

AGRIVOLTAICS: OUR PERSPECTIVE



Sustainably growing food since 1998. Transitioning to the second generation. Specializing in agrivoltaics to fight the climate crisis.



Finicky Farm, LLC

Agrivoltaic activity and acreage (2022 through 2025)

Agrivoltaic risks are about capital, scaling operational capacity, and marketing— i.e., farm business, not whether AgPV “works”!

Legend

Conventional Arrays

Home Farm

Local fields

Pine Meadow ASTGUs (2025)

Solar Acreage (2022)

Solar Acreage (2023)



Agricultural, Family & Conservation Goals

- Transition land to more regenerative farming
- Support renewable energy

2021: 2 arrays, 25 acres, 30 ewes, <0.5 FTE evenings and weekend

2023: 11 arrays, 175 acres, 90 ewes, ~120 lambs, 1+ FTE

2024-2025: 225+ acres under management, 1-2+ FTE, hay production, ASTGU construction, prep for initial vegetable and fruit crops

Google Earth

Image Landsat / Copernicus

20 mi



Watch us farm
on Instagram &
Facebook:
@finickygrazing



Partner Stories: Finicky Farm in Northfield, Massachusetts

W. Walden Mutual
47 subscribers

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7



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211 views 4 months ago

"We can raise local, grass-fed lamb in there while producing renewable electricity. I love sheep, but I love that bigger picture story even more."

Our Partners, Jesse and Desiree Robertson-Dubois, run Finicky Farm together with their family. With their herds of sheep and goats they are able to replace work that would normally be done with ...more

<https://www.youtube.com/watch?v=tlfJaj56HFk>





HOW SHOULD WE REGULATE AGRIVOLTAICS?



**THE CLIMATE CRISIS IS AN IMMEDIATE THREAT
TO PUBLIC HEALTH, SAFETY AND WELFARE**

AGRIVOLTAICS ARE AGRICULTURE

- Agriculture is exempt from special permits and cannot be prohibited or unreasonably regulated. (MGL c. 40A, §3)
- Agrivoltaics are required to be treated as agriculture for zoning. (MGL c. 61A, §2A (d)):
“Renewable energy generating sources located on land used primarily and directly for agricultural purposes ... shall be subject to the provisions afforded to land used for agriculture under section 3 of chapter 40A.”
- Northfield’s zoning bylaw specifically permits all uses “protected or exempt pursuant to MGL c. 40A, §3, or other state law” thus recognizing the authority of other state laws (including 61A) to restrict zoning.
- Northfield’s zoning bylaw specifically recognizes and allows additional agriculturally-related uses on a farm by right – in addition to those exempted under MGL c. 40A, §3.

§ 200-5.3. Permitted in all districts.

The following uses are permitted in all districts:

- Federal government use.
- State government uses to the extent that this Zoning Bylaw would prohibit the exercise of an essential government function. [Amended 1-24-2022 STM by Art. 16]
- Uses to the extent protected or exempt pursuant to MGL c. 40A, § 3, or other state law.

§ 200-5.4. Schedule of Uses.

[Amended 12-10-2018 STM by Art. 3]

Table 1 Legend:

Y: Permitted by right

N: Prohibited use

SP: Allowed by special permit from the Zoning Board of Appeals

PB: Allowed by special permit from the Planning Board

Table 1. Schedule of Uses		
	RA	RAF
A. Agriculture, Conservation, Recreation Uses		
Agriculture	Y	Y
Agriculturally related uses on a farm (§ 200-9.5)	Y	Y
Greenhouse	Y	Y
Conservation, wildlife preserve	Y	Y
Camp for children and youth, day or overnight	PB	PB
Campground	PB	PB
Boathouse, ski tow, golf course, driving range	SP	SP
Recreation-affiliated business (§ 200-9.6)	N	N



§200-9.5: FARM BUSINESSES

“The purpose of this section is to promote and maintain local farming [by allowing] a variety of agriculturally related uses and farm-affiliated businesses that are not explicitly exempt under MGL c. 40A, § 3, but which the Town of Northfield deems important for the preservation of a rural economy”

ALLOWED IN ANY DISTRICT WITH SITE PLAN REVIEW (NO SPECIAL PERMIT):

- Value-added processing
- Commercial kitchen, cannery or copacking facility
- Parking for 20 or more vehicles
- Gift shop for the sale of agricultural products and agriculturally related products

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§ 200-9.5. Agricultural tourism and farm businesses.

A. Purpose. The purpose of this section is to promote and maintain local farming. Toward that end, this section provides for a variety of agriculturally related uses and farm-affiliated businesses that are not explicitly exempt under MGL c. 40A, § 3, but which the Town of Northfield deems important for the preservation of a rural economy in order to:

- (1) Maintain and promote agriculture and its related activities, such as agricultural tourism;
- (2) Preserve open space and farmland;
- (3) Maintain both an agricultural heritage and a rural character;
- (4) Increase community benefits by having fresh, local produce for sale; and
- (5) Increase positive growing businesses that contribute to the general economic conditions and cycle of the area and the Commonwealth.

B. Applicability. The provisions of this section shall apply to any farm as defined in this bylaw on five or more acres of land.

C. Use regulations. The following agriculturally related uses are permitted in any district:

- (1) Seasonal outdoors mazes of agricultural origin, such as straw bales or corn.
- (2) Petting farm, animal display, and pony rides.
- (3) Wagon, sleigh- and hayrides.
- (4) Nature trails.
- (5) Open-air or covered picnic area with restrooms.
- (6) Educational classes, lectures, seminars.

D. The following farm-affiliated businesses and uses are permitted in any district, subject to site plan review by the Planning Board:

- (1) Storage, retail or wholesale marketing, or processing of agricultural products into a value-added agricultural product is permitted if more than 50% of the stored, processed, or merchandised products are produced by the farm operator for at least three of the immediately preceding five years.
- (2) Cider mill or winery selling product, in a tasting room, derived from crops grown primarily on site for at least three of the immediately preceding five years.
- (3) Historical agricultural exhibits.
- (4) Gift shop for the sale of agricultural products and agriculturally related products.
- (5) Designated parking for 20 or more vehicles.
- (6) Commercial or cooperative kitchen, cannery, or copacking facility.

E. The following uses are allowed only by special permit from the Planning Board:

- (1) Bed-and-breakfast.
- (2) Restaurant related to the agricultural use on the site.
- (3) Non-agriculturally related uses, such as small-scale entertainment venue or organized meeting space made available for rent for weddings, corporate picnics, birthday parties, and the like.



AGRIVOLTAICS COMPARED TO OTHER AGRICULTURAL BUSINESSES

- Less traffic
- Similar or less visual impact
- Similar or less environmental impact
- Similar or less noise impact



§200-7.1: DIMENSIONAL REQUIREMENTS

RA DISTRICT

- 25' min setbacks
- 35' max building height

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§ 200-7.1. Schedule of Dimensional and Density Regulations.

No building or structure in any district shall be located, constructed, changed, enlarged or permitted and no use of premises or land in any district shall be permitted which does not conform to the density and dimensional regulations as set forth herein.

Table 2. Table of Dimensional and Density Regulations

Requirement	RA	RAF	VC	PD	RT
Minimum lot area (square feet)	50,000	100,000	35,000	100,000	100,000
Lot served by municipal sewer (square feet)	35,000	N/A	35,000	80,000	N/A
Minimum lot frontage (feet)	150	250	150	250	150
Minimum lot depth (feet)	200	300	200	300	200
Minimum front, side, and rear setbacks (feet)	25	25	25	25	25
Maximum building height (feet)	35	35	35	35	40



§200-3.5: SITE PLAN REVIEW

BOTH AGRICULTURAL AND SOLAR USES ARE PROTECTED UNDER MGL C. 40A, § 3

- Site plan review of agriculture and solar is limited to matters “necessary to protect the public health, safety or welfare.”

APPLICABILITY OF NORTHFIELD’S SITE PLAN REVIEW IS FURTHER LIMITED:

- 1,500 s.f. or more of gross floor area
- 5 or more parking spaces

THE PROPOSED AGRIVOLTAIC PROJECT IS NOT SUBJECT TO SITE PLAN REVIEW UNDER NORTHFIELD’S ZONING BYLAW

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§ 200-3.5. Site plan review.

A. Purposes. Site plan review is a means of managing the aesthetics and environmental impacts of land use by the regulation of permitted uses, not their prohibition. Its purpose is to assure protection of the public interest consistent with a reasonable use of the site for the purposes permitted in the district. Accordingly, no building permit shall be issued for any use, site, or building alteration, or other improvement that is subject to this section, unless an application for site plan review has been prepared in accordance with the requirements herein and unless such application has been approved by the Planning Board (hereinafter referred to in this section as the “Board”).

B. Applicability. Site plan review shall apply to the following:

- (1) New construction or any alteration, reconstruction, or renovation of any multifamily, commercial, industrial, institutional, or municipal use involving 1,500 square feet or more of gross floor area.
- (2) New construction or any alteration, reconstruction, or renovation of an existing building, or any change in use of an existing building requiring five or more parking spaces.
- (3) Any use or structure or expansion thereof, and any use of land, exempt under MGL c. 40A, § 3, if one or both of the above criteria in Subsection B(1) or (2) also apply, and only to the extent allowed by law.
- (4) Construction, expansion, redesign, or alteration of an existing parking area involving the addition of five or more new parking spaces.

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GROSS FLOOR AREA

The sum of the gross horizontal area of the several floors of a building, measured from the exterior faces of the exterior walls or from the center of the common walls of attached buildings. “Gross floor area” includes basement floors, attic floor space, halls, closets, stairwells, space devoted to mechanical equipment, and enclosed porches.



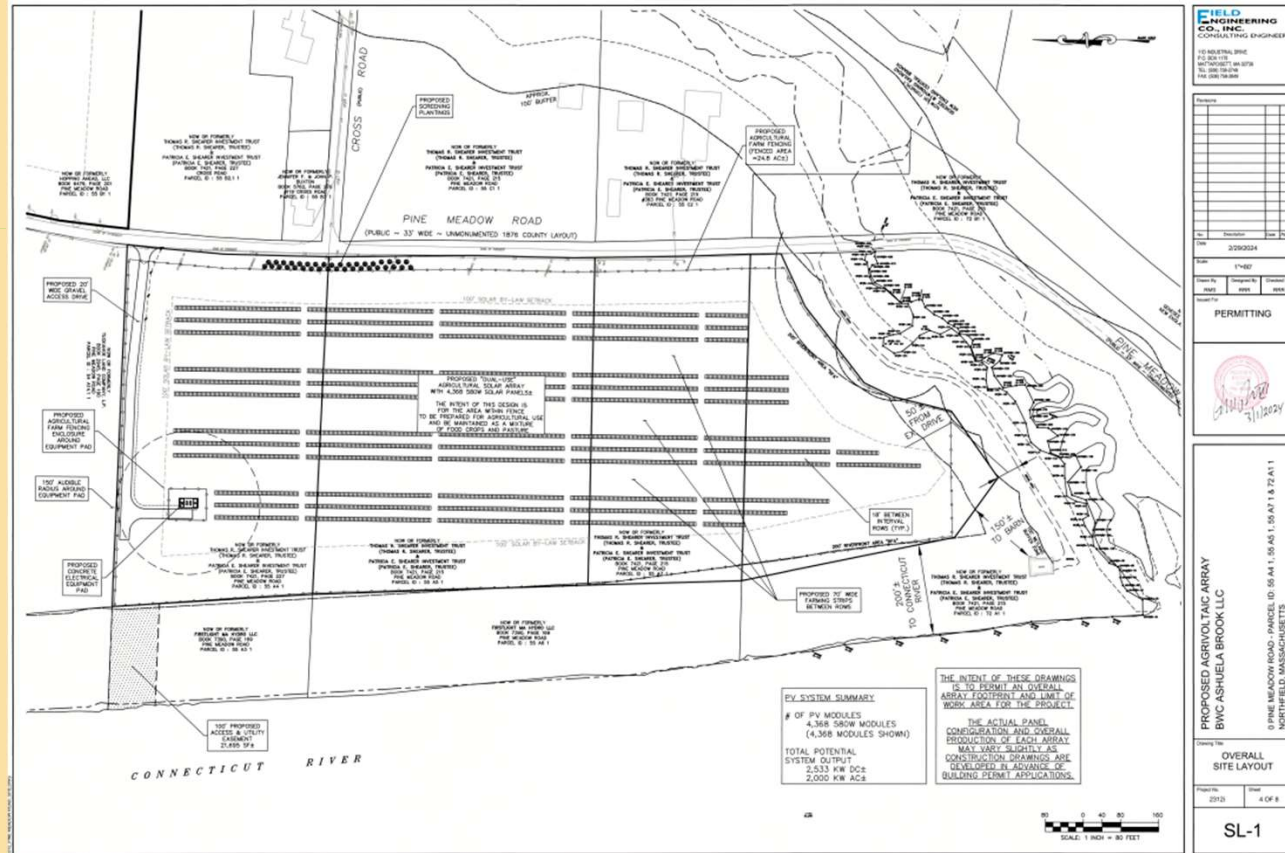
NEXT STEPS

PLANNING BOARD DECISION:

- Prioritize supporting agrivoltaic farmers
- OR
- Prioritize “fighting big solar”

THINGS TO CONSIDER:

- What agrivoltaic design features should be prioritized in the real world?
- What purpose does screening serve?
- What purpose do setbacks serve?
- Does insistence on poorly-defined “comparable crops” serve Northfield’s interests? The farmers’ interests?
- How should the ASTGU Guideline be interpreted by MDAR and DOER?



BLUEWAVE WANTS A SPECIAL PERMIT FOR CLARITY & SIMPLICITY

PLANNING BOARD CAN USE ZONING FLEXIBILITY TO IMPROVE DESIGN



ASTGU Guideline: <https://www.mass.gov/info-details/smart-guideline-regarding-the-definition-of-astgu>