#### Morris – Proposed Agricultural Co Use Plan

# **Property Information**

# Description of property:

The proposed project would be built on 54 South Street, a parcel off South Street and West Street in Morris, Connecticut owned by James Tillson in Morris, Connecticut. Portions of the parcel have been used to cultivate crops for at least the last 30 years. The parcel consists of 75.21 acres, which can be observed in the Agricultural Map.

## Project overview:

The project is part of the NRES program and will consist of a 4.999 MW array. The project area is expected to consist of 20.2 acres, of which approximately 17 acres will be on prime farmland. The project has a life expectancy of twenty-one years, with four options to extend the project by five years. The project is expected to require an access road of crushed stone along with several utility poles outlined in the Agricultural Map. Should the project be sold to another entity, the Farm Plan requirements and decommissioning plan will be carried over to the new owner.

### Past Agriculture Activities

The site has been used for a variety of different activities. The property owner operates a business on-site where he screens and sells topsoil and uses part of the land to store heavy machinery, including tractors and trailers. The southern farmland and western woodlands serve as hunting grounds during the winter months. Since the landowner bought the land in 1992, he has farmed the land in some capacity. Approximately half of the property is used to cultivate sweet corn in the summer and pumpkins in the fall by a local farmer.

#### **Property Management**

#### Description of farming activities:

Greenskies Clean Energy proposes to continue the agricultural use of the land through a Solar + Farming project through this project proposes a versatile agricultural co-use model that maintains ecological integrity while enabling active farming. Rather than committing to a single crop type or farming method, the project envisions a rotating set of viable farming strategies that respond to site conditions and market demand. These may include:

Vegetable row cropping (e.g., squash, zucchini, kale, beans) in higher sunlight zones between rows;

Shade-tolerant specialty crops such as culinary mushrooms (shiitake, oyster) grown under solar panels or in dedicated shaded structures;

Perennial culinary herbs (e.g., thyme, oregano, lavender, mint) that complement pollinator species and require minimal intervention;

Berry and small fruit production (e.g., currants, gooseberries, elderberries), which can thrive with partial sunlight; 1) planting of and 2) planting of perennial warm season grasses.

These systems may be implemented in phases, depending on operator interest, soil performance, and observed microclimate conditions. The flexibility of the planting strategy allows the site to function as both a regenerative agricultural pilot and a revenue-generating farm.

Greenskies Clean Energy remains committed to the long-term viability of agriculture on-site. Key practices such as no-till planting, cover cropping, compost amendment, delayed mowing, and integrated pest management will ensure the health of the soil and resilience of the crops, regardless of the chosen model.

The spacing in between rows is being designed to allow for sufficient acreage to grow plants, provide sufficient area of high sunlight levels, and provide workability for farmers while again balancing needs of required solar capacity. These rows will be on a single mount tracker modules aligned north to south, which will maximize available sunlight for plants to grow.

The site is being designed with farmer's safety in mind. All electrical feeders will be either secured to the modules/racking directly or be underground. There will be increased signage and fencing to ensure that farm workers are never exposed to unsafe conditions. Usually, at this stage of development, Greenskies has not yet selected an engineering, procurement, and construction (EPC) contractor, nor has Greenskies finalized its site design. Both of these activities would ordinarily take place in a project's development cycle after the initial round of permitting is completed. Nonetheless, Greenskies is developing this project with farming as a long term integral aspect of the project and is committed to having the farming use be parallel with the solar for the life of the project.

Soil health is improved by using regenerative methods and perennial plants. Use of perennial plants reduces negative impact to soils, keeps living roots in the ground, provides year round ground cover, and increases the absorption of water into soils. This approach also increases the micro and fungal biodiversity of the soil which improves its quality and the ability to nourish plants grown in the soil.

Array Planting (Underneath the Solar Arrays)

The planting strategy beneath the solar arrays will emphasize productive use of shaded or partially-shaded microclimates, aligning with legitimate agricultural practices. While shade-tolerant perennial forbs and grasses will still be incorporated for soil stability, specific agricultural options may include:

Culinary mushroom cultivation, using low structures or log stacks positioned in deep shade areas;

Leafy greens or herbs such as parsley, cilantro, or sorrel, which thrive in dappled light;

Inter-row cover cropping using legumes (e.g., clover or vetch) for nitrogen fixation and potential forage value.

These crops will be established using no-till planting methods to minimize soil disturbance. The array layout (north-south single-axis trackers) provides varied sun exposure, allowing experimental or rotational cropping patterns between the rows. Farming activities will include delayed mowing, periodic overseeding, and organic soil amendments to support continuous productivity.

Border Area Planting (Along Fence Lines)

The fence line borders will serve as active edge-growing zones suitable for perennial, pollinator-friendly crops and small-scale production. In addition to native forbs and warm-season grasses, the site may support:

Berry shrubs such as elderberry, currants, or gooseberries that tolerate partial sun;

Medicinal and culinary herbs (e.g., lavender, chamomile, lemon balm);

Pollinator-friendly companion crops that support adjacent production zones (e.g., flowering buckwheat, borage).

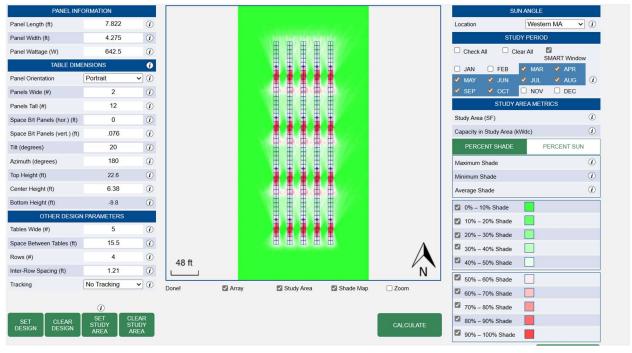
#### **Design Specifications**

Although the system's design may change due to project needs, Greenskies anticipates using a single axis tracking system for the northern section of the system with 8-foot row spacing and a fixed ballasted system for the southern section with 15.5-foot row spacing, both with a height to panel center of around 5 feet. Panel dimensions will be approximately 96.9 in x 44.6 in x 1.38 in. for the tracking system and 93.6 x 50.4 x 1.38 The use of a tracking system combined with this configuration will maximize sunlight exposure for the proposed agricultural use.

Greenskies used the Agricultural Canopy Shading Analysis Tool to model the amount of direct sunlight available per square foot with time-phased shade map simulations to assist with crop planting. This analysis incorporated the CT DOAG's growing season and time of day considerations. The meteorological data used for this analysis was pulled from the nearest station, which was in Rutland, Massachusetts. The analysis found the percentage shading reductions outside the panel perimeter ranged from 0-50%.

Below is a heat map of a sample of the array with a radiance key. Based on our model, we believe the available light will provide sufficient radiance for the proposed planting





# Site Access

In the event that a person authorized by the state of Connecticut would like to request access to the site for data collection purposes related to Agrivoltaics, they may reach out to Steve Martineau of Greenskies Clean Energy's Asset & Monitoring Team <a href="mailto:steven.martineau@greenskies.com">steven.martineau@greenskies.com</a>