

INTEGRATED VEGETATION MANAGEMENT PLAN

SR North Stonington, LLC

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A Shell New Energies Partner

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1.0 Introduction

Silicon Ranch Corporation (SRC), on behalf of SR North Stonington, LLC develops Integrated Vegetation Management Plans for projects based on commonly accepted solar industry practices for Agrivoltaics, or dual-use solar (renewable energy production and regenerative agriculture) while meeting solar industry vegetation management performance specifications and regulatory requirements. SRC takes an integrated approach to land management, using a combination of mechanical and biological controls, including managed sheep grazing with mechanical mowing support. Herbicides are used only to control noxious and invasive weed species as required by local, state, and federal regulations. Pollinator Habitat and screening installations along key viewsheds provide additional ecological and agricultural value to the Agrivoltaics project.

2.0 Project Description

The SR North Stonington property consists of approximately 157.16 acres located along adjacent roads Boom Bridge Road along the eastern-most portion of the Eastern Parcel, Interstate 95 along the southern portion of the Western Parcel, and Providence-New London Turnpike between the Northern and Central Parcels. Cranberry Bog Road terminates at the western boundary of the Western Parcel before continuing as an access road through the property. The property ranges in elevation between 50 to 2010 feet above sea level, with gradual to steep inclines throughout its entirety. Post construction, the property will be vegetated using warm and cool season perennials in order to optimize soil stabilization throughout the year, increase water infiltration, and increase biodiversity of both flora and fauna on the project. Silicon Ranch takes an integrated management strategy through its Regenerative Energy program by integrating regenerative agricultural practices into the long-term land and vegetation management strategy. This consists of biological control methods (Adaptive Multi-Paddock sheep grazing), mechanical, and chemical control measures as needed, and described in section 3.0. An ecological health monitoring program is applied annually to monitor the ecological impact and trends, keeping managers most informed as to the outcomes of their management decisions.

Managed sheep grazing is performed using a variant of rotational grazing practices, specifically Adaptive Multi-Paddock Grazing (AMP Grazing). Within array fencing, temporary electric fence or virtual fencing will be used to subdivide the array into various 'paddocks', where flocks of sheep are rotated rapidly through each paddock, typically spending 3-days or less in each paddock to avoid overgrazing. Sheep are not rotated back to previous paddocks for 40-60 days, depending on weather and other abiotic factors, allowing vegetation adequate 'recovery period' to regrow. Manure is evenly distributed across the project due to the rapid rotations, serving as a fertilizer that further supports perennial vegetation health while reducing instance of erosion. This technique mimics the way bison and grasslands co-evolved over millions of years in the great plains of North America, and over time the overall functionality of the solar-grassland ecosystem (essentially a synthetic savanna) will be improved. Mechanical 'finish mowing' is used as a support tool to manage vegetation to remain compliant with solar industry vegetation management performance specifications. Pollinator habitat established in shading buffers will be managed such that woody perennial species are prevented from establishing, while accommodating various habitat and nesting needs of wildlife. Vegetative screening plantings are aligned with NRCS recommendations and will be installed at select locations to alleviate viewshed impacts to adjacent residences and create additional pollinator habitat and agricultural value.

Additional infrastructure consideration necessary for safe and humane pasture-based livestock are designed into the facility and management plans, including livestock guardian animals, grazing fencing and water systems. Water sources (wells, water taps, hauled water) are established to distribute livestock water across the site as needed and to support module washing activities. Typical grazing fencing is established to optimize land management needs of the entire property, inside and outside array fencing, while meeting the various energy production, livestock and wildlife goals of the project.

3.0 Vegetation Management Objectives

3.1 Vegetation Establishment

- 3.1.1** Perennial vegetation will be established throughout Project Area providing adequate ground cover in order to reduce occurrence of erosion
- 3.1.2** Pollinator plantings may be established in open areas within the array or outside of array in order to promote and enhance biodiversity of the flora and fauna on the site
- 3.1.3** A mix of cool and warm season species is desired
- 3.1.4** Typical Seed Mix:

Fawn Tall Fescue
Annual Ryegrass
Creeping Red Fescue
Perennial Ryegrass
Kentucky Bluegrass 85

- 3.1.5** Typical Pollinator Seed Mix:

Side Oats Grama
Little Bluestem
Roundseed Panicgrass
Butterfly Milkweed
Partridge Pea, PA Ecotype
Lanceleaf Coreopsis
Blackeyed Susan
Narrowloef Mountainmint
Aromatic Astor, PA Ecotype
Zigzag Astor, PA Ecotype
Tall White Beardtongue
Ohio Spiderwort, PA Ecotype
Golden Alexanders
Sundrops
Gray Goldenrod, PA Ecotype

- 3.1.6** Diversity within the species composition is desired, with a healthy mix of perennial grasses, forbs, and sedges desired based on local growing conditions

3.2 Weed Prevention and Detection

- 3.2.1** Existing vegetative species composition will be inventoried, monitored, and controlled during construction, production, and reclamation
- 3.2.2** Weed inventories will allow for early detection and proper identification of a new weed infestation
- 3.2.3** New infestations of noxious weeds in and around Project Area will be prevented using an integrated approach as described below

3.3 Integrated Management Plan Implementation

- 3.3.1** Vegetation will be monitored and controlled throughout production term in order to provide safe access for technicians, prevent shading on the modules, and to provide adequate vegetative cover in order to prevent erosion
 - 3.3.1.1** Control methods include mechanical and biological vegetation removal as well as use of herbicide for control of noxious/invasive weed control as required by local, state and federal regulations

- 3.3.2** Vegetation will not be allowed to grow more than 24", and controlled no lower than 3" during any control operation
- 3.3.3** Typical control prescription is as follows:
 - 3.3.3.1** Adaptive Multi-Paddock Grazing (AMG Grazing) using sheep may occur year-round as feasible, while preventing overgrazing and meeting performance specifications defined in 3.3.2
 - 3.3.3.1.1** Temporary electric fence or virtual fencing is used to subdivide the array into various 'paddocks'
 - 3.3.3.1.2** Flocks of sheep are rapidly rotated through each paddock, typically spending no more than 3 days in each
 - 3.3.3.1.3** Vegetation is typically given a 40-60 day 'recovery period' to regrow, increasing photosynthetic productivity
 - 3.3.3.2** Vegetation removal operations via mechanical mowing may occur at a frequency of 4 to 5 per year, or as needed during growing season to provide safe access for Electrical Technicians and Agrivoltaic vendors.
 - 3.3.3.2.1** To occur in March/April; May/June; July/Aug; Sept/Oct as needed and based on local weather and climatic conditions
 - 3.3.3.3** Appropriate herbicide to be used only as required for control of noxious/invasive weed species
 - 3.3.3.3.1** To occur in March/April; Sept/Oct as needed and based on local weather and climatic conditions.
 - 3.3.3.4** Growth inhibitors of any kind are prohibited for use