



Vegetation Installation and Management Plan for Inkberry Solar, LLC

Prepared June 2025 by:



Contents

1.	Inkberry Solar, LLC Vegetation Management Plan (VMP) Overview	3
1.1.	Site Developer	3
1.2.	Vegetation Restoration Consultant	3
1.3.	Project Description	3
1.4.	VMP Use and Objectives	3
2.	Site Information	4

2.1.	Site Location	4
2.2.	Map of Array Layout	5
2.3.	Site Conditions.....	5
3.	Overview of Vegetation Establishment and Management	6
3.1.	Vegetative Goals	6
3.2.	Contribution of Native Habitat on Solar Sites	6
3.3.	Vegetation Installation Overview	7
3.4.	Vegetation Management Overview	7
4.	Vegetation Installation Procedures	8
4.1.	Site Inspections and Monitoring.....	8
4.2.	Site Preparation Herbicide Application	8
4.3.	Site Preparation Mowing	8
4.4.	Soil and Seedbed Preparation	8
4.5.	Seed and Seeding	8
4.6.	Tree and Shrub Installation	9
4.7.	Erosion control	9
5.	Vegetation Management Procedures	10
5.1.	Adaptive Management	10
5.2.	Complete Site Maintenance Mowing	10
5.3.	Integrated Vegetation Maintenance	10
5.4.	Dormant Mowing	10
6.	Vegetation Installation and Management Timeline	11
6.1.	Site Prep and Installation Phase	11
6.2.	Establishment Phase.....	12
6.3.	Maintenance Phase	12
7.	Monitoring	12
	Mix	13
8.	Seed	
9.	Pollinator Scorecard	14
10.	Soils Maps	15

1. Inkberry Solar, LLC Vegetation Management Plan (VMP) Overview

1.1. Site Owner

Inkberry Solar, LLC
PO Box 310
Highland Park, IL 60035
312.882.3713

1.2. Vegetation Restoration Consultant

Natural Resource Services, Inc
2885 Quail Road NE
Sauk Rapids, MN 56379
320.290.5363

and

16425 W. State Route 90 Princeville, IL
61559

1.3. Project Description

The proposed Inkberry Solar project is planned for approximately 20 acres of land in Boone County, Illinois. Tracker-style panels with approximately 30-36" ground clearance at max tilt are planned. The site will be planted with a fully-native pollinator mix appropriate for a solar site. Vegetative screening is planned on the west side using 4-6 ft native prairie grasses and on portions of the south side using evergreen trees.

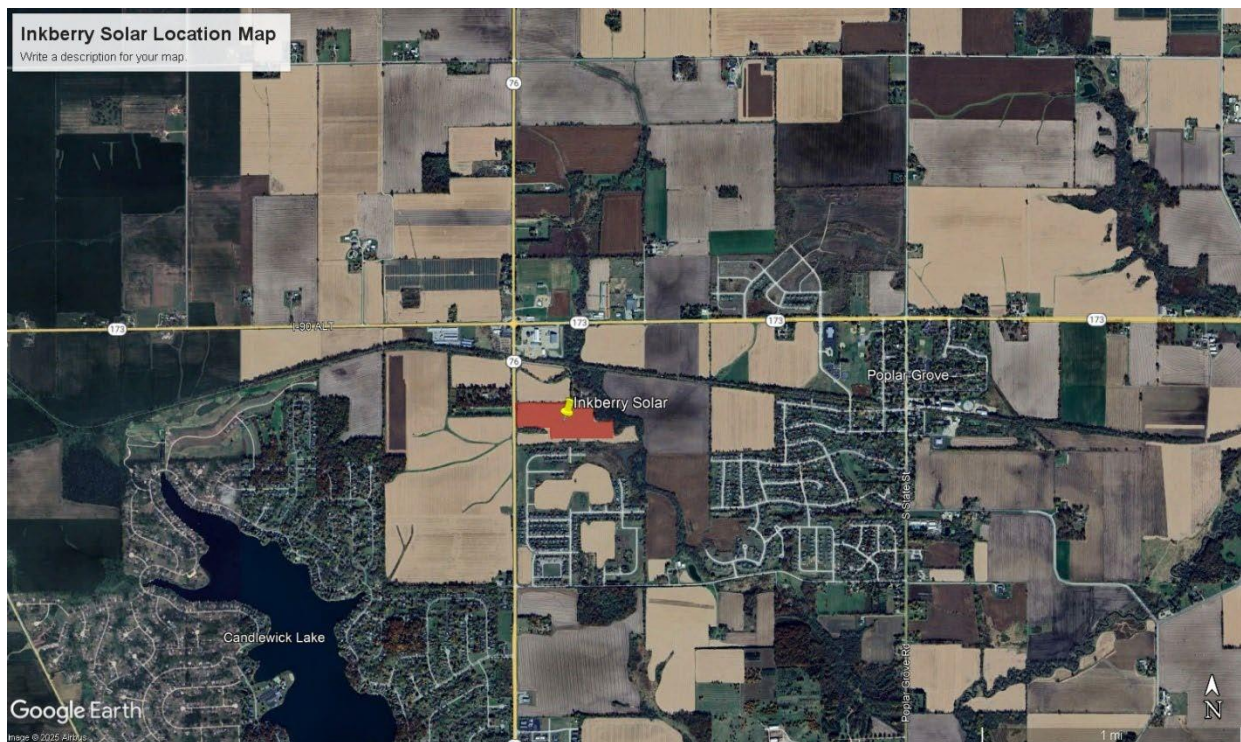
1.4. VMP Use and Objectives

The VMP was written to provide a brief overview and description of the project and to act as a guide for vegetation installation and management. It has been custom-written based on information known at the time of writing. The VMP should be treated as a living document and adjusted as additional information about the site is gathered both pre and post construction. A qualified native vegetation contractor with a history of success working on native vegetation restorations should be contracted to implement the procedures outlined in this document and to provide feedback and suggestions for the VMP during the lifespan of the project.

2. Site Information

2.1. Site Location

The Inkberry Solar project site is located east side of IL-76, approximately 1/3 of a mile south of the intersection of IL-76 and IL173.



2.2. Map of Array Layout

chosen with an emphasis on native pollinator habitat to achieve and maintain Pollinator Friendly status as defined in the Illinois Pollinator Friendly Solar Site Act (525 ILCS 55/) ¹ .

3.2. Contribution of Native Habitat on Solar Sites

Economical production of power is the foremost goal of solar sites. There is a parallel opportunity to provide critically important native pollinator-friendly habitat throughout the array while capitalizing on the long-term low maintenance needs of native vegetation.

Establishing prairies and other native plant communities within the confines of solar sites provides a tremendous opportunity to restore ecosystems that have been severely degraded or eliminated across all areas of the country.

Native plants have profound root systems, many reaching 12 or more feet deep into the soil. Rainwater follows those roots into the ground, helping to reduce water runoff and promote the drainage of standing water into an aquifer. Those deep roots also stabilize the soil, preventing erosion from rain and wind. The plants provide seeds for songbirds, cover for game birds and, of course, provide blossoms and host plants for our beloved butterflies and other nectar-loving insects.

Native grasses and forbs will be selected based on their ecological appropriateness to the specific conditions of this site, with consideration to their mature height to not interfere with panel productivity. These species will not require irrigation, fertilizer, or other soil amendments.

The contribution to habitat restoration cannot be overstated given the acreage impacted and lifespan of the project.



3.3. Vegetation Installation Overview

The native mix planned for this array is selected for ecological appropriateness to the moister soil types and site conditions as well as the mature plant height of 24" to 36" so as to not

¹ <https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=3900&ChapterID=44>

interfere with panel productivity. The habitat provides low-maintenance vegetation that won't require fertilizer, amended soils or irrigation on this site.

It is important to note that the species selected for this site are based on their ability to successfully establish from seed and thrive within the unique conditions found on solar sites. From a practical standpoint, the species contained in these mixes are generally available in the marketplace and, as a whole, have reasonable price points. Ultimately, the list consists of well-performing, workhorse species coupled with smaller amounts of more unique species for a robust mixture.

3.4. Vegetation Management Overview

Maintenance plays a vital role in the eventual success of any native landscape installation, especially during the establishment period of years one through three. Active management is similar in all areas of the project site. All areas of the site are inspected annually followed by maintenance necessary to encourage healthy native species while discouraging nonnative/invasive species. During the growing season of the first year of establishment, the site shall be inspected a minimum of three times.



4. Vegetation Installation Procedures

4.1. Site Inspections and Monitoring

Site inspections and monitoring throughout the installation process are vital to continually assess site conditions and determine what procedures are needed and the timing of those

procedures. The pre-construction site inspection is particularly important to determine the need for any herbicide application or mowing prior to soil preparation and seeding.

4.2. Site Preparation Herbicide Application

A site preparation herbicide application, if deemed necessary, should be performed by a licensed, qualified contractor using appropriate herbicides to kill all actively growing weeds on the project site. Typically, only glyphosate herbicide is necessary, but if certain perennial weed species are present such as Canada thistle, a broadleaf additive may be necessary. The contractor should carefully select an herbicide with a short soil residual, such as Garlon 3A, to minimize the impact on germination of the permanent seeding. The vegetation should not be disturbed for a minimum of 14 days after an herbicide application to allow time for effective weed elimination.

4.3. Site Preparation Mowing

Site preparation mowing may be required to reset vegetative growth to prepare for an herbicide application. Additionally, site preparation mowing may be needed to cut and mulch vegetation to simplify the soil preparation and seeding process.

4.4. Soil and Seedbed Preparation

Soil and seedbed preparation is vital to the success of any planting. Disking and harrowing (or raking) the site is common and extremely effective. If extreme compaction is present on site, a ripper may be needed to mitigate the compaction. The seedbed should be relatively smooth and firm prior to seeding. Soil that is too clumpy or too fluffy may result in seeds being planted too deep in the soil to germinate and survive.

4.5. Seed and Seeding

A custom native pollinator seed mix has been designed for use on this project and is found on page 13. Seeding will be completed through broadcasting by using a mechanical spreader appropriate for the specified seed mixes. Large and fluffy seeds (such as most grasses and cover crop) should be broadcast first and then lightly harrowed/raked into the soil. Following the harrowing, small seeds (such as most forbs, sedges, and rushes) should be broadcast on top of the soil.

4.6. Tree Installation

Tree installation can occur either before or after permanent seeding depending on the preferences of the contractor, timing of seeding, and the site conditions. If installation occurs after permanent seeding, touchup seeding in the disturbed areas may need to be completed. All trees should be watered at the time of installation and properly mulched. A watering plan should be in place in the event of inadequate rainfall.

4.7. Erosion control

Erosion control measures should be implemented as required after permanent seeding is completed.



5. Vegetation Management Procedures

5.1. Adaptive Management

An adaptive management strategy is vital to the success of any project, but especially so for native pollinator restorations. Adaptive management consists of continual monitoring and adjusting maintenance strategies based on the site conditions in order to achieve the best outcomes. No two sites are exactly the same and responding to changing site conditions, weed pressures, weather, and a multitude of other variables is essential to the success of the planting.

5.2. Complete Site Maintenance Mowing

Complete site maintenance mowing consists of mowing the entire project area during the growing season, including trimming as appropriate around equipment or in inaccessible areas. Complete site maintenance mowing is implemented primarily during the establishment phase

of the restoration (years 1-3) for several reasons. First, if a closed canopy of vegetation develops, mowing is implemented to knock back the taller vegetation and allow sunlight to reach the native seedlings below. Second, if weed species are present and actively nearing their seed set, mowing is implemented to prevent those weeds from producing viable seed. Third, vegetation has become tall enough to shade the panels or impact other solar equipment on site and must be cut down.

5.3. Integrated Vegetation Maintenance

Integrated vegetation maintenance or IVM is a method using a combination of targeted mowing/trimming and herbicide application aimed at reducing or eliminating weed species and promoting the desired vegetation. IVM can also include grazing, haying, and other maintenance options as appropriate. IVM is implemented starting towards the end of the 2nd full growing season typically and is used throughout the life of the project. 3 IVM visits are typical on most sites until year 5 when a reduction to 1-2 visits per year can be made if site conditions allow.

5.4. Dormant Mowing

Dormant mowing is a type of complete site mow implemented when vegetation is not actively growing on site. This method is typically performed in early spring or fall. Oftentimes, dormant mows are completed in the fall to mulch up dead vegetation and encourage decomposition. This practice also has a dual purpose of cleaning up the site to make electrical maintenance easier and to reduce the chance of accidental fire.

6. Vegetation Installation and Management Timeline

6.1. Site Prep and Installation Phase *Site*

Preparation:

1. Prior to the start of construction, a cover crop may be seeded to aid in erosion control, soil moisture management, and weed suppression.
2. Inspection of the project area to assess site conditions and determine the need for any site prep mowing or spraying activities.
3. If necessary, an herbicide application will be completed using glyphosate (Roundup® or equivalent) as per manufacturer's directions in areas with actively growing vegetation. Allow a minimum of 14 days before disturbing the soil or completing seeding activities.
4. When perennial broadleaf vegetation is present a triclopyr herbicide will be added (Garlon 3A® or equivalent) as per manufacturer's directions. When a broadleaf herbicide is used allow a minimum of 30 days before disturbing the site or completing seeding.
5. Depending on the density and type of undesirable vegetation present (i.e., annual vs perennial) a complete site mowing might be advisable in lieu of an herbicide application.

For instance, if the site is dominated by Foxtail (an annual), mowing would be preferable to an herbicide application.

Soil Prep and Seeding:

1. Construction debris, garbage, and building materials will be removed and/or staged outside the intended seeding areas.
2. Disk soil within the project area in preparation for seeding. Harrow or rake the soil to achieve the proper seedbed.
3. Broadcast the large and fluffy seed (mostly grasses) along with a cover crop of winter wheat or oats.
4. Harrow or rake the soil to work the seed to a proper depth.
5. Broadcast the small seeds (forbs, sedges, rushes, small grass seeds) on top of the soil.

Vegetative Screening Installation

1. Prior to evergreen tree installation, planting locations should be marked to ensure proper placement and spacing of the trees.
2. Install evergreen trees using appropriate equipment and procedures, including watering at the time of installation, mulch rings, and staking or guying if necessary.
3. Implement a watering plan post-installation to ensure survival.
4. On the west side, the tallgrass screening area should be seeded at the same time as the rest of the permanent seeding, using a native grass and forb mix appropriate for Boone County and the site conditions.

5. Example Screening Option:

Two types of evergreen species used for screening are the Red Pine, growing 20 – 40' wide, up to 60 feet tall, and the Eastern Red Cedar, 10' – 20' wide and 40 feet tall. Trees would be four to six feet tall at time of installation and planted 16' on center in a double, staggered row to increase visual screening. Final selections are to be determined at this time, pending approval by the AHJ.



Red Pine, *Pinus resinosa*



Eastern Red Cedar, *Juniper virginiana*

Installation Phase Maintenance

If the site is seeded in the summer or early fall, 1-2 complete site mowings may be needed during this first partial growing season.

6.2. Establishment Phase

Year 1 is defined as the 1st full growing season for the vegetation. A recommendation of 3 complete site mowings is most common for this phase. Depending on site conditions and vegetation growth, more or less may be needed.

Year 2 is the second full growing season. 3 total visits are typical with 2 complete site mowings and 1 Integrated Vegetation Maintenance visit the most likely combination.

Year 3 typically requires 3 IVM site visits depending on vegetation status.

6.3. Maintenance Phase

Year 4 – 34. During the maintenance phase, 2 IVM visits are typical.

7. Monitoring

Consistent project monitoring is essential to evaluate vegetative establishment, weed presence, and possible erosion concerns. This information helps determine which management procedures to utilize, the proper timing for those procedures, and whether any other remedial action is required such as reseeding or replanting. As the site's vegetation matures, adaptive management should be utilized as previously described.

8. Seed Mix

Inkberry Solar Native Pollinator Seed Mix						
Seeding Rate - 12.5 lb/acre - 75 seed/ft²						
Common Name	Scientific Name	Bloom Month	% of Mix by Weight	Lbs/Acre	Seeds per ft²	% of Mix by Seeds/ft²
Sideoats Grama	<i>Bouteloua curtipendula</i>		34.25%	4.28	9.43	12.58%
Prairie Brome	<i>Bromus kalmii</i>		0.80%	0.10	0.29	0.39%
Plains Oval Sedge	<i>Carex brevior</i>		2.80%	0.35	3.72	4.97%
Bicknell's Sedge	<i>Carex bicknellii</i>		0.96%	0.12	0.75	1.00%
Troublesome Sedge	<i>Carex molesta</i>		1.84%	0.23	2.11	2.82%
Brown Fox Sedge	<i>Carex vulpinoidea</i>		2.00%	0.25	9.18	12.24%
Silky Wild Rye	<i>Elymus villosus</i>		6.00%	0.75	1.52	2.02%
Little Bluestem	<i>Schizachyrium scoparium</i>		26.96%	3.37	18.57	24.75%

Prairie Dropseed	Sporobolus heterolepis		0.40%	0.05	0.29	0.39%
Graminoid Total			76.00%	9.50	45.87	61.15%
Common Yarrow	Achillea millefolium	Jun-Aug	0.44%	0.06	3.63	4.84%
Nodding Onion	Allium cernuum	Jul-Aug	0.24%	0.03	0.08	0.11%
Lead Plant	Amorpha canescens	Jun-Aug	1.33%	0.17	0.98	1.30%
Canada Anemone	Anemone canadensis	May-Jun	0.04%	0.01	0.02	0.02%
Wild Columbine	Aquilegia canadensis	Apr-Jun	0.04%	0.01	0.07	0.10%
Common Milkweed	Asclepias syriaca	Jun-Aug	0.34%	0.04	0.06	0.08%
Butterfly Milkweed	Asclepias tuberosa	Jun-Aug	0.32%	0.04	0.06	0.08%
Canada Milkvetch	Astragalus canadensis	Jun-Aug	1.08%	0.14	0.84	1.13%
Partridge Pea	Chamaecrista fasciculata	Jul-Sep	3.11%	0.39	0.39	0.51%
White Prairie Clover	Dalea candida	Jun-Sep	4.08%	0.51	3.56	4.74%
Purple Prairie Clover	Dalea purpurea	Jul-Sep	6.02%	0.75	4.98	6.63%
Cream Gentian	Gentiana flavida	Aug-Sep	0.04%	0.01	0.27	0.36%
Prairie Blazing Star	Liatris pycnostachya	Jul-Sep	0.24%	0.03	0.12	0.16%
Virginia Mountain Mint	Pycnanthemum virginianum	Jun-Sep	0.09%	0.01	0.95	1.26%
Prairie Wild Rose	Rosa arkansana	Jun-Aug	0.29%	0.04	0.03	0.04%
Black-eyed Susan	Rudbeckia hirta	Jun-Oct	1.92%	0.24	8.13	10.83%
Gray Goldenrod	Solidago nemoralis	Aug-Oct	0.04%	0.01	0.57	0.76%
Ohio Goldenrod	Solidago ohioensis	Aug-Sep	0.04%	0.01	0.21	0.28%
Calico Aster	Symphyotrichum lateriflorum	Aug-Oct	0.04%	0.01	0.48	0.64%
Sky Blue Aster	Symphyotrichum oolentangiense	Aug-Oct	0.16%	0.02	0.57	0.76%
Ohio Spiderwort	Tradescantia ohiensis	May-Jul	0.24%	0.03	0.09	0.12%
Hoary Vervain	Verbena stricta	Jun-Sep	1.44%	0.18	1.85	2.46%
Golden Alexanders	Zizia aurea	Apr-Jun	2.40%	0.30	1.21	1.62%
Forb Total			24.00%	3.00	29.14	38.85%
Mix Total			100.00%	12.50	75.01	100.00%

9. Pollinator Scorecard

Illinois Solar Site Pollinator Habitat Planning Form

Use this form as a draft before completing the *Illinois Planned Pollinator Habitat on Solar Sites Scorecard* online

In Between and Under Solar Panels

1. PLANNED PLANT DIVERSITY IN ROWS & UNDER SOLAR ARRAY (choose up to 2)

- ☐ 4-6 species +5 pts
☒ 7 or More species +8 pts
☒ All Native Species (minimum 4 species) +10 pts

Perimeter and Buffer Area

2. VEGETATIVE BUFFER PLANNED ADJACENT TO THE SOLAR SITE (choose all that apply)

- ☒ Buffer planned outside of array fencing +5 pts
☐ Buffer is 30-49ft wide measured from array fencing +5 pts
☐ Buffer is at least 50ft wide measured from array fencing +10 pts
☐ Buffer has Native shrubs/trees that provide food for wildlife +5 pts

3. SEEDS USED FOR NATIVE PERIMETER & BUFFER AREAS (choose all that apply)

- ☒ Mixes are seeded using at least 20 seeds per square foot of Pure Live Seed or 40 Seeds per square foot on slopes > 5% +10 pts
☐ All seeds are from a source within 150 miles of site +5 pts
☐ At least 2% milkweed cover is planned to be established from seeds/plants +5 pts

4. PLANNED # OF NATIVE SPECIES IN SITE PERIMETER & BUFFER AREA (species with more than 1% cover)(choose 1)

- ☐ 5-10 species +2 pts
☐ 10-15 species +5 pts
☒ 16-20 species +10 pts
☐ >20 species +15 pts

Exclude invasive and non-native plant species from total

5. PLANNED PERCENT OF PERIMETER & BUFFER AREA DOMINATED BY NATIVE PLANT SPECIES (choose 1)

- ☐ 26- 50 % +2 pts
☐ 51-75 % +10 pts
☒ More than 75% +15 pts

Whole Site

6. PLANNED PERCENT OF SITE VEGETATION COVER TO BE DOMINATED BY DESIRABLE WILDFLOWERS (choose 1)

- ☒ 26- 50 % +2 pts
☐ 51-75 % +10 pts
☐ More than 75% +15 pts



7. PLANNED SEASONS WITH AT LEAST THREE BLOOMING NATIVE SPECIES PRESENT (choose all that apply)

- ☒ Spring (April-May) +5 pts
☒ Summer (June-August) +5 pts
☒ Fall (September-October) +5 pts

8. HABITAT SITE PREPARATION PRIOR TO IMPLEMENTATION (choose all that apply)

- ☒ Soil preparation done to promote germination and reduce erosion as appropriate for the site. +10 pts
☒ Measures taken to control weeds prior to seeding +10 pts
☐ None -10 pts

9. AVAILABLE HABITAT COMPONENTS WITHIN 0.25 MILES (choose all that apply)

- ☐ Native bunch grass for bee nesting +2 pts
☐ Native trees/shrubs for bee nesting +2 pts
☐ Clean, perennial water sources +2 pts
☐ Created habitat nesting features +2 pts

10. SITE PLANNING AND MANAGEMENT(choose all that apply)

- ☒ Detailed establishment and management plan developed +10 pts
☐ Signage legible at forty or more feet stating "pollinator friendly solar habitat" +3 pts

11. INSECTICIDE RISK (choose all that apply)

- ☐ Planned on-site use of insecticide or pre-planting seed/plant treatment (excluding buildings/electrical boxes, etc.) -40 pts
☐ Communication/registration with local chemical applicators or on www.fieldwatch.com to prevent drift +5 pts

Total Points: 105

Meets Preliminary Pollinator Standards - 85
 Provides Exceptional Habitat - 110 and higher

Owner: Inkberry Solar LLC

Vegetation Consultant: Natural Resource Services, Inc

Project Location: Boone County

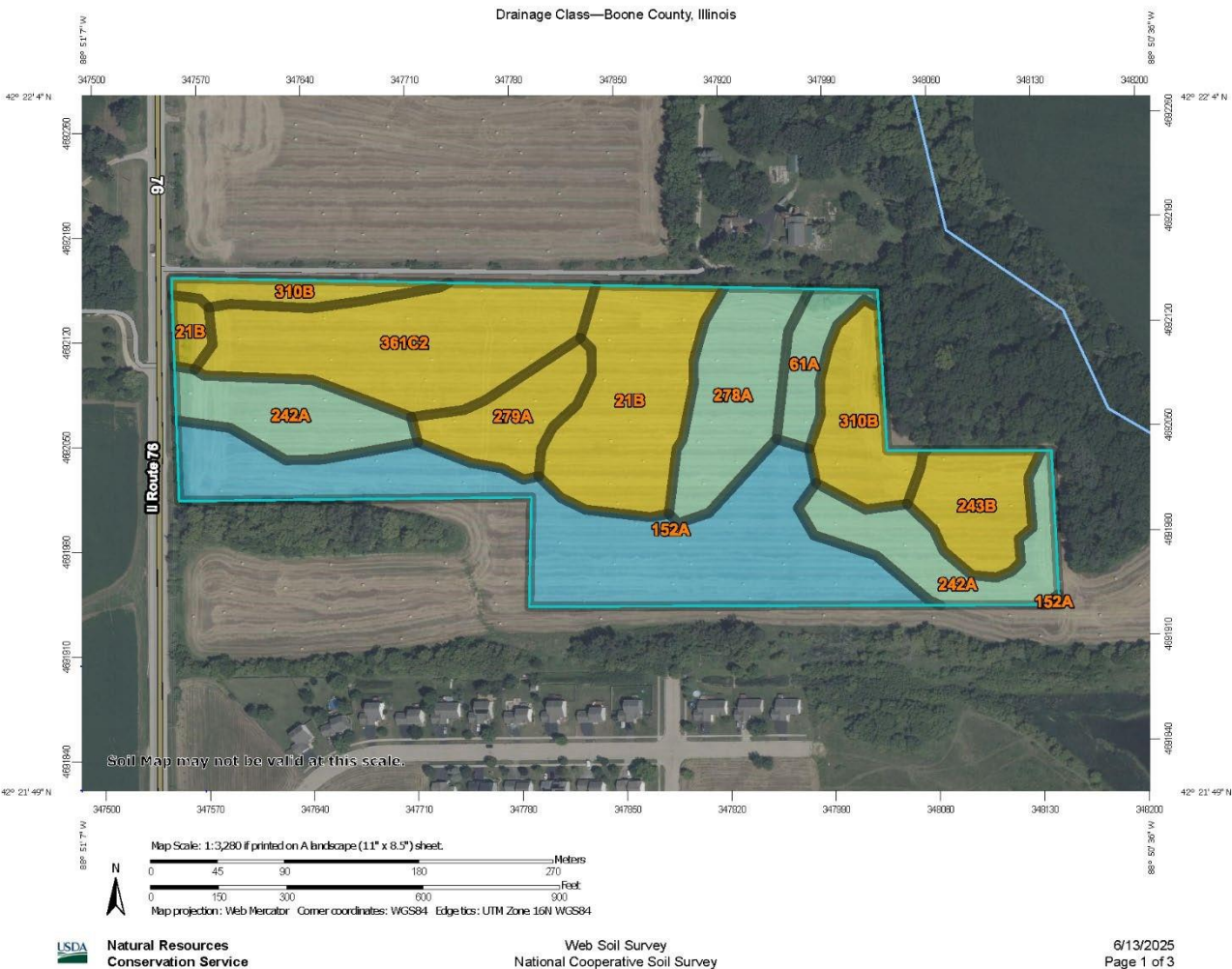
Project Size: +/- 20 acres acres

Final Seeding Date: TBD - Anticipated fall 2026

This form is designed (with the help of the Solar Site Pollinator Guidelines found on IDNR's website) to guide owners or managers of solar sites to meet the requirements to be able to claim a site is pollinator friendly according to the "Pollinator Friendly Solar Site Act (525 ILCS 55)". This form is for company records only and does not grant the title of a Pollinator Friendly Solar Site until the "Illinois Planned Pollinator Habitat on Solar Sites Scorecard" is completed with a score of 85 or higher on IDNR's website. This preliminary recognition is good for 3yrs, after which the "Established Pollinator Habitat on Solar Sites Scorecard" will need to be completed every 5 years to maintain recognition as a Pollinator Friendly Solar Site.

12/3/2019

10. Soils Maps



Drainage Class

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
21B	Pecatonica silt loam, 2 to 5 percent slopes	Well drained	3.3	13.6%
61A	Atterberry silt loam, 0 to 2 percent slopes	Somewhat poorly drained	0.8	3.2%
152A	Drummer silty clay loam, 0 to 2 percent slopes	Poorly drained	6.1	25.1%
242A	Kendall silt loam, 0 to 2 percent slopes	Somewhat poorly drained	3.2	13.4%
243B	St. Charles silt loam, 2 to 5 percent slopes	Well drained	1.4	5.7%
278A	Stronghurst silt loam, 0 to 2 percent slopes	Somewhat poorly drained	2.1	8.7%
279A	Rozetta silt loam, 0 to 2 percent slopes	Well drained	1.3	5.3%
310B	McHenry silt loam, 2 to 4 percent slopes	Well drained	2.1	8.9%
361C2	Kidder loam, 4 to 6 percent slopes, eroded	Well drained	3.9	16.1%
Totals for Area of Interest			24.1	100.0%

Description

"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized-excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

