VILLAGE OF SUGAR GROVE
BOARD REPORT

TO: VILLAGE PRESIDENT & BOARD OF TRUSTEES

FROM: WALTER MAGDZIARZ, COMMUNITY DEVELOPMENT DIRECTOR
DANIELLE MARION, PLANNING & ZONING ADMINISTRATOR

SUBJECT: ORDINANCE: SPECIAL USE PERMIT FOR SOLAR GARDEN ENERGY SYSTEM, COMMUNITY SOLAR 2 (AURORA AIRPORT)

AGENDA: MARCH 19, 2024 VILLAGE BOARD MEETING

DATE: MARCH 14, 2024

ISSUE

Shall the Village Board grant a Special Use Permit for a solar garden energy system on a portion of the Aurora Airport property, hereinafter referred to as Community Solar-2.

DISCUSSION

The Village Board discussed the matter at its March 5th meeting and heard comments from the public as well as the SunCode, LLC ("Applicant"). The Village Board engaged in further discussion on a number of topics that were raised during this comment period. Substantive topics included concerns about glare, questions pertaining to whether or not there would be changes to the existing electric distribution system, the security fence materials, the burial of utilities (both on and off-site), the proposed service drive, and the Applicant's decommissioning plan. In addition, the Village Board considered a number of procedural concerns that were raised by members of the public, including whether the application was properly completed and whether adequate notice was provided.

A summary of those discussions and the requested staff follow-up is provided below:

I. Substantive Considerations.

a. ***Glare.*** The public, specifically pilots using the Aurora Airport, expressed concerns about glare that may be created by the solar panels. The Village's Zoning Ordinance requires that a glare study be conducted in accordance with FAA requirements. This study has been completed by the Applicant. The findings indicate that there are expected to be intermittent periods of glare, however, not to the level that would cause the FAA to modify or reject the proposed project. The Applicant still must submit its application to the FAA, who will approve or deny the glare study.

In addition to FAA requirements, the Village's Zoning Ordinance also requires the use of anti-reflective materials on solar panels located in the vicinity of the airport. The Applicant's application material indicate that the panels are non-reflective. Moreover, the tracking feature of the solar panels also serves to reduce glare by reducing the angle of incidence from the sun's rays. That is, the more perpendicular the panels are to the sun's rays the less opportunities for glare are created.

The Village Board also asked the Applicant to prepare a glare study for selected residences in the Dugan Woods and Prairie Glen neighborhoods. This additional study was conducted by the Applicant and the results indicated that no glare was perceived. When the existing shade trees along the railroad and property lines are factored into the equation, there is no significant glare concern for the nearby residences. The consultant's report is attached for the Village Board's reference and review.

In light of the foregoing, it is staff's opinion that the Applicant has properly mitigated any glare concerns, pending final FAA approval.

b. ***Security fence*.** The Applicant proposes an eight-foot-tall chain link security fence in accordance with the Village's Zoning Ordinance. The Zoning Ordinance does not specify the design or materials for the security fence. Accordingly, staff finds that the proposed fence is in compliance with current Village requirements.

c. ***Utility burial.*** The Applicant agreed to bury all on-site electric lines as required by the Village's Zoning Ordinance. The existing utility poles along U.S. 30 are buried across the entire runway protection zone which includes the proposed solar garden. In this instance, the connection between the solar garden and the electric distribution system is expected to be buried, as well.

d. ***Service drive*.** The Applicant agreed to revise the plans to indicate the proposed service drive to serve the solar garden energy system will be paved.

e. ***Decommissioning plan***. The Applicant provided a decommissioning plan as required by the Village's Zoning Ordinance. It describes what the operator will be expected to do with the solar panels (recycled), the support structures (recycled), electrical wiring (recycled), security fence (recycled), and the restoration of the ground, including soil and erosion control practices during the decommissioning activities. The decommissioning plan is backed by a financial guarantee in a form and amount approved by the Village Board prior to issuing the building permit for construction of the solar facility.

The Village Board questioned how it would determine when the Applicant's decommissioning obligations are triggered. While the Village will be, in part, dependent upon obtaining this information from the City of Aurora, an additional condition has been added to the Special Use Permit obligating the owner/operator to inform the Village if its operations cease for a period of more than twelve (12) months. In addition, should the owner/operator fail to respond to an inquiry by the Village within the specified timeframe regarding the status of its operations, the Village will be authorized to draw upon the security and to commence decommissioning.

In addition, language was added requiring written notice to the Village upon the solar garden energy system's transfer to a new owner/operator and establishing that any successor owner/operator must post new security before the prior owner/operator's security is released.

II. **Procedural Considerations.**

a. ***The process.*** A number of questions were raised concerning the process for constructing the solar garden energy system. The approval of the Special Use Permit is the first step in the process. If the Special Use Permit is granted, the Applicant then must obtain FAA approval of the development and the glare study. Once approvals are received (and prior to the issuance of a building permit) the Applicant would then be required to perform a drain tile investigation, provide geotechnical information for footing and foundations, and provide the Village with a financial guarantee to cover the future decommissioning costs (as determined by the Village). Zoning approval by the Village is necessary for the Applicant to submit the project to the State for approval of the solar energy credits.

b. ***Completeness of the application.*** All of the required information for submitting an application for a Special Use Permit for a solar garden energy system has been provided. The application has been reviewed by Village staff and is deemed complete.

c. ***Notification process.*** All of the required notifications were satisfactorily completed in accordance with state statute and the Zoning Ordinance: sign(s) were posted, the public hearing notice was published in a newspaper of general circulation, and written notice was mailed to all property owners within 250-feet of the Subject Property. The Subject Property is a lot of record within the boundaries of the Aurora Municipal Airport. State statutes do not require the owner of property adjacent the Airport but more than 250-feet from the Subject Property to receive written notice.

d. ***Applicant identity.*** Sun Code, LLC is the Applicant. As is common with many developments, Sun Code has formed or will be forming additional LLCs for this project. The public also raised questions regarding the different names in contract documents between the applicant and the City of Aurora. Those arrangements are not in the Village's purview. The City of Aurora is the land owner and provided consent to the Applicant to make the application for a Special Use Permit. The Village attorney reviewed the applicant information and determined the there is no procedural defect.

e. ***Applicant licensure status.*** . While some professions, such as barbers, engineers, plumbers, mortgage brokers, architects, and roofers, are required to be licensed to do business in the State of Illinois, solar energy providers are not one of them.

There was additional discussion about requiring sidewalks or bike paths across the frontage of the Subject Property. Ordinarily those improvements are associated with subdivision of property. The applicant is not subdividing the property, so the Village cannot invoke the subdivision requirements in this instance.

The Planning Commission/ Zoning Board of Appeals held the requisite public hearing and all interested persons were provided the opportunity to be heard. The proposed solar garden energy system complies with all of the Village's zoning requirements. The Planning Commission/Zoning Board of Appeals recommended approval of the PUD amendment, subject to certain conditions and restrictions which are incorporated in the attached Ordinance. Village staff recommends adding development of the site in

accordance with the approved site development plans and material and equipment specifications, and, prohibiting battery storage facilities on the site, as additional conditions of approval.

ATTACHMENTS

- Glare Analysis, Fore Solar (for selected residences)
- Ordinance Granting a Special Use Permit for a Solar Garden Energy System (Aurora Airport, Community Solar-2), exhibits attached separately

RECOMMENDATION

That the Village Board approve the Ordinance Granting a Special Use Permit for a Solar Garden Energy System (Aurora Airport, Community Solar-2).

FORGESOLAR GLARE ANALYSIS

Project: **Aurora Solar CS**

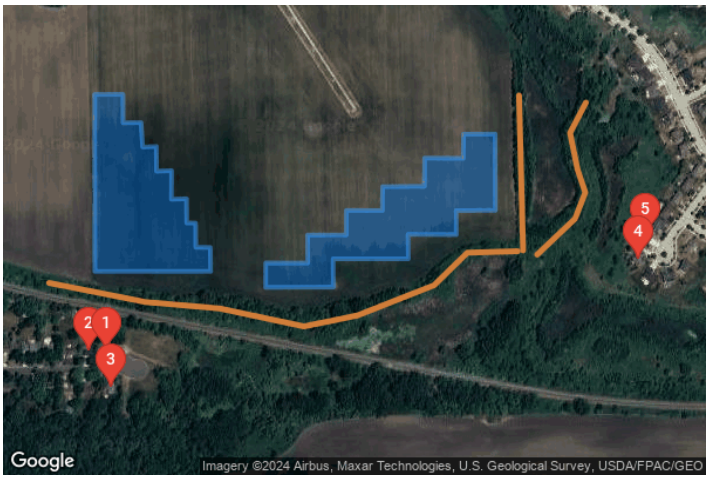
Proposed construction of a Community Solar system on behalf of the Aurora Municipal Airport (ARR). The SunCode Aurora Airport Solar CS, LLC (Project) proposed location in Village of Sugar Grove, IL 60554, Kane County.

Site configuration: **CS2_Residental_Analysis**

Client: SunCode Energy

Created 10 Mar, 2024
Updated 10 Mar, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 500 kW to 1 MW
Site ID 114022.18954

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2



Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
CS2 array area east	SA tracking	SA tracking	0	0.0	0	0.0	-
CS2 array area west	SA tracking	SA tracking	0	0.0	0	0.0	-

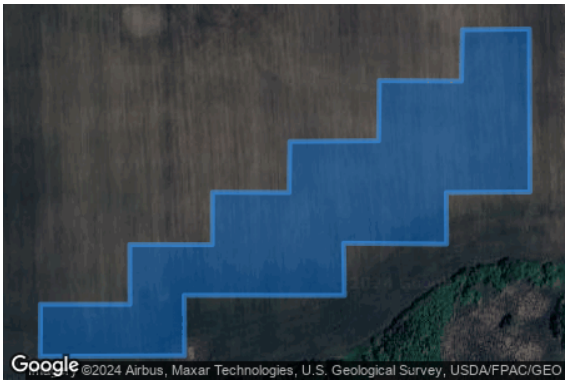
Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0

Component Data

PV Arrays

Name: CS2 array area east
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass without AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	41.759852	-88.471875	698.64	10.00	708.64
2	41.759851	-88.471107	699.77	10.00	709.77
3	41.760233	-88.471109	701.83	10.00	711.83
4	41.760232	-88.470399	701.35	10.00	711.35
5	41.760567	-88.470398	703.24	10.00	713.24
6	41.760565	-88.469740	702.47	10.00	712.47
7	41.760891	-88.469734	703.11	10.00	713.11
8	41.760896	-88.468971	702.95	10.00	712.95
9	41.761280	-88.468965	702.50	10.00	712.50
10	41.761277	-88.468259	701.93	10.00	711.93
11	41.761605	-88.468252	701.14	10.00	711.14
12	41.761609	-88.467675	698.88	10.00	708.88
13	41.760569	-88.467670	694.19	10.00	704.19
14	41.760565	-88.468389	698.21	10.00	708.21
15	41.760236	-88.468386	694.28	10.00	704.28
16	41.760242	-88.469271	697.65	10.00	707.65
17	41.759908	-88.469264	695.83	10.00	705.83
18	41.759909	-88.470641	696.16	10.00	706.16
19	41.759909	-88.470641	696.16	10.00	706.16
20	41.759523	-88.470638	696.91	10.00	706.91
21	41.759523	-88.470638	696.91	10.00	706.91
22	41.759518	-88.471878	696.91	10.00	706.91

Name: CS2 array area west
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0°
Max tracking angle: 60.0°
Resting angle: 0.0°
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	41.762146	-88.475009	706.10	10.00	716.10
2	41.762147	-88.474490	705.78	10.00	715.78
3	41.761760	-88.474487	704.62	10.00	714.62
4	41.761760	-88.474487	704.62	10.00	714.62
5	41.761763	-88.474158	703.13	10.00	713.13
6	41.761431	-88.474130	704.32	10.00	714.32
7	41.761438	-88.473879	704.10	10.00	714.10
8	41.761438	-88.473879	704.10	10.00	714.10
9	41.761101	-88.473876	703.54	10.00	713.54
10	41.761109	-88.473600	703.38	10.00	713.38
11	41.760720	-88.473603	701.74	10.00	711.74
12	41.760726	-88.473327	701.54	10.00	711.54
13	41.760397	-88.473323	700.14	10.00	710.14
14	41.760394	-88.473161	699.99	10.00	709.99
15	41.760065	-88.473156	698.33	10.00	708.33
16	41.760062	-88.472891	698.35	10.00	708.35
17	41.759737	-88.472885	696.68	10.00	706.68
18	41.759738	-88.475005	696.27	10.00	706.27

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
OP 1	1	41.758651	-88.474796	698.08	6.00
OP 2	2	41.758655	-88.475113	697.74	6.00
OP 3	3	41.758151	-88.474694	697.61	6.00
OP 4	4	41.759895	-88.465038	699.52	6.00
OP 5	5	41.760211	-88.464910	699.08	6.00

Obstruction Components

Name: Obstruction 1_Vegetation Buffer
Top height: 15.0 ft

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	41.759579	-88.475842	694.38
2	41.759319	-88.474083	695.11
3	41.759231	-88.472720	691.72
4	41.758987	-88.471175	689.74
5	41.759135	-88.470199	692.08
6	41.759547	-88.468794	692.35
7	41.759991	-88.468182	692.46
8	41.760011	-88.467262	692.42

Name: Obstruction 2_Vegetation Buffer
Top height: 15.0 ft

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	41.762133	-88.467237	695.34
2	41.760022	-88.467162	692.61

Name: Obstruction 3_Vegetation Buffer
Top height: 15.0 ft

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	41.762036	-88.466013	695.83
2	41.761622	-88.466302	696.69
3	41.761124	-88.466165	696.61
4	41.760812	-88.466023	697.52
5	41.760454	-88.466211	698.44
6	41.759966	-88.466904	693.57

Glare Analysis Results

Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
CS2 array area east	SA tracking	SA tracking	0	0.0	0	0.0	-
CS2 array area west	SA tracking	SA tracking	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0

PV: CS2 array area east no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0

CS2 array area east and OP 1

No glare found

CS2 array area east and OP 2

No glare found

CS2 array area east and OP 3

No glare found

CS2 array area east and OP 4

No glare found

CS2 array area east and OP 5

No glare found

PV: CS2 array area west no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0

CS2 array area west and OP 1

No glare found

CS2 array area west and OP 2

No glare found

CS2 array area west and OP 3

No glare found

CS2 array area west and OP 4

No glare found

CS2 array area west and OP 5

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

VILLAGE OF SUGAR GROVE
KANE COUNTY, ILLINOIS

ORDINANCE NO. 2024-0319CD2

An Ordinance Granting a Special Use Permit for a Solar Garden Energy System
(Aurora Airport, Community Solar-2)

Adopted by the Board of Trustees and President of the Village of Sugar Grove
this 19th day of March 2024

Published in pamphlet form by authority of the Board of Trustees of the Village of Sugar Grove
this 19th day of March 2024

VILLAGE OF SUGAR GROVE

ORDINANCE NO. 2024-0319_

An Ordinance Granting a Special Use Permit for a Solar Garden Energy System (Aurora Airport, Community Solar-2)

WHEREAS, the Village of Sugar Grove is not a home rule municipality within Article VII, Section 6A of the Illinois Constitution and accordingly, acts pursuant to the powers granted to it under 65 ILCS 5/1-1 *et seq.*; and,

WHEREAS, SunCode, LLC ("Applicant") is duly authorized to make application for a Special Use Permit for a solar garden energy system on the property generally located on the south side of US Route 30 and west of Indigo Drive and legally described in **Exhibit A**, attached hereto and incorporated herein by reference ("Subject Property"); and,

WHEREAS, the Applicant has made application to request to grant a Special Use Permit for a solar garden energy system on the Subject Property; and,

WHEREAS, the proposed solar garden energy system will occupy 20.88 acres of the Subject Property and consists of 9,632 solar panels that will track the sun across the sky and a small shed-like building constructed to house the inverter and other necessary equipment which will be surrounded by an eight-foot-tall security fence; and,

WHEREAS, after due notice, the Planning Commission/Zoning Board of Appeals held a public hearing on February 21, 2024, to consider the request to grant a Special Use Permit for a ground-mounted solar energy system and objectors were present and heard; and,

WHEREAS, the Planning Commission/Zoning Board of Appeals made its findings and recommendation in Planning Commission Recommendation PC24-03 that the Village Board grant the Special Use Permit, subject to certain conditions; and,

WHEREAS, the Village Board has found that the requested Special Use Permit is in compliance with the standards as set forth in the Zoning Ordinance and concurs with the Planning Commission's Recommendation.

NOW, THEREFORE, BE IT ORDAINED by the President and Board of Trustees of the Village of Sugar Grove, Kane County, Illinois, as follows:

SECTION ONE: RECITALS

The foregoing recitals shall be and are hereby incorporated as findings of fact as if recitals were fully set forth herein.

SECTION TWO: SPECIAL USE PERMIT

That a Special Use Permit for a solar garden energy system is hereby granted on the Subject Property generally located on the south side of US Route 30 and west of Indigo Drive and legally

described in **Exhibit A,** attached hereto and made a part hereof by this reference, subject to the following conditions:

1. Applicant must obtain FAA approval for the solar garden energy system, including satisfying glare requirements.
2. The owner/operator of the solar facility shall notify the Village, in writing, of any changes of ownership during the life of the project. Following any such transfer and as a condition of the release of any existing security, the new owner/operator must post replacement security in accordance with Village Code Section B.1.a.
3. The owner/operator of the solar facility shall notify the Village if its operations on the Subject Property cease. In addition, should the owner/operator fail to respond to an inquiry by the Village regarding the status of its operations within 30 days of the date of said inquiry, the Village shall be authorized, but not obligated, to draw upon the security deposit and to commence decommissioning.
4. Applicant shall prepare and provide a drain tile investigation, which must be approved by the Village prior to issuing the building permit.
5. Applicant shall perform a soil and water analysis within the solar field at five (5) and ten (10) years after facility is placed on-line to determine whether any undesirable substances from the solar panels are collecting on the Subject Property.
6. Battery storage shall not be permitted on the Subject Property.
7. Applicant may substitute ornamental trees for shade trees required in the landscape berm along Dugan Road at the rate required by Section 11-4-21-C-1-c
8. The service drive shown on the site development plan shall be paved, as required, prior to the facility being placed on-line.
9. The Electric Utility may be required to add new public electric infrastructure to serve the solar garden and such new infrastructure is required to be buried where above ground infrastructure does not currently exist. Where above ground electric infrastructure does exist, then any new electric infrastructure upgrades should be buried except in the case of environmental constraints such as wetland/ hydrology crossings. Also, the point of interconnection is required to be buried; all on-site private and public electric infrastructure (except the Solar Garden) shall be buried as required by Section 11-4-21-C-1-i.
10. That the Subject Property shall be developed in accordance with the site development plans attached hereto as **Exhibit B** and incorporated herein by reference. Minor changes in the location of solar panels, service road, equipment building resulting from soil or subsurface drainage features shall be permitted provided such changes do not increase the area of the solar garden energy system.
11. That the facility shall be constructed using the materials and equipment specified and attached hereto as **Exhibit C**. Substitution of materials and equipment shall require approval by the Village Board.
12. That the solar panels shall have an anti-reflective surface, as required.
13. That the decommissioning plan attached hereto as **Exhibit D**, is hereby approved and made part of this Special Use Permit.

SECTION TWO: GENERAL PROVISIONS

LAPSE OF APPROVAL. The Special Use Permit approval will lapse and have no further effect twelve (12) months following the date of this Ordinance, unless: (1) a building permit has been issued (if required); or, (2) the use or structure has been lawfully established. A Special Use Permit also lapses upon revocation of a building permit or a certificate of occupancy for violations of conditions of approval or upon expiration of a building permit to carry out the work authorized by the Special Use.

REPEALER: All ordinances or portions thereof in conflict with this ordinance are hereby repealed.

SEVERABILITY: Should any provision of this ordinance be declared invalid by a court of competent jurisdiction, the remaining provisions will remain in full force and effect the same as if the invalid provision had not been a part of this ordinance.

EFFECTIVE DATE: This ordinance shall be in full force and effect from and after its passage, approval and publication in pamphlet form as provided by law.

PASSED AND APPROVED by the President and Board of Trustees of the Village of Sugar Grove, Kane County, Illinois this 19th day of March 2024.

ATTEST:

Jennifer Konen,
President of the Board of Trustees

Tracey Conti,
Village Clerk

	Aye	Nay	Absent	Abstain
Trustee Matthew Bonnie	___	___	___	___
Trustee Sean Herron	___	___	___	___
Trustee Heidi Lendi	___	___	___	___
Trustee Sean Michels	___	___	___	___
Trustee Michael Schomas	___	___	___	___
Trustee James White	___	___	___	___

Exhibit A

(Legal Description)

The Easterly 1200 feet, as measured at right angles to the Easterly line of that part of the North East 1/4 of Section 19 and part of the North West 1/4 of Section 20, Township 38 North, Range 7 East of the Third Principal Meridian, described as follows: Commencing at the North East corner of said Section 19; thence North 89 degrees, 15 minutes 26 seconds West along the North line of said Section, 170.30 feet; thence South 0 degrees, 30 minutes, 0 seconds West 205.30 feet; thence North 85 degrees, 35 minutes, 0 seconds East 807.90 feet; thence South 0 degrees, 22 minutes, 0 seconds West 2.57 feet to the Center line of U.S. Route No. 30 for a point of beginning; thence continuing South 0 degrees, 22 minutes, 0 seconds West 2109.57 feet to the Northerly line of a tract conveyed to the Chicago, Burlington and Quincy Railroad by Document 431581; thence Westerly along said Northerly line 2815.97 feet; thence North 0 degrees, 11 minutes, 0 seconds West 1158.08 feet to the Center line of said Route 30; thence Easterly along said Center line 2736.40 feet to the Point of Beginning (Except that part in Route 30), in the Village of Sugar Grove, Kane County, Illinois.

PIN: 14-19-200-018 and 14-20-100-015

and

The Westerly 942.50 feet, a measured at a right angle to the West line of that part of the North West 1/4 of Section 20, Township 38 North, Range 7 East of the Third Principal Meridian, described as follows: Beginning at the North East corner of said North West 1/4; thence South along the Quarter Section line 40 chains to the center of Section 20; thence West along the Quarter Section line 30.47 chains to a point 9.60 chains East of the South West corner of said North West 1/4; thence North parallel with the West line of said Section 37.90 chains to the center line of the road; thence East along the center line 30.57 chains to the point of beginning; all in Township 38 North, Range 7 East of the Third Principal Meridian, (Except therefrom the right of way of the Chicago and Iowa Railroad Company and Excepting that part conveyed to the Chicago, Burlington and Quincy Railroad Company by Deed dated October 25, 1937 and recorded January 7, 1938 in Book 1067, Page 303 as Document 418102 and Excepting that part falling in the Highway), in the Township of Sugar Grove, Kane County, Illinois. And Except that part of the North West 1/4 of Section 20, Township 38 North, Range 7 East of the Third Principal Meridian, described as follows: Commencing at the center of Section 20; thence West along the Quarter Section line 30.47 chains to a point 9.60 chains East of the Southwest corner of said Northwest Quarter; thence North parallel with the West line of said 37.90 chains to the center line of the road; thence East along the center line 946.03 feet; thence Southerly parallel with the West line of said Northwest Quarter Section 40.15 feet to the Southerly road right-of-way line for a point of beginning; thence continuing

Southerly along a line parallel with said Westerly Quarter Section line 896.04 feet; thence Westerly at right angles to the last described course a distance of 498.13 feet; thence Northerly parallel with the Westerly line of said Quarter Section line 852.90 feet to the Southerly road right of way line; thence Easterly along said Southerly line 500.00 feet to the point of beginning, containing 10.00 acres (more or less) in Township 38 North, Range 7 East of the Third Principal Meridian, in the Township of Sugar Grove, Kane County, Illinois.

PIN: 14-20-100-021

Exhibit B

(Site Development Plan)

Exhibit C

(Material and Equipment Specifications)

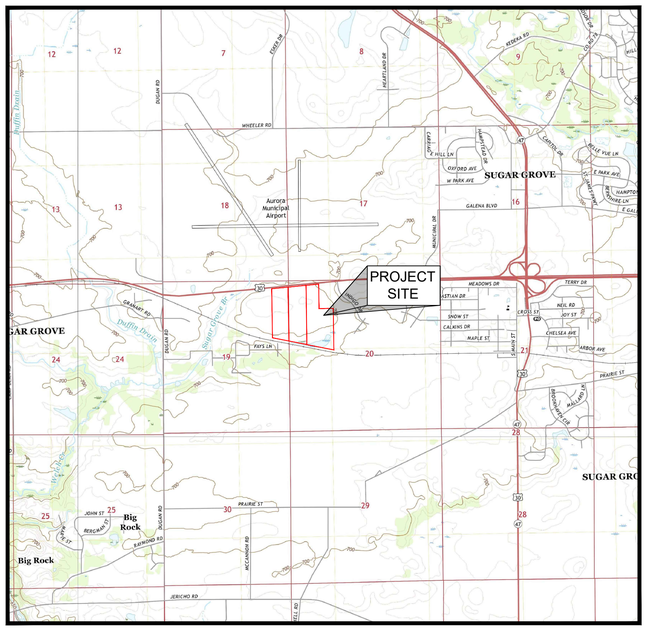
Exhibit D

(Decommissioning Plan)

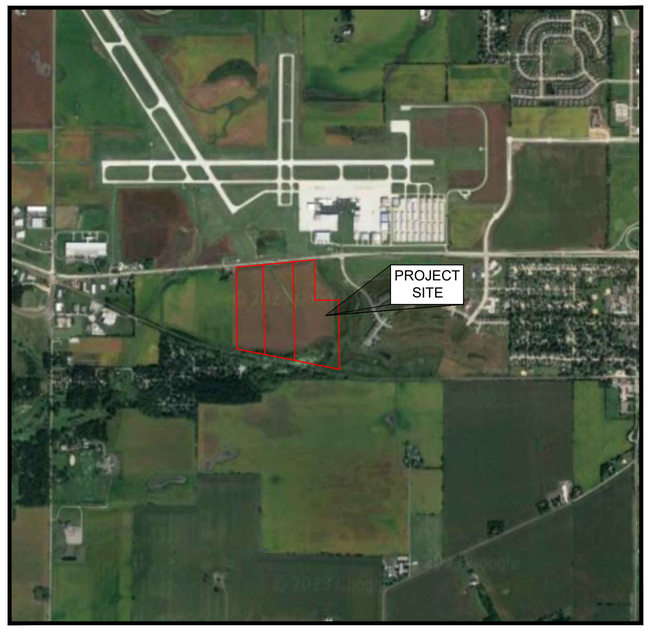
SUNCODE LLC

6.21 MW DC GROUND-MOUNT SOLAR PV DEVELOPMENT
AURORA MUNICIPAL AIRPORT
SUGAR GROVE, ILLINOIS
MARCH 12, 2024
ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION

DRAFT



LOCUS MAP
1"=2500'



AERIAL IMAGE
1"=1500'

DRAWING INDEX

SHEET NUMBER	DRAWING TITLE	DRAWING NUMBER
	COVER SHEET	
1	CONSTRUCTION, EROSION AND SEDIMENTATION CONTROL NOTES	G-001
2	EXISTING CONDITIONS PLAN	V-101
3	PROPOSED SITE PLAN	C-101
4	PROPOSED VIEWSHEDS	C-301
5	DETAILS	C-501

PROPERTY OWNER

CITY OF AURORA
CHIEF FINANCIAL OFFICER/TREASURER
44 E DOWNER PL
AURORA, ILLINOIS 60505

DEVELOPED BY

SUNCODE LLC

7700 IRVINE CENTER DRIVE SUITE 800
IRVINE, CALIFORNIA 92618

PREPARED BY

WSP USA ENVIRONMENT & INFRASTRUCTURE, INC.
100 APOLLO DRIVE SUITE 302
CHELMSFORD, MASSACHUSETTS 01824

EROSION AND SEDIMENTATION CONTROL PLAN:

THIS PLAN HAS BEEN DEVELOPED TO PROVIDE A STRATEGY FOR CONTROLLING SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION OF THE PROPOSED PROJECT.

THIS PLAN IS BASED ON STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION IN DEVELOPING AREAS AS CONTAINED IN ILLINOIS URBAN MANUAL: AN EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE MANUAL, 2013.

GENERAL EROSION AND SEDIMENTATION CONSTRUCTION DETAIL NOTES:

DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO SCHEDULE EARTHWORK OPERATIONS SUCH THAT THE AREA OF EXPOSED AND DISTURBED SOIL IS MINIMIZED. CONSTRUCTION SHALL BE PHASED TO MINIMIZE THE AREA OF DISTURBED SOIL THAT IS EXPOSED AT ANY ONE TIME. UPGRADIENT STORM WATER DIVERSION AND DISPERSION MEASURES SHALL BE INSTALLED WHERE APPROPRIATE. ALL CUT AND FILL SLOPES SHALL BE STABILIZED UPON COMPLETION. THE FOLLOWING MEASURES WILL BE UNDERTAKEN TO PROVIDE MAXIMUM PROTECTION TO THE SOIL, WATER, AND ABUTTING LANDS:

PRIOR TO GRUBBING OR ANY EARTH MOVING OPERATION, SEDIMENT BARRIERS, OR OTHER APPROPRIATE PERIMETER CONTROL BEST MANAGEMENT PRACTICES (BMPS) SHALL BE INSTALLED ACROSS THE SLOPE ON THE CONTOUR AT THE DOWNHILL LIMIT OF THE WORK AS PROTECTION AGAINST CONSTRUCTION RELATED EROSION. INSTALL ALL NECESSARY STORMWATER DIVERSIONS AND DISPERSION MEASURES. NO TOPSOIL SHALL BE REMOVED FROM THE PROPERTY DURING CONSTRUCTION.

1. PERMANENT SOIL STABILIZATION MEASURES FOR ALL SLOPES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN FOURTEEN CALENDAR DAYS AFTER FINAL GRADING HAS BEEN COMPLETED. WHEN IT IS NOT POSSIBLE OR PRACTICAL TO PERMANENTLY STABILIZE DISTURBED LAND, TEMPORARY EROSION CONTROL MEASURES SHALL BE IMPLEMENTED ON DISTURBED AREAS (INCLUDING STOCKPILES) WITHIN FOURTEEN CALENDAR DAYS OF EXPOSURE OF SOIL OR FORMATION OF PILES, UNLESS THESE AREAS ARE TO BE SUBSEQUENTLY SURFACED WITH PERMANENT STRUCTURES. ALL DISTURBED AREAS SHALL BE MULCHED FOR EROSION CONTROL UPON COMPLETION OF ROUGH GRADING.

2. ANY EXPOSED SLOPES 20% OR GREATER SHALL BE STABILIZED WITH EROSION CONTROL BLANKETS (ERONET C125 BY NORTH AMERICAN GREEN, OR APPROVED EQUAL) TO PREVENT EROSION DURING CONSTRUCTION AND TO FACILITATE REVEGETATION AFTER TOPSOILING AND SEEDING.

3. EXISTING TOPSOIL SHALL BE SAVED, STOCKPILED, AND REUSED AS MUCH AS POSSIBLE ON SITE. SEDIMENT BARRIER SHALL BE INSTALLED AT THE BASE OF STOCKPILES AT THE DOWNHILL LIMIT TO PROTECT AGAINST EROSION. STOCKPILES ANTICIPATED TO REMAIN FOR MORE THAN 14 CALENDAR DAYS SHALL BE STABILIZED BY SEEDING AND MULCHING UPON FORMATION OF THE PILES. UPGRADIENT OF THE STOCKPILES, STABILIZED DITCHES AND/OR BERMS SHALL BE CONSTRUCTED TO DIVERT STORMWATER RUNOFF AWAY FROM THE PILES.

4. INTERCEPTED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SEDIMENT BARRIER, OR AS DIRECTED IN THE DRAWING DETAILS FOR OTHER BMPS, AND SHALL BE DEPOSITED IN AN AREA THAT SHALL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED. ALL DAMAGED EROSION CONTROL DEVICES SHALL BE REPAIRED AND/OR REPLACED IMMEDIATELY. DEVICES NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION SHALL ALSO BE REPAIRED AND/OR REPLACED AS REQUIRED.

5. SOIL CUTTINGS GENERATED DURING THE DRILLING OF PILOT HOLES FOR GROUND SCREWS SHALL BE REMOVED AND COLLECTED. SOIL CUTTINGS MAY BE STOCKED PILED TEMPORARILY, BUT ULTIMATELY SHALL BE DISPOSED AND SPREAD IN AN AREA THAT SHALL NOT CONTRIBUTE TO OFF-SITE SEDIMENTATION, AND PERMANENTLY STABILIZED.

6. ADDITIONAL EROSION CONTROL METHODS SHALL BE IMPLEMENTED IF CONSTRUCTION OCCURS AFTER DECEMBER 15TH. ALL DISTURBED AREAS SHALL BE MINIMIZED TO THE EXTENT POSSIBLE. PRIOR TO FREEZING, ADDITIONAL EROSION CONTROL DEVICES SHALL BE INSTALLED AS APPROPRIATE. INSPECTION OF THESE EROSION CONTROL ITEMS SHALL BE FREQUENT, WITH PARTICULAR ATTENTION PAID TO WEATHER PREDICTIONS TO ENSURE THAT THESE MEASURES ARE PROPERLY IN PLACE TO HANDLE LARGE QUANTITIES OF RUNOFF RESULTING FROM HEAVY RAINS OR EXCESSIVE THAWS.

7. GENERAL EROSION AND SEDIMENTATION CONTROL ACTIONS SHALL INCLUDE THE FOLLOWING:

- MARK SOIL DISTURBANCE LIMITS
- INSTALL SEDIMENT BARRIERS BEFORE DISTURBING ANY SOILS
- DIVERT AND DISPERSE STORM WATER RUNOFF TO UNDISTURBED AREAS WHEREVER POSSIBLE
- MULCH DISTURBED AREAS
- PROTECT STEEP SLOPES
- INSPECT AND REPAIR EROSION CONTROLS AND SEDIMENT BARRIERS

DUST CONTROL:

1. CONSTRUCTION ACTIVITIES SHALL BE SCHEDULED TO MINIMIZE THE AREA OF DISTURBED SOIL THAT IS EXPOSED AT ONE TIME.
2. DUST CONTROL SHALL BE USED ON CONSTRUCTION ROUTES AND OTHER DISTURBED AREAS SUBJECT TO SURFACE DUST MOVEMENT AND DUST BLOWING.
3. MAINTAIN DUST CONTROL MEASURES PROPERLY THROUGH DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
4. DUST CONTROL METHODS SHALL BE APPROVED BY THE ENGINEER AND MAY INCLUDE VEGETATIVE COVER, MULCH (INCLUDING GRAVEL MULCH), SPRINKLING, STONE, AND BARRIERS.
5. VEGETATIVE COVER - FOR DISTURBED AREAS NOT SUBJECT TO TRAFFIC, VEGETATION PROVIDES THE MOST PRACTICAL METHOD OF DUST CONTROL.
6. MULCH (INCLUDING GRAVEL MULCH) - WHEN PROPERLY APPLIED, MULCH OFFERS A FAST, EFFECTIVE MEANS OF CONTROLLING DUST. SEE MANUFACTURER'S RECOMMENDATIONS OR THE ILLINOIS URBAN MANUAL: AN EROSION AND SEDIMENT CONTROL BEST PRACTICES MANUAL, 2013 FOR APPLICATION RATES.
7. SPRINKLING - EXPOSED SOILS MAY BE SPRINKLED UNTIL THE SURFACE IS WET. SPRINKLING IS ESPECIALLY EFFECTIVE FOR DUST CONTROL ON HAUL ROADS AND OTHER TRAFFIC ROUTES.
8. STONE - USED TO STABILIZE CONSTRUCTION ROADS; CAN ALSO BE EFFECTIVE FOR DUST CONTROL.
9. BARRIERS - A BOARD FENCE, WIND FENCE, SEDIMENT FENCE, OR SIMILAR BARRIER CAN CONTROL AIR CURRENTS AND BLOWING SOIL. ALL OF THESE FENCES ARE NORMALLY CONSTRUCTED OF WOOD AND THEY PREVENT EROSION BY OBSTRUCTING THE WIND NEAR THE GROUND AND PREVENTING THE SOIL FROM BLOWING OFFSITE.

INFILTRATION AREAS:

TO ENSURE THE LONG-TERM FUNCTION AND VALUE OF ANY AREA PROPOSED FOR INFILTRATION, INCLUDING BUT NOT LIMITED TO INFILTRATION BASINS, THE CONTRACTOR SHALL EXERCISE THE FOLLOWING BEST MANAGEMENT PRACTICED THROUGHOUT CONSTRUCTION.

1. THESE AREAS SHALL NOT BE USED FOR TEMPORARY CONSTRUCTION SEDIMENTATION CONTROL, SEDIMENTATION BASINS, OR DEWATERING ARES.
2. THESE AREAS SHALL REMAIN OFF-LINE UNTIL THE ENTIRE CONSTRUCTION AREA CONTRIBUTING TO THESE AREAS HAS BEEN STABILIZED WITH BUILDINGS, BUILDING FOUNDATIONS, PAVEMENT, OR VEGETATION, AS APPLICABLE.
3. STORMWATER RUNOFF DURING CONSTRUCTION SHALL BE DIRECTED AWAY FROM THESE AREAS TO THE GREATEST EXTENT PRACTICABLE. WHERE NOT FEASIBLE, THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROLS UP-GRADIENT OF THESE AREAS TO PREVENT SEDIMENTATION OF THESE AREAS DURING CONSTRUCTION.
4. THE SUBGRADE BELOW THESE AREAS SHALL NOT BE COMPACTED; THEREFORE, THE CONTRACTOR SHALL RESTRICT ACCESS TO THESE AREAS BY HEAVY EQUIPMENT AND SHALL NOT USE THESE AREAS FOR MATERIAL S STOCKPILES.
5. EXCAVATION AND CONSTRUCTION OF THESE AREAS SHALL BE PERFORMED USING HAND OR HYDRAULIC EQUIPMENT TO ENSURE THAT THE NATURAL FILTRATION EARTH MATERIAL IS NOT DISTURBED OR OTHERWISE COMPACTED.
6. UPON COMPLETION OF CONSTRUCTION OF ANY OF THESE AREAS, THE CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES TO PREVENT SILTATION OF THE FILTER MATERIALS.

MATERIAL AND SUBMITTAL

1. CONTRACTOR TO SUBMIT CONTENT, ANALYSIS, AND SAMPLE OF COMPOST AND MATERIAL TEST REPORTS FOR IMPORTED TOPSOIL USED IN SOIL MIX.
2. AS-BUILT DRAWINGS SHALL BE COMPLETED AND SHALL INDICATE THE TRUE MEASUREMENT AND LOCATION, HORIZONTAL AND VERTICAL, OF ALL ENTIRETY OF THE INFILTRATION BASINS, SEDIMENT FOREBAYS, AND GRASS SWALE. AS-BUILT DRAWINGS SHALL BE STAMPED WITH THE SEAL OF AN ILLINOIS LICENSED LAND SURVEYOR, SUBMIT ELECTRONIC COPIES OF AS-BUILT DRAWINGS UPON COMPLETION AND ACCEPTANCE OF WORK.

MONITORING PROGRAM:

1. EROSION AND SEDIMENTATION CONTROLS SHALL BE INSPECTED AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.25 INCHES OR GREATER. DAILY RAINFALL SHALL BE MONITORED AND RECORDED BY THE CONTRACTOR. ALL STRUCTURES DAMAGED BY CONSTRUCTION EQUIPMENT, VANDALS, OR THE ELEMENTS SHALL BE REPAIRED OR REPLACED IMMEDIATELY, PRIOR TO CONTINUING THE CONSTRUCTION.
2. FOLLOWING THE FINAL SEEDING, THE SITE SHALL BE INSPECTED IN ACCORDANCE WITH THE SCHEDULE OUTLINED IN #1 ABOVE, TO ENSURE THAT THE VEGETATION HAS BEEN ESTABLISHED (70% COVER ACHIEVED). IN THE EVENT OF ANY UNSATISFACTORY GROWTH, RESEEDING WILL BE CARRIED OUT, WITH FOLLOW-UP INSPECTION.
3. AFTER THE CONSTRUCTION INSPECTOR HAS DETERMINED THAT THE PROJECT AREA HAS BEEN PERMANENTLY STABILIZED (70% COVER HAS BEEN ACHIVED OR NON-VEGETATED MEASURES HAVE BEEN IMPLEMENTED), THE CONTRACTOR SHALL REMOVE ALL SEDIMENT BARRIERS, TEMPORARY SEDIMENTATION CONTROL RISERS AND ANY OTHER TEMPORARY EROSION CONTROL MEASURES.

SEEDING AND REVEGETATION PLAN:

IMMEDIATELY FOLLOWING THE COMPLETION OF TREE CLEARING, ALL DISTURBED AREAS SHALL BE TREATED AS STATED BELOW IN ORDER TO MINIMIZE CONSTRUCTION-PERIOD EROSION. THE SITE, INCLUDING UNDER AND AROUND THE SOLAR ARRAYS, SHALL BE SEEDED AND MAINTAINED WITH DROUGHT TOLERANT, PERENNIAL VEGETATIVE GROUND COVER . THE SITE SHALL BE SEEDED AND MAINTAINED TO PREVENT SOIL EROSION AND MANAGE STORMWATER RUNOFF.

UPON COMPLETION OF SITE CONSTRUCTION, ALL AREAS PREVIOUSLY DISTURBED SHALL BE SEEDED TO ESTABLISH POLLINATOR FRIENDLY HABITAT WHEREVER FEASIBLE. THESE AREAS WILL BE CLOSELY MONITORED BY THE CONTRACTOR UNTIL SUCH TIME AS A SATISFACTORY GROWTH OF VEGETATION IS ESTABLISHED. SATISFACTORY GROWTH SHALL MEAN A MINIMUM OF 70% OF THE AREA IS VEGETATED WITH VIGOROUS GROWTH.

1. SEEDING METHODS MAY BE DRILL SEEDINGS, BROADCASTS AND ROLLED, CULTIPACKED, OR TRACKED WITH A SMALL TRACK PIECE OF CONSTRUCTION EQUIPMENT, OR HYDRO-SEEDING, WITH SUBSEQUENT TRACKING.
2. WATERING MAY BE REQUIRED DURING DRY PERIODS CONSULT SEED MANUFACTURER'S INSTRUCTIONS.
3. INSPECT SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS AND RESEED IMMEDIATELY. CONDUCT A FOLLOW-UP SURVEY AFTER ONE YEAR AND RESEED WHERE NECESSARY.
4. ALL SEDIMENT CONTROL STRUCTURES LOCATED DOWN GRADIENT OF SOILS STABILIZED BY VEGETATIVE MEASURES SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 70% OF THE AREA IS VEGETATED WITH VIGOROUS GROWTH.

ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION

WSP USA ENVIRONMENT & INFRASTRUCTURE, INC.
100 APOLLO DRIVE, SUITE 302
CHELMSFORD MASSACHUSETTS 01824
TELEPHONE: (978) 692-9090
FAX: (978) 692-6633
WEB: WWW.WSP.COM

REVISION	DATE	ISSUE / REVISION DESCRIPTION	ISSUED	APPROVED
0	03/12/2024	ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION	MRM	NWZ

PROJECT:
6.21 MW DC GROUND-MOUNT SOLAR PV DEVELOPMENT
U.S. ROUTE 30
SUGAR GROVE, IL 60554

TITLE:
CONSTRUCTION, EROSION AND SEDIMENTATION CONTROL NOTES

CLIENT:
SUNCODE LLC

SEAL:
DRAFT

DESIGNED BY: MRM	DRAWN BY: MRM
CHECKED BY: APV	SCALE: AS SHOWN

PROJECT NUMBER: 3652230432

DRAWING NUMBER: **G-001**

SHEET NUMBER: **1 OF 5**

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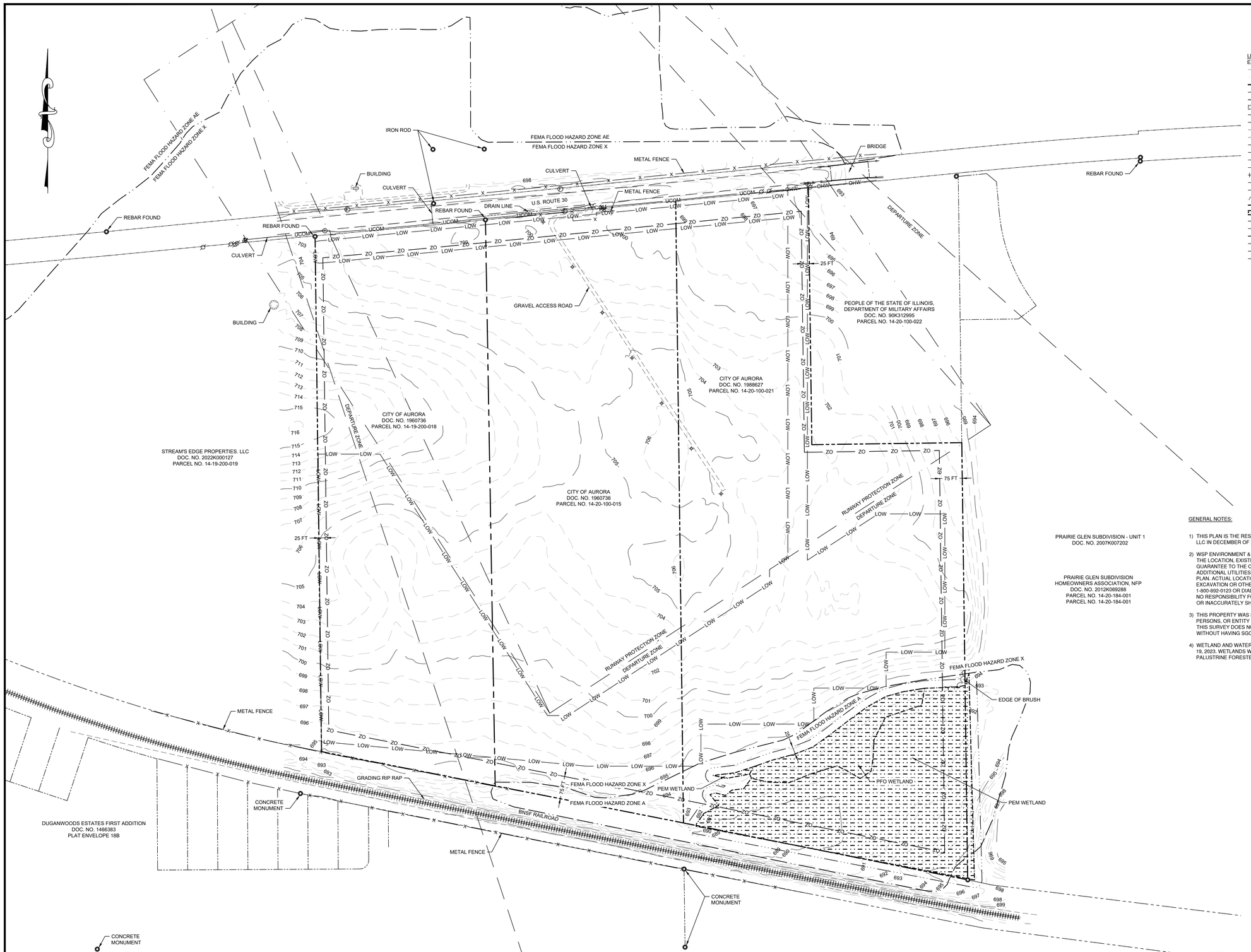

LEGEND:

EXISTING:

- MAJOR CONTOUR
- MINOR CONTOUR
- PROPERTY LINE
- ABUTTER'S PROPERTY LINE
- PROPERTY LINE SETBACK
- BUILDING
- RIGHT OF WAY
- EDGE OF ASPHALT
- EDGE OF GRAVEL
- EDGE OF CONCRETE
- METAL FENCE
- BRIDGE
- GUARD RAIL
- JERSEY BARRIER
- RAILROAD RAIL
- OVERHEAD WIRE
- COMMUNICATION LINE
- EDGE OF BRUSH
- EDGE OF WETLAND
- WETLAND AREA
- 25' WETLAND BUFFER
- DRAIN LINE
- FEMA FLOOD HAZARD ZONE
- RUNWAY PROTECTION ZONE
- DEPARTURE ZONE
- PROPOSED LIMIT OF WORK
- BOUNDARY EVIDENCE
- UTILITY POLE
- LIGHT POLE
- TELEPHONE POLE
- WATER VALVE
- FIRE DEPARTMENT CONNECTION
- FIBER OPTICS MARKER

GENERAL NOTES:

1) THIS PLAN IS THE RESULT OF A FIELD SURVEY CONDUCTED BY SGC ENGINEERING, LLC IN DECEMBER OF 2023.
2) WSP ENVIRONMENT & INFRASTRUCTURE, INC. HAS NOT INDEPENDENTLY VERIFIED THE LOCATION, EXISTENCE, AND SERVICEABILITY OF ANY UTILITIES AND MAKES NO GUARANTEE TO THE COMPLETENESS OR THE ACCURACY OF ANY UTILITIES SHOWN. ADDITIONAL UTILITIES MAY EXIST IN THE FIELD, WHICH ARE NOT SHOWN ON THIS PLAN. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD PRIOR TO EXCAVATION OR OTHER CONSTRUCTION ACTIVITIES. CALL " JULIE, INC." AT 1-800-892-0123 OR DIAL 811. WSP ENVIRONMENT & INFRASTRUCTURE, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN.
3) THIS PROPERTY WAS PREPARED FOR THE EXCLUSIVE USE OF THE PERSON, PERSONS, OR ENTITY NAMED IN THE CERTIFICATION AND TITLE BLOCK OF THIS PLAN. THIS SURVEY DOES NOT EXTEND TO ANY UNNAMED PERSON, PERSONS, OR ENTITY WITHOUT HAVING SGC'S CONSENT IN WRITING.
4) WETLAND AND WATERBODY DELINEATION WAS PERFORMED BY WSP ON OCTOBER 19, 2023. WETLANDS WERE DETERMINED TO BE PALUSTRINE EMERGENT (PEM) AND PALUSTRINE FORESTED (PFO).

ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION

WSP USA ENVIRONMENT & INFRASTRUCTURE, INC.
100 APOLLO DRIVE, SUITE 302
CHELMSFORD MASSACHUSETTS 01824
TELEPHONE: (978) 692-9090
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WEB: WWW.WSP.COM

REVISION	DATE	ISSUE / REVISION DESCRIPTION	ISSUED	APPROVED
0	03/12/2024	ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION	MRM	NWZ

PROJECT:
6.21 MW DC GROUND-MOUNT SOLAR PV DEVELOPMENT
U.S. ROUTE 30
SUGAR GROVE, IL 60554

TITLE:
EXISTING CONDITIONS PLAN

CLIENT:
SUNCODE LLC

SunCode Energy

SEAL:
DRAFT

DESIGNED BY: MRM	DRAWN BY: MRM
CHECKED BY: APV	SCALE: AS SHOWN
PROJECT NUMBER: 3652230432	
DRAWING NUMBER: V-101	
SHEET NUMBER: 2 OF 5	

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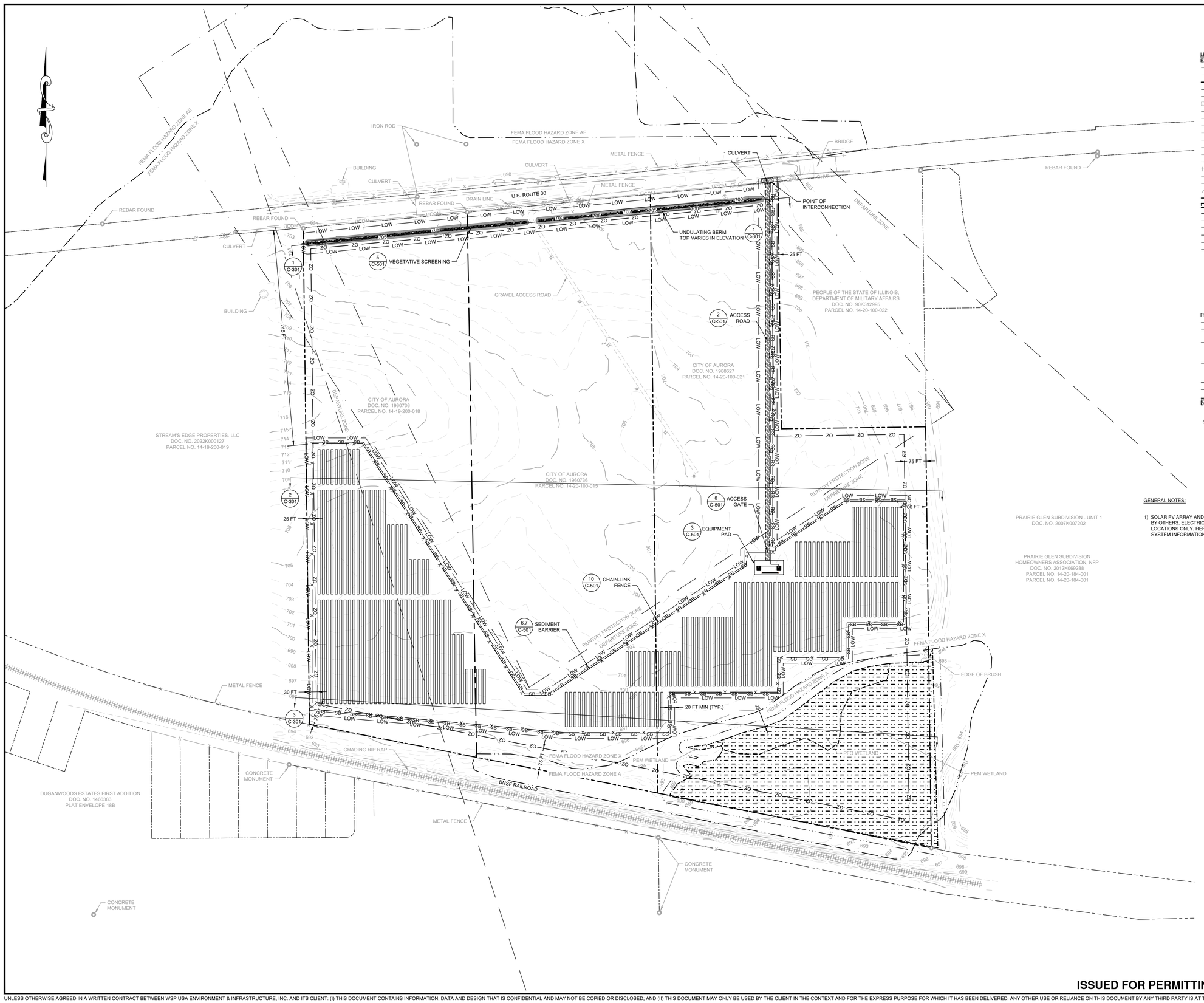


LEGEND:

EXISTING:

- 705 MAJOR CONTOUR
- 713 MINOR CONTOUR
- PROPERTY LINE
- ABUTTER'S PROPERTY LINE
- ZO PROPERTY LINE SETBACK
- BUILDING
- RIGHT OF WAY
- EDGE OF ASPHALT
- EDGE OF GRAVEL
- EDGE OF CONCRETE
- X METAL FENCE
- BRIDGE
- GUARD RAIL
- JERSEY BARRIER
- RAILROAD RAIL
- OHW OVERHEAD WIRE
- UCOM COMMUNICATION LINE
- EDGE OF BRUSH
- EDGE OF WETLAND
- WETLAND AREA
- 25' WETLAND BUFFER
- DRAIN LINE
- FEMA FLOOD HAZARD ZONE
- RUNWAY PROTECTION ZONE
- DEPARTURE ZONE
- LOW PROPOSED LIMIT OF WORK
- BOUNDARY EVIDENCE
- UTILITY POLE
- LIGHT POLE
- TELEPHONE POLE
- WATER VALVE
- FIRE DEPARTMENT CONNECTION
- FIBER OPTICS MARKER

PROPOSED:

- 705 MAJOR CONTOUR
- MINOR CONTOUR
- X FENCE 10 C-501
- SB SB SEDIMENT BARRIER 6,7 C-501
- EC UNDERGROUND ELECTRIC CONDUIT
- EDGE OF PAVEMENT
- PAVED ACCESS ROAD 2 C-501
- SOLAR PV ARRAY 1 C-501
- TREE OR SHRUB 5 C-501

GENERAL NOTES:

1) SOLAR PV ARRAY AND ELECTRICAL DESIGN, INCLUDING UTILITY POLES, PERFORMED BY OTHERS. ELECTRICAL EQUIPMENT AND COMPONENTS SHOWN TO ILLUSTRATE LOCATIONS ONLY. REFER TO ELECTRICAL DRAWINGS FOR DETAILED ELECTRICAL SYSTEM INFORMATION.

ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION

WSP USA ENVIRONMENT & INFRASTRUCTURE, INC.
100 APOLLO DRIVE, SUITE 302
CHELMSFORD MASSACHUSETTS 01824
TELEPHONE: (978) 692-9090
FAX: (978) 692-6633
WEB: WWW.WSP.COM

REVISION	DATE	ISSUE / REVISION DESCRIPTION	ISSUED	APPROVED
0	03/12/2024	ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION	MRM	NWZ

PROJECT:
6.21 MW DC GROUND-MOUNT SOLAR PV DEVELOPMENT
U.S. ROUTE 30
SUGAR GROVE, IL 60554

TITLE:
PROPOSED SITE PLAN

CLIENT:
SUNCODE LLC

SunCode Energy

SEAL:
DRAFT

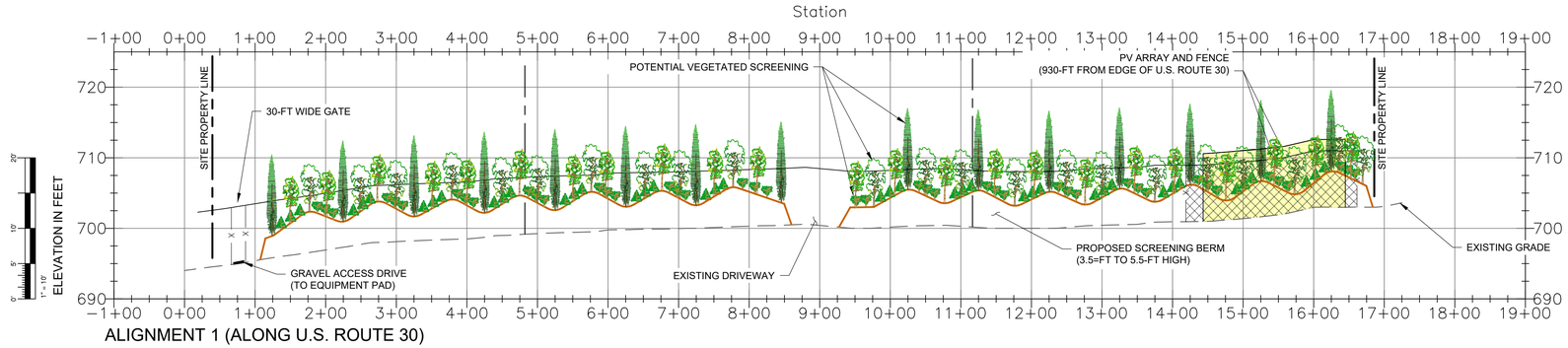
DESIGNED BY: MRM	DRAWN BY: MRM
CHECKED BY: APV	SCALE: AS SHOWN

PROJECT NUMBER: 3652230432

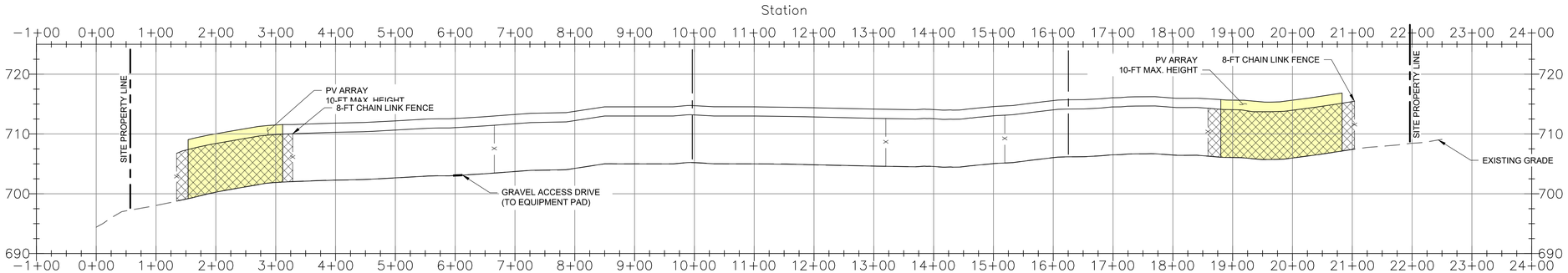
DRAWING NUMBER: **C-101**

SHEET NUMBER: **3 OF 5**

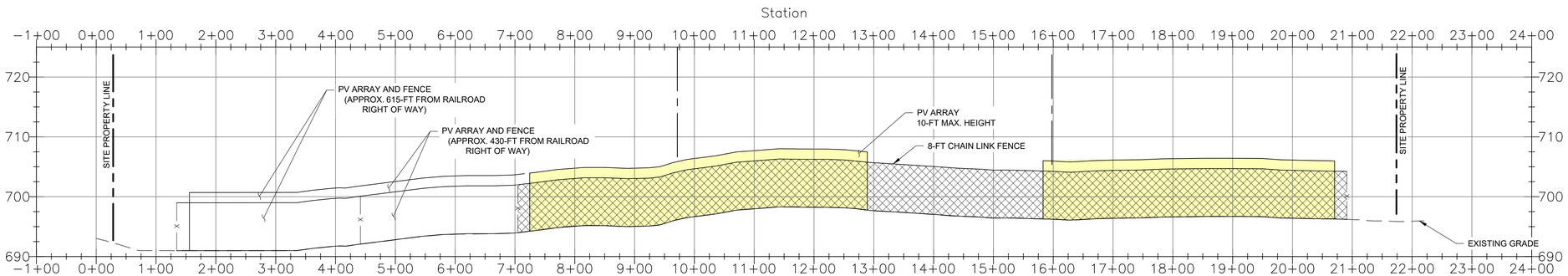
D:\SunCode Solar\Aurora Airport - 3652230432\17.0 CAD\7.1 Permitting\Sheets\C3D\3 - 3652230432 - C-101 CS2.dwg - C-101 - Mar 12, 2024 3:13pm - wds_morgan.mcdonald



ALIGNMENT 1 (ALONG U.S. ROUTE 30)



ALIGNMENT 2



ALIGNMENT 3

0' 50' 100' 150' 200'
1" = 100'

ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION

WSP USA ENVIRONMENT & INFRASTRUCTURE, INC.
100 APOLLO DRIVE, SUITE 302
CHELMSFORD MASSACHUSETTS 01824
TELEPHONE: (978) 692-9090
FAX: (978) 692-6633
WEB: WWW.WSP.COM

REVISION	DATE	ISSUE / REVISION DESCRIPTION	ISSUED	APPROVED
0	03/12/2024	ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION	MRM	NWZ

PROJECT:
6.21 MW DC GROUND-MOUNT SOLAR PV DEVELOPMENT
U.S. ROUTE 30
SUGAR GROVE, IL 60554

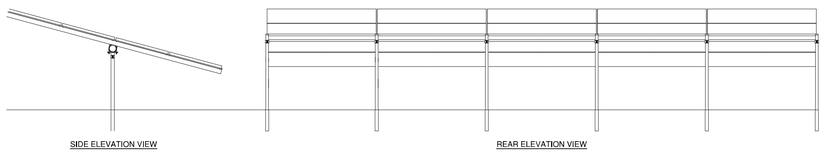
TITLE:
PROPOSED VIEW-SHED

CLIENT:
SUNCODE LLC

SEAL:
DRAFT

DESIGNED BY: MRM	DRAWN BY: MRM
CHECKED BY: APV	SCALE: AS SHOWN
PROJECT NUMBER:	3652230432
DRAWING NUMBER:	C-301
SHEET NUMBER:	3 OF 5

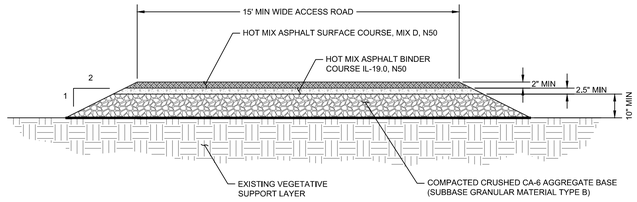
D:\SunCode Solar\Aurora Airport - 3652230432\7.0 CAD\7-1 Permitting\Sheets\C524 - 3652230432 - C-301 CS2.dwg - Draft - Mar. 12, 2024 3:29pm - wds_morgan.mcdonald



NOTE:

1. DESIGN FOR FOUNDATIONS, RACKING, AND MODULES BY OTHERS, DETAILS SHOWN FOR ILLUSTRATION PURPOSES ONLY.

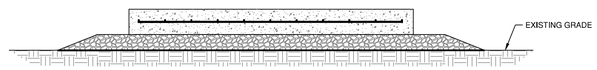
SOLAR PV ARRAY 1
NOT TO SCALE



NOTES:

1. ACCESS ROAD TO BE CONSTRUCTED AT A MINIMUM THICKNESS OF 10" COMPACTED CRUSHED CA-6 AGGREGATE BASE (SUBBASE GRANULAR MATERIAL TYPE B), AND SURFACED WITH A MINIMUM THICKNESS OF 2.5" HOT MIX ASPHALT BINDER COURSE IL-19.0, N50 AND A MINIMUM THICKNESS OF 2" HOT MIX ASPHALT SURFACE COURSE, MIX D, N50.

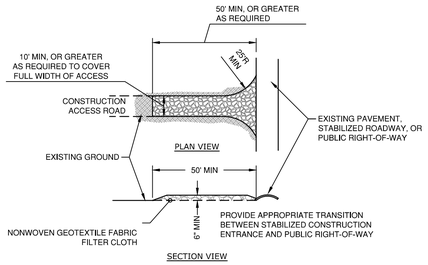
PAVED ACCESS ROAD 2
NOT TO SCALE



NOTE:

1. CONCRETE PAD SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. DESIGN TO BE FINALIZED AT LATER DATE.

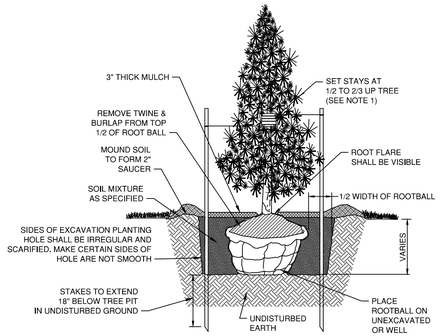
TYPICAL CONCRETE EQUIPMENT PAD SECTION 3
NOT TO SCALE



NOTES:

1. STONE TO BE 1"-3" STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FT.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TEN (10) FT. MIN, BUT NOT LESS THAN THE FULL TRAVELED WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH - SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED ACROSS OR BENEATH THE ENTRANCE,
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. IF WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

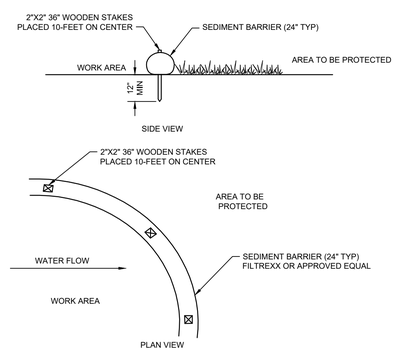
TEMPORARY STABILIZED CONSTRUCTION ENTRANCE 4
NOT TO SCALE



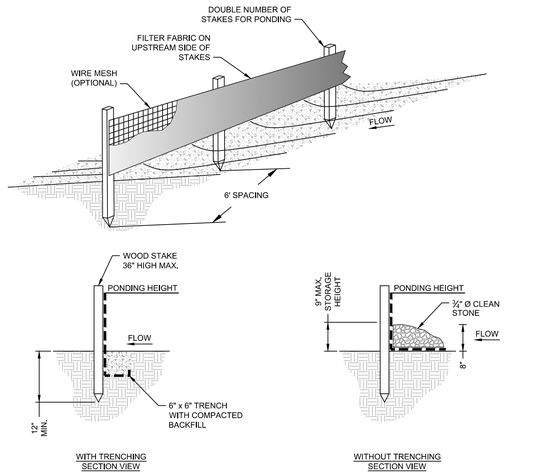
NOTES:

1. STAKE ALL TREES OVER 6 FEET TALL.
2. TREE SHALL BEAR SAME RELATION TO FINISHED GRADE AS IT BORE TO PREVIOUS GRADE (OR SLIGHTLY ABOVE).
3. NEVER CUT LEADERS.
4. PRUNE ONLY TO REMOVE DAMAGED OR BROKEN BRANCHES.
5. REMOVE ALL WIRE BRACKETS FROM ROOTBALL.
6. REMOVE ALL STAKES 1 YEAR AFTER PLANTING.
7. VEGETATION SHALL BE PLANTED ON TOP OF SCREENING BERM,
8. TREE HEIGHT AND LOCATION TO BE FINALIZED AT A LATER DATE PENDING FAA APPROVAL. LANDSCAPE MATERIALS TYPICALLY PLANTED AT THE FOLLOWING RATE:
   8.1. ONE SHADE TREE PER 50 LINEAR FEET
   8.2. ONE EVERGREEN TREE PER 50 LINEAR FEET
   8.3. THREE DECIDUOUS SHRUBS PER 50 LINEAR FEET
   8.4. THREE EVERGREEN SHRUBS PER 50 LINEAR FEET
   8.5. THREE ORNAMENTAL TREES MAY REPLACE EACH ONE SHADE TREE
   8.6. ORNAMENTAL GRASS MAY REPLACE THE DECIDUOUS SHRUBS AT A RATE APPROVED BY THE SUGAR GROVE ZONING OFFICIAL

VEGETATIVE SCREENING PLANTING 5
NOT TO SCALE



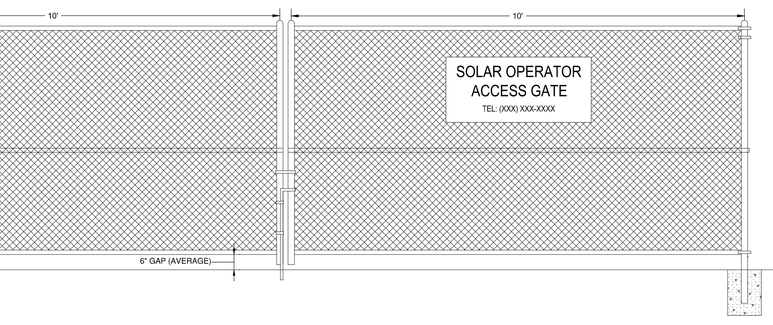
SEDIMENT BARRIER 6
NOT TO SCALE



NOTES:

1. PREFABRICATED SILT FENCE MUST BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. THE FENCE SHALL BE ANCHORED TO RESIST PULL-OUT, AND BE STRETCHED TIGHTLY BETWEEN STAKES TO PREVENT SAGGING.
3. A 6-INCH WIDE AND 6-INCH DEEP TRENCH SHALL BE EXCAVATED UPGRADIENT OF THE FENCE LINE TO KEY THE "FLAP" OF THE FABRIC. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.
4. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED BY WRAPPING END STAKES TOGETHER.
5. IN AREAS WHERE THE FLAP CANNOT BE KEYED PROPERLY (DUE TO FROZEN GROUND, BEDROCK, STONY SOIL, ROOTS NEAR A PROTECTED NATURAL RESOURCE, ETC.) THE SILT FENCE SHALL BE ANCHORED WITH AGGREGATE, CRUSHED STONE, EROSION CONTROL MIX, OR OTHER MATERIAL,

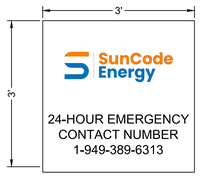
SEDIMENT BARRIER - SILT FENCE 7
NOT TO SCALE



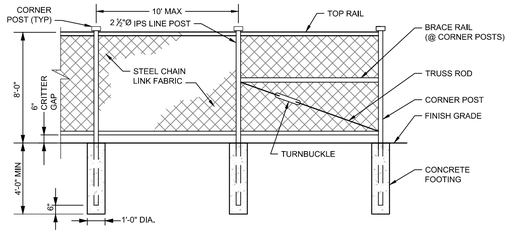
NOTES:

1. A "KNOX BOX" SHALL BE PROVIDED AT EVERY GATE LOCATION FOR EMERGENCY ACCESS.

ACCESS GATE DETAIL 8
NOT TO SCALE



SIGN AT ENTRANCE 9
NOT TO SCALE



NOTE:

1. TYPICAL FENCE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. DESIGN TO BE FINALIZED AT LATER DATE.

CHAIN LINK FENCE 10
NOT TO SCALE

ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION

WSP USA ENVIRONMENT & INFRASTRUCTURE, INC.
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REVISION	DATE	ISSUE / REVISION DESCRIPTION	ISSUED	APPROVED
0	03/12/2024	ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION	MRM	NWZ

PROJECT:
6.21 MW DC GROUND-MOUNT SOLAR PV DEVELOPMENT
U.S. ROUTE 30
SUGAR GROVE, IL 60554

TITLE: DETAILS

CLIENT: SUNCODE LLC

SEAL: DRAFT

DESIGNED BY:	DRAWN BY:
MRM	MRM
CHECKED BY:	SCALE:
APV	AS SHOWN

PROJECT NUMBER: 3652230432

DRAWING NUMBER: **C-501**

SHEET NUMBER: **5 OF 5**

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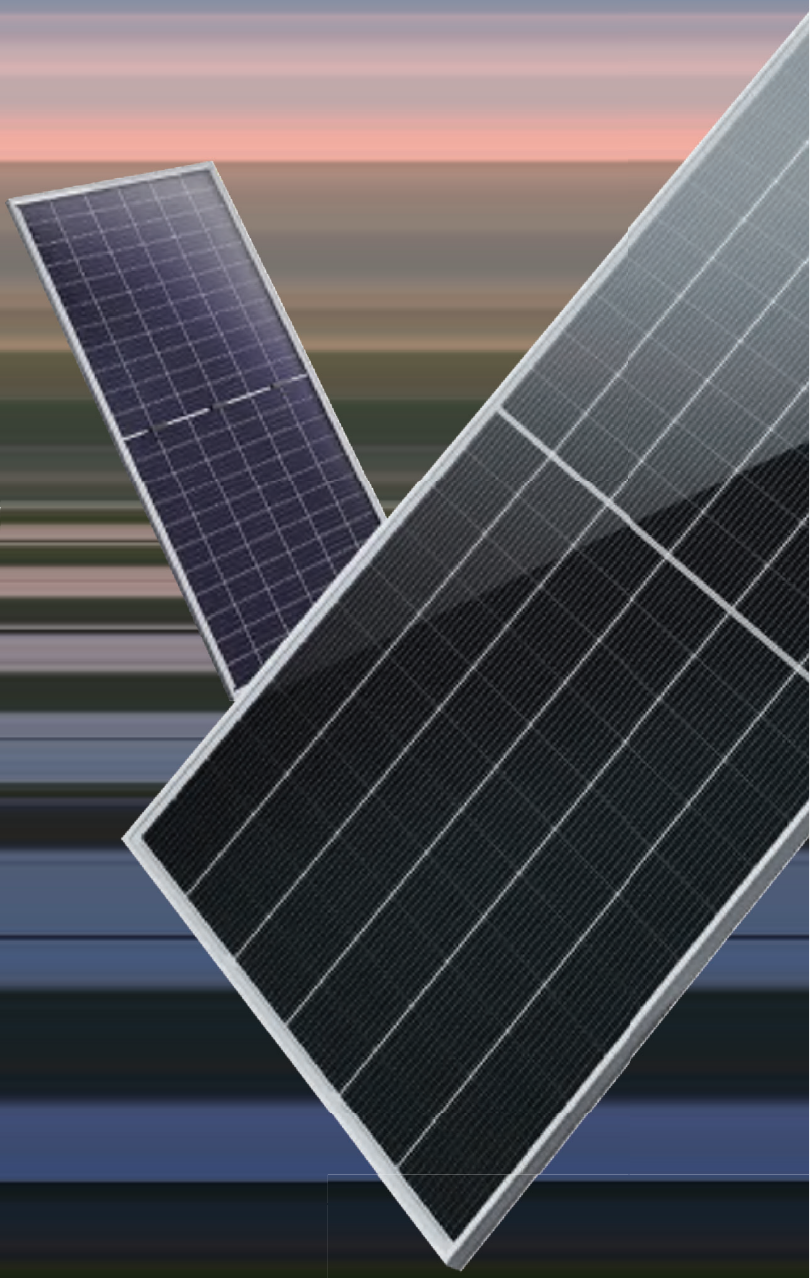
ASTRONERGY
A CHINT COMPANY



ASTRO 6 Twins

Create Sustainable and Efficient Green Energy

CHSM66M(DG)/F-BH
Bifacial Series (210)

645~660W

PERC+ / Multi-busbar / Half-cut

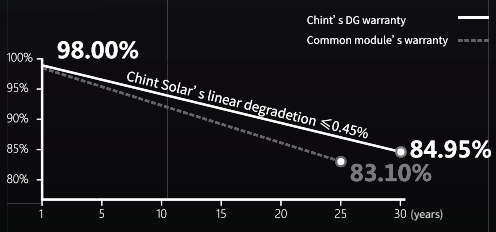
Non-destructive cutting

PID resistance

Bifacial gain

Lower BOS cost & LCOE

Assist carbon neutrality CO_2



12-year Product Warranty

30-year Linear Power Warranty

ISO 9001:2015:ISO Quality Management System
ISO 14001:2015:ISO Environment Management System
ISO 45001:Occupational Health and Safety
The first solar company which passed the Nord IEC/TS 62941 certification audit.

2021 TOP Performance PVEL

Tier 1 BloombergNEF

Underwritten by International Insurer

645~660W	0~+5W	21.2%	≤ 2.0%	≤ 0.45%
POWER RANGE	POWER TOLERANCE	MAX MODULE EFFICIENCY	FIRST YEAR POWER DEGRADETION	YEAR 2-30 POWER DEGRADETION

Electrical Specifications

STC: Irradiance 1000W/m², Cell Temperature 25° C, AM=1.5

Rated output (Pmpp / Wp)	645	650	655	660
Rated voltage (Vmpp / V)	37.48	37.68	37.88	38.08
Rated current (Impp /A)	17.21	17.26	17.30	17.34
Open circuit voltage (Voc / V)	45.29	45.49	45.69	45.89
Short circuit current (Isc /A)	18.27	18.32	18.37	18.42
Module efficiency	20.8%	20.9%	21.1%	21.2%

NMOT: Irradiance 800W/m², Ambient Temperature 20° C, AM=1.5, Wind Speed 1m/s

Rated output (Pmpp / Wp)	485.8	489.5	493.3	497.1
Rated voltage (Vmpp / V)	35.03	35.19	35.34	35.47
Rated current (Impp /A)	13.87	13.92	13.97	14.02
Open circuit voltage (Voc / V)	42.43	42.63	42.83	43.03
Short circuit current (Isc /A)	14.72	14.77	14.82	14.87

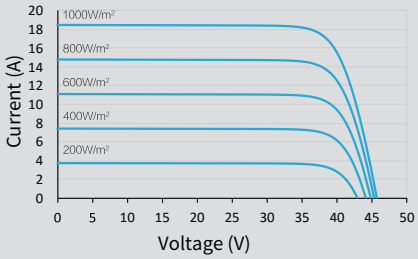
Electrical Specifications (Integrated power)

Pmpp gain	Pmpp / Wp	Vmpp / V	Impp /A	Voc / V	Isc /A
5%	687	37.88	18.17	45.69	19.29
10%	720	37.88	19.03	45.69	20.21
15%	753	37.89	19.90	45.70	21.13
20%	786	37.89	20.76	45.70	22.04
25%	818	37.89	21.63	45.70	22.96

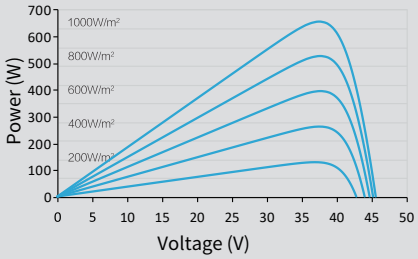
Electrical characteristics with different rear power gain (reference to 655W)

Curve

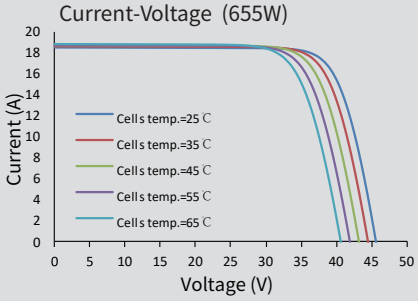
Current-Voltage (655W)



Power-Voltage (655W)



Current-Voltage (655W)



Temperature Ratings (STC)

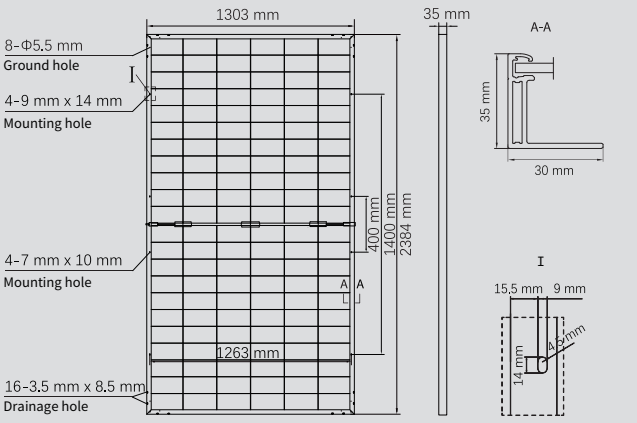
Temperature coefficient (Pmpp)	-0.34%/°C
Temperature coefficient (Isc)	+0.04%/°C
Temperature coefficient (Voc)	-0.25%/°C
Nominal module operating temperature (NMOT)	41±2°C

Operating Parameters

No. of diodes	3
Junction box IP rating	IP 68
Max. series fuse rating	35 A
Max. system voltage (IEC/UL)	1500V_{DC}

Mechanical Specifications

Outer dimensions (L x W x H)	2384 x 1303 x 35 mm
Cell Type	P type Mono-crystalline
No. of cells	132 (6*22)
Frame technology	Aluminum, silver anodized
Front glass thickness	2.0 mm
Cable length (IEC/UL)	Portrait: 350 mm; Landscape: 1400 mm
Cable diameter (IEC/UL)	4 mm² / 12 AWG
① Maximum mechanical test load	5400 Pa (front) / 2400 Pa (back)
Connector type (IEC/UL)	HCB40 / MC4-EVO2 (optional)
Module weight	38.2 kg
Packing unit	31 pcs / box (Subject to sales contract)
Weight of packing unit (for 40'HQ container)	1230 kg
Modules per 40' HQ container	527 pcs



① Refer to Astronergy crystalline installation manual or contact technical department.
Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

nextracker

NX Horizon™

NX Horizon™ is the world's most chosen solar tracker system for utility-scale power plants, deployed and contracted on over 75 gigawatts of solar power plants globally as of March 2023. NX Horizon's unrivaled combination of integrated hardware and software has become the gold standard for the utility-scale solar industry, thanks to its robust design, ease of installation, field-proven weather durability, and LCOE-optimized performance.

Pioneering independent-row technology

NX Horizon's patented independent row, self-powered tracking system provides reliable performance across the widest possible range of site conditions. Simple, robust hardware, including self-aligning module rails and vibration-proof fasteners, enables rapid installation and long life without maintenance. Mechanically balanced rows minimize tracking power requirements and pair with a time-proven, rugged drive & control system for maximum durability and uptime. NX Horizon's decentralized architecture with intelligent communications supports maximum layout adaptability, flexible construction and commissioning sequencing, advanced tracker functionality, and over-the-air updates.

6200 Paseo Padre Parkway | Fremont, CA 94555 | USA | +1 510 270 2500 | nextracker.com

Proven resilience

NX Horizon is designed to withstand extreme weather events, proven season after season across hundreds of systems around the world. Through Nextracker's in-house project-engineering services, NX Horizon is configured and optimized to suit the unique combination of severe weather hazards and climate for each project site. Based on the industry's most comprehensive wind analysis and field testing, NX Horizon is hardened against wind-related failures by robust structural design, an optimized damping system, and advanced stowing functionality. Furthermore, the combination of balanced, independent self-powered rows with integrated UPS, 60° stowing angle, and available smart software enables rapid hail-stow protection to maximize panel survivability, even in the event of a grid outage. NX Horizon is inherently tolerant of flooding with drive and control components 4-5' above grade and available flood stowing functions to protect panels.

Features and Benefits

7 years in a row
Global Market Share Leader

75 GW
Delivered on 6 Continents

Best-in Class
Software Ecosystem and Global Services

Up to 6% more energy
Using TrueCapture™ Smart Control System

Optimized for the lowest LCOE

Compared with conventional tracking systems, NX Horizon delivers Levelized Cost of Energy (LCOE) reductions of up to 7% by maximizing energy generation and solving for the lowest possible project CAPEX and OPEX. With pre-assembled components, no drive linkages, no AC wiring, self-aligning rails, and available XTR terrain following upgrades, NX Horizon is fundamentally faster to install, requiring less construction labor, less grading, and less total project capital cost. Projects using NX Horizon enjoy open-row access for maximum vegetation management and panel cleaning efficiency. Compared with linked row systems, NX Horizon cuts mowing costs by up to 55% and cleaning costs by up to 73%, reducing total project operations costs.

Lastly, but crucially for project returns, NX Horizon boosts project energy generation and revenue with its unique bifacial-optimized design as standard, and available IE-validated, 38GW proven TrueCapture Smart Control System with diffuse mode and row to row optimization functions.

6200 Paseo Padre Parkway | Fremont, CA 94555 | USA | +1 510 270 2500 | nextracker.com

GENERAL AND MECHANICAL

Architecture	Horizontal single-axis, independent row, independently balanced
Configuration	1x module in portrait
Tracking range of motion	Options for ±60° or ±50°
Row Size	Configurable per module type, string length and site layout
Array Height	Rotation axis elevation, 1.3 to 1.8 m / 4'3" to 5'10"
Drive type	High accuracy slew gear
Modules supported	All utility-scale crystalline and thin-film modules
Bifacial optimization	High-rise mounting rails, bearing & driveline gaps, round torque tube
Structural connections	Engineered fastening system, vibration-proof
Materials	Galvanized steel; other coatings available
Foundations	Complete range of foundation solutions available
Slope	Up to 15% N-S and 15% E-W
Ground coverage ratio (GCR)	No specific limit Typical range 25-45%
Operating temperature range	SELF POWERED: -30°C to 55°C (-22°F to 131°F) AC POWERED: -40°C to 55°C (-40°F to 131°F)
Wind speed	Configurable up to 240 kph (150 mph) 10m, 3-second gust
Wind protection	Intelligent wind stowing with symmetric damping system

ELECTRONICS AND CONTROLS

Solar tracking method	Astronomical algorithm with backtracking standard. TrueCapture™ upgrades available for enhanced energy yield
Tracker controller	Self-Powered Controller (SPC) with integrated inclinometer and UPS
Motor	Brushless DC
Power supply	SELF POWERED: Standalone smart solar power AC POWERED: Customer-provided 120-277 VAC circuit
Communications	Network control units (NCUs) at inverter pads/skids, self-powered weather stations, centralized data hub, encrypted Zigbee wireless mesh communications
Defensive stowing functions	Wind, hail, hurricane, snow, flood, loss of grid power
Operator interface	NX Navigator advanced HMI available, with SCADA integration

SERVICE, WARRANTY, AND STANDARDS

Tracker engineering & PE stamped design package	Standard
Foundation engineering & PE stamped design package	Available
Onsite construction support & commissioning service	Available
Warranty	10-year structural, 5-year drive and controls standard; extended warranty available
Certifications	UL 2703, UL 3703, IEC 62817, CSA
Codes and standards	UL 3703 / UL 2703 / IEC 62817 / CSA

ATTACHMENT

F Decommission Plan

Decommissioning Plan

Proposed Solar Facility

US Highway 30

Sugar Grove, IL

6.7 MW DC Photovoltaic System

Revision 1

February 20, 2024

Prepared for Village of Sugar Grove Planning Board

Aurora Airport Area 5 Solar Project

1 Park Plaza, Suite 600

Irvine, CA 92614

TABLE OF CONTENTS

1.0 PROJECT DESCRIPTION

This project is a 6.21-megawatt (MW) direct current (DC) located on parcels 14-19-200-018, 14-20-100-015, and 14-20-100-021 on US Highway 30 in the Village of Sugar Grove, Illinois (the Site). The facility will reside on 20.88 acres of the 83.2-acre parcel SunCode Energy (SunCode) is leasing from the City of Aurora effective July 17, 2023. The facility will interconnect to the Commonwealth Edison Co utility grid.

The facility consists of ground-mounted solar photovoltaic (PV) development which will be connected through a series of inverters, switchboards, and transformers mounted on a concrete pad located in the eastern part of the array near the access road (the Project). The PV panels will be secured on a tracking system supported by steel piers driven or screwed into the ground by a pile-driving machine to a depth of approximately 6 to 8 feet unless soil conditions require deeper posts or the use of a ballasted system. The entire facility will be surrounded by a self-locking eight foot (8') tall security fence as required by Section 11-4-21 of the Village of Sugar Grove, IL Code. Medium voltage power from the transformer will connect to 12.5 KV overhead distribution line. The utility poles will be located along the existing Site entrance and will connect to an existing pole on Dugan Road via overhead electric lines at the point of interconnection (POI). Native vegetation, grass, and wildflowers will be utilized for ground cover within the project boundaries.

It is estimated that the Project's useful lifetime will be 20-to-40 years with minimal replacement and repowering. For the purposes of this decommissioning plan, SunCode assumes the system will be completely dismantled, and the Site restored to its pre-construction state at the end of the 20-40 years.

2.0 DECOMISSIONING OVERVIEW

Upon the end of its useful life, the Project Owner will decommission and remove all equipment installed at the Site associated with the PV generation system. The Village of Sugar Grove will be notified by certified mail of the proposed dates for discontinued operations and decommissioning. In accordance with the Illinois Department of Agriculture's Standard Agricultural Impact Mitigation Agreement, decommissioning will be completed within 12 months of the facility reaching the end of its useful life. Most materials will be recycled or sold back to the manufacturer. Any non-recyclable materials will be disposed of at an approved landfill or facility in accordance with state and federal regulations.

The Project Owner will be responsible for all decommissioning costs and will obtain all permits or approvals required by the Village of Sugar Grove and the State of Illinois prior to decommissioning. With the support of the property owner at the time of decommissioning, the Site will be restored to agricultural use, or seeded to original conditions.

3.0 PROCEDURES FOR DECOMMISSIONING AFTER CEASING OPERATION

The PV system and any accessories will be dismantled, removed, and taken off-site to be recycled or disposed of upon completion of its useful life. Where possible, material will be recycled at an approve recycling facility.

3.1 Temporary Erosion Control

Throughout the decommissioning of the Project, appropriate construction-related erosion and sediment control best management practices will be used. To ensure they are working as intended, the BMPs will be inspected and maintained at regular intervals. Until the decommissioning is complete and the Site is stable, all controls will remain in place.

3.2 General Removal Process

The decommissioning process will reverse the installation order.

1. The system shall be disconnected from the utility power grid.
2. PV modules shall be disconnected, collected, and shipped to a recycler.
3. Site aboveground and underground electrical interconnection and distribution cables shall be removed and recycled.
4. The steel PV racking system, posts, and earth screws shall be removed and recycled.
5. Electrical and electronic devices, including transformers, inverters, and switch gear devices shall be removed and recycled off-site by an approved recycler or shipped back to the manufacturer for reuse or refurbishing.
6. Concrete foundations shall be removed, broken up, and recycled off-site by a concrete recycler.
7. Chain-link fencing, posts, and gates shall be removed and will be recycled.
8. The gravel access road can remain on Site, or it can be removed, and the gravel repurposed either on- or off-site.
9. The Site may be converted to other uses in accordance with applicable land use regulations in effect at the time of decommissioning. Since there are no permanent changes to the Site, it can be restored to its original condition, including re-vegetation. Any soil disturbances that occur during decommissioning will be repaired, and the disturbed areas will be readily loamed and seeded, as necessary, to stabilize the Site.
10. Debris and litter generated by the deconstruction of the facility will be removed and transported off site to a disposal facility.

4.0 FINANCIAL ASSURANCE AND SITE RESTORATION FUNDING

At the time of the building permit, the SunCode will provide a cost estimate of the total cost and scope of decommissioning of the Site. A letter of credit, or other financial surety instrument approved by the Village Board, in the amount of the estimated cost of decommission will be provided.