



Federal Aviation
Administration

<< OE/AAA

Project Submission Success

Project Name: GREEN-000623878-21

Project GREEN-000623878-21 has been submitted successfully to the FAA.

Your filing is assigned Aeronautical Study Number (ASN):

2021-ANE-3642-OE

Please refer to the assigned ASN on all future inquiries regarding this filing.

Please return to the system at a later date for status updates.

It is the responsibility of each e-filer to exercise due diligence to determine if coordination of the proposed construction or alteration is necessary with their state aviation department. Please use the link below to contact your state aviation department to determine their requirements:

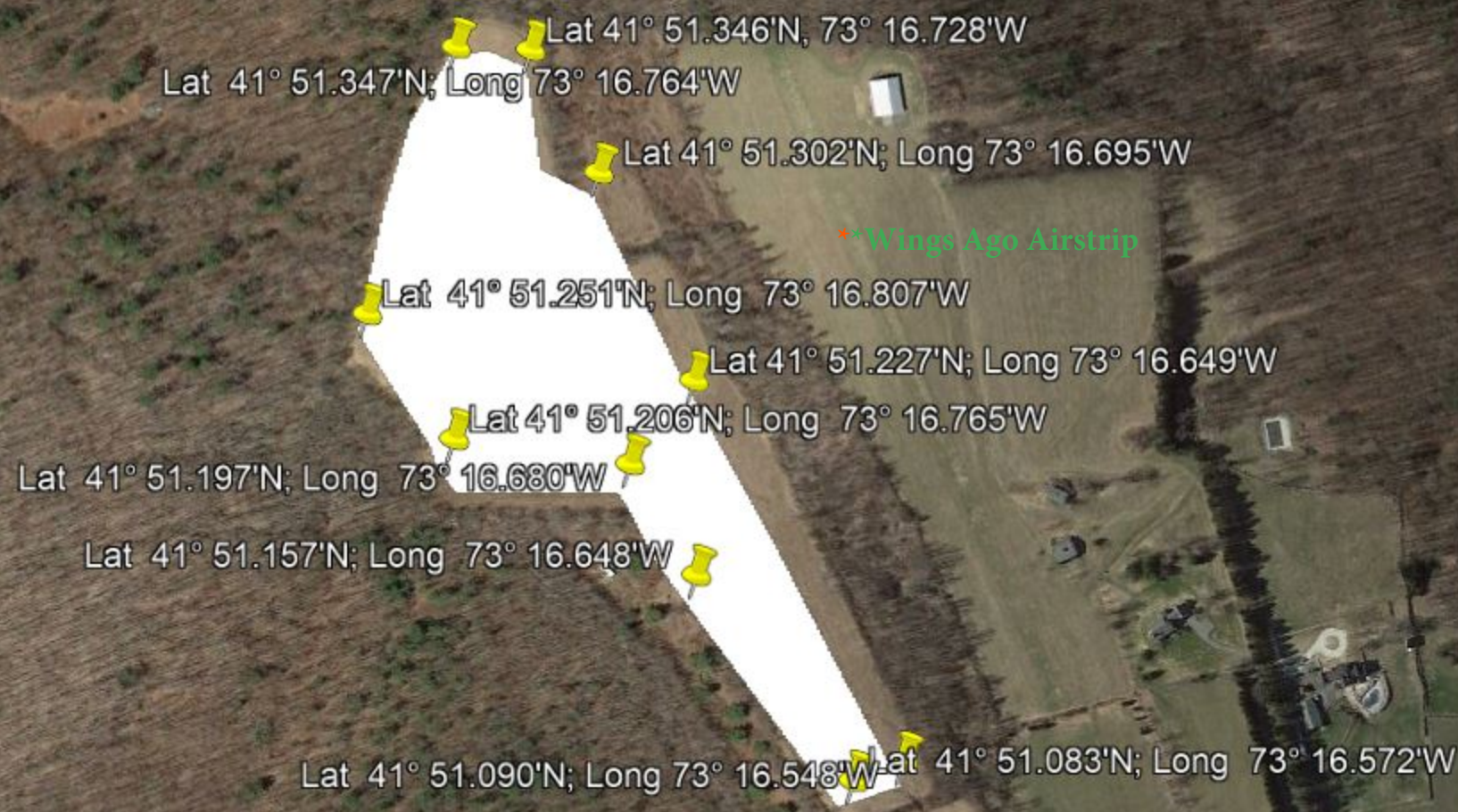
[State Aviation Contacts](#)

To ensure e-mail notifications are delivered to your inbox please add noreply@faa.gov to your address book. Notifications sent from this address are system generated FAA e-mails and replies to this address will NOT be read or forwarded for review. Each system generated e-mail will contain specific FAA contact information in the text of the message.

Goshen Solar Site

Legend




- 📌 Lat
- 📍 Project Area



Goshen Solar

129 Bartholomew Hill Rd., Goshen, CT

Legend

-  129 Bartholomew Hill Rd
-  Lat
-  Project Area

Lat 41°51'20.82"N; Long 73°16'45.84"W

Lat 41°51'20.76"N; Long 73°16'43.68"W

Lat 41°51'18.11"N; Long 73°16'41.70"W

Lat 41°51'15.06"N; Long 73°16'48.42"W

Lat 41°51'13.62"N; Long 73°16'38.94"W

Lat 41°51'12.36"N; Long 73°16'45.90"W

Lat 41°51'11.82"N; Long 73°16'40.80"W

Lat 41°51'9.42"N; Long 73°16'38.88"W

129 Bartholomew Hill Rd

Lat 41°51'5.40"N; Long 73°16'32.88"W

Lat 41°51'4.98"N; Long 73°16'34.32"W

****Wings Ago Airstrip**

Bartholomew Hill Rd.
1000 ft





Notice of Proposed Construction or Alteration - Off Airport

[Add a New Case \(Off Airport\) - Desk Reference Guide V_2018.2.1](#)

[Add a New Case \(Off Airport\) for Wind Turbines - Met Towers \(with WT Farm\) - WT-Barge Crane - Desk Reference Guide V_2018.2.1](#)

Project Name: GREEN-000623878-21

Sponsor: Greenskies Clean Energy

Details for Case : Goshen SCEF

[Show Project Summary](#)

Case Status	
ASN:	2021-ANE-3642-OE
Status:	Accepted
Public Comments:	None
Date Accepted:	06/07/2021
Date Determined:	
Letters:	None
Documents:	06/07/2021 11851_SCEF 1, 129... 06/07/2021 Figure 2 - Propos... 06/07/2021 Goshen-FAA Projec...
Project Documents: 03/24/2021 Goshen-FAA Projec...	
Construction / Alteration Information	
Notice Of:	Construction
Duration:	Temporary
if Temporary :	Months: 4 Days: 0
Work Schedule - Start:	03/01/2022
Work Schedule - End:	07/01/2022
<i>*For temporary cranes-Does the permanent structure require separate notice to the FAA? To find out, use the Notice Criteria Tool. If separate notice is required, please ensure it is filed. If it is not filed, please state the reason in the Description of Proposal.</i>	
State Filing:	Filed with State
Structure Details	
Latitude:	41° 51' 13.62" N
Longitude:	73° 16' 38.94" W
Horizontal Datum:	NAD83
Site Elevation (SE):	1560 (nearest foot) PASSED
Structure Height (AGL):	12 (nearest foot)
Current Height (AGL):	(nearest foot)
<i>* For notice of alteration or existing provide the current AGL height of the existing structure. Include details in the Description of Proposal</i>	
Minimum Operating Height (AGL):	(nearest foot)
<i>* For aeronautical study of a crane or construction equipment the maximum height should be listed above as the Structure Height (AGL). Additionally, provide the minimum operating height to avoid delays if impacts are identified that require negotiation to a reduced height. If the Structure Height and minimum operating height are the same enter the same value in both fields.</i>	
Requested Marking/Lighting:	None
Other :	
Recommended Marking/Lighting:	
Current Marking/Lighting:	None
Other :	<input type="text"/>
Nearest City:	Goshen
Nearest State:	Connecticut
Description of Location:	129 Bartholomew Hill Rd., Goshen, CT
Description of Proposal:	4 +/- MW AC PV solar energy facility
Structure Summary	
Structure Type:	Solar Panel
Structure Name:	Goshen SCEF
FDC NOTAM:	
NOTAM Number:	
FCC Number:	
Prior ASN:	
Proposed Frequency Bands	
Select any combination of the applicable frequencies/powers identified in the Colo Void Clause Coalition, Antenna System Co-Location, Voluntary Best Practices, effective 21 Nov 2007, to be evaluated by the FAA with your filing. If not within one of the frequency bands listed below, manually input your proposed frequency(ies) and power using the Add Specific Frequency link.	
Add Specific Frequency	
Low Freq	High Freq
Freq Unit	ERP
ERP Unit	

Previous [Back to Search Result](#) Next



**Federal Aviation
Administration**

The system will be going offline at 7pm ET on Thursday, March 25, 2021 for scheduled upgrades. We apologize for any inconvenience.

« OE/AAA

Notice of Proposed Construction or Alteration - Off Airport

[Add a New Case \(Off Airport\) - Desk Reference Guide V_2018.2.1](#)

[Add a New Case \(Off Airport\) for Wind Turbines - Met Towers \(with WT Farm\) - WT-Barge Crane - Desk Reference Guide V_2018.2.1](#)

Project Name: GREEN-000623878-21

Sponsor: Greenskies Clean Energy

Project Summary : GREEN-000623878-21

[Add Another Case to this Project](#) [Change the sponsor for this Project](#)

Structure	City, State	Lat/Long	Map	Actions
Goshen SCEF Draft	Goshen, CT	41° 51' 13.62" N 73° 16' 38.94" W	Verify Map	Clone Delete Upload a PDF

[Mapping - Desk Reference Guide V_2018.2.0](#) [Attaching Documents - Desk Reference Guide V_2018.2.0](#)

[Upload a PDF to the Project](#)

Please upload all supporting case documentation including the latest certified survey, if available.

To submit this project, you must verify the coordinates for each case listed above.

Draft: Cases that have been saved by the user but have not been submitted to the FAA.

Waiting: Wind Turbine/Met Tower (w/WT Farm) cases that have not been submitted to the FAA and are waiting for an action from the user, either to verify the map or attach specific documents

Accepted: Cases that have been submitted to the FAA.

Add Letter: Cases that have been reviewed by the FAA and require additional information from the user.

Work in Progress: Cases that are being evaluated by the FAA.

Interim: Cases that have been reviewed by the FAA and require resolution from the user.

Determined: Cases that have a completed aeronautical study and an FAA determination.

Terminated: Cases that are no longer valid.

Please allow the FAA a minimum of 45 days to complete a study.

Case Transfer:

- Use the check box(es) to select the case(s) you want to transfer.
- Select the "Transfer Cases button" to open the "Manage Transfer Cases" screen.

Note: Drafts and cases in Add and Terminated status can not be transferred.

[Click here to contact the appropriate representative.](#)

TO: Robert Bruno, Director of Planning, Engineering and Environmental Services, Connecticut Airport Authority

FROM: Gina Wolfman, Senior Developer

DATE: June 8, 2021

RE: Greenskies Clean Energy LLC – Goshen SCEF Project at 129 Bartholomew Hill Road; FAA Correspondence and Glare Analysis

As a follow-up to our recent communications, please see the following attached items:

- Figure 2 – Proposed Project Area Aerial Photo Map
- Figures 7A & 7B – Site Layout & Grading Plans
- FAA Screening documentation;
- FAA Notice of Proposed Construction or Alteration – Off Airport;
- Glare analysis report; and
- Wings Ago Airstrip (CT42) information sheet from the FAA database.

As you're aware, I'm managing a 4-MW AC Shared Clean Energy Facility ("SCEF") project in Goshen, CT. The Project site is located on a 69.1-acre parcel, in the RA5 residential zoning district, at 129 Bartholomew Hill Rd. Greenskies Clean Energy LLC plans to submit a Petition to the CT Siting Council. See attached Figure 2 – Proposed Project Area Aerial Photo Map.

With regard to the surrounding area, there is forested, undeveloped land to the north, and west of the site in the Town of Cornwall. To the east and south of the property are a few single-family residences and farmland. In addition, the Wings Ago Airstrip, a private use grass strip/air field, is located on the parcel to the east at 161 Bartholomew Hill Rd. The distance from the edge of the proposed project to the airstrip is approximately 470 +/- feet. There is a 220 +/- foot wooded buffer between the proposed Project and Wings Ago Airstrip, with trees approximately 40-50 feet tall; the airstrip is located another 160 +/- feet east of the tree line.

As we typically do, Greenskies ran an FAA screening for the project and results showed the proposed Project does not meet the notice criteria (see attached results). We initially reached out to you since we are not sure how the private Wings Ago Airstrip is regulated. The attached information sheet from the FAA database does not provide information on the current, specific type and frequency of use. According to Project site landowner and Town officials, the facility does not appear to have been used recently and/or consistently in recent years. Our understanding is that the airstrip is infrequently used by/made available to small craft/biplane operators for grass landing training, however, that's not documented through FAA. Greenskies plans to reach out to the owner of the airstrip.

After you conducted an initial review of the Project location, you requested a glare study be performed to see if there are any effects to the aircraft approaches. You requested this be done before submitting the Petition, rather than wait for the CT Siting Council to recommend (or not recommend) a review by the CT Airport Association. Please see attached ForgeSolar Glare Analysis report. Since no specific input data was available, the analysis was run using the default settings for 2-mile flight paths to FAA regulated facilities. The analysis did not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions. The existing wooded area between the proposed SCEF project and the airstrip, therefore, was not considered in the analysis.

Results:

The Project was divided into two array areas – northern or PV Array 1 and southern or PV Array 2. Flight path 1 is the approach from the south and flight path 2 is the approach from the north. Results for PV Array 1 indicate 2,467 minutes of yellow glare for Flight Path 1 between the hours of 1700 to 1800 (5:00 PM – 6:00 PM) May through mid-August. The daily duration of glare ranges from 20 – 25 minutes. For Flight Path 2, results show 0 minutes of glare.

Results for PV Array 2 indicate 6,319 minutes of yellow glare and 520 minutes of green glare for Flight Path 1 between the hours of 1700 to 1800 (5:00 PM – 6:00 PM) May through mid-August. The daily duration of yellow glare is about 60 minutes. For Flight Path 2, results show 0 minutes of glare.

If you are able to provide any of the following site-specific information about the Wings Ago Airstrip, we could revise the analysis:

1. Hours of operation and frequency of use;
2. Direction of approach for landing – do the planes come in from the north or south?
3. Threshold height – the runway is 1600 feet long and is used for small craft grass landings; the software used to analyze glare defaults to a 50-ft threshold for FAA facilities; based on your expertise, could you recommend a more accurate threshold height for this private facility?
4. Glide slope - the software used to analyze glare defaults to a glide slope of 3 for FAA facilities; based on your expertise, could you recommend a more accurate glide slope for the types of planes utilizing this private facility?

Please provide an opinion and/or determination of potential glare impact on Wings Ago Airstrip operations. Thank you for your review and please feel free to reach out with any additional information or questions.

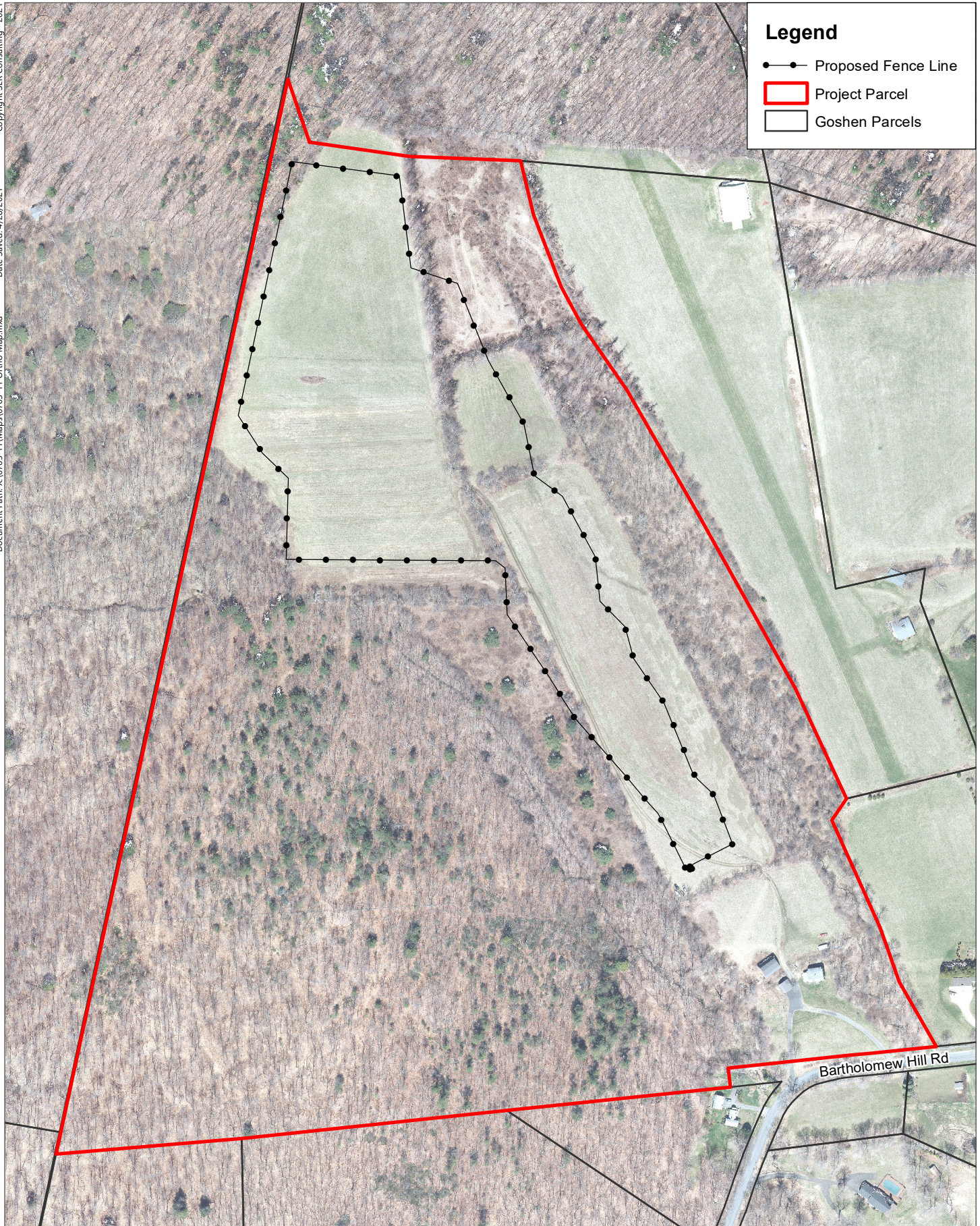


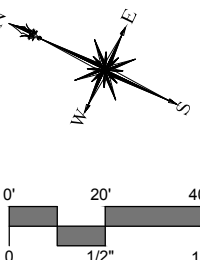
Figure 2 - Proposed Project Area Aerial Map

Greenskies Goshen PV Solar Facility
Goshen, Connecticut

0 150 300
Feet
1 in = 300 feet



1350 MAIN STREET
SUITE 1012
SPRINGFIELD, MA 01103
413.241.6920



MATCHLINE - SEE SHEET LA-2

**GOSHEN PV SOLAR FACILITY
GREENSKIES CLEAN ENERGY LLC
129 BARTHOLOMEW HILL ROAD
GOSHEN, CONNECTICUT**

G	HMM	MRO
DRAWN	CHECKED	
1"=40'		
APRIL 21, 2021		
16763.00011		
NO.		
06 OF 12		

LA-1

FORGESOLAR GLARE ANALYSIS

Project: **Goshen SCEF**

Proposed 4 MW AC ground mount solar energy facility at 129 Bartholomew Hill Road, Goshen, CT.

Site configuration: **Untitled**

Analysis conducted by Greenskies Developer (devteam@greenskies.com) at 21:44 on 10 May, 2021.

U.S. FAA 2013 Policy Adherence

The following table summarizes the policy adherence of the glare analysis based on the 2013 U.S. Federal Aviation Administration Interim Policy 78 FR 63276. This policy requires the following criteria be met for solar energy systems on airport property:

- No "yellow" glare (potential for after-image) for any flight path from threshold to 2 miles
- No glare of any kind for Air Traffic Control Tower(s) ("ATCT") at cab height.
- Default analysis and observer characteristics (see list below)

ForgeSolar does not represent or speak officially for the FAA and cannot approve or deny projects. Results are informational only.

COMPONENT	STATUS	DESCRIPTION
Analysis parameters	PASS	Analysis time interval and eye characteristics used are acceptable
2-mile flight path(s)	FAIL	Flight path receptor(s) receive yellow glare
ATCT(s)	N/A	No ATCT receptors designated

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

FAA Policy 78 FR 63276 can be read at <https://www.federalregister.gov/d/2013-24729>

SITE CONFIGURATION

Analysis Parameters

DNI: peaks at 1,000.0 W/m²
Time interval: 1 min
Ocular transmission
coefficient: 0.5
Pupil diameter: 0.002 m
Eye focal length: 0.017 m
Sun subtended angle: 9.3
mrad
Site Config ID: 53492.9600



PV Array(s)

Name: PV array 1
Axis tracking: Fixed (no rotation)
Tilt: 25.0°
Orientation: 180.0°
Rated power: -
Panel material: Light textured 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	41.855843	-73.279252	1584.94	10.00	1594.94
2	41.855796	-73.278694	1583.34	10.00	1593.34
3	41.855188	-73.278586	1584.15	10.00	1594.15
4	41.855076	-73.278200	1579.96	10.00	1589.96
5	41.853926	-73.277599	1572.61	10.00	1582.61
6	41.853222	-73.277213	1560.42	10.00	1570.42
7	41.853222	-73.279316	1561.05	10.00	1571.05
8	41.853494	-73.279488	1560.59	10.00	1570.59
9	41.853718	-73.279423	1563.90	10.00	1573.90
10	41.854037	-73.279981	1562.54	10.00	1572.54
11	41.855236	-73.279702	1586.69	10.00	1596.69

Name: PV array 2

Axis tracking: Fixed (no rotation)

Tilt: 25.0°

Orientation: 180.0°

Rated power: -

Panel material: Light textured 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	41.853158	-73.277127	1559.81	10.00	1569.81
2	41.851528	-73.275947	1528.92	10.00	1538.92
3	41.851416	-73.276355	1529.72	10.00	1539.72
4	41.853238	-73.277556	1562.22	10.00	1572.22

Flight Path Receptor(s)

Name: FP 1

Description:

Threshold height: 50 ft

Direction: 337.1°

Glide slope: 3.0°

Pilot view restricted? Yes

Vertical view: 30.0°

Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	41.852471	-73.274724	1548.03	50.00	1598.04
Two-mile	41.825837	-73.259602	1309.56	841.93	2151.49

Name: FP 2

Description:

Threshold height: 50 ft

Direction: 163.5°

Glide slope: 3.0°

Pilot view restricted? Yes

Vertical view: 30.0°

Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	41.855380	-73.276526	1589.90	50.00	1639.91
Two-mile	41.883108	-73.287538	945.74	1247.62	2193.36

GLARE ANALYSIS RESULTS

Summary of Glare

PV Array Name	Tilt (°)	Orient (°)	"Green" Glare min	"Yellow" Glare min	Energy kWh
PV array 1	25.0	180.0	0	2,467	-
PV array 2	25.0	180.0	520	6,319	-

Total annual glare received by each receptor

Receptor	Annual Green Glare (min)	Annual Yellow Glare (min)
FP 1	520	8786
FP 2	0	0

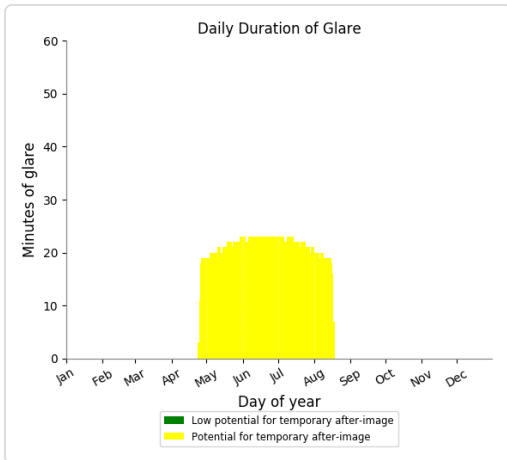
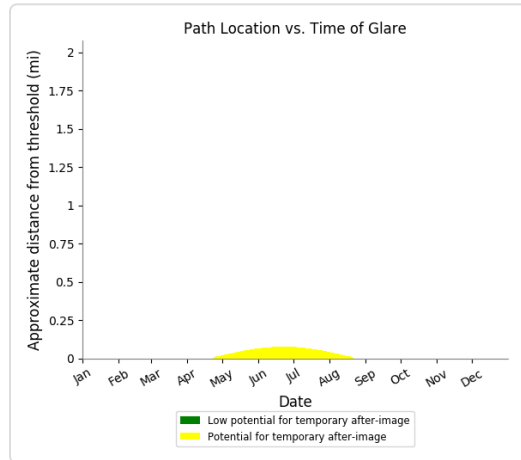
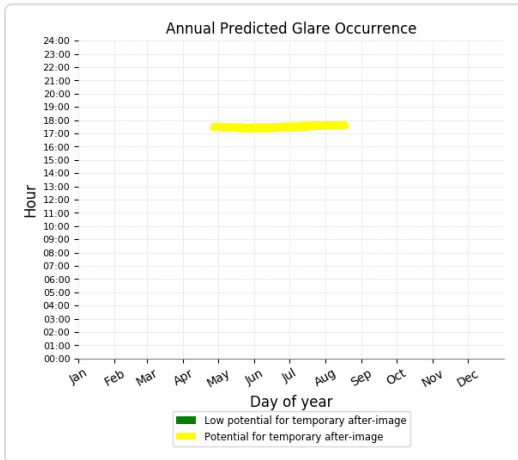
Results for: PV array 1

Receptor	Green Glare (min)	Yellow Glare (min)
FP 1	0	2467
FP 2	0	0

Flight Path: FP 1

2467 minutes of yellow glare

0 minutes of green glare



Flight Path: FP 2

0 minutes of yellow glare

0 minutes of green glare

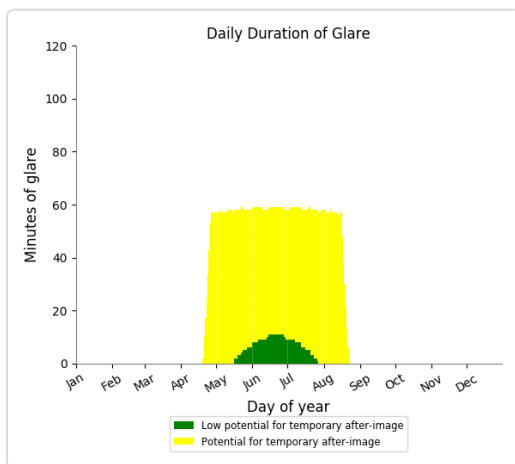
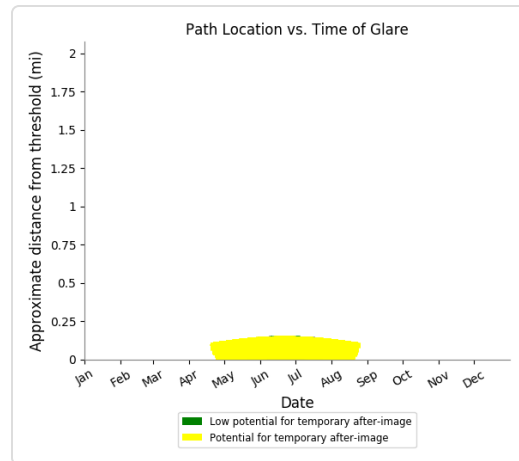
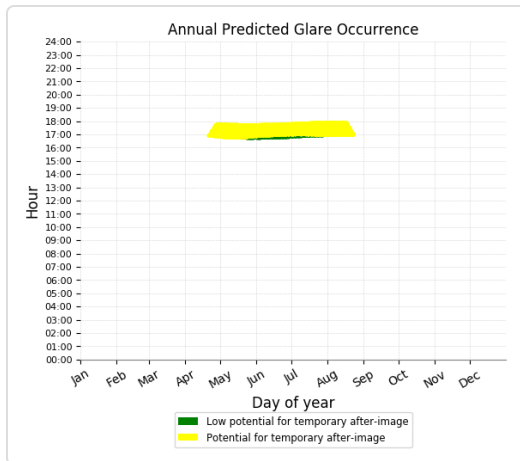
Results for: PV array 2

Receptor	Green Glare (min)	Yellow Glare (min)
FP 1	520	6319
FP 2	0	0

Flight Path: FP 1

6319 minutes of yellow glare

520 minutes of green glare



Flight Path: FP 2

0 minutes of yellow glare

0 minutes of green glare

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.

Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions.

Several 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.

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.)

Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.

Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.

The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual results and glare occurrence may differ.

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.

Refer to the Help page at www.forgesolar.com/help/ for assumptions and limitations not listed here.



Notice Criteria Tool

[Notice Criteria Tool - Desk Reference Guide V_2018.2.0](#)

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference [CFR Title 14 Part 77.9](#).

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the [FAA Co-location Policy](#)
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

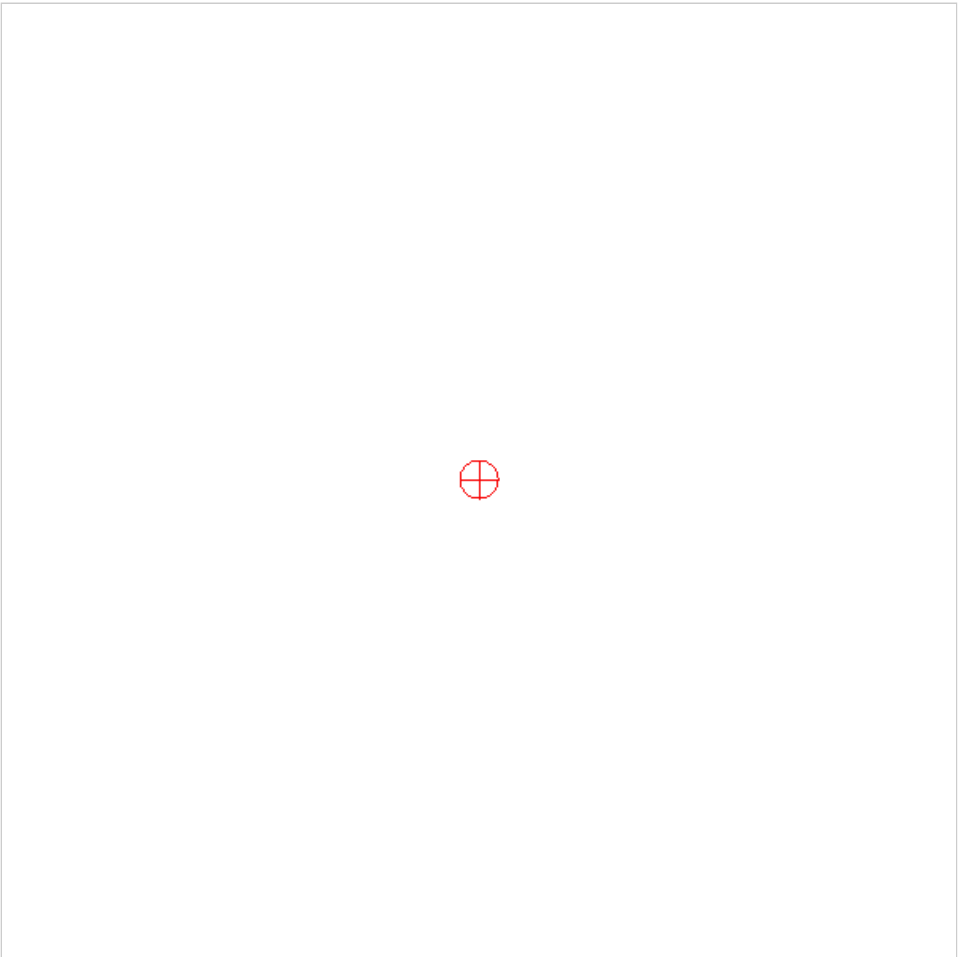
If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the [Air Traffic Areas of Responsibility map](#) for Off Airport construction, or contact the [FAA Airports Region / District Office](#) for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	<input type="text" value="41"/> Deg	<input type="text" value="51"/> M	<input type="text" value="14.84"/> S	<input type="button" value="N"/> ▼
Longitude:	<input type="text" value="73"/> Deg	<input type="text" value="16"/> M	<input type="text" value="42.03"/> S	<input type="button" value="W"/> ▼
Horizontal Datum:	<input type="button" value="NAD83"/> ▼			
Site Elevation (SE):	<input type="text" value="1580"/> (nearest foot)			
Structure Height :	<input type="text" value="12"/> (nearest foot)			
Traverseway:	<input type="button" value="No Traverseway"/> ▼ (Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway			
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes			

Results

You do not exceed Notice Criteria.





Notice of Proposed Construction or Alteration - Off Airport

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Project Name: GREEN-000623878-21

Sponsor: Greenskies Clean Energy

Details for Case : Goshen SCEF

[Show Project Summary](#)

Case Status	
ASN:	2021-ANE-3642-OE
Status:	Accepted
Public Comments:	None
Date Accepted:	06/07/2021
Date Determined:	
Letters:	None
Documents:	06/07/2021 11851_SCEF 1, 129... 06/07/2021 Figure 2 - Propos... 06/07/2021 Goshen-FAA Projec...
Project Documents: 03/24/2021 Goshen-FAA Projec...	
Construction / Alteration Information	
Notice Of:	Construction
Duration:	Temporary
if Temporary :	Months: 4 Days: 0
Work Schedule - Start:	03/01/2022
Work Schedule - End:	07/01/2022
<i>*For temporary cranes-Does the permanent structure require separate notice to the FAA? To find out, use the Notice Criteria Tool. If separate notice is required, please ensure it is filed. If it is not filed, please state the reason in the Description of Proposal.</i>	
State Filing:	Filed with State
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<i>* For aeronautical study of a crane or construction equipment the maximum height should be listed above as the Structure Height (AGL). Additionally, provide the minimum operating height to avoid delays if impacts are identified that require negotiation to a reduced height. If the Structure Height and minimum operating height are the same enter the same value in both fields.</i>	
Requested Marking/Lighting:	None
Other :	
Recommended Marking/Lighting:	
Current Marking/Lighting:	None
Other :	<input type="text"/>
Nearest City:	Goshen
Nearest State:	Connecticut
Description of Location:	129 Bartholomew Hill Rd., Goshen, CT
Description of Proposal:	4 +/- MW AC PV solar energy facility
Structure Summary	
Structure Type:	Solar Panel
Structure Name:	Goshen SCEF
FDC NOTAM:	
NOTAM Number:	
FCC Number:	
Prior ASN:	
Proposed Frequency Bands	
Select any combination of the applicable frequencies/powers identified in the Colo Void Clause Coalition, Antenna System Co-Location, Voluntary Best Practices, effective 21 Nov 2007, to be evaluated by the FAA with your filing. If not within one of the frequency bands listed below, manually input your proposed frequency(ies) and power using the Add Specific Frequency link.	
Add Specific Frequency	
Low Freq	High Freq
Freq Unit	ERP
ERP Unit	

Previous [Back to Search Result](#) Next

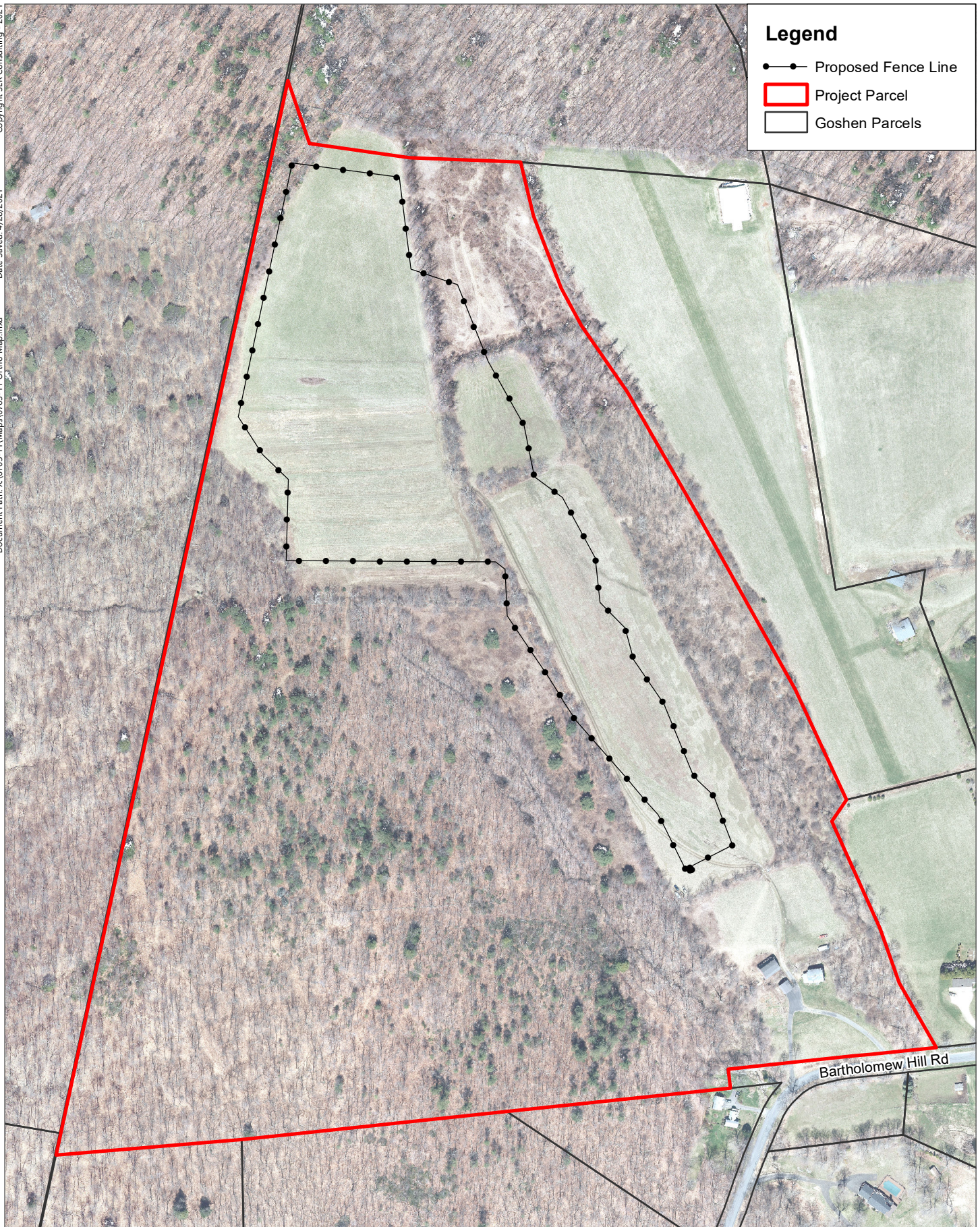


Figure 2 - Proposed Project Area Aerial Map

Greenskies Goshen PV Solar Facility
Goshen, Connecticut

0 150 300
Feet
1 in = 300 feet



1350 MAIN STREET
SUITE 1012
SPRINGFIELD, MA 01103
413.241.6920

SYSTEM INFORMATION	
SYSTEM SIZE (DC)	4,708 KW
SYSTEM SIZE (AC)	3,984 KW
PANEL SIZE	CS3Y-475MB-AG*
PANEL QUANTITY	9,912
PANEL TILT	25°
PANEL AZIMUTH	0°
ROW SPACING	14'
GCR	49%
INVERTER SIZE	(24) SOLECTRIA XGI 166*
ESTIMATED ANNUAL PRODUCTION	6,229 MWh

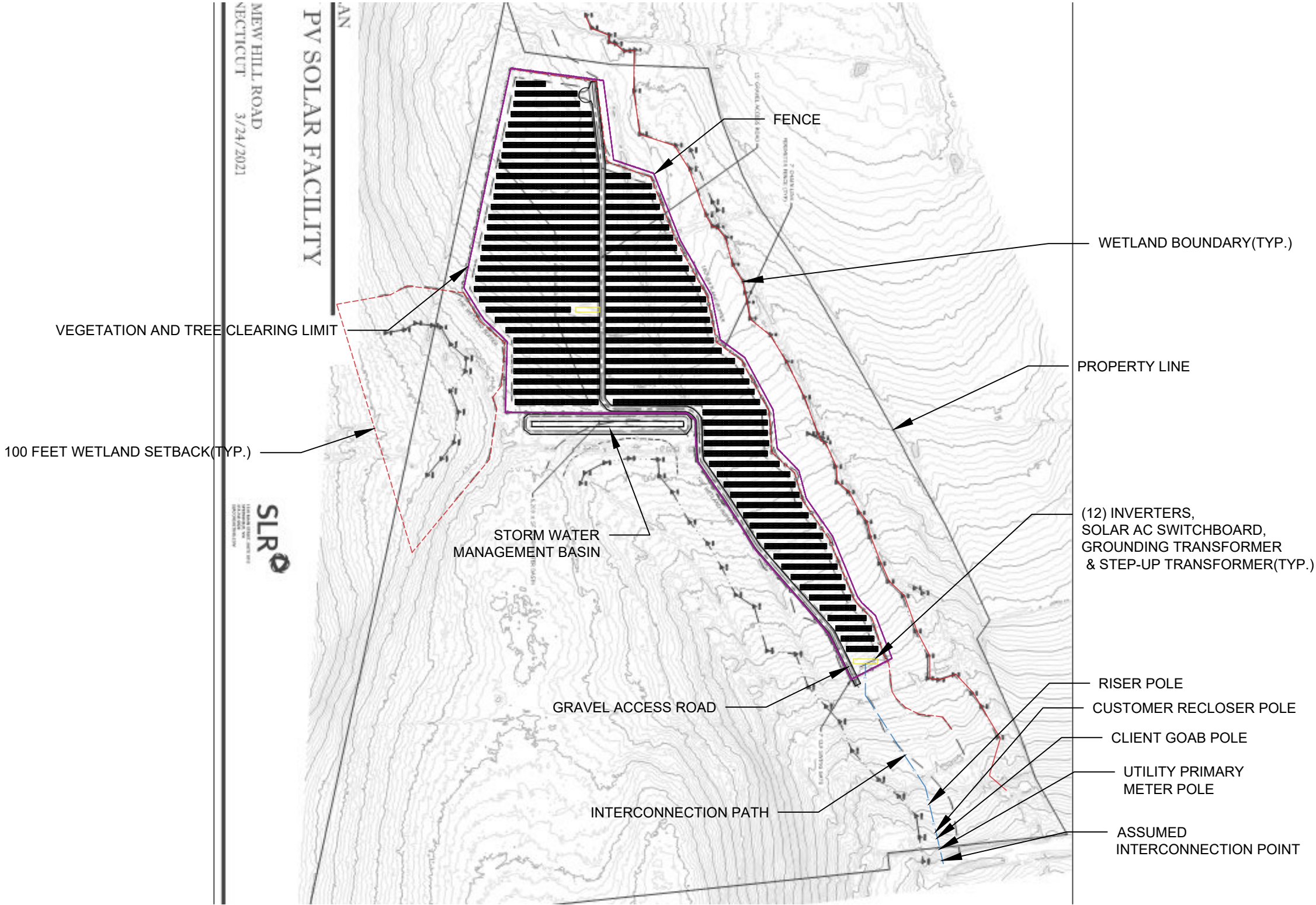
*Preliminary equipment selection, equivalent alternative may be used in actual installation



RACKING CROSS-SECTION
(NOT TO SCALE)



PROGRESS SET
NOT FOR CONSTRUCTION

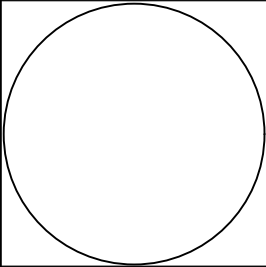


1 PROPOSED PV SOLAR ARRAY LAYOUT
S.01 1"=300'

Greenskies
127 WASHINGTON AVENUE
NORTH HAVEN, CT 06457
PH - 860.398.5408
FAX - 860.398.5423

REVISIONS:		
NO.	DATE	DESCRIPTION

PROPOSED SITE PLAN
SCEF 1 GOSHEN FARM
PV SOLAR ARRAY
129 BARTHOLOMEW HILL ROAD
GOSHEN, CT 06756






BATCH NO.:	PROPOSAL
DRAWN BY:	KK
SCALE:	AS NOTED
DATE:	07 APRIL 2021

PV.03

Goshen Solar

129 Bartholomew Hill Rd., Goshen, CT

Legend

-  129 Bartholomew Hill Rd
-  Lat
-  Project Area

Lat 41°51'20.82"N; Long 73°16'45.84"W

Lat 41°51'20.76"N; Long 73°16'43.68"W

Lat 41°51'18.11"N; Long 73°16'41.70"W

Lat 41°51'15.06"N; Long 73°16'48.42"W

Lat 41°51'13.62"N; Long 73°16'38.94"W

Lat 41°51'12.36"N; Long 73°16'45.90"W

Lat 41°51'11.82"N; Long 73°16'40.80"W

Lat 41°51'9.42"N; Long 73°16'38.88"W

129 Bartholomew Hill Rd

Lat 41°51'5.40"N; Long 73°16'32.88"W

Lat 41°51'4.98"N; Long 73°16'34.32"W

****Wings Ago Airstrip**

Bartholomew Hill Rd.
1000 ft



Aeronautical Information Services

Airport ID

Data Effective: **04/22/2021 - 05/20/2021**

CT42

WINGS AGO AIRSTRIP
GOSHEN , CT - UNITED STATES

All	Summary	Operations	Communications	NAVAIDS	Weather	RWY 18/36
Heliports	Charts	Contacts	Remarks			

Summary

Latitude/Longitude	41-51-14.28 N / 73-16-32.31 W
Elevation	1585 FT
Variation	14 W 1985
From city	3 miles NW of GOSHEN, CT
ARTCC	ZBW
Section chart	NEW YORK
Time Zone	UTC-5(-4DT)

View active NOTAMS

OPERATIONS

Airport Status	Operational
Minimum Operational Network	No

Facility use	Private use only
Control Tower	No air traffic control tower at airport
Tower Hours	
Apch/Dep Hours	
FSS	BRIDGEPORT FSS (BDR) Toll Free: 1-800-WX-BRIEF
NOTAMs Facility	
Attendance	UNATNDD
Wind Indicator	Yes
Segmented Circle	No
Lights	
Beacon	
Landing Fee	No
Fuel	NONE
Fire and Rescue	
Int'l Operations	

COMMUNICATIONS

UNICOM:	None
CTAF:	None
ATIS:	None

NAVAIDS

NAVAIDS:

Type	ID	Name	Frequency	Hours	Distance	Bearing	Remarks
VOR/DME	PWL	PAWLING	114.3 MHz	24 Hours	15.4 nm	70.7°	<ul style="list-style-type: none"> OPERATIONAL IFR
VOT	BDL	BRADLEY	111.4 MHz	24 Hours	26.8 nm	260.0°	<ul style="list-style-type: none"> OPERATIONAL IFR
VORTAC	BAF	BARNES	113 MHz	24 Hours	31.1 nm	233.7°	<ul style="list-style-type: none"> OPERATIONAL RESTRICTED VORTAC UNUSBL 310-340 DEGS BYD 25 NM BLO 6500 FT. VOR UNUSBL249-260 BYD 10 NM BLO 10000

5/10/2021

WINGS AGO AIRSTRIP

NDB	PFH	PHILMONT	272 KHz	24 Hours	31.2 nm	140.1°	<ul style="list-style-type: none">OPERATIONAL IFR
TACAN	CEF	WESTOVER	114 MHz	24 Hours	39.3 nm	238.6°	<ul style="list-style-type: none">OPERATIONAL RESTRICTEDNO-NOTAM MP 1100-1500Z++ FRI.TACAN AZM UNUSBL 001-089 BYD 35 NM BLW 7000 FT; 090-110 BLW 8000 FT; 111-180 BYD 20 NM BLW 7000 FT; 220-240 BYD 24 NM BLW 4000 FT; 305-320 BYD 15 NM BLW 4000 FT.DME UNUSBL 001-089 BYD 20 NM BLW 7000 FT; 090-110 BLW 8000 FT; 111-180 BYD 20 NM BLW 7000 FT; 220-240 BYD 24 NM BLW 4000 FT; 305-320 BYD 15 NM BLW 4000 FT.

DME	HVN	NEW HAVEN	109.8 MHz	24 Hours	39.6 nm	333.8°	<ul style="list-style-type: none">OPERATIONAL RESTRICTEDDME UNUSBL BYD 19 NM.
FAN MARKER	SKU	STANWYCK		24 Hours	39.7 nm	60.2°	<ul style="list-style-type: none">OPERATIONAL VFR ONLY

WEATHER

ID	Type	Frequency	Phone	Distance	Remarks
CT71	WX AWOS-AV	129.825 MHz		23.0 nm	<ul style="list-style-type: none">AWOS-AV WX BCST ON 129.825 (3 MIC CLICKS).
OXC	WX AWOS-3PT	132.975 MHz	203-262-1190	23.6 nm	
BDL	WX ASOS	118.15 MHz	860-386-3480	27.0 nm	
MMK	WX ASOS	134.925 MHz	203-639-9405	28.8 nm	
HFD	WX ASOS		860-527-5837	28.9 nm	

RUNWAY 18/36

Dimensions	1600 ft. x 40 ft.
Surface Type	TURF
Surface Condition	
Treatment	

Runway Edge Lights

PCN

Single Wheel

Double Wheel

Double Tandem

Dual Double Tandem

Base End: 18

Traffic Pattern	Left
-----------------	------

Runway End Identifier Lights	No
------------------------------	----

Reciprocal End: 36

Traffic Pattern	Left
-----------------	------

Runway End Identifier Lights	No
------------------------------	----

HELIPORTS

None

CHARTS

Chart data valid from 0901Z 04/22/21 to 0901Z 05/20/21.

CONTACTS

OWNER

WINGS AGO, INC.
161 BARTHOLOMEW HILL ROAD
GOSHEN, CT 06756
UNITED STATES
Phone: (860) 782-1077

MANAGER

PETER BUJNOWSKI
161 BARTHOLOMEW HILL ROAD
GOSHEN, CT 06756
UNITED STATES
Phone: (860) 782-1077

REMARKS

- FOR CD CTC YANKEE APCH AT 860-386-3597



Notice Criteria Tool

[Notice Criteria Tool - Desk Reference Guide V_2018.2.0](#)

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference [CFR Title 14 Part 77.9](#).

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the [FAA Co-location Policy](#)
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the [Air Traffic Areas of Responsibility map](#) for Off Airport construction, or contact the [FAA Airports Region / District Office](#) for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	<input type="text" value="41"/> Deg	<input type="text" value="51"/> M	<input type="text" value="14.84"/> S	<input type="button" value="N ▼"/>
Longitude:	<input type="text" value="73"/> Deg	<input type="text" value="16"/> M	<input type="text" value="42.03"/> S	<input type="button" value="W ▼"/>
Horizontal Datum:	<input type="button" value="NAD83 ▼"/>			
Site Elevation (SE):	<input type="text" value="1580"/> (nearest foot)			
Structure Height :	<input type="text" value="12"/> (nearest foot)			
Traverseway:	<input type="button" value="No Traverseway ▼"/> (Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway			
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes			

Results

You do not exceed Notice Criteria.



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2021-ANE-3642-OE

Issued Date: 06/23/2021

G. Wolfman
Greenskies Clean Energy
127 Washington Ave, West Bldg., Lower Level
North Haven, CT 06473

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Goshen SCEF
Location:	Goshen, CT
Latitude:	41-51-13.62N NAD 83
Longitude:	73-16-38.94W
Heights:	1560 feet site elevation (SE) 12 feet above ground level (AGL) 1572 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 12/23/2022 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (816) 329-2525, or natalie.schmalbeck@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2021-ANE-3642-OE.

Signature Control No: 483961617-485756354

(DNE)

Natalie Schmalbeck
Technician

Attachment(s)
Map(s)

Verified Map for ASN 2021-ANE-3642-OE



Gina Wolfman

From: noreply@faa.gov
Sent: Wednesday, June 9, 2021 9:53 AM
To: Gina Wolfman
Subject: Status of FAA Filing 2021-ANE-3642-OE

Your filing is assigned Aeronautical Study Number (ASN): 2021-ANE-3642-OE.

To review your electronic record, go to our website oeaaa.faa.gov and select the Search Archives link to locate your case using the assigned Aeronautical Study Number (ASN).

The FAA verified your filing and an aeronautical study has been initiated. Please allow a minimum 45 days for the FAA to complete the study. Please refer to the assigned ASN on all future inquiries regarding this filing.

For Wind Turbine proposals only, please ensure Wind Turbine Data as described on the project summary page in your registered e-filing account has been uploaded to your filing.

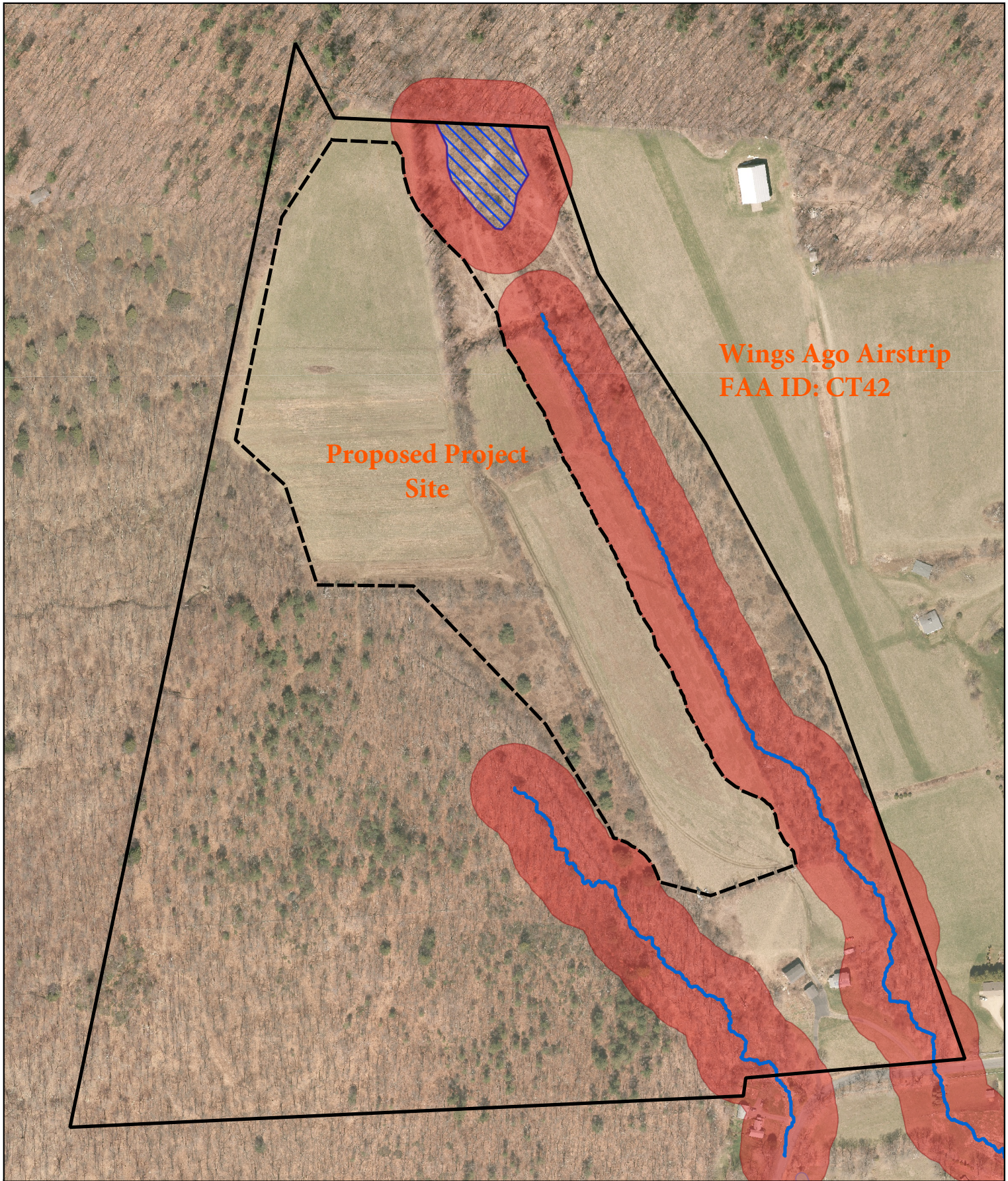
To ensure e-mail notifications are delivered to your inbox please add noreply@faa.gov to your address book. Notifications sent from this address are system generated FAA e-mails and replies to this address will NOT be read or forwarded for review. Each system generated e-mail will contain specific FAA contact information in the text of the message.



Archive Search Results Form 7460-1 for ASN 2021-ANE-3642-OE






Overview				
Study (ASN):	2021-ANE-3642-OE	Received Date:	06/07/2021	
Prior Study:		Entered Date:	06/07/2021	
Status:	Determined	Completion Date:	06/23/2021	
Letters:	Determination	Expiration Date:	12/23/2022	
Supplemental Form 7460-2: Please login to add a Supplemental Form 7460-2.		Map:	View Map	
Sponsor Information		Sponsor's Representative Information		
Sponsor:	Greenskies Clean Energy	Representative:		
Attention Of:	G. Wolfman	Attention Of:	Gina Wolfman	
Address:	127 Washington Ave, West Bldg., Lower Level	Address:	127 Washington Ave, West Bldg., Lower Level	
Address2:		Address2:		
City:	North Haven	City:	North Haven	
State:	CT	State:	CT	
Postal Code:	06473	Postal Code:	06473	
Country:	US	Country:	US	
Phone:	203-398-5408 328	Phone:	203-398-5408 328	
Fax:		Fax:		
Construction Info		Structure Summary		
Notice Of:	CONSTR	Structure Type:	Solar Panel	
Duration:	PERM (Months: 0 Days: 0)	Structure Name:	Goshen SCEF	
Work Schedule:	03/01/2022 to 07/01/2022	FCC Number:		
Date Built:				
Structure Details		Height and Elevation		
Latitude (NAD 83):	41° 51' 13.62" N		Proposed	DNE
Longitude (NAD 83):	73° 16' 38.94" W	Site Elevation:	1560	
Horizontal Datum:	NAD 83	Structure Height:	12	12
Survey Accuracy:	4D	Total Height (AMSL):	1572	1572
Marking/Lighting:	None			
Other Description:				
Current Marking/Lighting:	None			
Current Marking/Lighting Other Description:				
Name:				
City:	Goshen			
State:	CT			
Nearest County:	Litchfield			
Nearest Airport:	No Airport within 12NM			
Distance to Structure:				
On Airport:	No			
Direction to Structure:				
Description of Location:	129 Bartholomew Hill Rd., Goshen, CT			
Description of Proposal:	4 +/- MW AC PV solar energy facility			
		Frequencies		
		Low Freq	High Freq	Unit
		ERP		Unit

Previous [Back to Search Result](#) Next



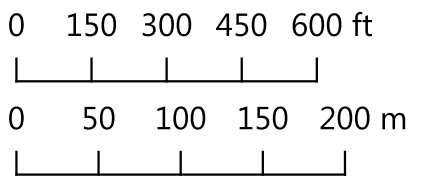
PROPOSED PROJECT AREA
129 BARTHOLOMEW RD, GOSHEN CT

Greenskies
 a Clean Focus company
 180 Johnson St
 Middletown, CT 06457
 (860) 398-5408
 www.greenskies.com

-  Parcel Boundary
-  Proposed Project Area
-  100' Buffer Zone
-  Hydric Soils (Wetland)
-  Watercourse (Wetland)



Scale:	1:4600
Produced By:	C.Ross
Project No:	11851
Date Produced:	1/17/2020



Gina Wolfman

From: Robert Bruno <rbruno@ctairports.org>
Sent: Tuesday, March 23, 2021 8:31 AM
To: Gina Wolfman
Subject: RE: [EXTERNAL] FW: Goshen, CT Project Site Review

Gina, It was great talking to you yesterday. After review of location adjacent to the airport we feel a glare study should be conducted to see if there are any effects to the aircraft approaches. You will also need to complete an FAA 7460-1 form. Once completed you can send to me but include all of the information on the siting counsel package as we review that information.

Thanks,
Bob

Robert Bruno
Director of Planning, Engineering and Environmental Services
Connecticut Airport Authority
860-254-5516
rbruno@ctairports.org



From: Gina Wolfman <gina.wolfman@cleanfocus.us>
Sent: Monday, March 22, 2021 5:10 PM
To: Robert Bruno <rbruno@ctairports.org>
Subject: [EXTERNAL] FW: Goshen, CT Project Site Review

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Bob,

Thank you for the quick response in returning my email. It was a pleasure meeting/speaking with you this afternoon. As we discussed, rather than wait for the CT Siting Council to recommend (or not recommend) a review by the CT Airport Association, we would appreciate having it done before submitting our Petition for the project. This will allow for efficiency in the overall permitting process.

Please see attached aerial photo showing the project parcel, proposed development area and Wings Ago Airstrip (<https://www.airnav.com/airport/CT42>) to the east. During our conversation you indicated glare will likely not be an issue/potential impact since the project is not sited off either end of the licensed facility. If you could complete your review and provide a determination via email we would greatly appreciate it. I look forward to hearing from you on this matter.

With kind regards,

Gina L. Wolfman

Senior Project Developer/
Permitting Specialist

Greenskies Clean Energy LLC
127 Washington Ave., West Bldg. – Lower Level

North Haven, CT 06473

Remote P 203-270-1398 | C 203-816-7165 www.greenskies.com



From: Gina Wolfman

Sent: Monday, March 22, 2021 12:19 PM

To: 'rbruno@ctairports.org' <rbruno@ctairports.org>

Subject: Goshen, CT Project Site Review

Hi Bob,

Good morning. I work with Jean-Paul LaMarche at Greenskies and he passed your contact info to me. I'm managing a project in Goshen, CT. As we typically do, I ran an FAA screening and results show we do not meet the notice criteria (see attached results). We're aware of a private airstrip on the abutting property to the east but are not sure how it's regulated. I would like to speak with you about the project and best way to proceed with regard to required reviews. Thanks and I look forward to hearing from you.

With kind regards,

Gina L. Wolfman

Senior Project Developer/
Permitting Specialist

Greenskies Clean Energy LLC
127 Washington Ave., West Bldg. – Lower Level

North Haven, CT 06473

Remote P 203-270-1398 | C 203-816-7165 www.greenskies.com



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