

How To: Hold a Solar Developer Accountable

Lynne Bruning

September 1, 2022



**OPEN HOUSE FOR PROPOSED
COMMUNITY SOLAR FARMS
IN [REDACTED]**

**Wednesday, July 31
3 – 7 p.m.**
[REDACTED] Volunteer Ambulance Corps
[REDACTED]
[REDACTED]



[REDACTED] is bringing low cost, natural power to your community.

Join us to learn more about the proposed community solar farms in [REDACTED].

Wednesday, July 31, 3 – 7 p.m.

[REDACTED] Volunteer Ambulance Corps
[REDACTED]
[REDACTED]

The farm will generate enough green electricity to power approximately 2,450 homes.

This open house is hosted by [REDACTED], an [REDACTED] based solar developer that puts the community at the heart of its developments to:

- Save residents and businesses money on electricity bills
- Provide grazing and pollination spaces for local farmers
- Bring economic, social and environmental benefits to the community

For more information:

[REDACTED]
or [REDACTED]
[REDACTED]



NOT PROVIDED
Project legal name
Street address, town and county
Tax ID Number for all involved parcels
Nameplate capacity in MWac, array in MWdc, battery energy storage MWh
Total number of acres for the parcel
Number of acres inside the fence
Who is buying the electricity
Who is buying the tax credits
If the array fixed mount or tracking
How many solar panels and wattage

*****ECRWSS EDDM***
Residential Customer
CAR-RT-WS**

SOLAR FARMS

EDUCATIONAL BENEFITS

We organise trips to the solar farm so children from local schools can learn about science, technology and energy generation.



SECURITY

Traditional rural fencing and discreet CCTV cameras will be used around the perimeter of the site to maintain security.



WILDFLOWER MEADOWS

The land around and beneath the solar panels will be sown with native wildflowers and grasses to support habitats for bees and other pollinators.



EXISTING TREES

The site is surrounded by mature trees and forestry, which screens it effectively from public view as well as providing important wildlife habitats.

BEEHIVES

Beehives on the solar farm will provide pollination services to support local farmers and agriculture.



BIRD AND BAT BOXES

These will be located around the perimeter of the site to encourage bats to roost and birds to nest.



SHEEP GRAZING

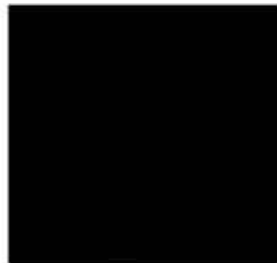
The land around the solar panels will be maintained where economically feasible by sheep grazing in autumn, after the meadows have seeded, to keep land in food production.



SOLAR PANELS

The panel arrays are single axis trackers and will generate enough clean power for the equivalent of over 1,225 homes.





NOT PROVIDED
 Project's Legal Name
 Project Street Address, Town and County
 Tax Id Parcel Numbers for all lots in the solar facility.
 If lot line adjustment and project variances are required
 Number of acres for all lots involved in the project
 Number of acres inside the fence
 Project name plate capacity in MWac, solar array in MWdc, battery energy storage in MWh

SOLAR FARMS

EDUCATIONAL BENEFITS

We organise trips to the solar farm so children from local schools can



Not required by local law.
 Item is not reviewed or included in the legal documents.



Not required by local law

SECURITY

Traditional rural fencing and discreet CCTV cameras will be used around the perimeter of the site to maintain security.



Not required by local law

WILDFLOWER MEADOWS

The land around and beneath the solar panels will be sown with native wildflowers and grasses to support habitats for bees and other pollinators.



EXISTING TREES

The site is surrounded by mature trees and forestry, which screens it effectively from public view as well as providing important wildlife habitats.

Project site is clear cut to the property line.
 Any vegetative screening is on neighboring property.

Equipment Not Provided
 Battery Energy Storage
 DC/DC Converters
 Major Switchgear
 Control Gear
 Inverters,
 Tracking Motors
 Tracking gears



Not required by local law

BEEHIVES

Beehives on the solar farm will provide pollination services to support local farmers and agriculture.



Not required by local law

BIRD AND BAT BOXES

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Not required by local law

SHEEP GRAZING

The land around the solar panels will be maintained where economically feasible by sheep grazing in autumn, after the meadows have seeded, to keep land in food production.

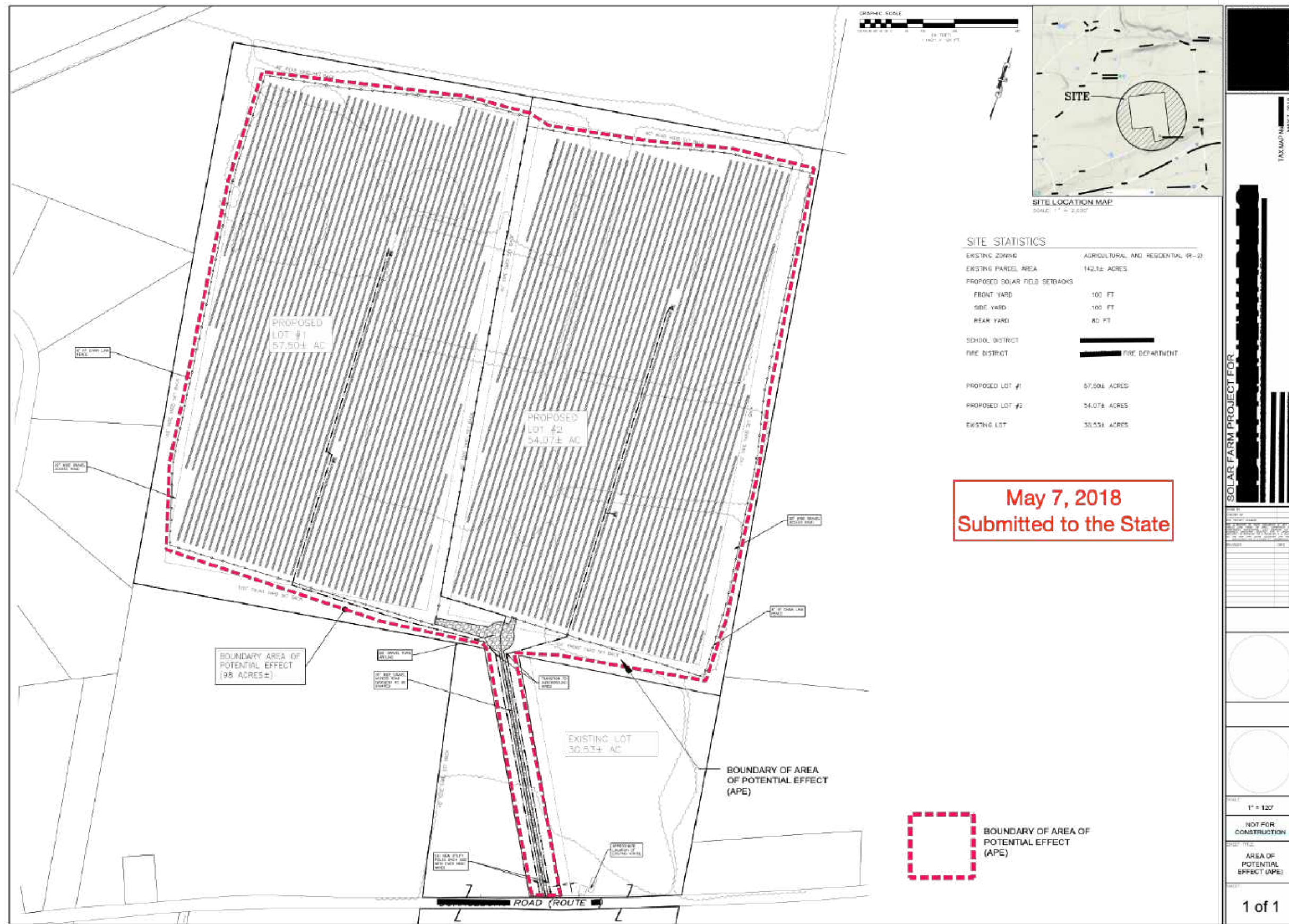


How many panels Height of panels at maximum tilt?
 Wattage of panels? How will panels be disposed of?
 Provide photo of panels installed with human for scale.

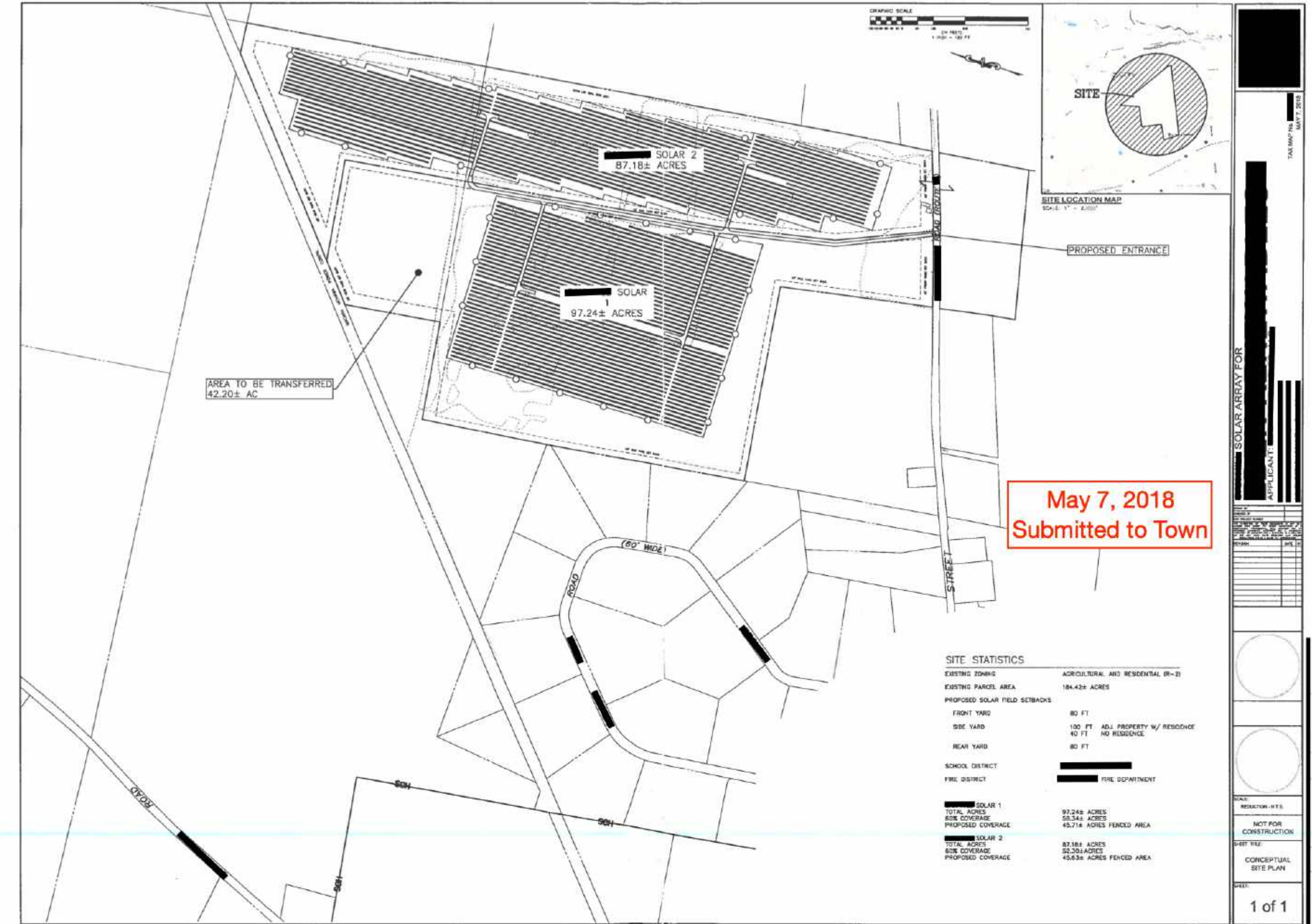
SOLAR PANELS

The panel arrays are single axis trackers and will generate enough clean power for the equivalent of over 1,225 homes.

Same developer. Same Project. Same date.



Submitted to the State



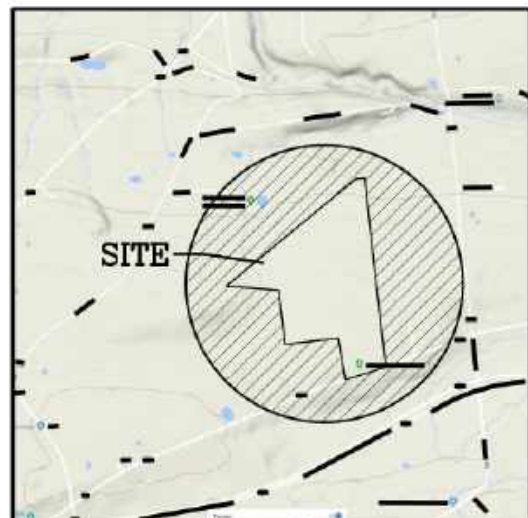
Submitted to the Town

PROPOSED SITE PLAN FOR

SOLAR 1&2

APPLICANT:

SOLAR 1, LLC & SOLAR 2, LLC



SITE LOCATION MAP
SCALE: 1" = 2000'



SITE STATISTICS

EXISTING ZONING	AGRICULTURAL AND RESIDENTIAL (R-2)
PARCEL AREA	
LOT 1	70.378 AC
LOT 2	70.353 AC
PROPOSED SOLAR FIELD SETBACK:	
FRONT	1: 100 FT 2: 100 FT
SIDE	1: 40 FT 2: 40 FT
REAR	1: 100 FT 2: 100 FT
ACCESS ROAD LENGTH	±2,740 FT
SCHOOL DISTRICT	
FIRE DISTRICT	FIRE DEPARTMENT
SOLAR 1 PROPOSED COVERAGE	32.2± ACRES FENCED AREA
SOLAR 2 PROPOSED COVERAGE	33.0± ACRES FENCED AREA
PROPOSED DISTURBANCE	
ACCESS ROAD WETLAND	±0.84 AC ±0.04 AC (1,554 SF)

DRAWING INDEX

- 1 OF 10 COVERSHEET
- 2 OF 10 EXISTING CONDITIONS
- 3 OF 10 SITE PLAN [REDACTED] 1
- 4 OF 10 SITE PLAN [REDACTED] 2
- 5 OF 10 SITE PLAN ACCESS ROAD
- 6 OF 10 EROSION & SEDIMENT CONTROL PLAN [REDACTED] 1
- 7 OF 10 EROSION & SEDIMENT CONTROL PLAN [REDACTED] 2
- 8 OF 10 EROSION & SEDIMENT CONTROL PLAN ACCESS ROAD
- 9 OF 10 SITE DETAILS
- 10 OF 10 DETAILS BY OTHERS

RECORD OF WORK

SUBMITAL TO TOWN OF [REDACTED] [REDACTED] [REDACTED]	DATE	BY
RESUBMIT TO TOWN OF [REDACTED] [REDACTED] [REDACTED]	3/17/2019	[REDACTED]
	3/5/2019	[REDACTED]

PLANS PREPARED BY:

[REDACTED]

PROPOSED SITE PLAN FOR SOLAR 1&2

APPLICANT: [REDACTED]

TAX MAP No. [REDACTED] FEBRUARY 6, 2019

SCALE: N.T.S.

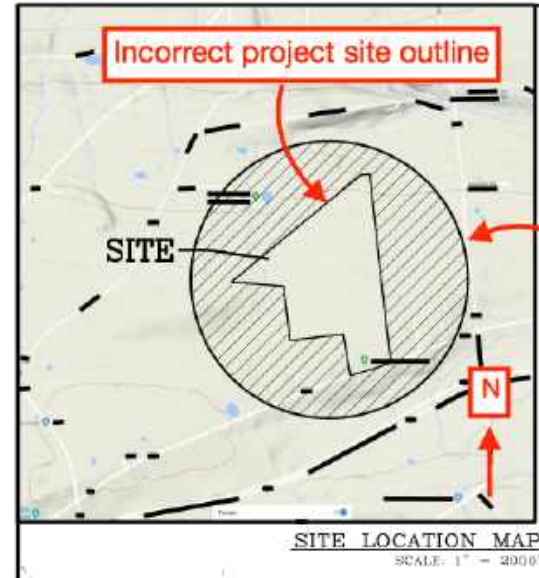
NOT FOR CONSTRUCTION

SHEET TITLE: COVERSHEET

SHEET: 1 of 10

Does local law permit adjoining solar facilities or multiple solar facilities within one mile?

HOW TO REVIEW A SOLAR APPLICATION
TYPICAL QUESTIONS AND COMMENTS
For Educational Purposes Only
Comments do not reflect on any specific project or company.



What does hashed circle around the site represent?
Is it obscuring the view of important information?

PROPOSED SITE PLAN FOR SOLAR 1&2

APPLICANT:
SOLAR 1, LLC & SOLAR 2, LLC

Duplicate Project title block.
Is it obscuring the view of important information?

Site is bisect by two lane state road.
Acres includes north parcel and south parcel.
Should bisected lots acreage be combined to meet to permit developer to comply with local law for lot coverage?

Unrelated Parcel
Irrelevant to Project review
Is it obscuring the view of important information?

National Wetland Inventory is not identified

Are easements and maintenance agreements filed with county clerk?

Are utility poles, power lines, major switchgear, transformers at street interconnection shown?

North is not oriented to top of page.
Orientation does not match Site Location Map

Equipment pads and electrical equipment not identified.
Are details provided?

Satellite images show a grass path.
Is there an existing road?
Is this reflected in the stormwater plan?

Lot number and acres is not legible.
Does lot coverage comply with local law?

Engineer stamp is not provided.

SITE STATISTICS

EXISTING ZONING	AGRICULTURAL AND RESIDENTIAL (R-2)
PARCEL AREA	
LOT 1	70.378 AC
LOT 2	70.353 AC
PROPOSED SOLAR FIELD SETBACK:	
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ACCESS ROAD LENGTH	±2,740 FT
SCHOOL DISTRICT	
FIRE DISTRICT	FIRE DEPARTMENT
PROPOSED SOLAR 1 COVERAGE	32.2± ACRES FENCED AREA
PROPOSED SOLAR 2 COVERAGE	33.0± ACRES FENCED AREA
PROPOSED DISTURBANCE	
ACCESS ROAD WETLAND	±0.84 AC ±0.04 AC (1,554 SF)

Site is bisect by two lane state road.
Acres includes north parcel and south parcel.

Treeline is not identified in color.
Treeline has significantly changed since May 7, 2018 site plan.
State Environmental Review began July 2018.

Incorrect fire department

National Wetland Inventory is not identified

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10 OF 10	DETAILS BY OTHERS

Not To Scale

Signature of town planning board is not provided.

Request site plan to be printed in color to identify state wetlands, federal wetlands and tree lines.

PROPOSED SITE PLAN FOR SOLAR 1&2

APPLICANT: [REDACTED]

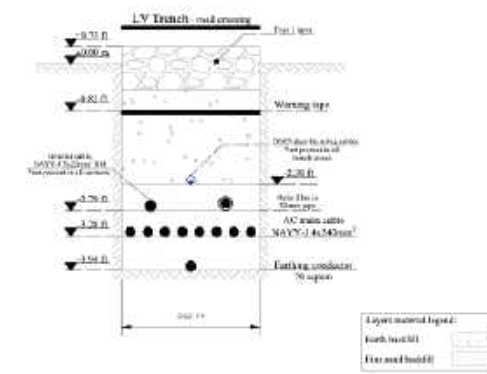
TAX MAP No. [REDACTED] FEBRUARY 6, 2019

SCALE: N.T.S.

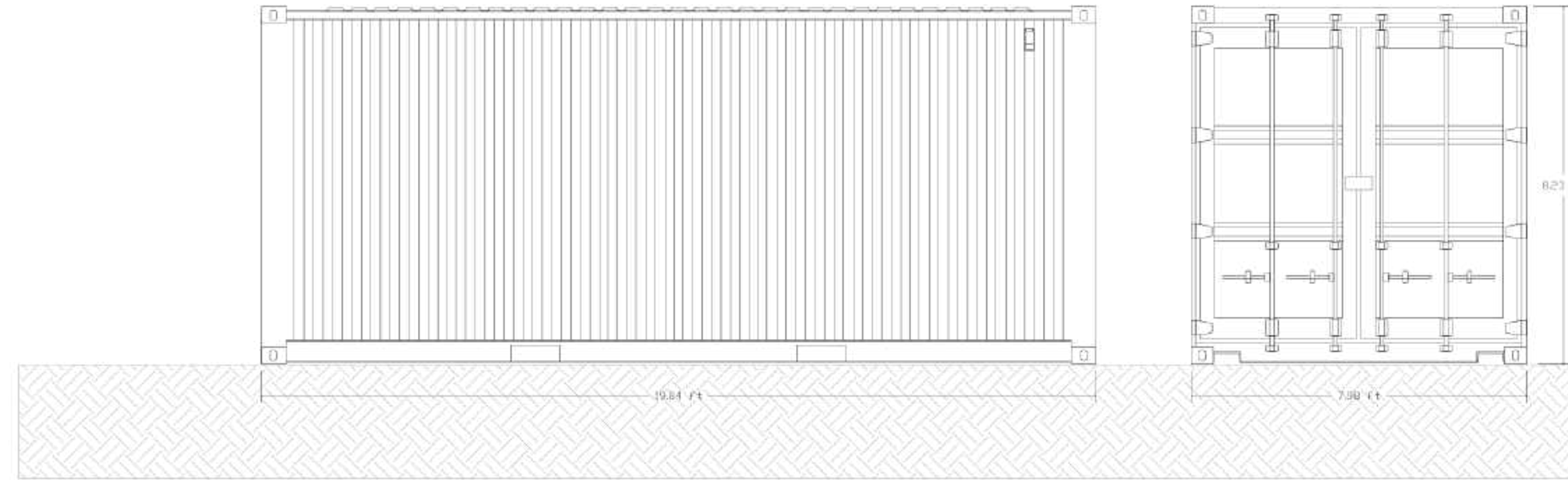
NOT FOR CONSTRUCTION

COVERSHEET

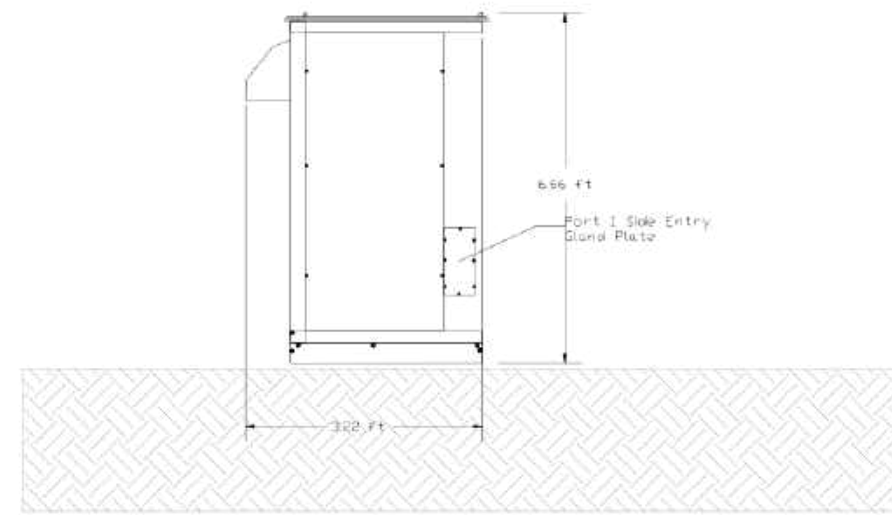
1 of 10



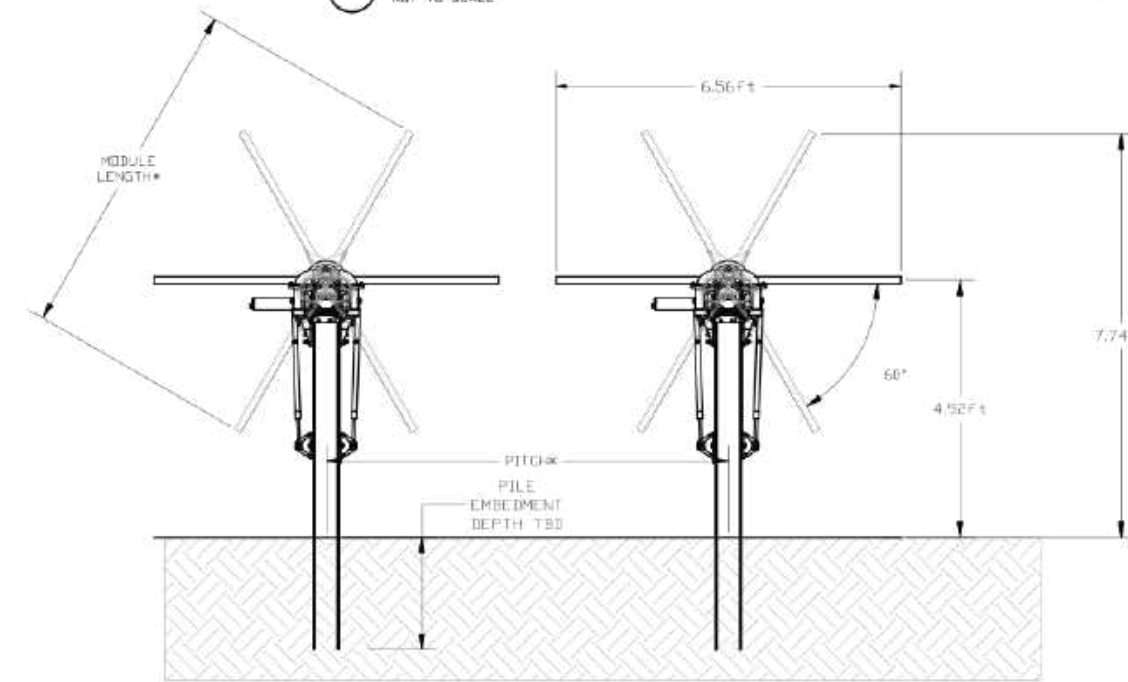
TRENCH CROSS SECTION (BY OTHERS)
NOT TO SCALE



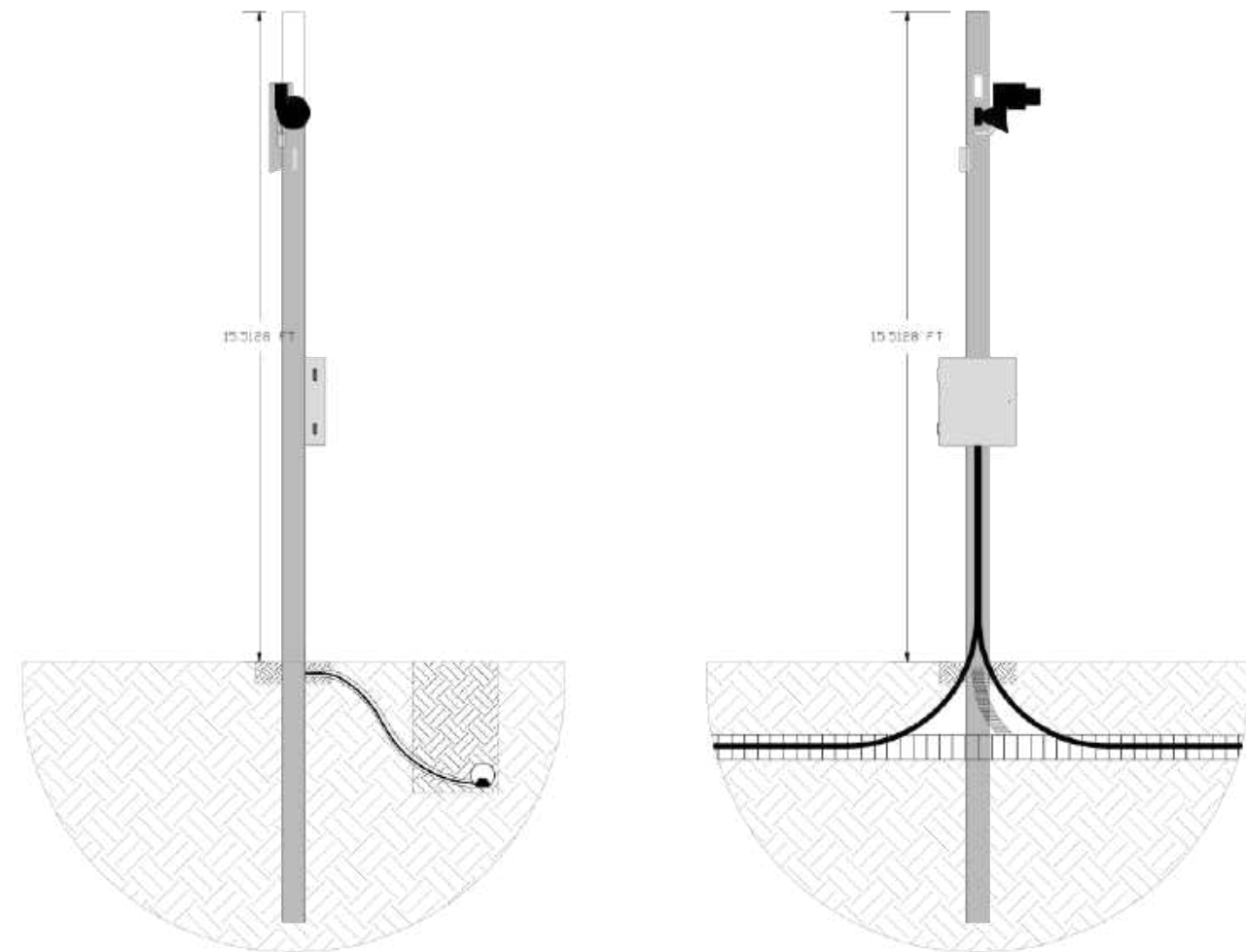
SPARE PART CONTAINER (BY OTHERS)
NOT TO SCALE



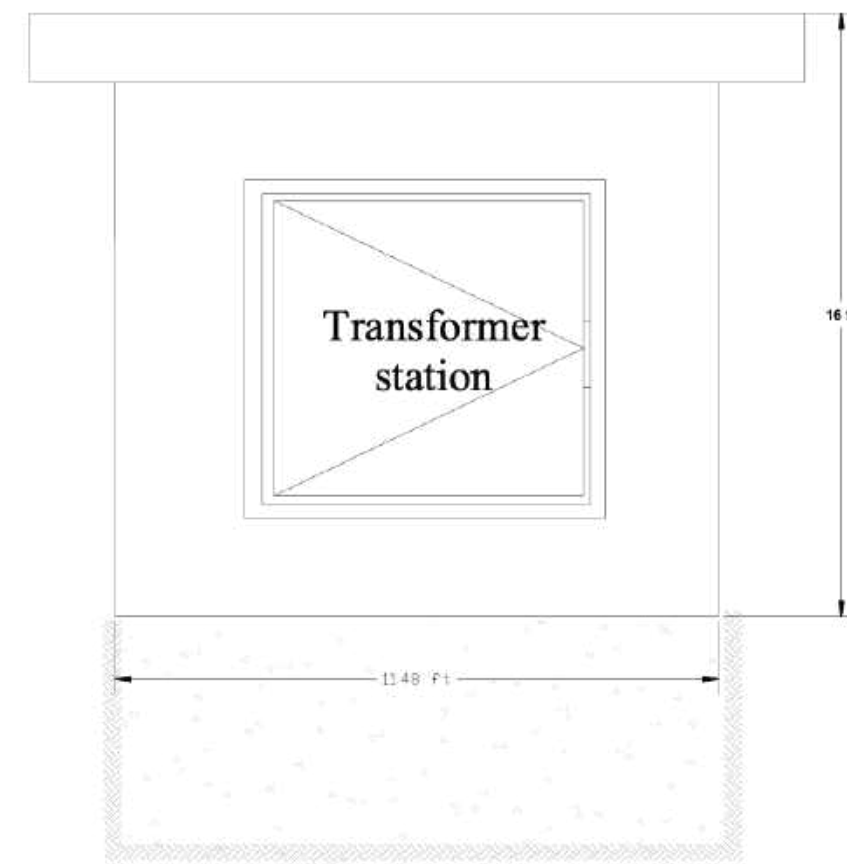
DC TO DC CONVERTER (BY OTHERS)
NOT TO SCALE



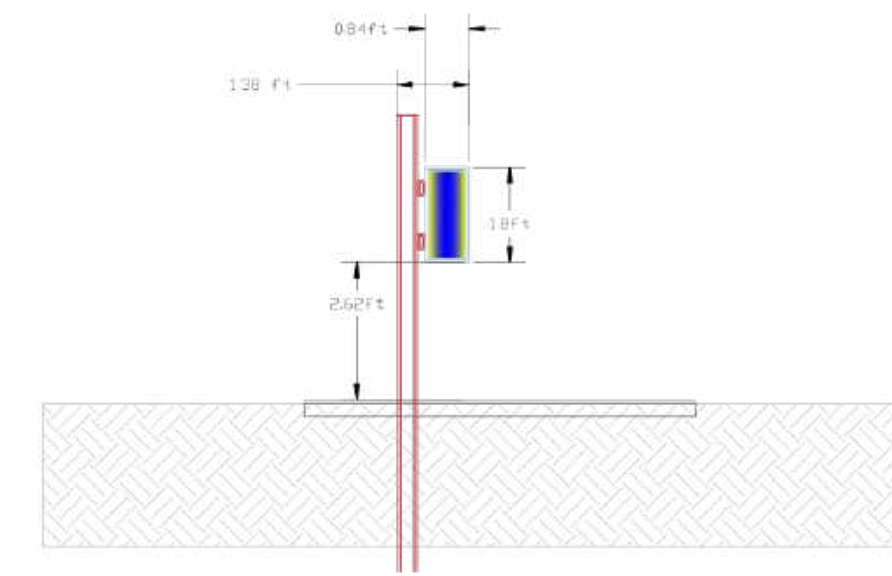
PV TRACKER SYSTEM (BY OTHERS)
NOT TO SCALE



CCTV POLE DETAIL (BY OTHERS)
NOT TO SCALE



TRANSFORMER STATION (BY OTHERS)
NOT TO SCALE

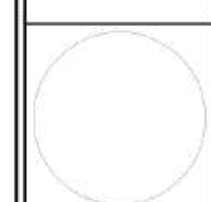


INVERTER ON POLES (BY OTHERS)
NOT TO SCALE

PROPOSED SITE PLAN FOR
SOLAR 1&2
APPLICANT:

TAX MAP No. FEBRUARY 6, 2019

NO. 1	DATE
NO. 2	DATE
NO. 3	DATE
NO. 4	DATE
NO. 5	DATE
NO. 6	DATE
NO. 7	DATE
NO. 8	DATE
NO. 9	DATE
NO. 10	DATE
NO. 11	DATE
NO. 12	DATE
NO. 13	DATE
NO. 14	DATE
NO. 15	DATE
NO. 16	DATE
NO. 17	DATE
NO. 18	DATE
NO. 19	DATE
NO. 20	DATE



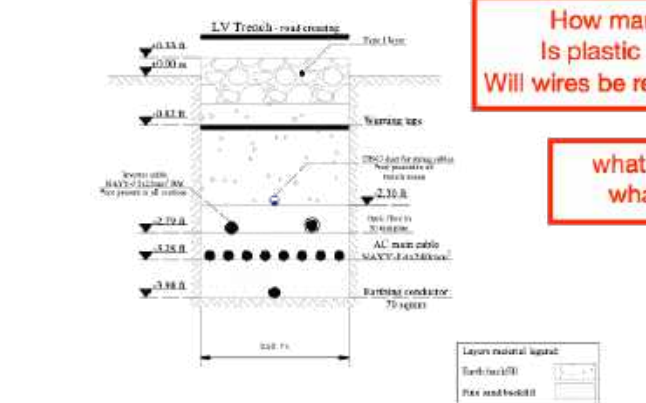
SCALE: N.T.S.

NOT FOR CONSTRUCTION

DETAILS BY OTHERS

SHEET

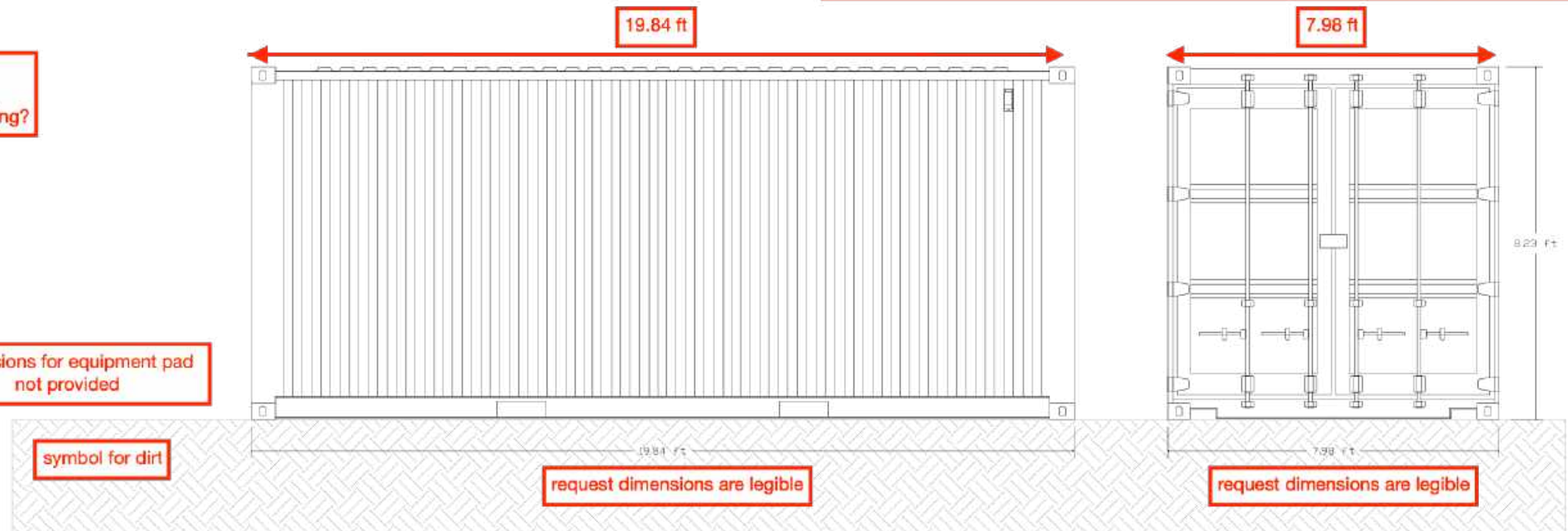
HOW TO REVIEW A SOLAR APPLICATION TYPICAL QUESTIONS AND COMMENTS
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TRENCH CROSS SECTION (BY OTHERS)
 NOT TO SCALE

How many miles of wire will be buried?
 Is plastic insulation coating free of PFAS?
 Will wires be removed at time of decommissioning?

what is depth of water table?
 what is depth of bedrock?



SPARE PART CONTAINER (BY OTHERS)
 NOT TO SCALE

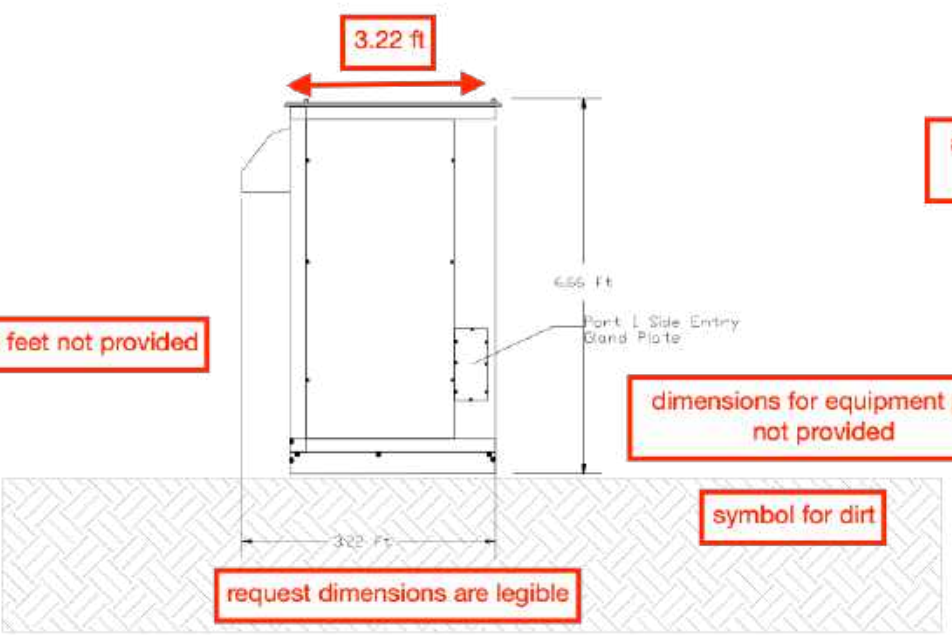
dimensions for equipment pad not provided

symbol for dirt

request dimensions are legible

request dimensions are legible

length in feet not provided



DC TO DC CONVERTER (BY OTHERS)
 NOT TO SCALE

dimensions for equipment pad not provided

symbol for dirt

request dimensions are legible

what is purpose of DC to DC converter?
 is it required for battery energy storage system?

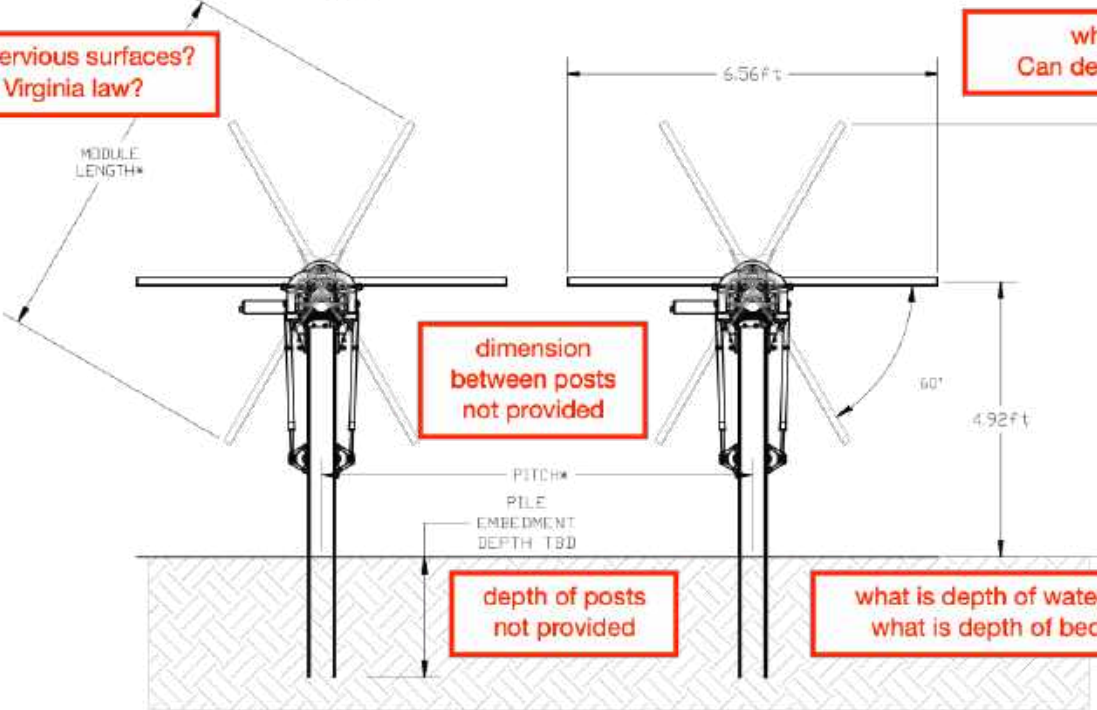
What is local law for height within the fence?
 What is local law for fence height?
 Are CCTV poles compliant?

How is CCTV monitored?
 Is CCTV typical for solar facilities?
 Is CCTV installed on any of the developers solar facilities?

How many miles of wire will be buried?
 Is plastic insulation coating free of PFAS?
 Will wires be removed at time of decommissioning?

CCTV POLE DETAIL (BY OTHERS)
 NOT TO SCALE

are solar panels considered impervious surfaces?
 has town reviewed State of Virginia law?



PV TRACKER SYSTEM (BY OTHERS)
 NOT TO SCALE

dimension between posts not provided

depth of posts not provided

what is depth of water table?
 what is depth of bedrock?

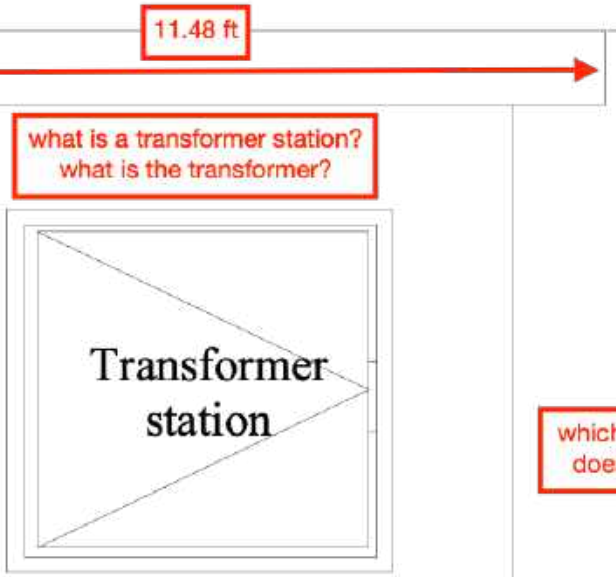
what panel height does local law specify?
 Can developer change panel height after approval?

EQUIPMENT NOT PROVIDED
 Battery Energy Storage System
 Tracking Motors
 Tracking Gears
 Transformer
 Control Gear
 Major Switch Gear
 Utility Power Poles

How many units of each piece of equipment?
 Is all equipment shown on the site plan?
 Are specification sheets, including decibel levels, provided for each piece of equipment?

Number of equipment pads is not provided.
 Are all equipment pads shown on the site plan?

length in feet not provided



TRANSFORMER STATION (BY OTHERS)
 NOT TO SCALE

what is a transformer station?
 what is the transformer?

does equipment pad provide an apron?

request dimensions are legible

symbol for concrete

dimensions for equipment pad not provided

which piece of equipment is 16 feet in height?
 does this include height of equipment pad?

what is this?
 what are the dimensions?

depth of posts not provided

what is depth of water table?
 what is depth of bedrock?

INVERTER ON POLES (BY OTHERS)
 NOT TO SCALE

engineer stamp not provided

length in feet not provided

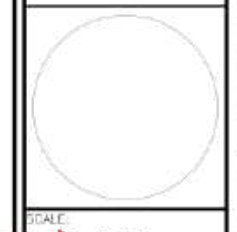
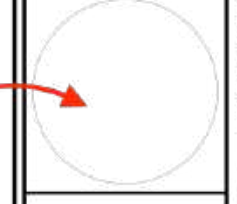
dimensions for equipment pad not provided

symbol for dirt

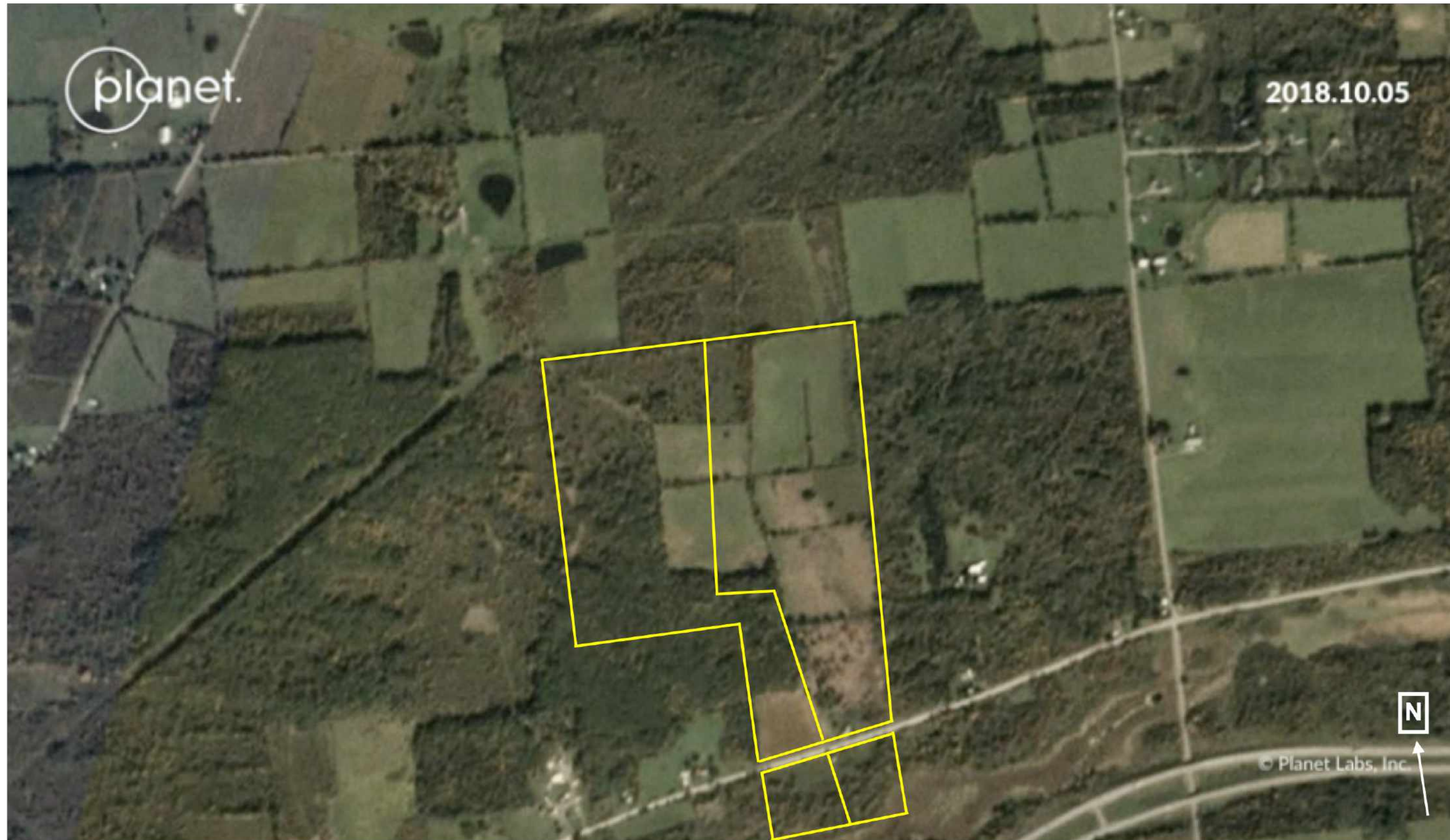
scale not provided

PROPOSED SITE PLAN FOR
SOLAR 1&2
 APPLICANT: _____

REVISION	DATE



SCALE: N.T.S.
 NOT FOR CONSTRUCTION
 SHEET TITLE: DETAILS BY OTHERS
 SHEET: 10 of 10



████████ Solar 1, LLC and █████████ Solar 2, LLC are outlined in yellow.
The western portion of the site reflects vegetation, much of which is mature growth forest.
State Environmental Quality Review Act Part 617.3(a) "Project sponsor may not commence any physical alteration to an action until SEQRA has been complied with."
SEQRA began July 2018 and ended July 2019.
Compare tree lines to June 9, 2019 Planet.com image, May 7, 2018 site plan and March 11, 2019 site plan.
Planet.com satellite image from October 5, 2018. Screenshot captured August 23, 2019



████████ Solar 1, LLC and ██████ Solar 2, LLC are outlined in yellow.
The western portion of the site reflects removal of vegetation, much of which is mature growth forest. Neighbors reported clear cutting and logging trucks in March and April 2019.
State Environmental Quality Review Act Part 617.3(a) "Project sponsor may not commence any physical alteration to an action until SEQRA has been complied with."
SEQRA began July 2018 and ended July 2019.
Compare tree lines to June 9, 2019 Planet.com image, May 7, 2018 site plan and March 11, 2019 site plan.
Planet.com satellite image from October 5, 2018. Screenshot captured August 23, 2019

Street Address 1 Street Address 2
City State/Province/Country ZIP/PostalCode

Relationship: Executive Officer Director Promoter

Clarification of Response (if Necessary):

MANAGER OF GENERAL PARTNER OF ISSUER, [REDACTED]

4. Industry Group

- Agriculture
Banking & Financial Services
Commercial Banking
Insurance
Investing
Investment Banking
Pooled Investment Fund
Health Care
Biotechnology
Health Insurance
Hospitals & Physicians
Pharmaceuticals
Other Health Care
Manufacturing
Real Estate
Commercial
Construction
REITS & Finance
Residential
Other Real Estate
Retailing
Restaurants
Technology
Computers
Telecommunications
Other Technology
Travel
Airlines & Airports
Lodging & Conventions
Tourism & Travel Services
Other Travel
Other
Is the issuer registered as an investment company under the Investment Company Act of 1940?
Yes No
Other Banking & Financial Services
Business Services
Energy
Coal Mining
Electric Utilities
Energy Conservation
Environmental Services
Oil & Gas
Other Energy

5. Issuer Size

- Revenue Range OR Aggregate Net Asset Value Range
No Revenues No Aggregate Net Asset Value
\$1 - \$1,000,000 \$1 - \$5,000,000
\$1,000,001 - \$5,000,000 \$5,000,001 - \$25,000,000
\$5,000,001 - \$25,000,000 \$25,000,001 - \$50,000,000
\$25,000,001 - \$100,000,000 \$50,000,001 - \$100,000,000
Over \$100,000,000 Over \$100,000,000

Ask Questions

<https://duanesburgneighbors.com/category/solar/how-to/>

Questions to ask the energy developer, town, planning and zoning board when reviewing an energy application. UPDATED JULY 17, 2022.

Solar, wind and battery energy projects are complex. Ask questions!

Download and print [the list of questions as a PDF](#).

Then use the [spread sheet](#) to track the answers.

PROJECT

What is the project's legal name? LLC?

What is the street address of the project?

What tax ID Numbers for all involved parcels?

What is the project nameplate capacity in megawatt alternating current (MWac)?

What is the project solar array capacity in megawatt direct current (MWdc)?

What is the project battery storage in megawatt hours (MWh)?

What is the project's capacity factor?

Who is the asset owner?

TOWN

What is town hall address, website, are files online or paper?

Are the minutes posted online the official legal minutes or does a Freedom of Information need to be filed?

Meeting dates?

How many days before a meeting are documents required to be filed?

Who is on the board? Are there conflicts of interest? Should members recuse themselves?

Who is town attorney?

What is their experience with renewable energy?

Should the town hire an independent third party legal team to review the application?

What is town's history with lawsuits?

Does the State Comptroller have any audit reports on the town's finances?

Does the town have an Ethics Board? Who are members? Is there a history of complaints against town board or planning board?

Review process – does project present to town board, planning board, zoning board?

How can you obtain Freedom of Information documents?

Do you have a copy of the full size set of site plans, application, stormwater plan, decommissioning plan, and environmental report?

Require that the application is provided online allowing citizens full and free access to all documents.

Are the town records organized? Are application documents dated, stapled, and in order?

Do you have a copy of the zoning law? Solar law? Wind Law? Battery Energy Storage Law?

When were solar and wind laws adopted? Who sat on the committees?

Is there a concerned citizen group? What is their website?

Does the town have a code of conduct or ethics policy?

Make a Spreadsheet

<https://duanesburgneighbors.com/category/solar/how-to/>

DRAFT How TO: Review Solar Facility Spreadsheet DRAFT

	NAME, LLC	NAME 2, LLC	QUESTIONS and CLARIFICATIONS
UPDATED	DATE	DATE	
PROJECT			
Name			
State ID Number			
Service Process			
Incorporation Date			
Last Date of Filing			
Next Statement Due Date			
Entity Status			
APPLICANT			
Name			
Website			
Address			
Phone			
Registered			
Home Office			
Branch Office			
State ID Number			
Service Process			
Incorporation Date			
Foreign Formation Date			
Next Statement Due Date			
Filing History			
Additional Company Information			
Additional Company Information			
Officer			
Officer			
Public Relations			
Alternate Address			
Franchise			How many MW required by the state Public Service Commission?
APPLICANT ATTORNEY			
Name			
Website			
Address			
Phone			
Representative			
Representative			
LAND OWNER			
Name			
Address			
Involved Parcel Tax ID			
Acres			
Agricultural District			

Lynne Bruning

lynnebruning@gmail.com

<https://duanesburgneighbors.com/category/solar/how-to/>

twitter: lbruning2