



To: Project Folder

Date: October 18, 2023

Memorandum

Project #: 58982.00

From: Brad Ketterling, Director of Environmental Services – Vermont, and Carolyn Black, Environmental Planner

Re: Preliminary Evaluation of Implications of Mapped Primary Agricultural Soils on Development Potential

Based on a review of the VHB-prepared Natural Resources Map, dated August 31, 2023 and data from the Agency of Natural Resources (“ANR”) Natural Resources Atlas, there are five occurrences of soils that would be classified as Primary Agricultural Soils (“PAS”) per 10 V.S.A. § 6001(15) within the Study Area for the Essex Town Site at 80 and 90 Upper Main Street in Essex, Vermont (“Project”), and thus regulated by Act 250 under 10 V.S.A. § 6086(a)(9)(B). The Vermont Agency of Agriculture, Food & Markets (“AAFM”) reviews development / subdivision projects that are subject to Act 250 jurisdiction and provides recommendations to the District Commission. AAFM reviews whether soils meet definition of PAS; acreage of impacts; acreage of mitigation warranted; and proposed on-site mitigation, and files reviews and comments and attends Act 250 hearings, as required.

## Primary Agricultural Soils

Under 10 V.S.A. § 6001(15), a PAS is defined as:

- A. An important farmland soils map unit that the Natural Resources Conservation Service of the U.S. Department of Agriculture (“NRCS”) has identified and determined to have a rating of prime, statewide, or local importance, unless the (Act 250) District Commission determines that the soils within the unit have lost their agricultural potential. In determining that soils within an important farmland soils map unit have lost their agricultural potential, the Commission shall consider:
  - i. impacts to the soils relevant to the agricultural potential of the soil from previously constructed improvements;
  - ii. the presence on the soils of a Class I or Class II wetland under chapter 37 of this title;
  - iii. the existence of topographic or physical barriers that reduce the accessibility of the rated soils so as to cause their isolation and that cannot reasonably be overcome; and
  - iv. other factors relevant to the agricultural potential of the soils, on a site-specific basis, as found by the Commission after considering the recommendation, if any, of the Secretary of Agriculture, Food and Markets.
- B. Soils on the project tract that the District Commission finds to be of agricultural importance, due to their present or recent use for agricultural activities and that have not been identified by the NRCS as important farmland soil map units.

## Requirements of Act 250 Criterion 9(B)

Per 10 V.S.A. § 6086(a)(9)(B), an Act 250 permit will be granted if the development or subdivision will not result in any reduction in the agricultural potential of the PAS, or meet a suite of other conditions. As the Project would reduce the agricultural potential of the PAS, each of the necessary conditions are presented below with a *note* about potential applicability to the Project.

- (i) the development or subdivision will not significantly interfere with or jeopardize the continuation of agriculture or forestry on adjoining lands or reduce their agricultural or forestry potential;

**YES** - *this condition would seem to be met.*

and

- (ii) except in the case of an application for a project located in a designated Growth Center, there are no lands other than primary agricultural soils owned or controlled by the applicant which are reasonably suited to the purpose of the development or subdivision;

**FALSE**, *as the parcels are not yet owned by the Town. However, VHB understands that the Town is considering a new designation for these parcels, such as a downtown development district, a growth center, or a new town center. VHB notes that, per 10 V.S.A. § 6093(a)(1), only those new town centers designated before January 1, 2014 would apply. Otherwise, if that parcel were designated as a downtown development district or a growth center, condition (ii) would appear to be met.*

and

- (iii) except in the case of an application for a project located in a designated Growth Center, the subdivision or development has been planned to minimize the reduction of agricultural potential of the primary agricultural soils through innovative land use design resulting in compact development patterns, so that the remaining primary agricultural soils on the project tract are capable of supporting or contributing to an economic or commercial agricultural operation;

**UNLIKELY**, *depends on the Town's wishes for the site, but PAS underlie the area with highest development potential. However, an appropriate designation per 10 V.S.A. § 6093 (a)(1) would render this condition MET.*

and

- (iv) suitable mitigation will be provided for any reduction in the agricultural potential of the primary agricultural soils caused by the development or subdivision, in accordance with section 6093 of this title and rules adopted by the Natural Resources Board.

**YES**, *if the Town proceeds with an appropriate designation per 10 V.S.A. § 6093 (a)(1). Otherwise, it is **UNLIKELY** – this would be mandatory if Conditions (ii) and (iii) can be satisfied and – per 10 V.S.A. § 6093(a)(3) – if the District Commission agrees to mitigation flexibility (appropriate circumstances) for off-site or a combination of on and off-site mitigation. Note that the District Commission would review the Project for consistency with agricultural elements of local and regional plans and the goals of 24 V.S.A. § 4302 [regarding Municipal and Regional Planning And Development]. The AAFM does not weigh in on the validity of appropriate circumstances but defers to the District Commission. Suitable mitigation at this point typically consists of the payment of a mitigation fee. See approximate calculation below.*

## Determination of Appropriate Circumstances

### Preliminary Review of Town Plan

Combined zoning of Mixed Use / Planned Unit Development and Agriculture, so that is largely consistent with plan.

### Findings Required for Appropriate Circumstances

Per the Natural Resources Board "Statement of Procedure: Preservation of Primary Agricultural Soils,"<sup>1</sup> a determination of appropriate circumstances may be based on any one of, or a combination of, the findings (1)(A) through (1)(C) below, and a finding of (2) below by a District Commission. VHB has added *notes* about potentially applicability to the Project.

- › (1)(A) The tract of land containing primary agricultural soils is of limited value in terms of contributing to an economic or commercial agricultural operation, and devoting the land to agricultural uses would be impractical based on the size of the tract of land or its location in relationship to other agricultural and nonagricultural uses;

*May apply. All of the soils are PAS, the parcels have a recent history of farming, and the setting is not entirely non-agriculture. However, the Project could be seen as more consistent with nearby nonagricultural uses (proximity to the highway interchange, commercial development.*

or

- › (1)(B) The project tract is surrounded by or adjacent to other high-density development with supporting infrastructure and, as a result of good land use design, the project will contribute to the existing compact development patterns in the area;

*Yes – this seems reasonable.*

or

- › (1)(C) The area contains a mixture of uses, including commercial and industrial uses, and a significant residential component, supported by municipal infrastructure;

*Yes – this seems reasonable. The Project Area is adjacent to the VT Route 15 corridor and commercial retail services.*

and

- › (2) The Commission determines that payment of an offsite mitigation fee, or some combination of onsite and offsite mitigation, will best further the goal of preserving primary agricultural soils for present and future agricultural use with special emphasis on protecting prime agricultural soils, thus serving to strengthen the long-term economic viability of Vermont's agricultural resources.
- › *This is up to the discretion of the District Commission, based on the facts provided with the Act 250 application. The Town could present a case that the mitigation plan for the Project satisfies the "appropriate circumstances," as used in 10 V.S.A. § 6093(a)(3)(B), based on the findings described in (1)(A), "devoting the land to agricultural uses would be impractical based on the size of the tract of land or its location in relationship to other agricultural and nonagricultural uses" and (2), "offsite mitigation, will best further the goal of preserving primary agricultural soils for*

<sup>1</sup> Available online at:

<https://nrb.vermont.gov/sites/nrb/files/documents/9Bprocedure.pdf#:~:text=In%20some%20cases%2C%20a%20finding%20of%20%E2%80%9Cap%20appropriate%20circumstances%E2%80%9D.are%20preserved%20on%20the%20project%20tract%20or%20tracts.>

*present and future agricultural use with special emphasis on protecting prime agricultural soils, thus serving to strengthen the long-term economic viability of Vermont's agricultural resources."*

*Specifically, the tract of land in question is not adjacent to or near any existing commercial or economic agricultural operation. The tract is bordered by the following existing nonagricultural land uses: the VT Route 15 corridor, a Maplefields Service Station, and Hannafords Shopping Center with expanded impervious parking areas. Given these factors, offsite mitigation would best achieve the goals of protecting Vermont's agricultural resources.*

## Mitigation Fee for Appropriate Circumstances

For the purpose of this analysis, VHB assumes that the western half of the parcel at 80 Upper Main Street is not suitable for intensive development (*i.e.*, buildings, parking, roadways) due to the presence of two large Class II wetland features (Wetlands 2023-W-200 and 2023-3) and their associated buffers as well as the floodplain and river corridor associated with Indian Brook (see **Preliminary Primary Agricultural Soils Impact Analysis Map**, attached). Similarly, this analysis assumes that future development would avoid entirely the other two Class II wetlands and buffers (Wetlands 2023-1 and 2023-2). The remaining assumed buildable area is approximately 18.73 acres. This area does not account for setbacks from the property line, which would lower this number further.

Four PAS soil units underlie the potential buildable area:

- › Soil Unit CaC: Cabot silt loam, 3 to 15 percent slopes, a soil of Statewide importance but limited by wetness (approximately 0.17 acres);
- › GrA: Groton gravelly fine sandy loam, 0 to 5 percent slopes, a soil of a soil of Statewide importance (approximately 4.27 acres)
- › Soil Unit PeA: Peru fine sandy loam, 0 to 5 percent slopes, a Prime farmland soil (approximately 13.27 acres); and
- › Soil Unit PeB: Peru fine sandy loam, 5 to 12 percent slopes, a soil of Statewide importance (approximately 0.72 acre)

Per the US Department of Agriculture ("USDA") Natural Resources Conservation Service ("NRCS") *Farmland Classification Systems for Vermont Soils* (NRCS 2018), "Soil map units considered to have very limited potential for crop production were assigned to Agricultural Value Group 11 and given a Relative Value of 0." All soils units except for Groton gravelly fine sandy loam have been assigned an Agricultural Value Group ranking of zero (0). Groton gravelly fine sandy loam has an Agricultural Value Group ranking of 4. This requires a mitigation multiplier of 2.25.

Assuming the Town owns no land that can be used for off-site mitigation for PAS impacts and Conditions (ii) and (iii) are satisfied and the District Commission agrees that appropriate circumstances apply, the mitigation would be the following:<sup>2</sup>

- › Soil Unit GrA:  $2.25 \times 4.37 \text{ acres} \times \$4,783/\text{acre} = \mathbf{\$47,028.85}$

If the Town is successful in establishing an appropriate designation for the parcels per 10 V.S.A. § 6093 (a)(1), the mitigation multiplier would be 1.0 and the resulting mitigation fee would be the following:

- › Soil Unit GrA:  $1.0 \times 4.37 \text{ acres} \times \$4,783/\text{acre} = \mathbf{\$20,901.71}$

<sup>2</sup> Fees valid through December 31, 2022 per the AAFM. Has not been updated for 2023:

[https://agriculture.vermont.gov/sites/agriculture/files/documents/land\\_use/2022%20Mitigation%20Fee%20Memo.pdf](https://agriculture.vermont.gov/sites/agriculture/files/documents/land_use/2022%20Mitigation%20Fee%20Memo.pdf)

## Conclusion

Based on a preliminary review of the soil mapping and applicable regulations, it is VHB's preliminary opinion that applying an appropriate designation for the parcels per 10 V.S.A. § 6093 (a)(1) would eliminate possible obstacles related to developing areas mapped as PAS per the requirements of 10 V.S.A. § 6086(a)(9)(B) and would result in a substantially lower mitigation cost.

VHB notes that the following assessment should be reviewed by the Town's legal counsel.

## Links

For additional information, see the following weblinks:

- › Vermont Agency of Agriculture, Food & Markets PowerPoint presentation:

[https://agriculture.vermont.gov/sites/agriculture/files/documents/land\\_use/Presentation%209%28B%29.pdf](https://agriculture.vermont.gov/sites/agriculture/files/documents/land_use/Presentation%209%28B%29.pdf)

- › Statement of Procedure: Preservation of Primary Agricultural Soils

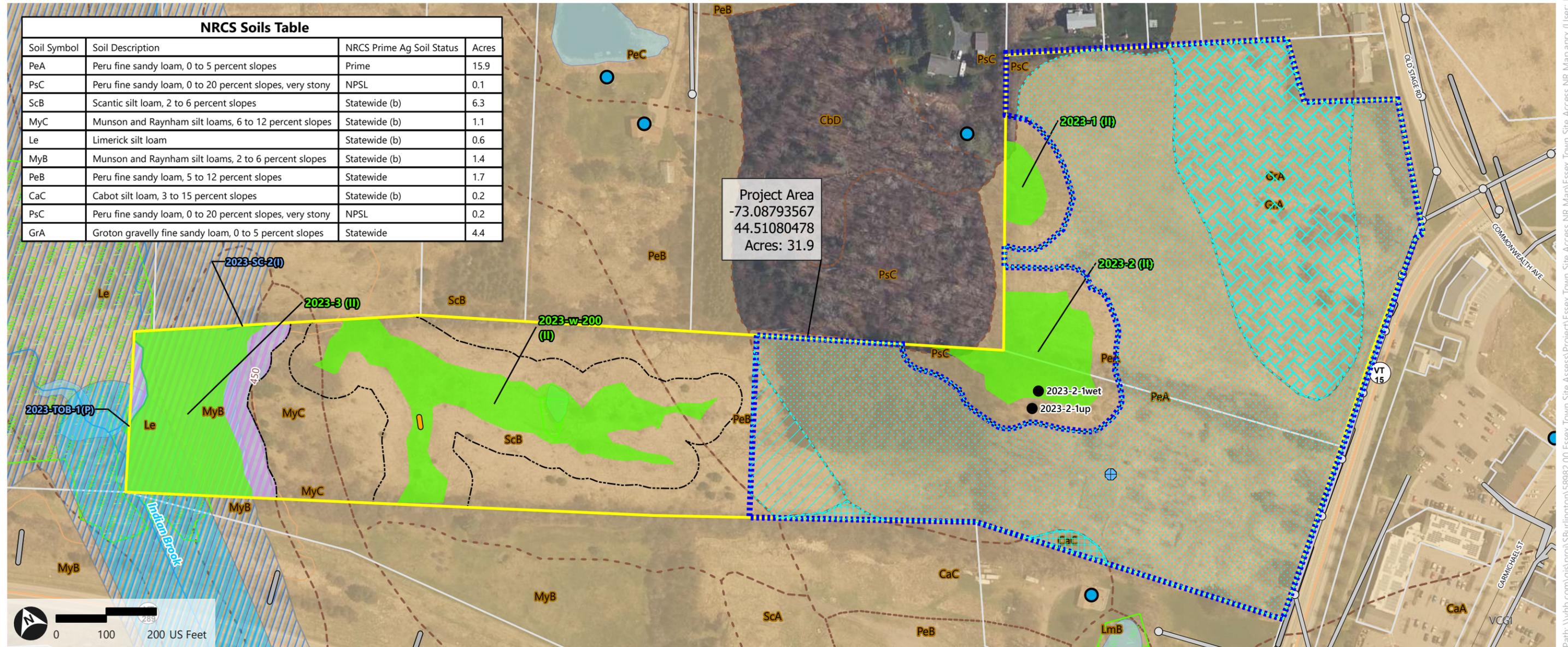
<https://nrb.vermont.gov/sites/nrb/files/documents/9Bprocedure.pdf#:~:text=In%20some%20cases%2C%20a%20finding%20of%20%E2%80%9Cap%20appropriate%20circumstances%E2%80%9D,are%20preserved%20on%20the%20project%20tract%20or%20tracts>

# Natural Resources Map - Preliminary Primary Agricultural Soils Impact Analysis

Essex Town Site | Essex Town, VT

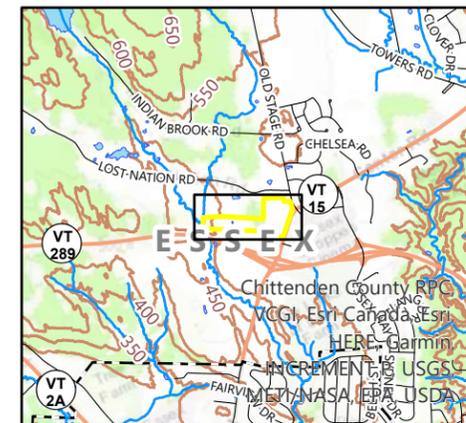


DRAFT | October 19, 2023



NRCS Soils Table			
Soil Symbol	Soil Description	NRCS Prime Ag Soil Status	Acres
PeA	Peru fine sandy loam, 0 to 5 percent slopes	Prime	15.9
PsC	Peru fine sandy loam, 0 to 20 percent slopes, very stony	NPSL	0.1
ScB	Scantic silt loam, 2 to 6 percent slopes	Statewide (b)	6.3
MyC	Munson and Raynham silt loams, 6 to 12 percent slopes	Statewide (b)	1.1
Le	Limerick silt loam	Statewide (b)	0.6
MyB	Munson and Raynham silt loams, 2 to 6 percent slopes	Statewide (b)	1.4
PeB	Peru fine sandy loam, 5 to 12 percent slopes	Statewide	1.7
CaC	Cabot silt loam, 3 to 15 percent slopes	Statewide (b)	0.2
PsC	Peru fine sandy loam, 0 to 20 percent slopes, very stony	NPSL	0.2
GrA	Groton gravelly fine sandy loam, 0 to 5 percent slopes	Statewide	4.4

- Project Area
- Delineated Wetland (VHB) (4)
- Presumed Class II Wetland Buffer (VHB)
- Delineated Waters (VHB) (2)
- Riparian Buffer (VHB)
- River Corridor (VHB)
- Water Supply (VHB) (1)
- Existing Utility Pole - GMP/VEC (VCGI)
- Delineation Data Point (VHB) (2)
- Culvert (VHB)
- Culvert (VHB)
- Parcel Boundary (VCGI) (55)
- Stream (ANR) (6)
- Waterbody (ANR) (4)
- VSWI (ANR) (3)
- Surface Water SPA (ANR) (0)
- Ground Water SPA (ANR) (0)
- Public Water Source (ANR) (0)
- Private Well (ANR) (5)
- River Corridor (ANR)
- 100 Year Flood Zone (FEMA) (1)
- Bear Feeding (FWD) (0)
- Bear Crossing (FWD) (0)
- AE/VCE Confirmed Vernal Pools (0)
- VT Rare, Threatened and Endangered Species (VCGI) (0)
- VT Uncommon Species (VCGI) (0)
- NRCS Prime Agricultural Soils (VCGI)
- NRCS Soil Boundary (VCGI)
- Town Boundary (VCGI)
- State Highway
- Town Road
- 50 ft Contour (VCGI)
- Culverts (VTrans)



- Assumed buildable area (simplified)
- CaC - Cabot silt loam, 3 to 15 percent slopes  
Ag Value: 0, Mitigation Factor: 0.17 acre
- GrA - Groton gravelly fine sandy loam, 0 to 5 percent slopes, 4.37 acres  
Ag Value: 4, Mitigation Factor: 2.25
- PeA - Peru fine sandy loam, 0 to 5 percent slopes, 13.27 acres  
Ag Value: 0, Mitigation Factor: 0
- PeB - Peru fine sandy loam, 5 to 12 percent slopes, 0.72 acre  
Ag Value: 0, Mitigation Factor: 0

(#) Count of feature visible within map extent.

Sources: Background Imagery by VCGI (2022) VCGI (Vermont Center for Geographic Information - Various Dates); ANR (Vermont Agency of Natural Resources - Various Dates); DFW (Vermont Department of Fish & Wildlife - Various Dates); VTrans (Vermont Department of Transportation - 2015); VHB - 2023.

Path: \\vhb.com\gis\proj\Burlington\58982.00 Essex Town Site Assess\Essex Town Site Access NR Map\Essex Town Site Access NR Map.aprx (User: JGrossman)