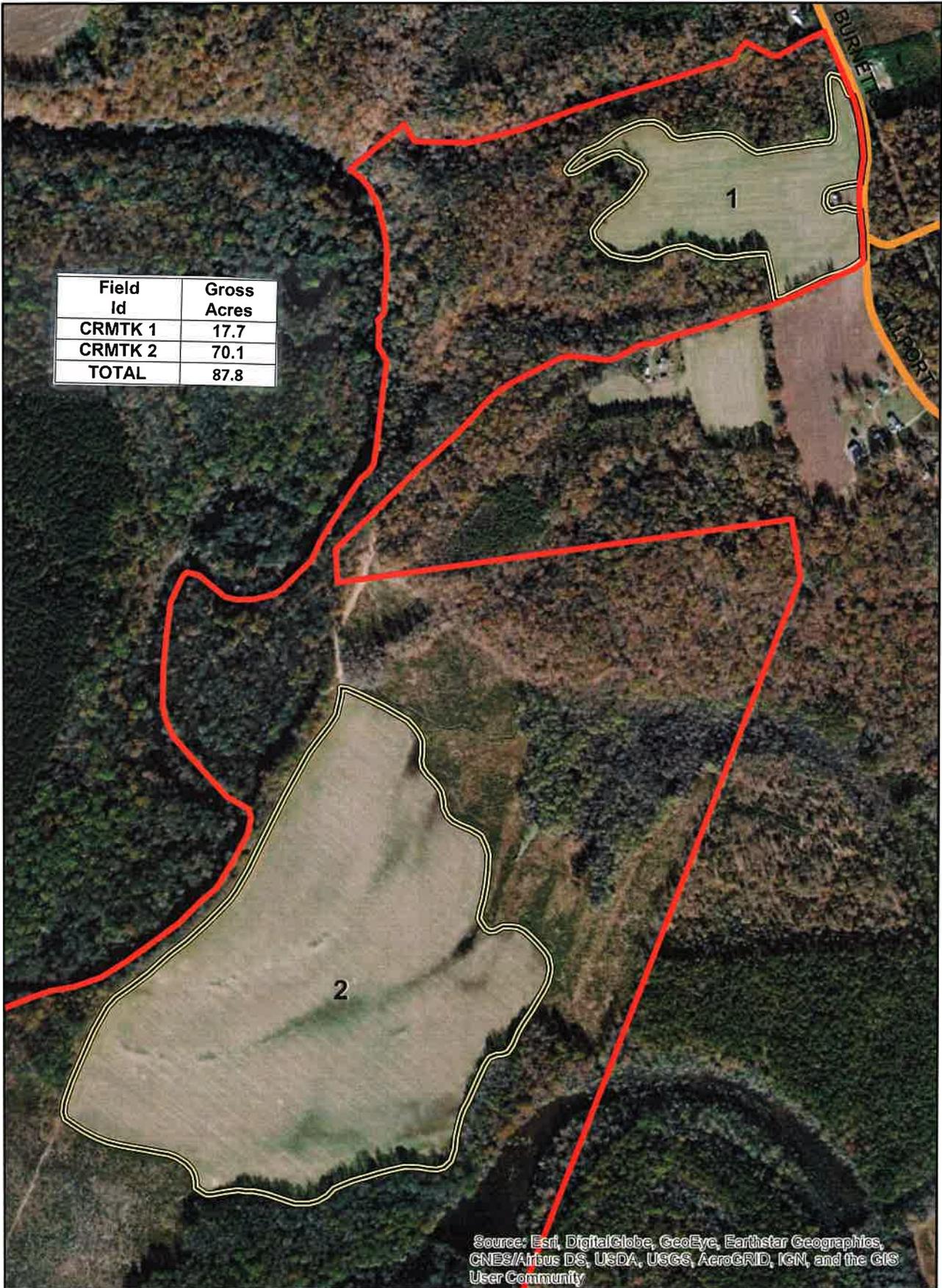




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**SOIL MAP**

1 in = 660 feet

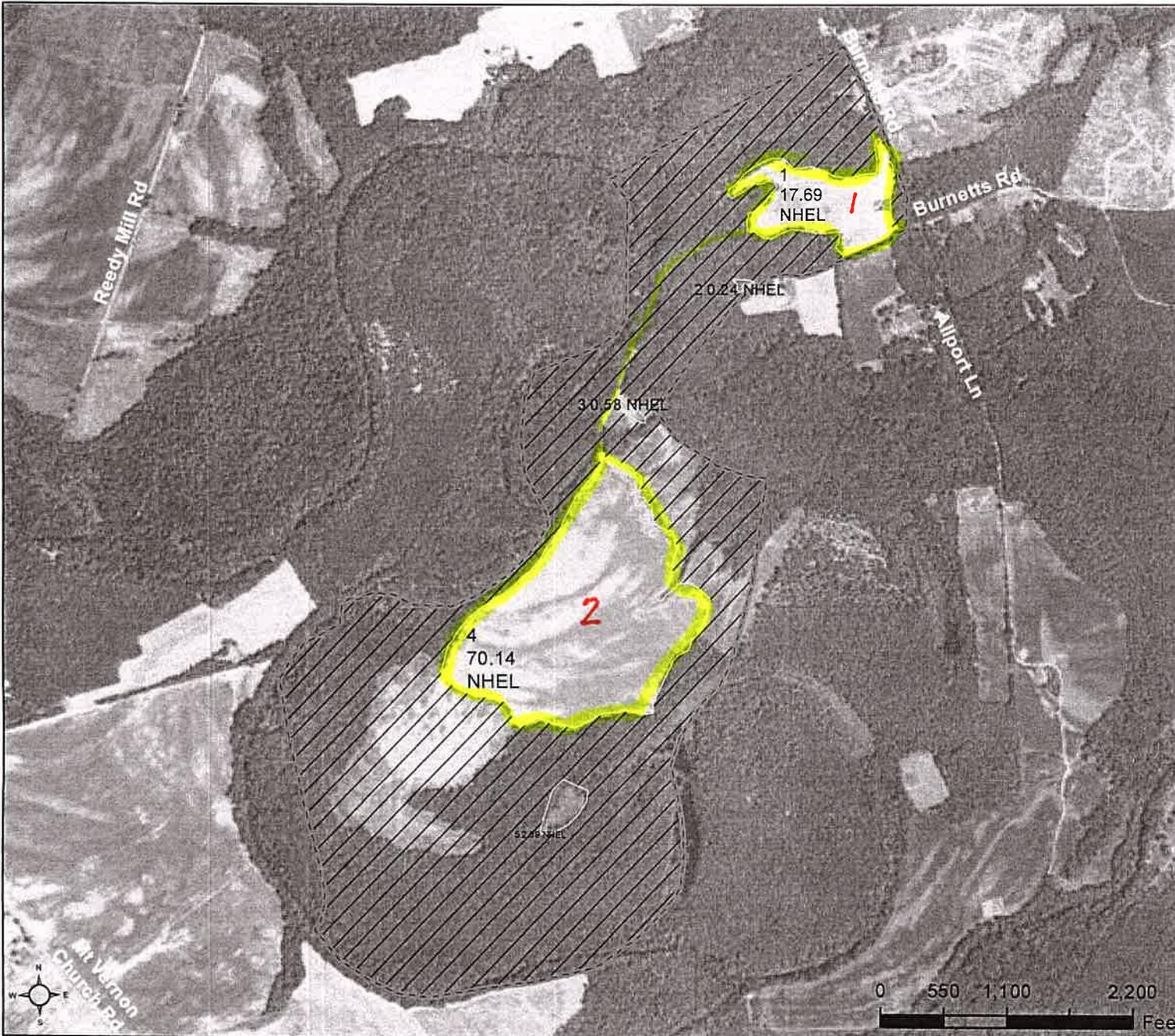


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**AERIAL MAP**

1 in = 660 feet

**Farm 1505**  
**Tract 1130**



2019 Program Year

Map Created June 05, 2019

**Common Land Unit**

-  Non-Cropland
-  Cropland
-  rcl\_l\_va033
-  Tract Boundary

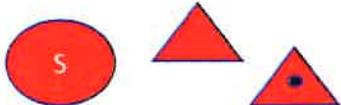
**Wetland Determination Identifiers**

-  Restricted Use
-  Limited Restrictions
-  Exempt from Conservation Compliance Provisions

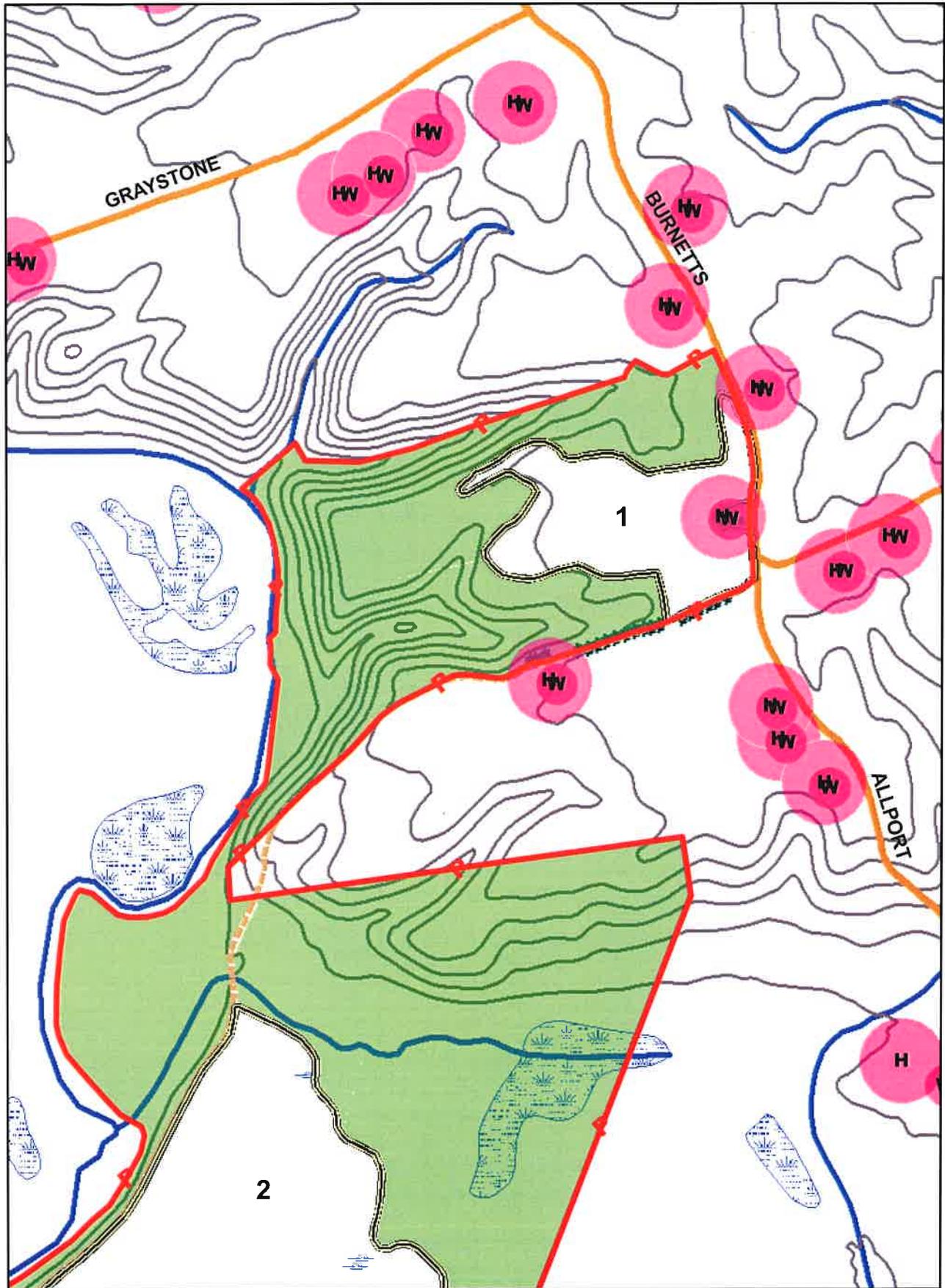
Tract Cropland Total: 91.34 acres

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).

# 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.

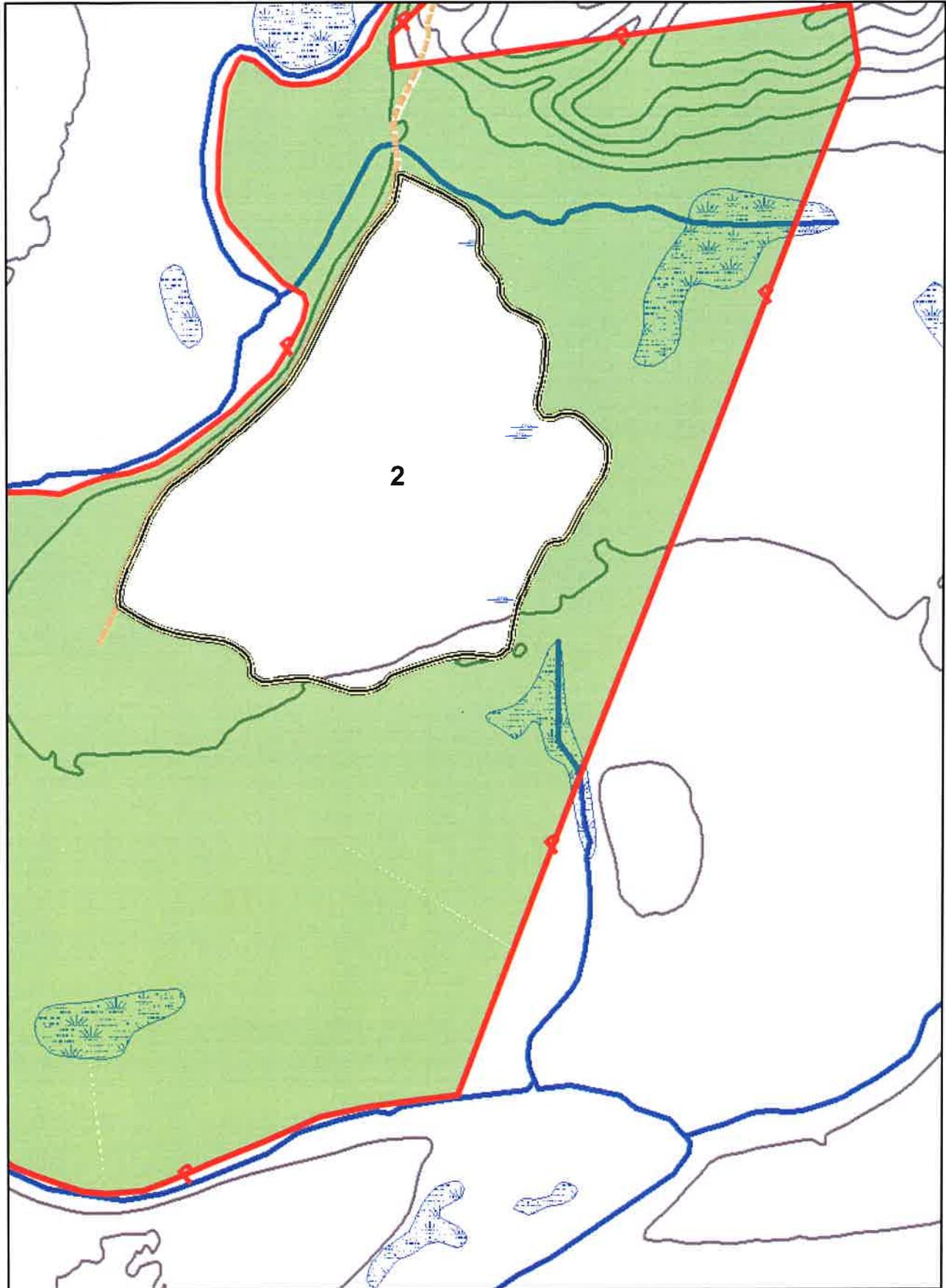


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SITE PLAN

1 in = 660 feet





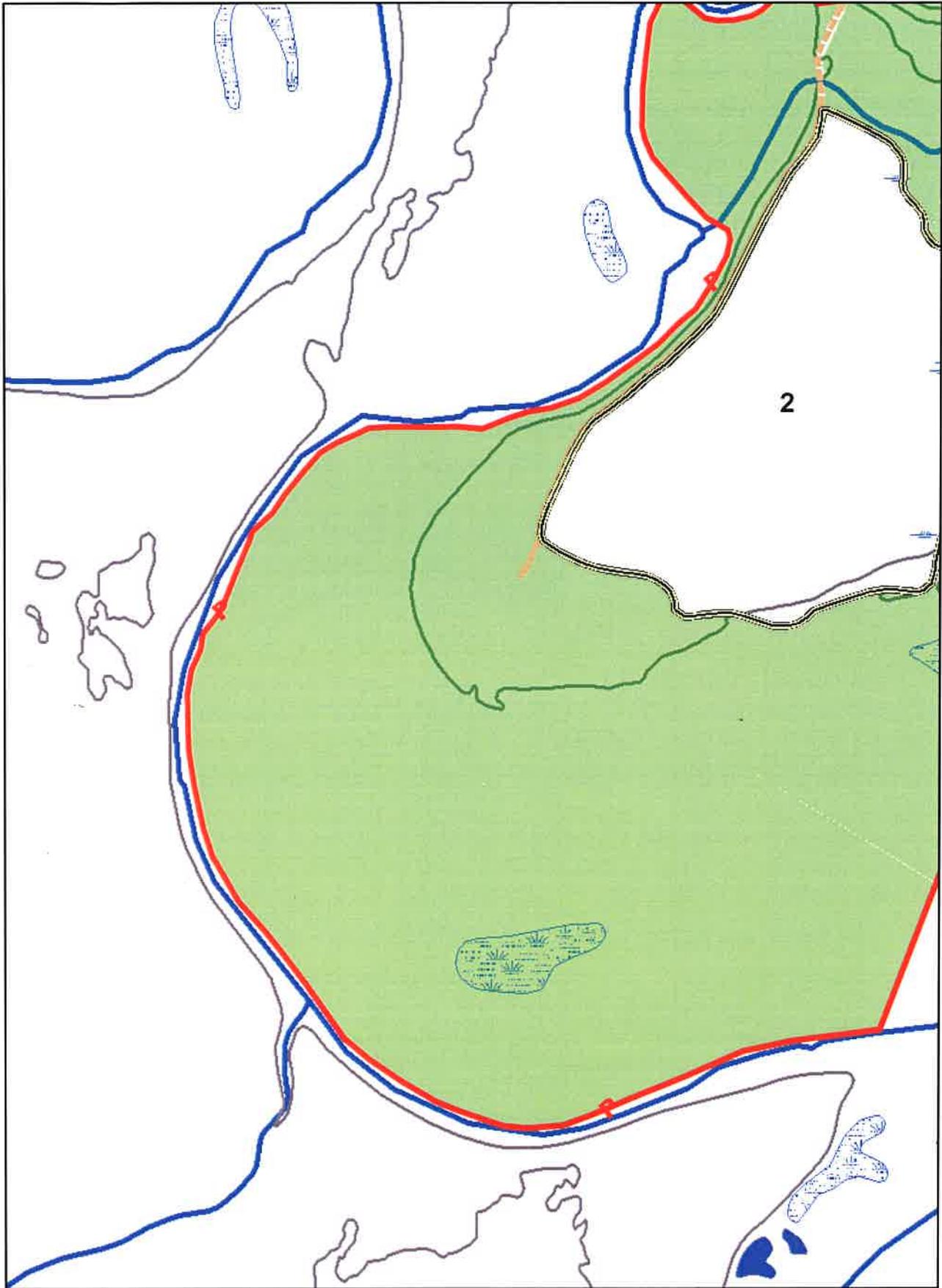
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**SITE PLAN**

1 in = 660 feet





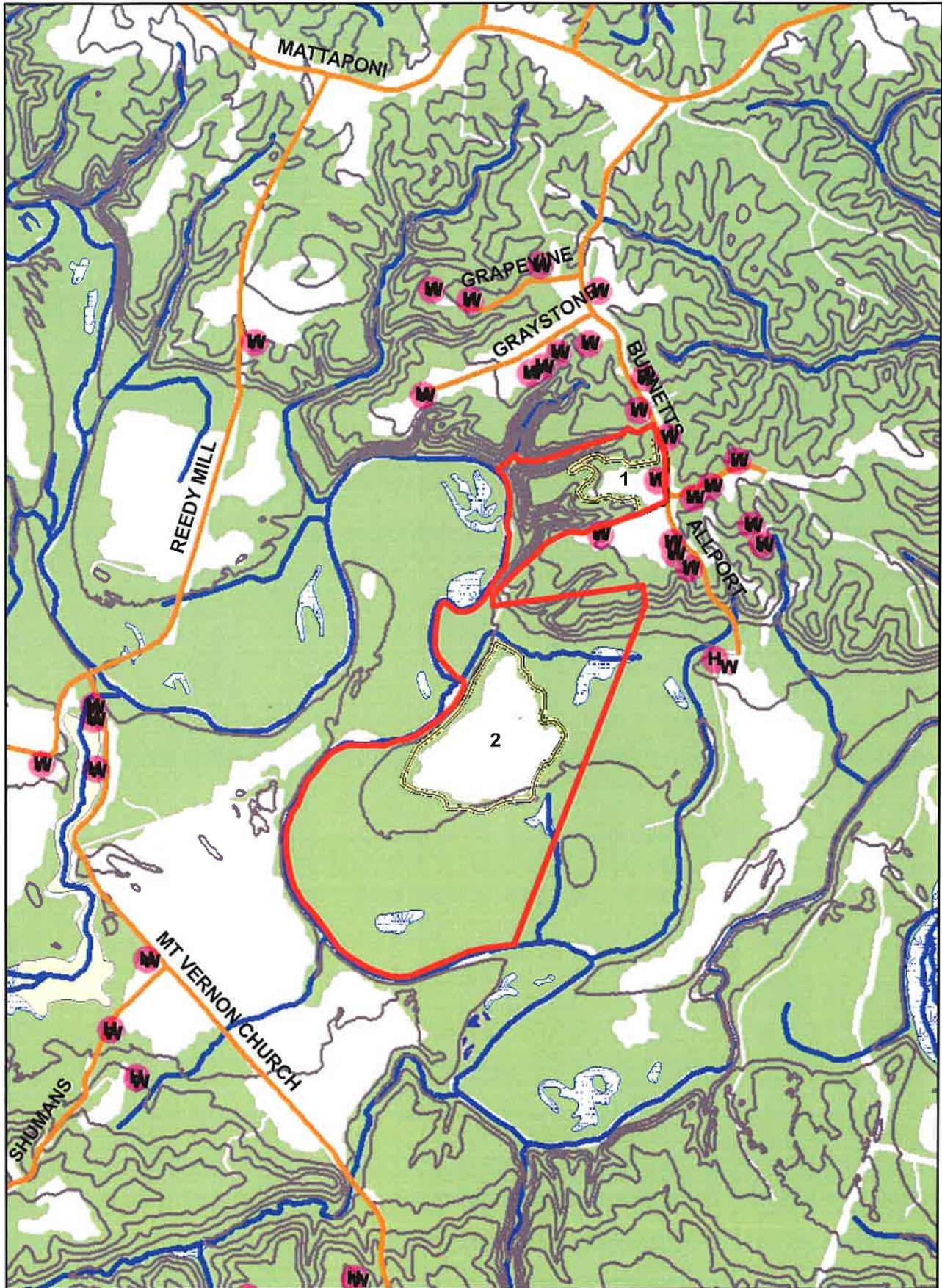
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8-5-19

**SITE PLAN**

1 in = 660 feet





8-5-19

**TOPOGRAPHIC MAP**

1 in = 2,000 feet