

Three Oaks Environmental

P.O. Box 404
Hubbardston, MA 01452
(978) 855-3180

July 9, 2020

David Brunelle
AH & DB Custom Homes Inc
193 W. Boylston St.
West Boylston, MA 01583

Re: Wetlands delineation, 227 Podunk Rd
Sturbridge, conducted on 6/29/20
9 AM, sunny, 77°F

I was tasked with determining if there were any wetland resource areas subject to either the MA Wetlands Protection Act or the Sturbridge Wetlands Bylaw on or near the above-referenced parcel. The property has been subdivided from a larger farm field parcel. Along the eastern side of the field is a forested area. The NRCS soils mapping indicates the presence of Ridgebury fine sandy loam which is a hydric soil. The wetland boundary in the woods is uneven coming close to the edge of the woods and then moving away. Though I delineated the entire wetland boundary parallel to the field, only that portion at the rear of lot 227 is relevant to the Notice of Intent that will be filed for construction of a single-family home and septic system partly within the 200-foot Sturbridge Wetlands Bylaw Buffer Zone. There is about 125 -130 feet of wetland boundary that extends the 200-foot Buffer Zone onto the farm field.

I used pink flagging beginning with number W1 by the stonewall on the property line to the south where the vegetation exceeded 50% wetland plant species as noted below. Evidence of hydrology included water-stained leaves and occasional puddles at the surface.



Vegetation in the wetland includes: sensitive fern, red maple, jewelweed, poison ivy
Cinnamon fern, jack-in-the-pulpit, wild geranium, and winterberry holly.

Vegetation in the upland includes: Virginia creeper, black cherry, witch hazel,
Bracken fern, white pine, red oak, white ash, red clover, daisies, hay-scented
fern, blackberries, Japanese barberry, true Solomon's seal, and Asian bittersweet.

The soil in the upland is a Woodbridge fine sandy loam as noted on the NRCS soil mapping (see attached). This is consistent with soils I augered in the field. I have attached the MassGIS data layers depicting the area noting the lack of any FEMA floodplain, designated rare species habitat, or certified vernal pools on the site. MassGIS mapping also shows that there are no Outstanding Resource Waters (ORW) on the site. I have attached copies of the various MassGIS maps.

Please let me know if there is any other information you need for this site.

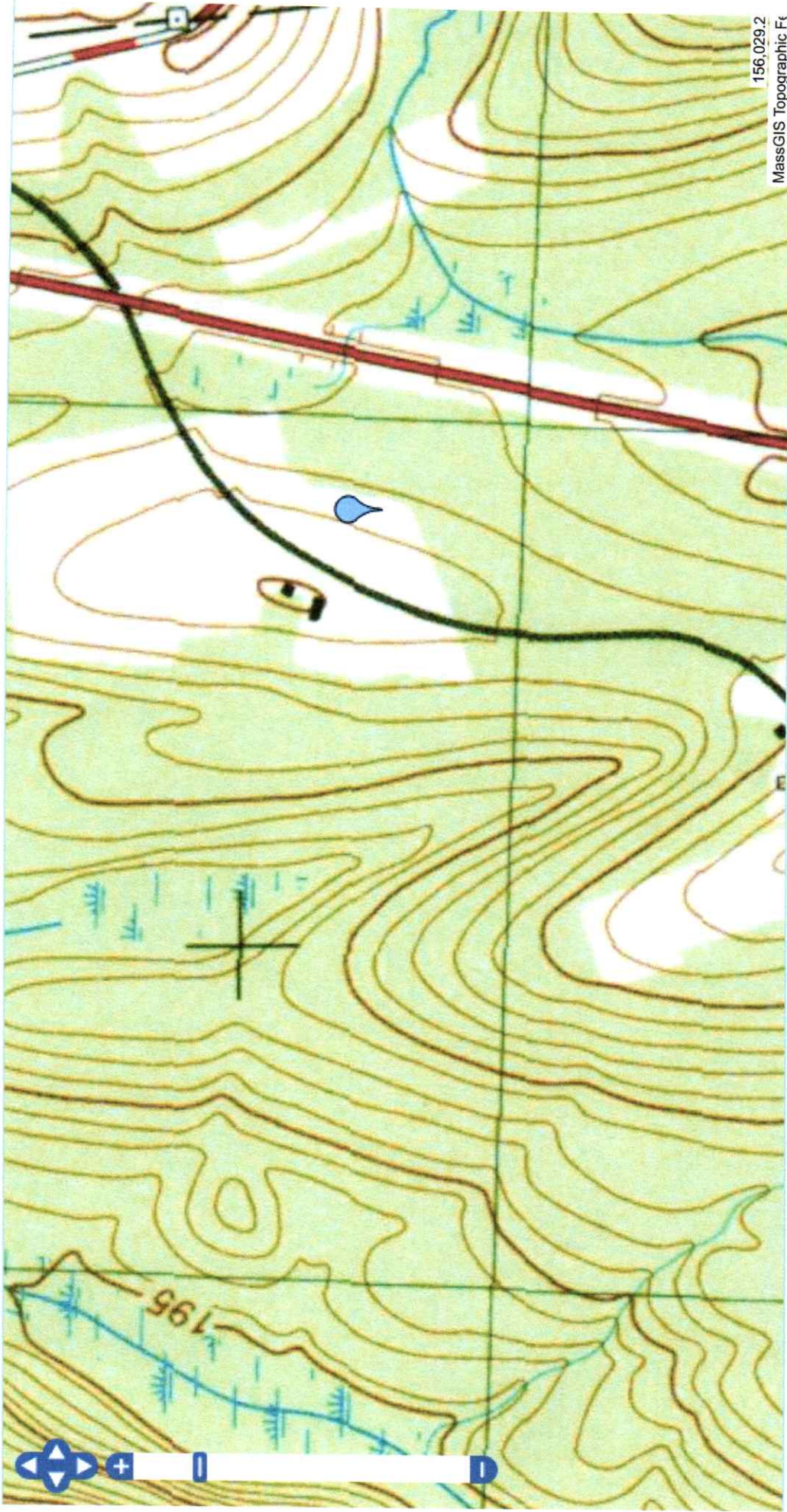
Sincerely
MaryAnn DiPinto
threeoaksenvironmental@gmail.com
Enclosures





227 PODUNK RD STURBRIDGE

Zoom to a town

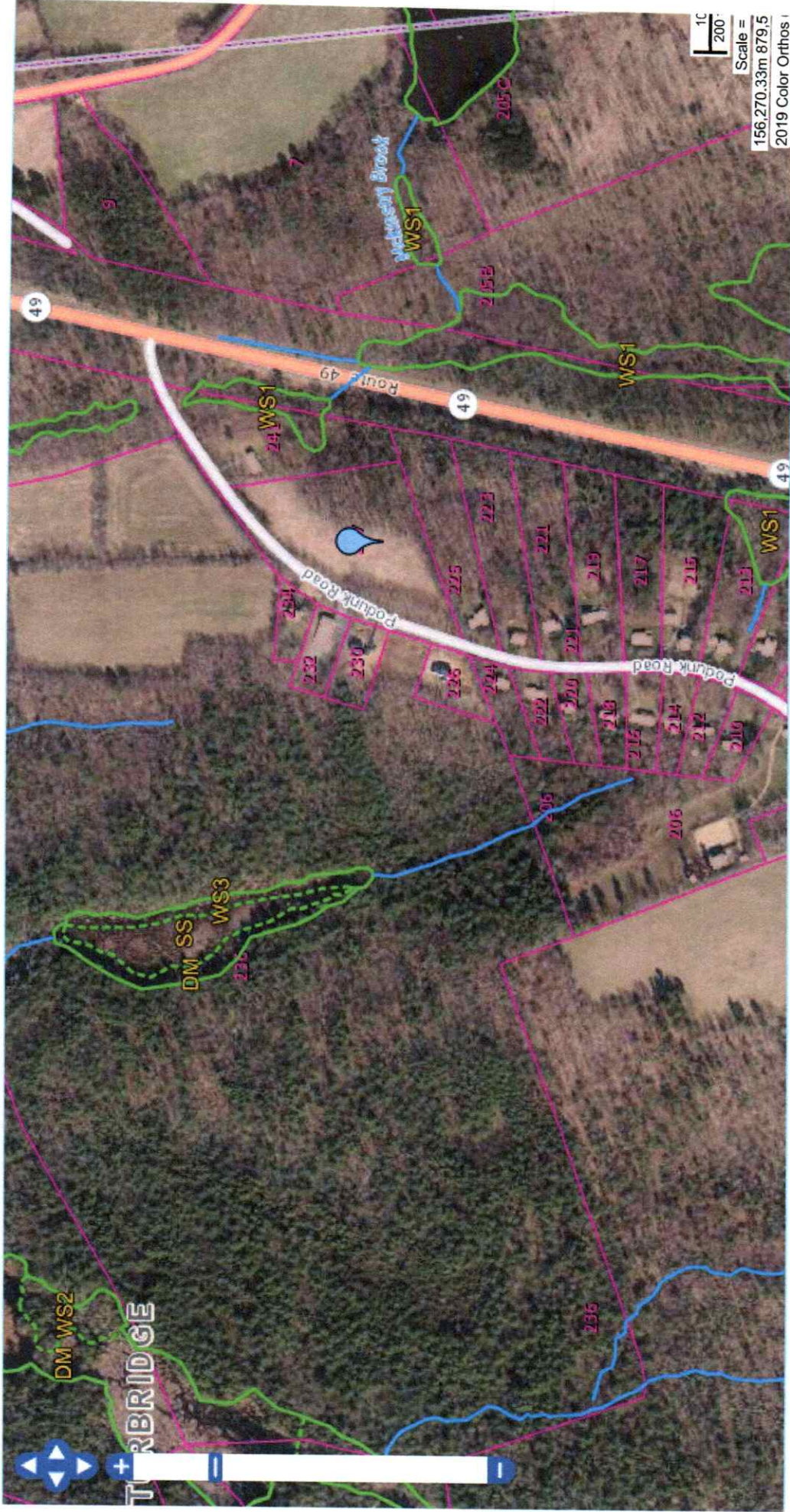


0 m

156,029.2
MassGIS Topographic Fr

227 PODUNK RD STURBRIDGE

Zoom to a town



0 m

Basel

227 podunk rd sturbridge

Zoom to a town



0 m

50 m
100 ft
Scale = 1:4,514
155,871.76m 879,573.09m

MassGIS Topographic Features Basemap

Basemaps

Available Data Layers

Search data layers

Status / Availability (maps showing where data is av

Active Data Layers

Check all Uncheck all

- NHESP Certified Vernal Pools
- NHESP Estimated Habitats of Rare Wildlife
- Potential Vernal Pools

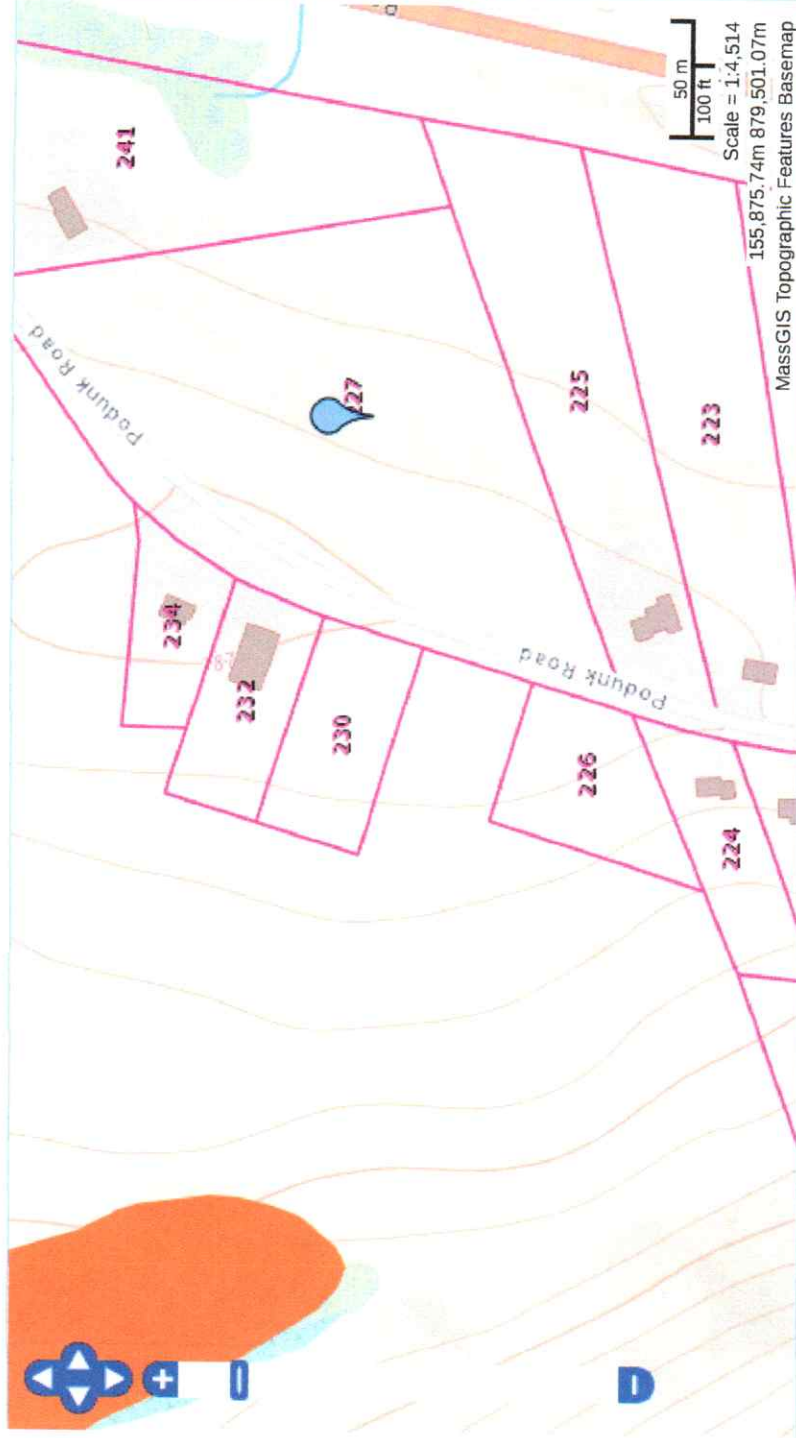
Legend

- NHESP Certified Vernal Pools
- NHESP Estimated Habitats of Rare Wildlife
- Potential Vernal Pools
- NHESP Priority Habitats of Rare Species

Tax Parcels for Query

227 podunk rd sturbridge

Zoom to a town



0 m

Basemaps

Available Data Layers

Search data layers

- FEMA Flood Data (Most Current)
- Q3 Flood Zones (from Paper FIRMs, where N
- FEMA National Flood Hazard Layer Polygons
- FEMA Q3 Flood from Paper FIRMs
- Ground Water Discharge

Active Data Layers

Check all Uncheck all

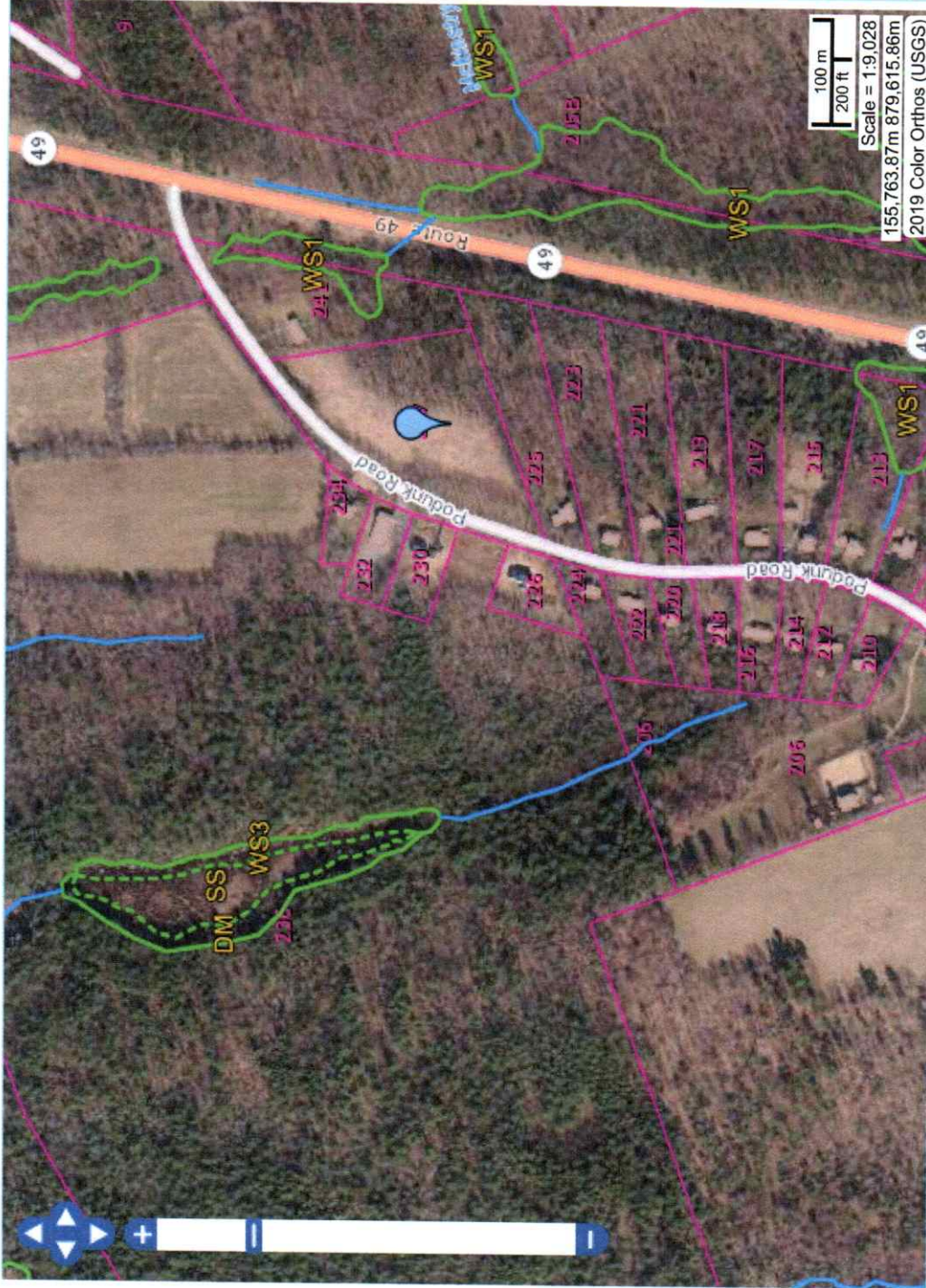
Legend

- FEMA National Flood Hazard Layer Polygons
- A: 1% Annual Chance of Flooding, no BFE
- AE: 1% Annual Chance of Flooding, with B
- AE: Regulatory Floodway
- AH: 1% Annual Chance of 1-3ft Ponding, v
- AO: 1% Annual Chance of 1-3ft Sheet Flow
- VE: High Risk Coastal Area
- D: Possible But Undetermined Hazard
- X: 0.2% Annual Chance of Flooding
- X: 1% Drainage Area < 1 Sq. Mi.
- X: Reduced Flood Risk due to Levee
- Area Not Included
- Area with no DFIRM - Paper FIRMs in Effect



227 PODUNK RD STURBRRII

Zoom to a town



0 m

Basemaps

Available Data Layers

Search data layers

- Ocean Mask
- Outstanding Resource Waters

Active Data Layers

- Check all
- Uncheck all
- Outstanding Resource Waters

Legend

Outstanding Resource Waters

- ACEC
- Cape Cod National Seashore
- Protected Shoreline
- Public Water Supply Watershed
- Retired Public Water Supply
- Scenic/Protected River
- Wildlife Refuge
- DEP Wetlands

DEP Wetlands Arcs

- SHORELINE
- HYDROLOGIC CONNECTION
- MEAN WATER LINE
- APPARENT WETLAND LIMIT
- CLOSURE LINE
- EDGE OF INTERPRETED AREA

Tax Parcels for Query

The Commonwealth of Massachusetts
TOWN OF STURBRIDGE

Name of City or Town

Office of the Board of Assessors



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Release of Classified Forest-Agricultural or Horticultural-Recreational Land Tax Lien

All rights upon the real property described below under a statement filed for record/registration on JANUARY 13, 1987, with the WORCESTER COUNTY Registry of Deeds, Book 10142 Page 320, Document Number _____, Certificate of Title Number _____ are hereby released.

That statement was filed to establish a lien for real property classified as forest agricultural or horticultural recreational land under the provisions of General Laws Chapter 61 61A 61B .

DESCRIPTION OF PROPERTY

(The description must be sufficiently accurate to identify the property. In the case of registered land, the Certificate of Title Number and the Registry Volume and Page must be given.)

A CERTAIN TRACT OF LAND SITUATED IN THE TOWN OF STURBRIDGE ON 227 PODUNK ROAD,
FURTHER IDENTIFIED AS 170-00343-227(NOW KNOWN AS 520-00343-227) AND CONTAINS 7 ACRES
ORIGINAL DEED 6299/295 AND SUBSEQUENT DEEDS 57845/355 & 57845/360

KENNETH P KASOWSKI

Name of Owner(s)

11-19-2019

Date

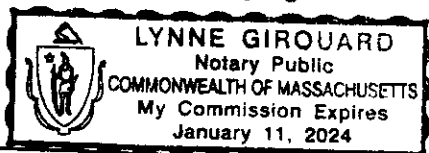
[Signature]
Dale McNeil
Board of Assessors

Worcester

The Commonwealth of Massachusetts

ss.

On this 19th day of November, 2019, before me, the undersigned notary public, personally appeared Dale McNeil, Paul Murphy, Sophia Lengyel, as Board of Assessors for the city/town of Sturbridge, proved to me through satisfactory evidence of identification, which were MA License, to be the persons whose names are signed on the preceding document in my presence, and acknowledged to me that they signed it voluntarily for its stated purpose.



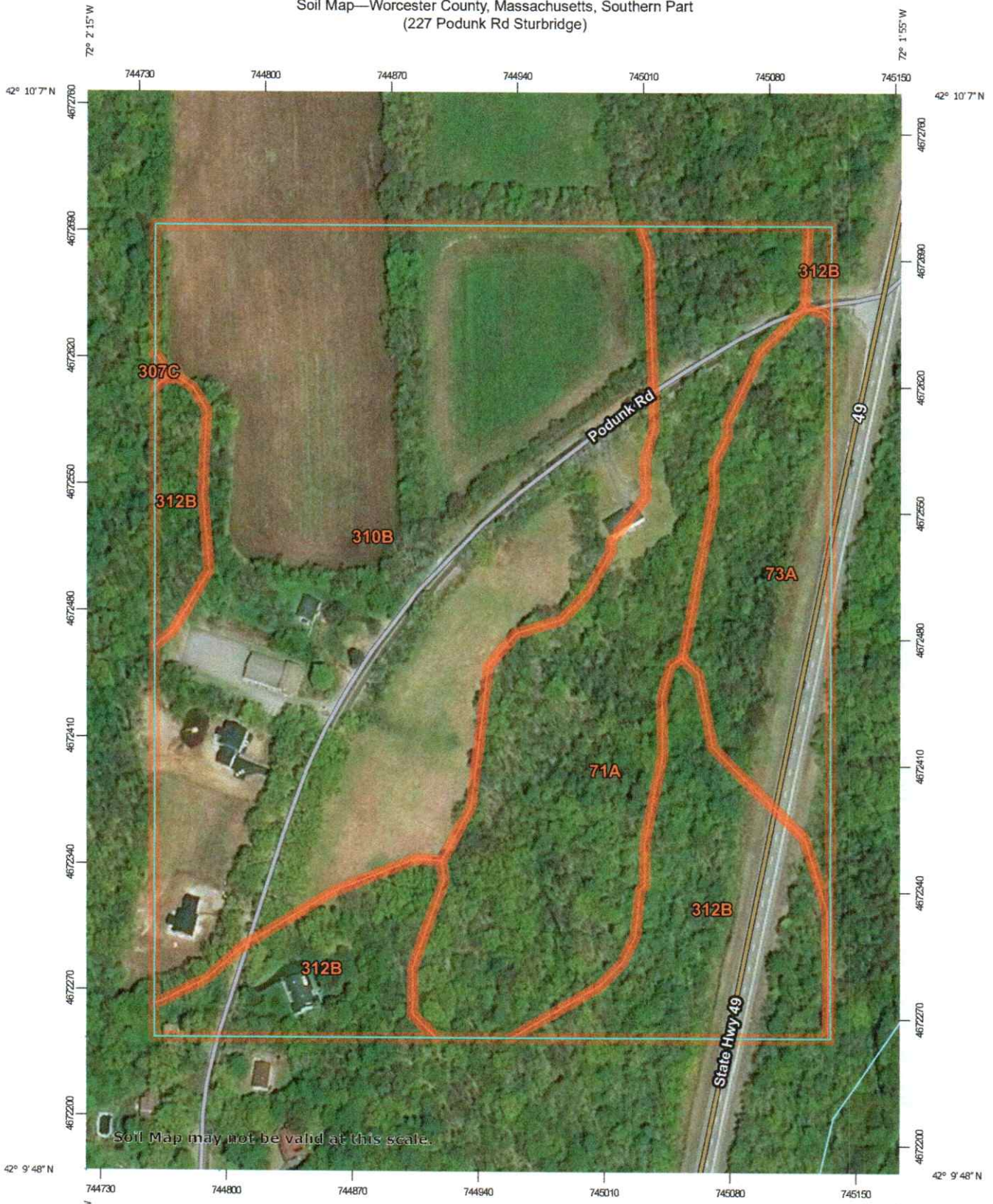
My commission expires _____

[Signature]
Notary Public

THIS FORM APPROVED BY THE COMMISSIONER OF REVENUE

ATTEST: WORC. Kathryn A. Toomey, Register

Soil Map—Worcester County, Massachusetts, Southern Part
(227 Podunk Rd Sturbridge)



Map Scale: 1:2,910 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
71A	Ridgebury fine sandy loam, 0 to 3 percent slopes, extremely stony	9.1	21.6%
73A	Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony	4.4	10.4%
307C	Paxton fine sandy loam, 8 to 15 percent slopes, extremely stony	0.0	0.0%
310B	Woodbridge fine sandy loam, 3 to 8 percent slopes	20.9	49.8%
312B	Woodbridge fine sandy loam, 0 to 8 percent slopes, extremely stony	7.6	18.1%
Totals for Area of Interest		41.9	100.0%

Worcester County, Massachusetts, Southern Part

310B—Woodbridge fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t2ql
Elevation: 0 to 1,470 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Woodbridge, fine sandy loam, and similar soils: 82 percent
Minor components: 18 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Woodbridge, Fine Sandy Loam

Setting

Landform: Hills, drumlins, ground moraines
Landform position (two-dimensional): Backslope, footslope, summit
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Ap - 0 to 7 inches: fine sandy loam
Bw1 - 7 to 18 inches: fine sandy loam
Bw2 - 18 to 30 inches: fine sandy loam
Cd - 30 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water storage in profile: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D

Ecological site: Moist Dense Till Uplands (F144AY037MA)
Hydric soil rating: No

Minor Components

Paxton

Percent of map unit: 10 percent
Landform: Drumlins, hills, ground moraines
Landform position (two-dimensional): Backslope, summit, shoulder
Landform position (three-dimensional): Side slope, crest, nose slope
Down-slope shape: Linear, convex
Across-slope shape: Convex
Hydric soil rating: No

Ridgebury

Percent of map unit: 8 percent
Landform: Drainageways, hills, ground moraines, depressions
Landform position (two-dimensional): Backslope, footslope, toeslope
Landform position (three-dimensional): Head slope, base slope, dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Worcester County, Massachusetts, Southern Part
Survey Area Data: Version 13, Jun 11, 2020

Worcester County, Massachusetts, Southern Part

71A—Ridgebury fine sandy loam, 0 to 3 percent slopes, extremely stony

Map Unit Setting

National map unit symbol: 2w69b

Elevation: 0 to 1,480 feet

Mean annual precipitation: 36 to 71 inches

Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 140 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Ridgebury, extremely stony, and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ridgebury, Extremely Stony

Setting

Landform: Drainageways, hills, ground moraines, depressions, drumlins

Landform position (two-dimensional): Toeslope, footslope

Landform position (three-dimensional): Base slope, head slope

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 6 inches: fine sandy loam

Bw - 6 to 10 inches: sandy loam

Bg - 10 to 19 inches: gravelly sandy loam

Cd - 19 to 66 inches: gravelly sandy loam

Properties and qualities

Slope: 0 to 3 percent

Percent of area covered with surface fragments: 9.0 percent

Depth to restrictive feature: 15 to 35 inches to densic material

Natural drainage class: Poorly drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None

Frequency of ponding: None

Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water storage in profile: Low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Ecological site: Wet Till Depressions (F144AY009CT)

Hydric soil rating: Yes

Minor Components

Whitman, extremely stony

Percent of map unit: 7 percent

Landform: Depressions

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Woodbridge, extremely stony

Percent of map unit: 7 percent

Landform: Hills, ground moraines, drumlins

Landform position (two-dimensional): Footslope, summit

Landform position (three-dimensional): Crest, base slope

Down-slope shape: Convex

Across-slope shape: Linear

Hydric soil rating: No

Paxton, extremely stony

Percent of map unit: 1 percent

Landform: Drumlins, hills, ground moraines

Landform position (two-dimensional): Shoulder, summit

Landform position (three-dimensional): Crest

Down-slope shape: Linear, convex

Across-slope shape: Convex, linear

Hydric soil rating: No

Data Source Information

Soil Survey Area: Worcester County, Massachusetts, Southern Part

Survey Area Data: Version 13, Jun 11, 2020