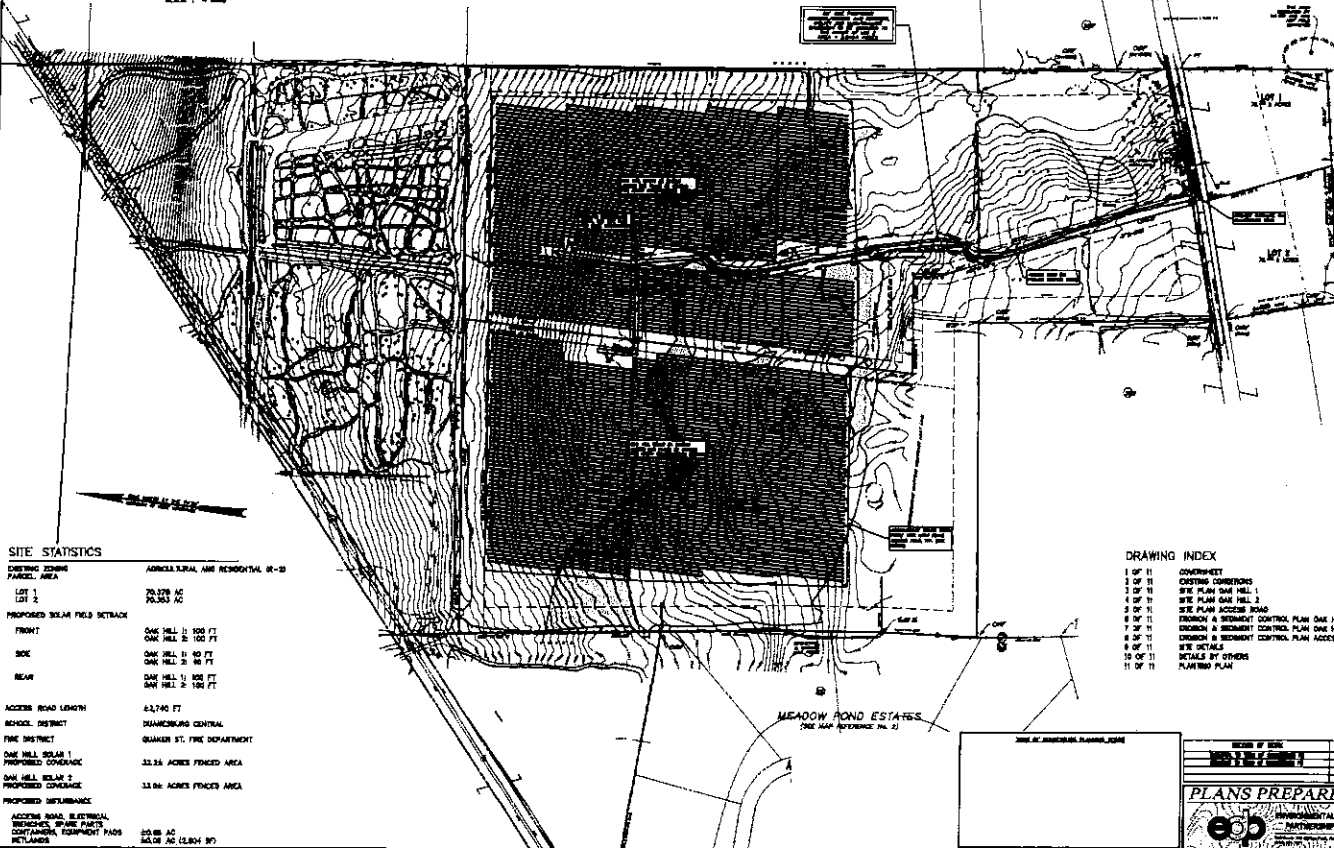
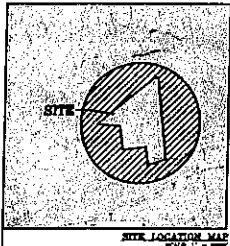


# **SCHEDULE A**

# PROPOSED SITE PLAN FOR OAK HILL SOLAR 1&2

APPLICANT:  
OAK HILL SOLAR 1, LLC & OAK HILL SOLAR 2, LLC  
13950 DUANESBURG ROAD  
TOWN OF DUANESBURG, SCHENECTADY COUNTY, NEW YORK



## SITE STATISTICS

EXISTING ZONING	AGRICULTURAL AND RESIDENTIAL (R-2)
PARCEL AREA	
LOT 1	20.128 AC
LOT 2	20.303 AC
PROPOSED SOLAR FIELD SETBACK	
FRONT	OAK HILL 1: 100 FT OAK HILL 2: 100 FT
SIDE	OAK HILL 1: 50 FT OAK HILL 2: 50 FT
REAR	OAK HILL 1: 100 FT OAK HILL 2: 100 FT
ACCESS ROAD LENGTH	6,240 FT
SCHOOL DISTRICT	DUANESBURG CENTRAL
FIRE DISTRICT	QUAKER ST. FIRE DEPARTMENT
OAK HILL SOLAR 1	
PROPOSED COVERAGE	33.34 ACRES FINCED AREA
OAK HILL SOLAR 2	
PROPOSED COVERAGE	33.04 ACRES FINCED AREA
PROPOSED INFRASTRUCTURE	
ACCESS ROAD, ELECTRICAL	
TRUCKS, SPARE PARTS	10.00 AC
OUTLANDS, EQUIPMENT PARK	
WETLANDS	34.00 AC (CLASH 97)

## DRAWING INDEX

1 OF 11	COVER SHEET
2 OF 11	EXISTING CONDITIONS
3 OF 11	SITE PLAN OAK HILL 1
4 OF 11	SITE PLAN OAK HILL 2
5 OF 11	SITE PLAN ACCESS ROAD
6 OF 11	EROSION & SEDIMENT CONTROL PLAN OAK HILL 1
7 OF 11	EROSION & SEDIMENT CONTROL PLAN OAK HILL 2
8 OF 11	EROSION & SEDIMENT CONTROL PLAN ACCESS ROAD
9 OF 11	SITE DETAILS
10 OF 11	DETAILS BY OTHERS
11 OF 11	PLANNING PLAN

MEADOW POND ESTATES  
(SEE MAP REFERENCE NO. 2)

3000 AC. AGRICULTURAL PLANNING, 2000

PLANS PREPARED BY

**Environmental Design**  
PARKTOWN, LLC

1 of 11

PROPOSED SITE PLAN FOR  
**OAK HILL SOLAR 1&2**  
APPLICANT: OAK HILL SOLAR 1, LLC & OAK HILL SOLAR 2, LLC  
TOWN OF DUANESBURG, SCHENECTADY COUNTY, NEW YORK

DATE: 11/11/11  
DRAWN BY: [Name]  
CHECKED BY: [Name]  
APPROVED BY: [Name]

N.T.S.  
NOT FOR CONSTRUCTION  
COVER SHEET





## DECOMMISSIONING AGREEMENT

This **DECOMMISSIONING AGREEMENT** (this "Agreement"), dated as of July \_\_\_\_\_, 2020 (the "Effective Date"), is made by and among the **Town of Duanesburg**, a municipal corporation duly established in Schenectady County with a principal place of business located at 5853 Western Turnpike, Duanesburg, NY 12056 (referred to as the "Town"), **Oak Hill Solar 2 LLC**, a limited liability company formed under the laws of the State of New York with principal offices at 1550 Wewatta Street, 4<sup>th</sup> Floor, Denver, CO 80202 (referred to as the "Operator") and Richard Murray, an individual (referred to as the "Landowner"). The Town, the Operator and the Landowner may each be referred to herein as a "Party" and collectively, as the "Parties".

WHEREAS, Operator intends to permit, construct, operate and maintain a solar energy facilities with battery storage with an estimated size of five (5) megawatts of alternating-current (AC) nameplate capacity that will generate electric power (the "Project"), as shown on the Site Plans entitled "Proposed Site Plan for Oak Hill 1 and 2", prepared by Environmental Design Partnership, LLP., last revised September 5, 2019 (hereinafter, the "Site Plans"), copies of which are attached as **Schedule A**, on real property owned by the Landowner and leased to the Operator, and more particularly identified hereto in **Schedule B**, and commonly known as 13686 Duanesburg Road Delanson, NY (Tax Map 74.00-2-5) in the Town of Duanesburg, Schenectady County, New York ("the Properties"); and

WHEREAS, on September 5, 2019, based on the Operator's application, and after duly noticed public hearing(s), the Town, by its Planning Board, granted conditional special use and site plan approval (hereinafter "Approval Resolution") for the Project<sup>1</sup>, on condition that, among other things, the applicant submit a final decommissioning plan and decommissioning security and that the applicant provided the Town with access to funds for the Decommissioning (as defined below) of the Project; and

WHEREAS, a copy of said Approval Resolution is attached hereto as **Schedule C**; and

WHEREAS, the Town has enacted Local Law 1-2016, which provides that Decommissioning must occur pursuant to a decommissioning plan, among other requirements (the "Local Law"); and

WHEREAS, the Parties now desire to enter into this Agreement to set forth the "Decommissioning Plan" for the Oak Hill 2 Solar Project attached hereto as **Schedule D**, as required by the Local Law and the Town Planning Board and to agree upon terms and conditions of the financial surety provided to the Town for the purpose of Decommissioning the Project;

NOW, THEREFORE, in consideration of the promises herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

---

<sup>1</sup> The Oak Hill Solar 1 project was also approved at this meeting.

1. Prior to the issuance of a building permit for the Project (the "Start Date"), the Operator shall post a letter of credit or bond, in form and substance reasonably satisfactory to the Town or deposit cash in escrow with the Town (the "Security") in the amount of ~~\$211,381~~ for the benefit of the Town. In the event Operator elects to deposit cash in escrow with the Town as the Security, the Parties shall execute the Decommissioning Escrow Agreement attached hereto as Schedule E. The Parties agree that the Security shall be used solely to pay for any Decommissioning costs of the Project. At least 60 days prior to the end of each successive five (5) -year period after the execution of this Agreement, the Operator shall provide the Town with an updated decommissioning plan setting forth an updated estimate for the Decommissioning of the Project, which updated estimate shall be subject to review and approval by the Town, which approval shall not unreasonably be withheld, conditioned or delayed. Within 30 days after the Town's approval of the updated estimate, the Security shall be changed to reflect the updated estimate approved by the Town for such Decommissioning of the Project. Any such updated and approved decommissioning plan shall be deemed the "Decommissioning Plan" hereunder. For avoidance of doubt, the updated estimate will use the estimated decommissioning cost as a template in the updated decommissioning plan. Operator shall have no further payment obligations in connection with Decommissioning during the operation of the Project provided that Operator complies with posting the Security in accordance with this Agreement. Nonetheless, in the event the actual Decommissioning costs incurred by the Town exceed the amount covered by the Security, Operator or its successor in title to the Project shall be responsible for reimbursing the Town for any and all such excess costs, provided that the Town delivers to the Operator a reasonable written record of such costs.

2. "Decommissioning" as used in this Agreement shall mean the removal of all collectors, mounts and/or associated equipment and facilities that were installed in connection with the Project and the reasonable restoration of the Properties to either of the following, at the Operator's option ("Decommissioning"): (i) the condition the Properties was in prior to the development, construction and operation of the Project, including restoration, regrading, and reseeding, or (ii) the condition designed by a subsequent Operator or developer as agreed upon with the Town. Costs of Decommissioning under this Agreement include labor, professional services and any other costs reasonably associated with such Decommissioning.

3. Each of the circumstances described in clauses (a) and (b) below shall be a "Triggering Event" for purposes hereof:

- (a) construction of the Project is not completed within eighteen (18) months of receiving a building permit, other than as a result of Force Majeure (defined below), or
- (b) the Project, after commencing commercial operation, "ceases to be operational" (as defined below) for more than twelve (12) consecutive months.

In the event the Operator fails to initiate Decommissioning of the Project within ninety (90) days of a Triggering Event (the "Decomm Deadline"), or Operator fails to provide a reasonable explanation for the delay in the construction or cessation of operation of the Project by the Decomm Deadline, then, the Town may issue a notice to Operator (the "Town Decommissioning

Notice”) and Operator shall have thirty (30) days to respond to the Town Decommissioning Notice with a reasonable explanation for the delay in the construction or the cessation of operation of the Project. In the event that (A) the Operator does not respond to the Town Decommissioning Notice in accordance with the forgoing sentence, or (B) Decommissioning is not completed, within six (6) months after a Triggering Event, then the Town shall have the right, but not the obligation, to commence Decommissioning of the Project through use of the Security.

For purposes of this Agreement, “Force Majeure” means any circumstance not within the reasonable control of the Party affected, but only if and to the extent that: (i) such event is not due to the affected Party’s negligence or willful misconduct; (ii) such event is not the result of any failure of the affected Party to perform any of its obligations hereunder; and (iii) the affected Party has given the other Party prompt notice describing such event. Subject to the foregoing conditions, Force Majeure Events include, without limitation: acts of God; war; acts of the public enemy; terrorism; riot; civil commotion; sabotage; fire; floods; landslide; volcanic eruption; epidemics; global pandemics; quarantine restrictions; embargos; and governmental authority decreed official state of emergency.

For the purposes of this Agreement, “ceases to be operational” shall mean no generation of electricity, other than due to Force Majeure, repairs, upgrades, permitting matters, casualty, or other issue regarding the Project that Operator is in good faith attempting to remedy

4. The parties hereto acknowledge that the Decommissioning is intended to occur outside the winter months. Upon removal of the infrastructure and disposal of the components of the Project from the Properties, and restoration of the Properties to its pre-project state, or to the condition designed by a subsequent Operator or developer as agreed upon with the Town. Upon completion of Decommissioning, the Operator shall have no further obligation to the Town provided that the costs of the Decommissioning has been paid for in full by the Security or otherwise by or on behalf of the Operator.

5. In the event that the Town elects to complete Decommissioning under Section 3, Operator (or its successors or assigns) agrees to give the Town the right of reasonable access to the Properties to Decommission the Project. In the event the leases between Landowner and Operator are terminated or Landowner otherwise has control over the Properties at the time of the Decommissioning, Landowner (or its successors or assigns) agrees to give the Town the right of reasonable access to the Properties in order to perform Decommissioning in accordance with this Agreement.

6. This Agreement may not be amended or modified except by written instrument signed and delivered by the Parties. This Agreement is binding upon and shall inure to the benefit of the Parties and their respective successors and assigns. In accordance with the provisions of section 109 of the New York General Municipal Law, Operator is prohibited from assigning, transferring, conveying, subletting or otherwise disposing of this Agreement, or of any right, title or interest in this Agreement, or its power to execute this Agreement, to any other person or corporation without the previous consent in writing of the Town, which consent shall not be unreasonably withheld, conditioned or delayed.

7. Operator, or the operations and maintenance provider of the Operator, shall provide the Town with proof that it either carries sufficient workers' compensation insurance coverage for any employees in New York involved in the Decommissioning as required under applicable law or that it is exempt from such requirement.

8. The Parties agree to execute and deliver any additional documents or take any further action as reasonably requested by another Party to effectuate the purpose of this Agreement.

9. The Parties agree that this Agreement shall be construed and enforced in accordance with and governed by the laws of New York, without regard to its conflict of laws principles. The Parties hereby consent to exclusive venue and jurisdiction in the state and federal courts located in the State of New York. **EACH PARTY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY WITH REGARD TO ANY DISPUTE RELATED HERETO.** If one or more of the provisions hereof are deemed by a court of competent jurisdiction to be unenforceable, in whole or in part, the scope of such provisions shall be reduced to the extent necessary to make them enforceable or, if such reduction is not possible for any reason, such provisions shall be severed from this Agreement entirely, without effect upon the balance hereof.

10. This Agreement may be executed through separate signature pages or in any number of counterparts, and each of such counterparts shall, for all purposes, constitute one agreement binding on all Parties.

11. Any and all notices required to be sent by a Party to another Party hereunder shall be addressed as follows by certified mail or mail courier service:

**To the Town:**

Town of Duanesburg  
Attn: Supervisor  
5853 Western Turnpike  
Duanesburg, NY 12056

**With a copy to:**

Whiteman Osterman & Hanna LLP  
Attn: Teresa Bakner, Esq.  
One Commerce Plaza  
Albany, New York 12260

**To Operator:**

Oak Hill Solar 2 LLC  
c/o AMP Solar Development Inc.  
1550 Wewatta St., 4<sup>th</sup> Floor  
Denver, CO 80202



**With an electronic copy to:**

jdonald@amp.energy

**To Landowner:**

Richard Murray 1206 Oak Hill Rd.  
Esperance, NY 12066

**[Signature Page Follows]**

**IN WITNESS WHEREOF**, the undersigned, intending to be legally bound hereby,  
have duly executed this Agreement as of the date first written above.

**TOWN:**

Town of Duanesburg

By: \_\_\_\_\_  
Name: Roger Tidball  
Title: Town Supervisor

**OPERATOR:**

Oak Hill Solar 2 LLC

By: AMP Solar Development Inc.  
Its: Manager

By: \_\_\_\_\_  
Name: David Rogers  
Title: President

**LANDOWNER:**

By: \_\_\_\_\_  
Name:  
Title:

**Schedule A**

**Site Plan**

**[to be attached]**

**Schedule B**  
**Description of Properties**  
**[to be attached]**

**Schedule C**

**Approval Resolution**

**[to be attached]**

**Schedule D**  
**Decommissioning Plan**  
**[to be attached]**

**Schedule E**  
**Form of Decommissioning Escrow Agreement**

# **SCHEDULE A**



PROPOSED SITE PLAN FOR

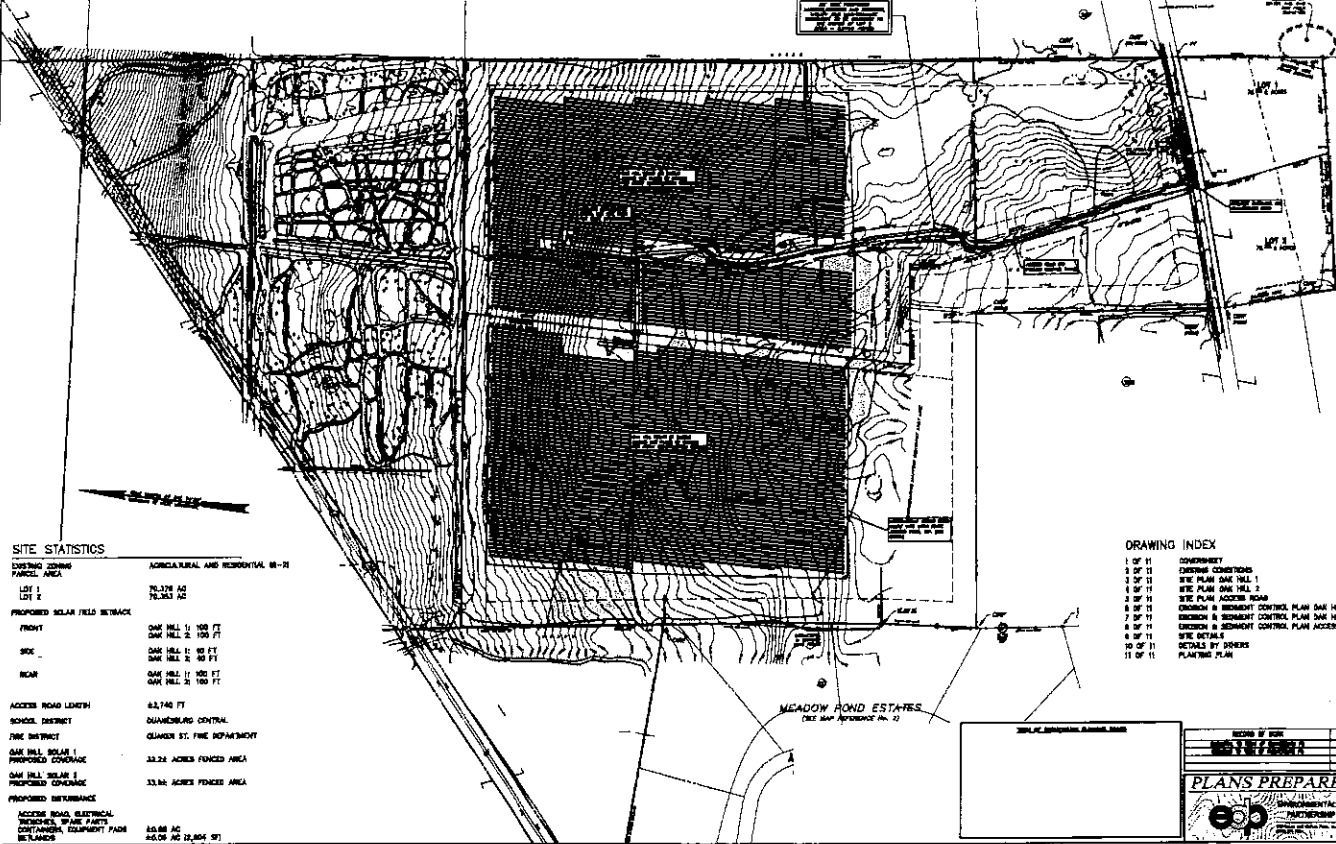
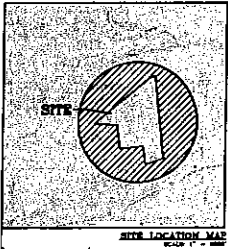
# OAK HILL SOLAR 1&2

APPLICANT:

OAK HILL SOLAR 1, LLC & OAK HILL SOLAR 2, LLC

13950 DUANESBURG ROAD

TOWN OF DUANESBURG, SCHENECTADY COUNTY, NEW YORK



## SITE STATISTICS

EXISTING ZONING	AGRICULTURAL AND RESIDENTIAL, RR-2
PARCEL AREA	
LOT 1	76,376 AC
LOT 2	76,363 AC
PROPOSED SOLAR FIELD ENTRANCE	
FRONT	OAK HILL 1: 100 FT
	OAK HILL 2: 100 FT
SIDE	OAK HILL 1: 80 FT
	OAK HILL 2: 80 FT
REAR	OAK HILL 1: 100 FT
	OAK HILL 2: 100 FT
ACCESS ROAD LENGTH	63,740 FT
SCHOOL DISTRICT	DUANESBURG CENTRAL
FIRE DISTRICT	QUAKER ST. FIRE DEPARTMENT
OAK HILL SOLAR 1	
PROPOSED COVERAGE	33.24 ACRES FENCED AREA
OAK HILL SOLAR 2	
PROPOSED COVERAGE	33.96 ACRES FENCED AREA
PROPOSED DISTURBANCE	
ACCESS ROAD, ELECTRICAL	
WIRING, SPARE PARTS	65.88 AC
CONTAINERS, EQUIPMENT PADS	65.06 AC (2,804 SF)
BEYONDS	

## DRAWING INDEX

- 1 OF 11 COVER SHEET
- 2 OF 11 EXISTING CONDITIONS
- 3 OF 11 SITE PLAN OAK HILL 1
- 4 OF 11 SITE PLAN OAK HILL 2
- 5 OF 11 SITE PLAN ACCESS ROAD
- 6 OF 11 EROSION & SEDIMENT CONTROL PLAN OAK HILL 1
- 7 OF 11 EROSION & SEDIMENT CONTROL PLAN OAK HILL 2
- 8 OF 11 EROSION & SEDIMENT CONTROL PLAN ACCESS ROAD
- 9 OF 11 SITE DETAILS
- 10 OF 11 DETAILS BY OTHERS
- 11 OF 11 PLANTING PLAN

MEADOW POND ESTATES  
(SEE MAP REFERENCE No. 1)



PLANS PREPARED BY:

**ecp** ENVIRONMENTAL CONSULTING PARTNERSHIP, LLP

10100 ROUTE 100  
SUITE 200  
DUANESBURG, NY 12158  
TEL: 518.784.1234  
FAX: 518.784.1235  
WWW.ECP-LLP.COM

PROPOSED SITE PLAN FOR  
**OAK HILL SOLAR 1&2**  
APPLICANT: OAK HILL SOLAR 1, LLC & OAK HILL SOLAR 2, LLC  
13950 DUANESBURG ROAD  
TOWN OF DUANESBURG, SCHENECTADY COUNTY, NEW YORK

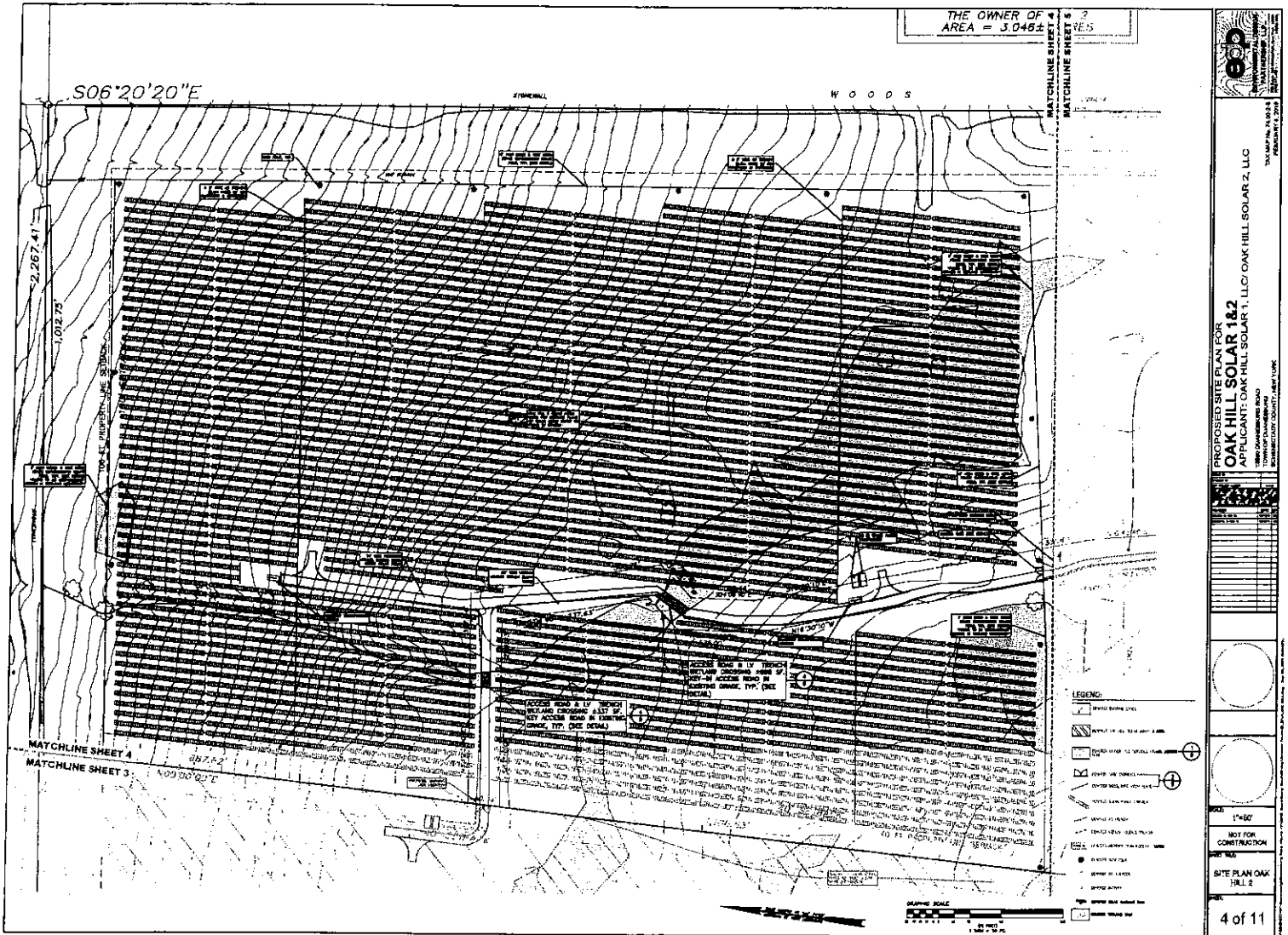
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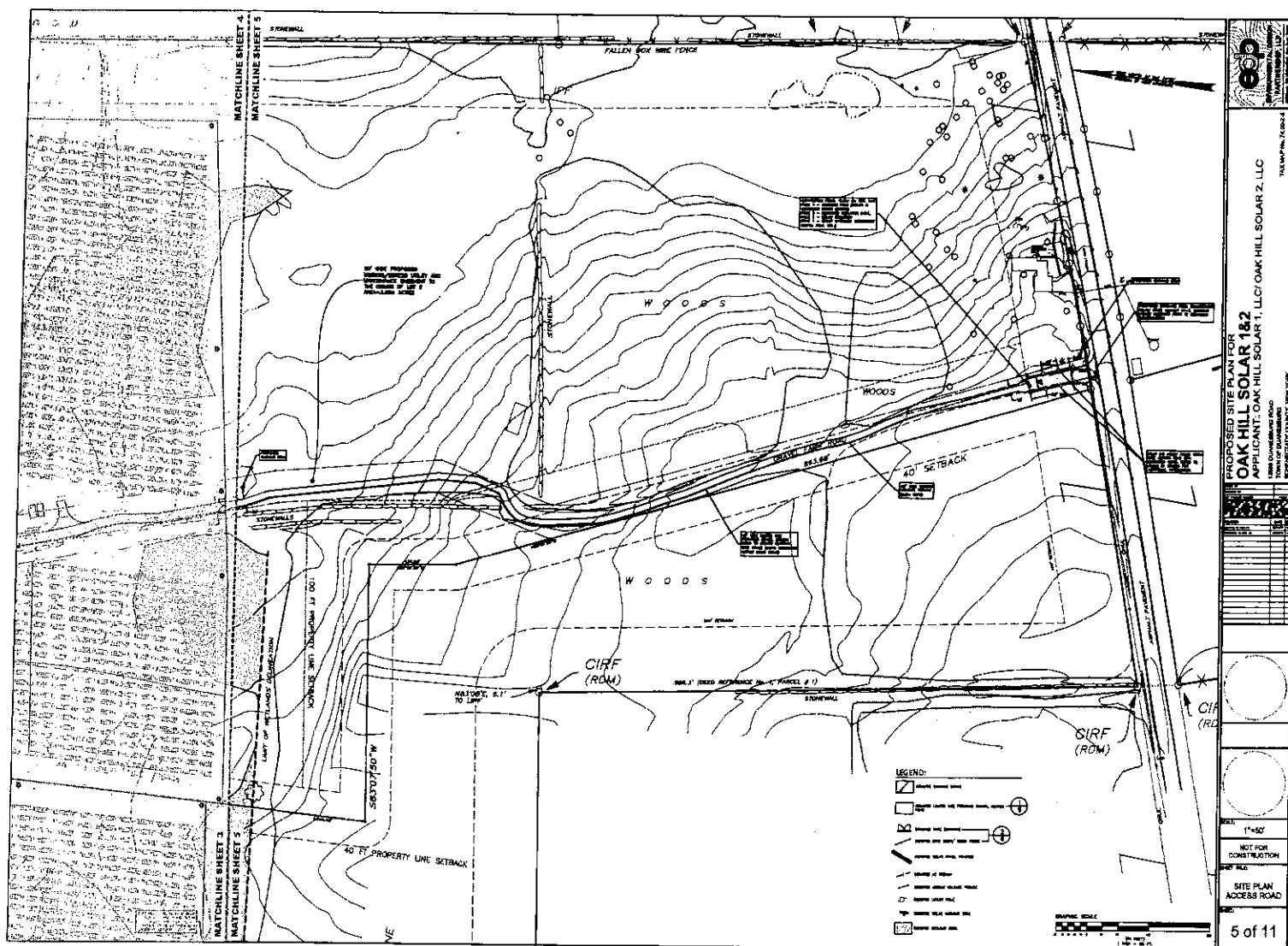
NOT FOR CONSTRUCTION

COVER SHEET

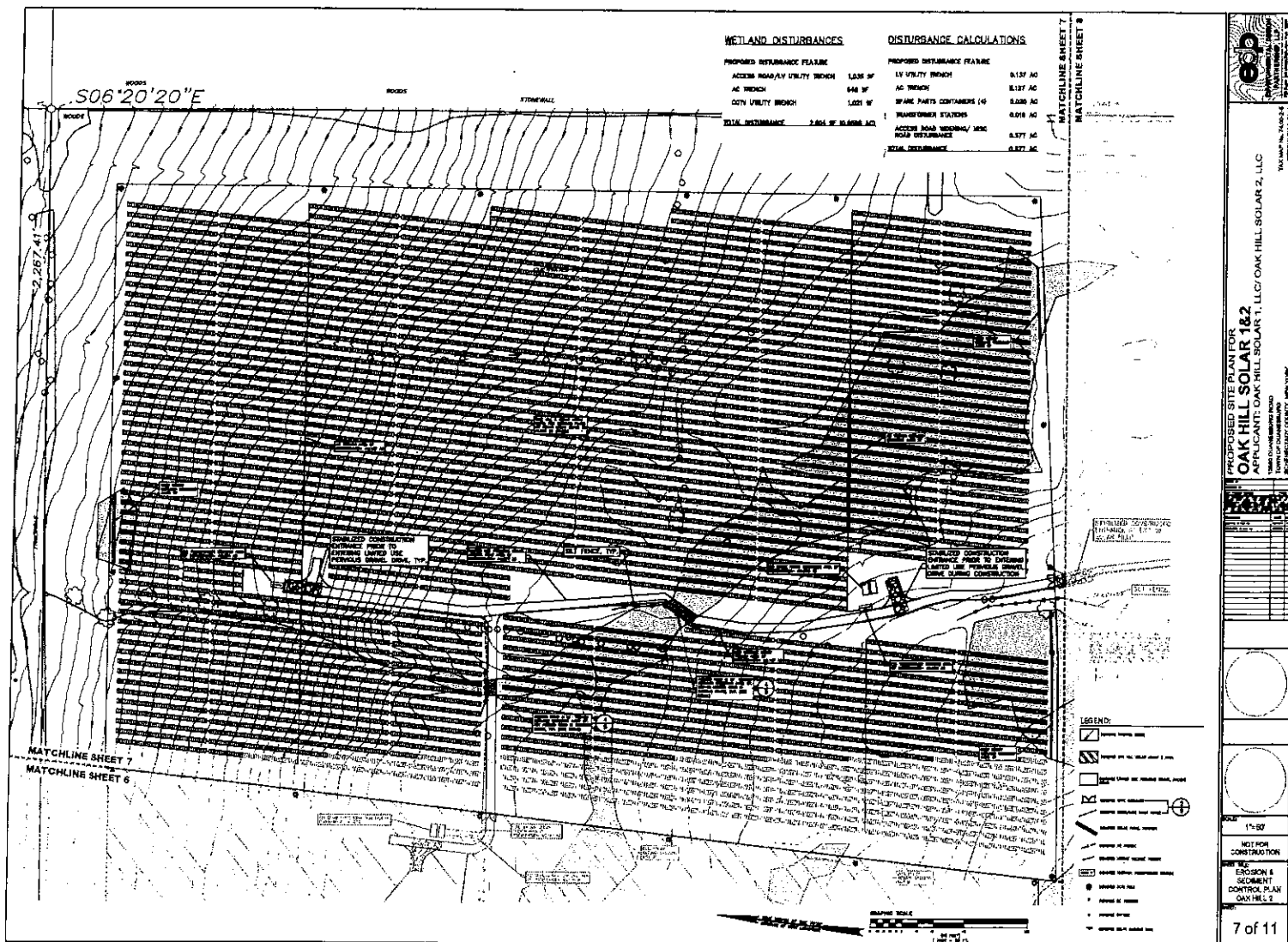
1 of 11













# **SCHEDULE B**





**ENVIRONMENTAL DESIGN  
PARTNERSHIP, LLP.**  
Shaping the physical environment

900 Route 146 Clifton Park, NY 12065  
(P) 518.371.7621 (F) 518.371.9540 edplp.com

**SUGGESTED DESCRIPTION  
LEASE PARCEL TO BE LEASED TO OAK HILL SOLAR 1, LLC  
WITHIN A PORTION OF LOT 2 OF LANDS OF RICHARD B. MURRAY  
TOWN OF DUANESBURG, NY**

LEASE PARCEL THROUGH ALL THAT CERTAIN TRACT, PIECE OR PARCEL OF LAND SITUATE in the Town of Duanesburg, County of Schenectady, State of New York lying north of the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) and within a portion of Lot 2, said lot as shown on a map entitled "Survey and Minor Subdivision of Lands of Richard B. Murray", dated July 29, 2019 as prepared by The Environmental Design Partnership, LLP and filed in the Schenectady County Clerk's Office on October 8, 2019 in Plat Cabinet "P" as Map No. 39 (Doc No. 2019-39) and being further bounded and described as follows:

**Commencing** at the point of intersection of the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) with the common division line of Lot 1 to the east and Lot 2 to the west as shown on said map;

*Thence* from said *Point of Commencement* along said common division line the following four (4) courses and distances:

- 1) North 22 deg. 01 min. 20 sec. West, 1,048.32 feet to a point;
- 2) North 07 deg. 06 min. 20 sec. West, 137.50 feet to a point;
- 3) South 83 deg. 07 min. 50 sec. West, 399.88 feet to a point;
- 4) North 00 deg. 00 min. 00 sec. East, 253.78 feet to the **Point of Beginning** of the herein described *lease parcel* of land;

*Thence* from said *Point of Beginning* through said Lot 2 the following four (4) courses and distances:

- 1) South 83 deg. 12 min. 50 sec. West, 883.00 feet to a point;
- 2) North 05 deg. 06 min. 10 sec. West, 890.50 feet to a point;
- 3) North 03 deg. 06 min. 30 sec. West, 590.66 feet to a point;
- 4) North 83 deg. 12 min. 50 sec. East, 995.00 feet to a point in the aforesaid common division line of Lot 1 to the east and Lot 2 to the west as shown on said map;

*Thence* along said common division line, South 00 deg. 00 min. 00 sec. West, 1,490.00 feet to the point or place of beginning of said *lease parcel* and containing 32.104± acres of land.

**ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.**

Shaping the physical environment

900 New York 146 Clifton Park, NY 12065

(P) 518.371.7621 (F) 518.371.9540 edpllp.com

TOGETHER WITH A 50-FOOT WIDE UTILITY & MAINTENANCE, INGRESS/ EGRESS AND REGRESS, EASEMENT THROUGH THAT CERTAIN TRACT, PIECE OR PARCEL OF LAND SITUATE in the Town of Duanesburg, County of Schenectady, State of New York lying along the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) and within a portion of Lot 1, said lot as shown on a map entitled "Survey and Minor Subdivision of Lands of Richard B. Murray", dated July 29, 2019 as prepared by The Environmental Design Partnership, LLP and filed in the Schenectady County Clerk's Office on October 8, 2019 in Plat Cabinet "P" as Map No. 39 (Doc No. 2019-39) and being further bounded and described as follows:

**Beginning** at the point of intersection of the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) with the common division line of Lot 2 to the west and Lot 1 to the east as shown on said map;

*Thence* from said *Point of Beginning* and along said common division line, North 22 deg. 01 min. 20 sec. West, 893.68 feet to a point;

*Thence* through said Lot 1 the following seven (7) courses and distances:

- 1) North 14 deg. 45 min. 20 sec. East, 195.87 feet to a point;
- 2) North 10 deg. 43 min. 40 sec. West, 251.17 feet to a point;
- 3) North 16 deg. 30 min. 10 sec. West, 554.76 feet to a point;
- 4) North 04 deg. 08 min. 40 sec. West, 125.00 feet to a point;
- 5) North 39 deg. 45 min. 00 sec. East, 65.00 feet to a point;
- 6) North 15 deg. 04 min. 40 sec. West, 237.63 feet to a point;
- 7) South 83 deg. 20 min. 00 sec. West, 290.23 feet to a point in said common division line of Lot 2 to the west and Lot 1 to the east;

*Thence* along said common division line, North 00 deg. 00 min. 00 sec. East, 50.34 feet to a point;

*Thence* through said Lot 1 the following eight (8) courses and distances:

- 1) North 83 deg. 20 min. 00 sec. East, 327.54 feet to a point;
- 2) South 15 deg. 04 min. 40 sec. East, 306.71 feet to a point;
- 3) South 39 deg. 45 min. 00 sec. West, 70.78 feet to a point;
- 4) South 04 deg. 08 min. 40 sec. East, 99.44 feet to a point;
- 5) South 16 deg. 30 min. 10 sec. East, 551.87 feet to a point;
- 6) South 10 deg. 43 min. 40 sec. East, 265.00 feet to a point;

**ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.**

Shaping the physical environment

900 New York 146 Clifton Park, NY 12065

(P) 518.371.7621 (F) 518.371.9540 edpllp.com

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7) South 14 deg. 45 min. 20 sec. West, 190.56 feet to a point;

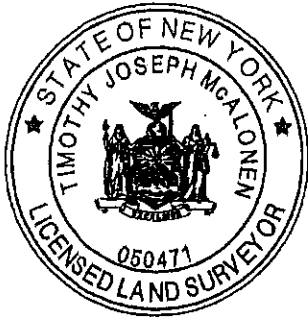
8) South 22 deg. 01 min. 20 sec. East, 881.42 feet to a point in said northerly line of Duanesburg Road;

*Thence* along said northerly line of said Duanesburg Road, South 72 deg. 57 min. 40 sec. West, 50.19 feet to the point or place of beginning of said *easement* and containing 3.046± acres of land.

Said *lease parcel* and *easement* made subject to any and all enforceable covenants, conditions, easements and restrictions of record as they may appear.

December 5, 2019

Prepared By: Timothy J. McAlonen, PLS/ZMB



Oak Hill 1 Lease Parcel Description.dox



**ENVIRONMENTAL DESIGN  
PARTNERSHIP, LLP.**  
Shaping the physical environment

900 Route 146 Clifton Park, NY 12065  
(P) 518.371.7621 (F) 518.371.9540 edpllp.com

**SUGGESTED DESCRIPTION**  
**LEASE PARCEL TO BE LEASED TO OAK HILL SOLAR 2, LLC**  
**WITHIN A PORTION OF LOT 1 OF LANDS OF RICHARD B. MURRAY**  
**TOWN OF DUANESBURG, NY**

LEASE PARCEL THROUGH ALL THAT CERTAIN TRACT, PIECE OR PARCEL OF LAND SITUATE in the Town of Duanesburg, County of Schenectady, State of New York lying north of the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) and within a portion of Lot 1, said lot as shown on a map entitled "Survey and Minor Subdivision of Lands of Richard B. Murray", dated July 29, 2019 as prepared by The Environmental Design Partnership, LLP and filed in the Schenectady County Clerk's Office on October 8, 2019 in Plat Cabinet "P" as Map No. 39 (Doc No. 2019-39) and being further bounded and described as follows:

**Commencing** at the point of intersection of the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) with the common division line of Lot 2 to the west and Lot 1 to the east as shown on said map;

*Thence* from said *Point of Commencement* along said common division line the following four (4) courses and distances:

- 1) North 22 deg. 01 min. 20 sec. West, 1,048.32 feet to a point;
- 2) North 07 deg. 06 min. 20 sec. West, 137.50 feet to a point;
- 3) South 83 deg. 07 min. 50 sec. West, 399.88 feet to a point;
- 4) North 00 deg. 00 min. 00 sec. East, 225.78 feet to the **Point of Beginning** of the herein described *lease parcel* of land;

*Thence* from said *Point of Beginning* continuing along said common division line, North 00 deg. 00 min. 00 sec. East, 1,518.00 feet to the point;

*Thence* through said Lot 1 the following four (4) courses and distances:

- 1) North 83 deg. 12 min. 50 sec. East, 908.00 feet to a point;
- 2) South 05 deg. 58 min. 10 sec. East, 1,476.00 feet to a point;
- 3) South 83 deg. 43 min. 10 sec. West, 724.00 feet to a point;
- 4) South 83 deg. 12 min. 50 sec. West, 343.00 feet to the point or place of beginning of said *lease parcel* and containing 33.891± acres of land.

**ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.**

Shaping the physical environment

900 New York 146 Clifton Park, NY 12065

(P) 518.371.7621 (F) 518.371.8540 edpllp.com

TOGETHER WITH AND SUBJECT TO A 50-FOOT WIDE UTILITY & MAINTENANCE, INGRESS/EGRESS AND REGRESS EASEMENT THROUGH THAT CERTAIN TRACT, PIECE OR PARCEL OF LAND SITUATE in the Town of Duanesburg, County of Schenectady, State of New York lying north of the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) and within a portion of Lot 1, said lot as shown on a map entitled "Survey and Minor Subdivision of Lands of Richard B. Murray", dated July 29, 2019 as prepared by The Environmental Design Partnership, LLP and filed in the Schenectady County Clerk's Office on October 8, 2019 in Plat Cabinet "P" as Map No. 39 (Doc No. 2019-39) and being further bounded and described as follows:

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*Thence* from said *Point of Beginning* and along said common division line, North 22 deg. 01 min. 20 sec. West, 893.68 feet to a point;

*Thence* through said Lot 1 the following seven (7) courses and distances:

- 1) North 14 deg. 45 min. 20 sec. East, 195.87 feet to a point;
- 2) North 10 deg. 43 min. 40 sec. West, 251.17 feet to a point;
- 3) North 16 deg. 30 min. 10 sec. West, 554.76 feet to a point;
- 4) North 04 deg. 08 min. 40 sec. West, 125.00 feet to a point;
- 5) North 39 deg. 45 min. 00 sec. East, 65.00 feet to a point;
- 6) North 15 deg. 04 min. 40 sec. West, 237.63 feet to a point;
- 7) South 83 deg. 20 min. 00 sec. West, 290.23 feet to a point in said common division line of Lot 2 to the west and Lot 1 to the east;

*Thence* along said common division line, North 00 deg. 00 min. 00 sec. East, 50.34 feet to a point;

*Thence* through said Lot 1 the following eight (8) courses and distances:

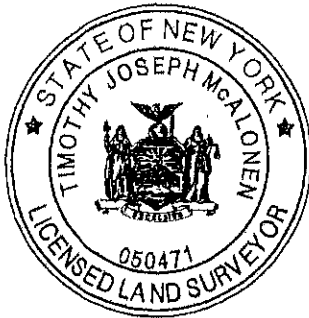
- 1) North 83 deg. 20 min. 00 sec. East, 327.54 feet to a point;
- 2) South 15 deg. 04 min. 40 sec. East, 306.71 feet to a point;
- 3) South 39 deg. 45 min. 00 sec. West, 70.78 feet to a point;
- 4) South 04 deg. 08 min. 40 sec. East, 99.44 feet to a point;
- 5) South 16 deg. 30 min. 10 sec. East, 551.87 feet to a point;
- 6) South 10 deg. 43 min. 40 sec. East, 265.00 feet to a point;

- 7) South 14 deg. 45 min. 20 sec. West, 190.56 feet to a point;  
8) South 22 deg. 01 min. 20 sec. East, 881.42 feet to a point in said northerly line of Duanesburg Road;  
*Thence* along said northerly line of said Duanesburg Road, South 72 deg. 57 min. 40 sec. West, 50.19 feet to the point or place of beginning of said *easement* and containing 3.046± acres of land.

Said *lease parcel* and *easement* made subject to any and all enforceable covenants, conditions, easements and restrictions of record as they may appear.

December 5, 2019

Prepared By: Timothy J. McAlonen, PLS/ZMB



Oak Hill 2 Lease Parcel Description.doox

# **SCHEDULE C**

Phillip Sexton, Planning Board Chair  
Dale Warner, Town Planner  
Melissa Deffer, Clerk  
Teresa Bakner, Board Attorney



TOWN OF DUANESBURG  
SCHENECTADY COUNTY

Jeffrey Schmitt, Vice Chairperson  
Elizabeth Novak, Board Member  
Martin Williams, Board Member  
Thomas Rulison, Board Member  
Michael Harris, Board Member  
Joshua Houghton, Board Member

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Town of Duanesburg  
Planning Board Minutes  
October 17<sup>th</sup>, 2019  
**Final Copy**

**MEMBERS PRESENT:** Phillip Sexton Chairman, Jeffery Schmitt Vice Chairman, Elizabeth Novak, Martin Williams, Thomas Rulison and Michael Harris. Also, in attending Dale Warner Town Planner, and Melissa Deffer Clerk.

**INTRODUCTION:** Chairman Phillip Sexton opened the meeting at 7:00pm. Phillip welcomed everyone to tonight's Planning Board meeting.

**PLEDGE OF ALLEGIANCE:**

**OPEN FORUM:** Chairman Sexton opened the forum at 7:01

Bruce O'Day of 5394 Western Turnpike wanted to state on the record that he is supporting the Andrew Lucks application.

Lynn Bruning located at 13388 Duanesburg Rd wanted to know what the status of the Comprehensive Plan?  
Chairmen Sexton explained to Lynn that they have been working on the Plan for just over a year now and how in the near future he will be asking the public for comments.

**Harris/Rulison** made the motion to close the open forum at 7:07.  
Harris yes, Rulison yes, Williams yes, Novak yes, Schmitt yes, Sexton yes. **Approved.**

**SKETCH PLAN REVIEW:**

**PUBLIC HEARINGS:**

**#19-13 Lucks Andrew:** SBL#66.00-3-4.1, (H) located at 5456 Western Turnpike is seeking a Special Use Permit for a retail business under the Town of Duanesburg Zoning Ordinance

Town Hall • 5853 Western Turnpike • Duanesburg, NY 12056 • (518) 895-8920

Over➔



adopted 6/11/15 under section 9.4.(15). Andrew Lucks gave his presentation to the board. Andrew is looking to relocate his business Outlander Survival from 6721 Duanesburg Rd to 5456 Western Turnpike. They will be in the same zone as they are in now. Andrew explained to the public how he will upgrade the building with security Systems and bars on all doors and windows (as a smash and grab is one of their main concerns), fix the parking lot and eventually reface the building. All lights on the building will be down cast with some solar lights around the driveway. Andrew is leasing for now from Bruce O'Day who will be going to have the property subdivided. Once the property is subdivided Andrew will be purchasing.

Cheryl Schrade 1619 Eaton Corners Rd asked Andrew if they will be test firing guns on the property. Andrew explained to Mrs. Schrade that with his business they do not test fire any weapons.

**Harris/Rulison** made a motion to close the Public Hearing for the **#19-13 Lucks Andrew** application at 7:09.

Harris yes, Rulison yes, Williams yes, Novak yes, Schmitt yes, Sexton yes. **Approved.**

**Novak/Sexton** made a motion to approve the **#19-13 Lucks Andrew** application for a Special Use Permit for a retail business under the Town of Duanesburg Zoning Ordinance adopted 6/11/15 under section 9.4.(15) contingent on down cast lighting.

Novak yes, Sexton yes, Harris yes, Rulison yes, Williams yes, Novak yes, Schmitt yes. **Approved.**

#### **New Business:**

**#19-14 Perog. Steven and Cheryl:** SBL#43.00-2-28, (R-2) located at 21 Lea Drive is seeking a Special Use Permit for a two family dwelling adding a single apartment over an existing garage under the Town of Duanesburg Zoning Ordinance adopted 6/11/15 under section 15.4(I); section 8.4(8); section 13.2.1; section 3.5.60. Steven gave some of his presentation to the board. Due to not enough information the board decided to table it until the November 21<sup>st</sup> meeting.

**Sexton/Harris** made a motion to table the **#19-14 Perog. Steven and Cheryl** application to the November 21<sup>st</sup> meeting.

Sexton yes, Harris yes, Rulison yes, Williams yes, Novak yes, Schmitt yes. **Approved.**

#### **Old Business:**

None

#### **Sketch Plan Review:**

**#19-15 O'Neil. Paul/O'Neil. Gerald:** SBL#43.00-1-14.31, (R-2) located at 327 Hardin Road is seeking a minor subdivision under section 3.4 of the Town of Duanesburg Subdivision Ordinance. They would like to divide an existing lot of 34.30 acres into two portions lot #1 located on Hardin Road is 6.82 (+-) lot #2 located on State Highway 30 is 27.475 acres. Shannon O'Neil gave her presentation on behalf of her father Paul O'Neil.

**Sexton/Williams** made a motion to exempt the minor subdivision application from further planning Board review and refer to the Code Enforcement Officer to complete administratively as the proposed action neither creates nor increases any significant planning issues with respect to the existing or potential future use of any involved parcels. Sexton yes, Williams yes, Rulison yes, Harris yes, Schmitt yes, Novak yes. **Approved.**

**OTHER:**

**#19-12 Murray, Richard/Eden Renewables:** SBL# 74.00-2-5, (R-2) located 1206 Oak Hill Rd Under Local Law # 1-2016 of the Town of Duanesburg Zoning Ordinance Resolution revision.

**Sexton/Rulison** made a motion to amend the resolution approving the project to show the correct amount of lot coverage as shown on the site plans which were approved for the solar project for the **#19-12 Murray, Richard/Eden Renewables** application. Bullet 3B will now show that Lot 1 contains 70.378 acres with 32.8 acres of coverage which is 46 percent and that Lot 2 contains 70.353 acres with 33.0 acres of coverage which is 47 percent.

Sexton yes, Rulison yes, Williams yes, Novak yes, Schmitt yes, Harris yes. **Approved.**

**MINUTES APPROVAL:**

**Novak/Harris** made the motion to approve the September 19<sup>th</sup>, 2019 Planning Board minutes with minor corrections.

Novak yes, Harris yes, Sexton yes, Schmitt yes, Williams yes, Rulison yes. **APPROVED.**

**Sexton/Harris** made a motion to go into **executive session to discuss the enforcement action with the CEO associated with #19-14 Perog, Steven and Cheryl** application.

Sexton yes, Harris yes, Rulison yes, Williams yes, Novak yes, Schmitt yes. **Approved.**

**Sexton/Harris** made a motion to come out of **executive session.**

Sexton yes, Harris yes, Rulison yes, Schmitt yes, Williams yes, Novak yes. **Approved. NO ACTION WAS TAKEN BY THE BOARD DURING OR AFTER the EXECUTIVE Session.**

**ADJOURNMENT:**

**Harris/Novak** made the motion to **adjourn at 7:50pm.**

Harris yes, Novak yes, Schmitt yes, Sexton yes, Rulison yes, Houghton yes, Williams yes. **APPROVED.**

**TOWN OF DUANESBURG PLANNING BOARD  
RESOLUTION APPROVING SPECIAL USE PERMIT, SUBDIVISION AND SITE PLAN  
FOR THE EDEN RENEWABLES OAK HILL SOLAR ENERGY PROJECTS – 1206 OAK HILL ROAD**

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Date: September 19, 2019

**WHEREAS**, on or about May 7, 2018, Eden Renewables ("Eden Renewables" or the "Applicant") applied to the Duanesburg Planning Board ("Planning Board") for a Special Use Permit and Site Plan Review pursuant to the Town of Duanesburg Local Law No. 1-2016, for the 5-MW Oak Hill Solar Energy Projects 1 and 2 (collectively, the "Project") to be located at 1206 Oak Hill Road in the Town of Duanesburg, Schenectady County, New York on the lands owned by Richard Murray (SBL# 74.00-2-5) ("Property"); and

**WHEREAS**, on or about May 17, 2018, the Applicant appeared before the Planning Board in furtherance of the proposed Project and the Planning Board requested that the Applicant meet with the Town Planner/Code Enforcement Officer to discuss the proposed application; and

**WHEREAS**, on or about July 18, 2018, the Applicant appeared before the Planning Board and requested a lot line adjustment and minor subdivision in order to install two 5-MW solar fields on each created parcel, in addition to the Special Use Permit sought pursuant to the Town of Duanesburg Local Law No. 1-2016; and

**WHEREAS**, on or about July 18, 2018, the Planning Board adopted a resolution pursuant to the State Environmental Quality Review Act [ECL Article 8 and its implementing regulations at 6 NYCRR Part 617, collectively referred to as "SEQRA"] in which it assumed the role of SEQRA Lead Agency, declared the proposed action as a Type 1 action and conducted a coordinated review;

**WHEREAS**, on or about August 16, 2018, the Planning Board adopted a resolution appointing Doug Cole of Prime AE Group of NY as the Town Designated Engineer to assist in its review of the application from Eden Renewables; and

**WHEREAS**, on or about September 11, 2018, the Town's Designated Engineer provided written comments on the application; and

**WHEREAS**, on or about March 11, 2019, the Applicant submitted revised site plans, minor subdivision and lot line adjustment plans, revised applications, a revised Full Environmental Assessment Form ("Full EAF"), and a decommissioning plan, accompanied by a letter addressing comments from the Town's Designated Engineer; and

**WHEREAS**, on or about March 21, 2019, the Applicant appeared before the Planning Board in furtherance of the site plan review process, and the Planning Board requested receipt of additional information and other actions from the Applicant; and

**WHEREAS**, on or about June 6, 2019, the Applicant submitted additional information to the Planning Board and addressed the outstanding actions identified by the Planning Board; and

**WHEREAS**, on or about June 20, 2019, the Planning Board reviewed the materials submitted by the Applicant, issued a negative declaration of environmental significance for this Type 1 action, after reviewing Part 1 of the EAF and completing Parts 2 and 3 of the EAF, and scheduled the Public Hearing for July 18, 2019; and

**WHEREAS**, on or about July 11, 2019, acting on a referral of the application from the Planning Board pursuant to GML § 239-m, County Planning recommended approval of the Project;

**WHEREAS**, on July 18 and August 16, 2019, the Planning Board held two well-attended public hearings on the applications and heard comments for and against the Project;

**WHEREAS**, the Planning Board directed the applicant to respond in writing to the public comments and the applicant submitted two sets of responses after each public hearing;

**WHEREAS**, the Planning Board directed the Town Designated Engineer, Mr. Cole of Prime AE to review the responses to the public comments and the additional information submitted by the Applicant, all as set forth in Mr. Cole's letter of September 10, 2019 providing comments on the Applicant's materials and recommending that the Town should condition any approval on the Applicant obtaining a permit from the US Army Corps of Engineers, if one is required by the agency, advising that the supplementary Visual Impact Assessment demonstrates that the existing Biggs and Otis and any other nearby residences will be adequately screened by existing vegetation, distance and topography such that the solar array will not be visible; and finding that the revised Decommissioning Plan is reasonable for the proposed system; and

**WHEREAS**, the Planning Board has carefully considered the documentation in the record (including the supplemental information provided by the Applicant, the comments by involved and interested agencies, the recommendation of County Planning and the comments, both oral and written, by the members of the public;

**NOW, THEREFORE, BE IT RESOLVED**, by the Planning Board as follows:

1. That the applications for Minor Subdivision, Site Plan Review and Special Use Permit submitted by the Applicant for the Project were determined to be complete under the Town of Duanesburg Solar Law, the Duanesburg Zoning Law, and the Town of Duanesburg Subdivision Regulations; and
2. That having received and reviewed the application materials submitted by the Applicant, including but not limited to, site plans, subdivision plans, lot line adjustment plans, decommissioning plans, a Full Environmental Assessment Form, statements of proposed construction impacts and ongoing operation and maintenance, and having completed Parts 2 and 3 of the Full EAF, hereby determines that the Project will not have a significant adverse impact on the environment (as duly noted in the Full EAF) and, therefore, hereby confirms and issues a Negative Declaration as set forth in the EAF Part 3 and its attached reasons supporting the determination read into the record and incorporated herein based on the following findings:
  - a. The Project will not have any significant impacts on federal wetlands or waterbodies as determined by the full wetland delineation conducted on the Project site, that any necessary approvals would be covered by the ACOE nationwide permit program, and that there are no impacts on State wetlands or streams;
  - b. The Project will not create any permanent impacts from odors, noise or traffic nor to groundwater and surface waters, there will only be insignificant and temporary impacts during construction;

- c. The Project avoids and/or minimizes impacts on plants and animals, due to the very limited vegetative clearing that will result from the Project, once construction is complete vegetation will cover the ground under the panels and the property will continue to be used for limited agricultural purposes, such as sheep grazing and bee keeping;
  - d. The Project will not create any impacts to historical or cultural resources as shown in the Letter of No Effect from the New York State Office of Parks, Recreation, and Historic Preservation dated June 4, 2019;
  - e. The Project will minimize any visual impacts due to the existing topography, the retention of existing vegetation as shown on the final site plans and will not create any impacts from glare as demonstrated by the Applicant;
  - f. The Planning Board hereby requires that the Project provide evergreen landscaping plan showing the establishment of a substantial evergreen buffer on the Applicant's property within 10 feet of the property boundary currently containing houses within approximately 600 feet of the project site boundary for a length of approximately 1600 feet at the back of the parcel with 2 staggered rows of trees planted 20 feet on center with the trees having the height at the time of planting of 6 to 7 feet and with the trees being species spruce and fir evergreens. The applicant shall also provide a maintenance and replacement agreement for the evergreen buffer to be planted;
  - g. The Project does not impact any Critical Environmental Areas and is not located in a flood zone;
  - h. The Project will have a positive economic benefit as it will result in revenue to the Town pursuant to a Payment-In-Lieu-Of-Taxes ("PILOT") Agreement and it will result in jobs during the construction and operation of the facility;
  - i. The Project will provide renewable energy in the production of electricity and will contribute to the State's goal of replacing fossil fuel generated electricity with renewable sources of electricity;
  - j. The Project will also not change the community character as it has been sited to not be visible to the maximum extent possible to surrounding homes and roadways, and an evergreen landscaped buffer will be created on the property containing the project as set forth above;
  - k. The Project is also a use of land that will be discontinued in the future and as such a decommissioning plan is in place to return the property to its current condition; and
  - l. The Applicant has indicated that it intends to continue to have the property in agricultural uses, such as sheep grazing and beekeeping, which also makes it consistent with the community which contains agricultural uses.
3. That Planning Board's findings set forth below demonstrate the proposed construction of the Project, a Solar Energy System (Major), at the Property satisfies the requirements of the Town of Duanesburg Solar Law:
- a. The Project is in the R-2 Zoning District and as such is a permitted use subject to Special Use Permit and Site Plan approval by the Planning Board;
  - b. The projects are located on parcels in excess of 97.24 and 87.18 acres and when constructed will have a lot coverage of 45.71 and 45.63 acres, respectively, thereby satisfying the lot coverage limitation of 60%;
  - c. The Project provides the required 100' setback between its components and the boundary of the Property, provides the required minimum of 25' buffer of vegetation to screen views of the Project and, in fact, that the Project exceeds this standard to address the concerns of adjoining property owners;
  - d. A fence meeting or exceeding the applicable requirements of the Zoning Law has been proposed;
  - e. The Project preserves existing on site vegetation to the maximum extent practicable and does not propose to clear cut all trees in a single contiguous area exceeding 20,000 square feet on the property;
  - f. The Town of Duanesburg Planning Board reviewed the plans showing brush hogging and tree clearing that had been undertaken by the property owner and determined such tree clearing did not exceed the above requirement;

- g. The SEQRA regulations require that a project sponsor may not commence any physical alteration related to an action until the provisions of SEQR have been complied with and the Planning Board specifically finds that the property owner brush hogging the property and taking down some limited trees for agriculture and silviculture purposes was consistent with the past uses of the property and not directly related to the development of the solar farm;
  - h. The Project is not located within an active farm field but is vacant hay field periodically cut by the property owner and historically used for more intensive agricultural purposes;
  - i. Native grasses and vegetation will be maintained below the arrays;
  - j. The site plans demonstrate that the Project:
    - i. Provides through its siting and through the implementation of an evergreen landscaping plan to be approved by the Town of Duaneburg, a project design that minimize visual impacts from public roads and existing residential dwellings on contiguous parcels to the satisfaction of the Planning Board;
    - ii. layout ensures that the solar panels will not reflect solar radiation or glare onto adjacent buildings, properties and roadways and that the solar panels include a non-glare coating and are designed to absorb the maximum amount of solar rays such that the panels will not misdirect or reflect solar rays onto neighboring properties or public roads in excess of that which already exists;
    - iii. existing vegetation on the site is preserved to the maximum extent practicable;
    - iv. all transmission/interconnection lines on the Property shall be underground and within necessary easements and in compliance with applicable electrical and town codes excepting aboveground lines as required by National Grid;
    - v. no artificial lighting is proposed;
    - vi. that any signage will be in accordance with applicable town requirements and the manufacturers and/or installers identification and appropriate warning signage shall be posted;
    - vii. the average height of the solar panels are 8' feet above grade – below the 20' height limitation;
    - viii. all disturbed areas shall be restored in accordance with the zoning law's requirements.
4. That the decommissioning plan is approved and the Planning Board requires that financial security be provided at least 30 days prior to the commencement of construction to the Town Clerk by the Applicant in the form of a bond or letter of credit in the amount \$422,762.00 (\$211,381.00 per project) with the form of financial security acceptable to the Town's attorney, with such funds to be used for decommissioning of the Project in the event that the Project is not decommissioned by the Project owner or the landowner; and
  5. That this project approval is conditioned upon the Applicant obtaining any other State or federal approvals required for the project including but not limited to any such permits required by the NYSDEC, the USACOE and the NYSDOT; and
  6. That this resolution and negative declaration shall be filed in the office of the Town Clerk and shall take effect immediately and that the notice of negative declaration be published in the ENB, that the negative declaration be provided to all involved agencies and that it be filed as required by SEQRA.

<u>Roll Call Vote:</u>	<u>Yes</u>	<u>No</u>	<u>Abstain/Absent</u>
Phillip Sexton	✓		
Jeffrey Schmitt	✓		
Elizabeth Novak	✓		
Martin Williams	✓		
Thomas Rullson	✓		

Michael Harris  
Joshua Houghton

✓  
✓

# **SCHEDULE D**



**OAK HILL COMMUNITY SOLAR 1 AND 2  
DECOMMISSIONING STATEMENT**



ORIGINAL

ENTERED ON 8/5/19  
BY: DW 3:35

## **CONTENTS:**

1. INTRODUCTION
2. DECOMMISSIONING PLAN
3. COST OF DECOMMISSIONING
4. ESTABLISHMENT OF DECOMMISSIONING FUND
5. DEMOLITION INSTRUCTIONS

## **APPENDICES:**

APPENDIX 1:	SITE LOCATION PLAN
APPENDIX 2:	BREAKDOWN OF DECOMMISSIONING COSTS
APPENDIX 3:	NYSDA FACT SHEET
APPENDIX 4:	IRREVOCABLE STANDBY LETTER OF CREDIT



ORIGINAL

ENTERED ON: 9/5/19  
BY: DW 3:35

### 1. INTRODUCTION

Oak Hill Solar 1 & 2, LLC (the "Applicant"), a New York limited liability company, hereby submits this plan for the eventual decommissioning of the two proposed 5 MWAC/7.5 MWDC community solar electric generation facilities located at 13950 Duanesburg Road, Delanson, NY 12053, in the Town of Duanesburg (the "Town") within Schenectady County in New York State (the "Projects") and the establishment of a decommissioning fund (the "Decommissioning Fund") for review as part of the "Solar Energy Facilities Law" as adopted by the Town of Duanesburg through Resolution NO. 107-2016 (the "Solar Bylaw"), before the planning board of the Town of Duanesburg (the "Board").

A site location plan is provided at Appendix 1 for reference.

### 2. DECOMMISSIONING ACTIVITIES

The Projects are anticipated to operate for 25-30 years. At the time the Projects ceases to operate, Applicant will perform decommissioning which shall include removal of all energy facilities, structures and equipment including any subsurface wires and footings from the parcel. Any access roads created for building or maintaining the system shall also be removed and re-planted with vegetation. The solar panels and all other equipment removed from the project site, unless being reused or repurposed for another project, shall be recycled in accordance with all applicable New York State policies and procedures in effect at the time of decommissioning.

Further, decommissioning will include restoring the property to its pre-installed condition, including grading and vegetative stabilization to eliminate any negative impacts to surrounding properties. Specifically, such decommissioning shall include, but is not limited to, physical removal of all ground-mounted solar collectors, structures, equipment, security barriers and transmission lines from the site.

### 3. COST OF DECOMMISSIONING

The fully inclusive cost to decommission each Project, as defined in Section 2 herein, is estimated at \$211,381 (the "Estimated Decommissioning Cost"), as detailed in Appendix 2.

The Estimated Decommissioning Cost shall be adjusted annually to account for inflation, based upon the current Consumer Price Index ("CPI") as maintained by the Bureau of Labor Statistics (the "Revised Estimated Decommissioning Cost").

#### **4. ESTABLISHMENT OF DECOMMISSIONING FUND**

The Decommissioning Fund will be funded with either (i) a surety bond (the "Bond") or (ii) an irrevocable standby Letter of Credit (the "LC") that is solely for the benefit of the Town. No other entity, including Applicant, shall have the ability to demand payment under the Decommissioning Fund. A draft LC form is attached to this Plan as Appendix 4. The LC or other Board-approved financial security, shall be in place and filed with the Board prior to commencement of construction.

Every five years and for the Project's life, Applicant shall file a report with the Board on the effect of the annual inflation adjustment, as noted above, including a Revised Estimated Decommissioning Cost. If the Revised Estimated Decommissioning Cost exceeds the then current Estimated Decommissioning Cost, Applicant shall create a new or amended Bond (or other appropriate financial security) to be issued to reflect the Revised Estimated Decommissioning Cost. In the event the CPI has a negative value at the time the annual adjustment is calculated, the value of the Bond (or other appropriate financial security) shall not be reduced.

At the end of the Project's useful life, and in the event Applicant does not seek Board approval to repower the Project, Applicant will decommission the Project as required under the Board's Solar Bylaw. Upon completion of decommissioning, Applicant shall seek a certification of completion from the Board. The certification will be provided to the issuing bank with instructions to terminate the LC (or another appropriate financial security).

The Board shall have the right to draw on the LC (or other appropriate financial security) to pay the costs of decommissioning in the event that Applicant (or its successor) is unable or unwilling to commence decommissioning due to dissolution, bankruptcy, or otherwise. Prior to the Board drawing on the LC (or other appropriate financial security), Applicant shall have a reasonable period of time to commence decommissioning, not to exceed ninety days following issuance of a Board order requiring decommissioning of the Project.

#### **5. DEMOLITION INSTRUCTIONS**

The following list is the sequential procedure that should be followed by the town for removal of the system pursuant to this plan:

a. **Project Component Removal**

All control cabinets, electronic components, and internal cables will be removed along with the panels, racks, and inverters. These components will be lowered to the ground where they will be transported whole for reconditioning and reuse, or disassembled/cut into more easily transportable sections for salvageable, recyclable, or disposable components.



ORIGINAL

ENTERED ON: 9/5/19  
BY: DW 3:35

b. PV Module Removal

The Project's solar photovoltaic panels are manufactured according to the regulatory toxicity requirements based on the Toxicity Characteristic Leaching Procedure (TCLP). Under these regulations, solar panels are not considered hazardous waste. The panels used in the Project will contain:

Glass	75%
Polymers	10%
Aluminum	8%
Silicon	5%
Copper	1%
Silver	1%

All which have recycling or resale value. Modules will be dismantled and packaged per manufacturer, approved recyclers or resellers specifications and shipped to an approved off-site solar panel recycler.

It is important to recognize that solar panels have a minimum 10 year product warranty and a minimum 25 year performance guarantee. Those warranties have a direct impact on the panels' salvage value. The earlier the decommissioning event the higher salvage value.

International Renewable Energy Agency (IRENA) and the International Energy Agency's Photovoltaic Power Systems Programme (IEA-PVPS) published a detailed report titled, "The End-of-Life Management: Solar Photovoltaic Panels" that projects the PV panel waste volumes to 2050 and highlights that recycling or repurposing of solar PV panels at the end of their 30-year lifetime will unlock a large stock of raw materials and valuable components. The report estimates that PV panel waste, comprised could total 78 million tonnes globally by 2050. The value of the recovered material could exceed \$15 billion by 2050. This potential material influx could produce 2 billion new panels or be sold into global commodity markets.

Below is a short list of American companies that already operate in the solar panel recycling or repurposing market.

<http://www.tekoverly.com/>

<http://www.morgenindustries.com/index.html>

<https://echoenvironmental.com/solar-panel-recycling/>

<http://www.glrnow.com/>

<http://www.intercotradingco.com/usa-solar-panel-recycling/>

<https://silrec.com/>

<http://www.solarsilicon.com/>

c. Electric Wire Removal

The copper and aluminum electric wires have a value for recycling. The DC wiring can be removed manually from the panels to the inverter. Underground wire in the project will be pulled and removed from the ground. Overhead cabling for the interconnection will be removed from poles. All wire will be sent to an approved recycling facility.

d. Racking and Fencing removal

All racking and fencing material like posts that were driven into the ground will be pulled, broken down into manageable units, removed from the facility and sent to an approved recycler.

e. Concrete Slab Removal

Concrete slabs used as equipment pads will be broken and removed to a depth of two feet below grade. Clean concrete will be crushed and disposed of off-site and/or recycled and reused either on or off-site. The excavation will be filled with subgrade material of quality and compacted density comparable to the surrounding area.

f. Access Road

The last structure to be removed is the access roads. They will be stripped exposing the geotextile beneath. The geotextile will then be removed and disposed of revealing the original soil surface. The compacted soil beneath the road fill might require ripping with a subsoiler plow to loosen it before it can be returned to crop production. Some of the access road might be retained by the landowner as it will be an improvement for their farm access.

g. Site Restoration Process

The site consists of 65.2 acres of agricultural land. Following the decommissioning activities, the sub-grade material, and topsoil from affected areas will be de-compacted and restored to a density and depth consistent with the surrounding areas. All unexcavated areas compacted by equipment used in decommissioning shall be de-compacted in a manner to adequately restore the topsoil and sub-grade material to the proper density consistent and compatible with the surrounding area.

If the subsequent use for the Project site will involve agriculture, a deep till of the project site will be undertaken. The affected areas will be inspected, thoroughly cleaned, and all construction-related debris removed. Disturbed areas will be reseeded to promote the re-vegetation of the area unless the area is to be immediately redeveloped. In all areas restoration shall include, as reasonably required, leveling, terracing, mulching, and other necessary steps to prevent soil erosion, to ensure the establishment of suitable grasses and forbs, and to control noxious weeds and pests. The future use of the land for agricultural purposes would not be prejudiced.



ORIGINAL

Appendix 1  
Site Location Plan

ENTERED ON: 9/5/19  
BY: DW 3/55





Appendix 2  
**Breakdown of Decommissioning Costs**



**ORIGINAL**

6/19/19  
ENTERED  
OFFICE

Applicant submits this breakdown of the Estimated Decommissioning Cost to support the proposed decommissioning fund of \$211,381 for each project based on 2019 cost of work estimates following the NYSERDA guidance which is based on the estimating practices followed by the State of Massachusetts and New York Southeast scrap value prices

It should be further noted that while the Decommissioning Fund is established in the amount equal to the gross decommissioning costs of \$211,381.00, there will likely be significant salvage value that would make the net system decommissioning cost lower than the proposed Decommissioning Fund amount.

To better explain the potential salvage value for this project we have completed a more detailed analysis of the current value of the main project components: solar panels, racking system aluminum/steel content and the electric cabling copper/aluminum content. The current published values for these materials can have a fairly large spread. For each item we choose the use the most conservative pricing available to assume current worst case scenario. As you can see from the summary analysis the current salvage value is 3 times higher than the proposed decommission cost.

Estimated Decommissioning Cost				
	Type	Quantity	Cost Per Item	Total
Fence Removal with Gate and CCTV	LF	7,618	\$4.50	\$34,281.00
Remove Transformers & Concrete Pads	Each	2	\$5,000.00	\$10,000.00
Remove Major Switch Gear & Concrete Pad	Each	1	\$5,000.00	\$5,000.00
Remove Modules and Racking	\$/MWac	5	\$9,000.00	\$45,000.00
Removal of Posts	Each	1,975	\$20.00	\$39,500.00
Remove & Dispose String Inverters, Storage and DC Converters	Each	60	\$300.00	\$18,000.00
Removal of Underground Wires and Backfill	LF	3,500	\$10.00	\$35,000.00
Site Restoration, Grade and Seed	Acre	10	\$900.00	\$9,000.00
Removal of Gravel Access Road	Cubic Yards	624	\$25.00	\$15,600.00
Current Total:				\$211,381.00
Total after 25 years of inflation (2.5% inflation rate)				\$346,372.38
Detailed Salvage Value				
	Solar Panels	43,435	\$6.60	\$300,003.00
	Racking Steel (lbs)	1,168,100.00	\$0.05	\$58,405.00
	Racking Aluminum (lbs)	1,760,000.00	\$0.15	\$264,000.00
	Project Cabling (lbs)	75,991.00	\$0.73	\$55,429.63
Total Salvage Value				\$677,837.63
Proposed decommissioning fund				
				\$211,381.00

Appendix 3

**NYSERDA Fact Sheet**

# FACT SHEET

## DECOMMISSIONING SOLAR PANEL SYSTEMS

ORIGINAL



NEW YORK  
STATE OF  
OPPORTUNITY.

NY-Sun

ENTERED ON: 9/27/19  
BY: J.W. 3:35

This fact sheet provides information to local governments and landowners on decommissioning of large-scale solar panel systems.

As local governments develop solar regulations and landowners negotiate land leases, it is important to understand the options for decommissioning solar panel systems and restoring project sites to their original status.

From a land use perspective, solar panel systems are generally considered large-scale when they constitute the primary use of the land, and can range from less than one acre in urban areas to 10 or more acres in rural areas. Depending on where they are sited, large-scale solar projects can have habitat, farmland, and aesthetic impacts. As a result, large-scale systems must often adhere to specific development standards.

### Abandonment and decommissioning defined

**Abandonment** occurs when a solar array is inactive for a certain period of time.

- Abandonment requires that solar panel systems be removed after a specified period of time if they are no longer in use. Local governments establish timeframes for the removal of abandoned systems based on aesthetics, system size and complexity, and location. For example, the Town of Geneva, NY, defines a solar panel system as abandoned if construction has not started within 18 months of site plan approval, or if the completed system has been nonoperational for more than one year.<sup>1</sup>
- Once a local government determines a solar panel system is abandoned, and has provided thirty (30) days prior written notice to the owner it can take enforcement actions, including imposing civil penalties/fines, and removing the system and imposing a lien on the property to recover associated costs.

**Decommissioning** is the process for removing an abandoned solar panel system and remediating the land.

- When describing requirements for decommissioning sites, it is possible to specifically require the removal of infrastructure, disposal of any components, and the stabilization and re-vegetation of the site.

### What is a decommissioning plan?

Local governments may require to have a plan in place to remove solar panel systems at the end of their lifecycle, which is typically 20-40 years. A decommissioning plan outlines required steps to remove the system, dispose of or recycle its components, and restore the land to its original state. Plans may also include an estimated cost schedule and a form of decommissioning security (see Table 1).

### What is the estimated cost of decommissioning?

Given the potential costs of decommissioning and land reclamation, it is reasonable for landowners and local governments to proactively consider system removal guarantees. A licensed professional engineer, preferably with solar development experience, can estimate decommissioning costs, which vary across the United States. Decommissioning costs will vary depending upon project size, location, and complexity. Table 1 provides an estimate of potential decommissioning costs for a ground-mounted 2-MW solar panel system. Figures are based on estimates from the Massachusetts solar market. Decommissioning costs for a New York solar installation may differ. Some materials from solar installations may be recycled, reused, or even sold resulting in no costs or compensation. Consider allowing a periodic reevaluation of decommissioning costs during the project's lifetime by a licensed professional engineer, as costs could decrease and the required payment should be reduced accordingly.

Table 1: Sample list of decommissioning tasks and estimated costs

Tasks	Estimated Cost (\$)
Remove Rack Wiring	\$2,450
Remove Panels	\$2,450
Dismantle Racks	\$12,350
Remove Electrical Equipment	\$1,850
Breakup and Remove Concrete Pads or Ballasts	\$1,500
Remove Racks	\$7,800
Remove Cable	\$8,500
Remove Ground Screws and Power Poles	\$13,850
Remove Fence	\$4,350
Grading	\$4,000
Seed Disturbed Areas	\$250
Truck to Recycling Center	\$2,250
<b>Current Total</b>	<b>\$60,200</b>
<b>Total After 20 Years (2.5% Inflation rate)</b>	<b>\$98,800</b>

<sup>1</sup> Town of Geneva, N.Y. CODE § 130-4(D)(5) (2016);



NEW YORK  
STATE OF  
OPPORTUNITY.

NYSERDA

Appendix 4  
**IRREVOCABLE STANDBY LETTER OF CREDIT**  
DATE:

Applicant:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Beneficiary:

Town of Duanesburg  
5853 Western Turnpike  
Duanesburg, NY 12056

Dear Sir or Madam:

By order of \_\_\_\_\_ ("Applicant"), we, [insert name of issuing bank] ("Issuing Bank"), have established this irrevocable Standby Letter of Credit (this "Letter of Credit") in favor of the Town of Duanesburg ("Beneficiary"), , for an aggregate amount of up to \$\_\_\_\_\_, (as reduced pursuant to this Letter of Credit, the "Maximum Stated Amount") effective [insert initial date of this Letter of Credit] and expiring [insert date which is 364 days after the initial date of this Letter of Credit] as may be extended in accordance with the terms hereof (the "Expiration Date"). We are informed by the Applicant that this Letter of Credit is provided in connection with the Payment in Lieu of Taxes Agreement (the "Agreement"), dated [insert date of agreement], as amended from time to time, by and between Beneficiary and Applicant and is for the benefit of the Town of Duanesburg and Duanesburg Central School District.

The Maximum Stated Amount at the time of any drawing hereunder shall be immediately and permanently reduced by the amount of such drawing and otherwise as set forth herein.

Funds hereunder are available to Beneficiary, providing all terms and conditions of this Letter of Credit are strictly complied against Beneficiary's sight draft drawn on Issuing Bank in the form of **Annex A** and when accompanied by Beneficiary's statement purportedly signed by Beneficiary and reading as follows:

Either:

"An Event of Default under Section 6(a)(1) of the Agreement with respect to Applicant's due but unpaid PILOT Payments (as defined in the Agreement) has occurred, and the amount that Beneficiary is drawing under this Letter of Credit is due and owing



ORIGINAL

ENTERED ON 9/5/19  
BY: DW. 335

by Applicant to Beneficiary as a result of such Event of Default. A copy of the unpaid PILOT Payment invoice is attached to the sight draft."

Or

"The Letter of Credit Number \_\_\_\_\_ is set to expire on \_\_\_\_\_, 20\_\_ (the "Expiration Date"). Beneficiary has received notice from Issuing Bank that this Letter of Credit will not be extended by Issuing Bank. Applicant is required to maintain a letter of credit securing Applicant's obligation to make PILOT Payments (as defined in the Agreement) under Section 3(o) of the Agreement ("Payment Security") and has failed to provide Beneficiary with alternative Payment Security at least thirty (30) calendar days prior to the Expiration Date, and as of the date of this drawing, has not provided Beneficiary with such Payment Security. As a result of the foregoing, Beneficiary is entitled to draw the Maximum Stated Amount of the Letter of Credit."

Issuing Bank hereby undertakes to honor Beneficiary's sight drafts drawn on Issuing Bank in accordance with this Letter of Credit by the date and time specified below, indicating the Letter of Credit number [insert Letter of Credit number], if presented to Issuing Bank on a Business Day occurring on or before the applicable expiration date for an aggregate amount not to exceed the Maximum Stated Amount.

Any drawings under this Letter of Credit shall be presented to Issuing Bank at its counters by personal presentation, courier or messenger service. In addition, drawings may also be presented by fax transmission to [Insert Issuing Bank fax number] or such other fax number identified by Issuing Bank in a written notice to Beneficiary. To the extent a drawing is presented by fax transmission, Beneficiary must (i) provide telephone notification to Issuing Bank at [Insert Issuing Bank telephone number] prior to or simultaneously with the sending of such fax transmission and (ii) send the original of such drawing to Issuing Bank by overnight courier at [Insert Issuing Bank address], however such original drawing documents will not be examined by us nor form part of the drawing. If a drawing is presented in compliance with the terms of this Letter of Credit to Issuing Bank at such address or fax number by 11:00 a.m., New York City Time, on any Business Day, payment will be made not later than the close of business, New York City Time, on the next Business Day and if such drawing is so presented to Issuing Bank after 11:00 a.m., New York City Time, on any Business Day, payment will be made on the second Business Day no later than the close of business, New York City Time.

If a demand for payment made hereunder does not conform to the terms and conditions of this Letter of Credit, Issuing Bank shall give Beneficiary notice in writing (or by telephone confirmed in writing) that Beneficiary's demand for payment was not effected in accordance with the terms and conditions of this Letter of Credit, stating the reasons therefore and that Issuing Bank will upon Beneficiary's instructions hold any documents at Beneficiary's written direction or return the same to Beneficiary. Upon being notified that the demand for payment was not effected in conformity with this Letter of Credit, Beneficiary may correct any such non-conforming demand if, and to the extent that

Beneficiary is entitled and able to do so on or before the Expiration Date, but in no event shall the Expiration Date of this Letter of Credit be extended.

Issuing Bank has no duty or right to inquire into the validity of, or the basis for, any draw.

This Letter of Credit shall permit multiple partial drawings.

As used herein, "Business Day" means any day on which (A) commercial banks are not closed, or authorized or required to close, in New York City or (B) with respect to a certain drawing request, the bank to which funds are requested to be transferred hereunder as set forth in such drawing request is not closed, or authorized or required to close, and may receive such funds by wire transfer as requested hereunder.

Should Beneficiary have occasion to communicate with Issuing Bank regarding this Letter of Credit, kindly direct the communication to the attention of [insert Issuing Bank address/department] mentioning the Letter of Credit number [insert letter of credit number].

This Letter of Credit, together with sight drafts submitted in accordance with the terms hereof, sets forth in full the terms of our undertaking and this undertaking shall not in any way be modified, amended, limited or amplified by reference to any document, instrument or agreement referred to herein, and any document, instrument or agreement referred to herein, and any such reference shall not be deemed to incorporate herein by reference any document or agreement.

Except as far as otherwise expressly stated herein this Letter of Credit is subject to the International Standby Practices (ISP98), International Chamber of Commerce Publication No. 590 (the "ISP"), and as to matters not governed by the ISP, shall be construed in accordance with the laws of the state of New York without regard to principles of conflicts of law that may result in the application of the laws of another jurisdiction.

As allowed by law, any payments hereunder shall be made free and clear of, and without deduction or set off for or on account of any present or future taxes, duties, charges, fees, deduction or withholding of any nature and by whomever imposed.

The Expiration Date of this Letter of Credit will be automatically extended without amendment for a period of one (1) year from the Expiration Date, or any future Expiration Date, unless at least sixty (60) days prior to the then current Expiration Date Issuing Bank sends notice to Beneficiary by overnight courier at Beneficiary's address shown above, that Issuing Bank elects not to extend the Expiration Date of this Letter of Credit for any such additional period.

ISSUING BANK

Authorized Signature

ANNEX A



ORIGINAL

IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER \_\_\_\_\_

Date \_\_\_\_\_

ENTERED ON 9/5/19  
BY DW 5:35

Sight Draft

Pay to the order of the County of Chautauqua Industrial Development Agency the amount of \$ \_\_\_\_\_ drawn under [Name of issuing bank] Irrevocable Standby Letter of Credit Number \_\_\_\_\_ dated \_\_\_\_\_, 20\_\_. A copy of the unpaid PILOT Payment invoice is attached hereto [For a payment default].

[INSERT BENEFICIARY PAYMENT INSTRUCTIONS]

Town of Duanesburg

By:

Name:

Title:

cc:





## DECOMMISSIONING AGREEMENT

This **DECOMMISSIONING AGREEMENT** (this "Agreement"), dated as of July \_\_\_\_\_, 2020 (the "Effective Date"), is made by and among the **Town of Duanesburg**, a municipal corporation duly established in Schenectady County with a principal place of business located at 5853 Western Turnpike, Duanesburg, NY 12056 (referred to as the "Town"), **Oak Hill Solar 2 LLC**, a limited liability company formed under the laws of the State of New York with principal offices at 1550 Wewatta Street, 4<sup>th</sup> Floor, Denver, CO 80202 (referred to as the "Operator") and Richard Murray, an individual (referred to as the "Landowner"). The Town, the Operator and the Landowner may each be referred to herein as a "Party" and collectively, as the "Parties".

WHEREAS, Operator intends to permit, construct, operate and maintain a solar energy facilities with battery storage with an estimated size of five (5) megawatts of alternating-current (AC) nameplate capacity that will generate electric power (the "Project"), as shown on the Site Plans entitled "Proposed Site Plan for Oak Hill 1 and 2", prepared by Environmental Design Partnership, LLP., last revised September 5, 2019 (hereinafter, the "Site Plans"), copies of which are attached as **Schedule A**, on real property owned by the Landowner and leased to the Operator, and more particularly identified hereto in **Schedule B**, and commonly known as 13686 Duanesburg Road Delanson, NY (Tax Map 74.00-2-5) in the Town of Duanesburg, Schenectady County, New York ("the Properties"); and

WHEREAS, on September 5, 2019, based on the Operator's application, and after duly noticed public hearing(s), the Town, by its Planning Board, granted conditional special use and site plan approval (hereinafter "Approval Resolution") for the Project<sup>1</sup>, on condition that, among other things, the applicant submit a final decommissioning plan and decommissioning security and that the applicant provided the Town with access to funds for the Decommissioning (as defined below) of the Project; and

WHEREAS, a copy of said Approval Resolution is attached hereto as **Schedule C**; and

WHEREAS, the Town has enacted Local Law 1-2016, which provides that Decommissioning must occur pursuant to a decommissioning plan, among other requirements (the "Local Law"); and

WHEREAS, the Parties now desire to enter into this Agreement to set forth the "Decommissioning Plan" for the Oak Hill 2 Solar Project attached hereto as **Schedule D**, as required by the Local Law and the Town Planning Board and to agree upon terms and conditions of the financial surety provided to the Town for the purpose of Decommissioning the Project;

NOW, THEREFORE, in consideration of the promises herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

---

<sup>1</sup> The Oak Hill Solar 1 project was also approved at this meeting.

1. Prior to the issuance of a building permit for the Project (the "Start Date"), the Operator shall post a letter of credit or bond, in form and substance reasonably satisfactory to the Town or deposit cash in escrow with the Town (the "Security") in the amount of \$211,381 for the benefit of the Town. In the event Operator elects to deposit cash in escrow with the Town as the Security, the Parties shall execute the Decommissioning Escrow Agreement attached hereto as Schedule E. The Parties agree that the Security shall be used solely to pay for any Decommissioning costs of the Project. At least 60 days prior to the end of each successive five (5) -year period after the execution of this Agreement, the Operator shall provide the Town with an updated decommissioning plan setting forth an updated estimate for the Decommissioning of the Project, which updated estimate shall be subject to review and approval by the Town, which approval shall not unreasonably be withheld, conditioned or delayed. Within 30 days after the Town's approval of the updated estimate, the Security shall be changed to reflect the updated estimate approved by the Town for such Decommissioning of the Project. Any such updated and approved decommissioning plan shall be deemed the "Decommissioning Plan" hereunder. For avoidance of doubt, the updated estimate will use the estimated decommissioning cost as a template in the updated decommissioning plan. Operator shall have no further payment obligations in connection with Decommissioning during the operation of the Project provided that Operator complies with posting the Security in accordance with this Agreement. Nonetheless, in the event the actual Decommissioning costs incurred by the Town exceed the amount covered by the Security, Operator or its successor in title to the Project shall be responsible for reimbursing the Town for any and all such excess costs, provided that the Town delivers to the Operator a reasonable written record of such costs.

2. "Decommissioning" as used in this Agreement shall mean the removal of all collectors, mounts and/or associated equipment and facilities that were installed in connection with the Project and the reasonable restoration of the Properties to either of the following, at the Operator's option ("Decommissioning"): (i) the condition the Properties was in prior to the development, construction and operation of the Project, including restoration, regrading, and reseeded, or (ii) the condition designed by a subsequent Operator or developer as agreed upon with the Town. Costs of Decommissioning under this Agreement include labor, professional services and any other costs reasonably associated with such Decommissioning.

3. Each of the circumstances described in clauses (a) and (b) below shall be a "Triggering Event" for purposes hereof:

- (a) construction of the Project is not completed within eighteen (18) months of receiving a building permit, other than as a result of Force Majeure (defined below), or
- (b) the Project, after commencing commercial operation, "ceases to be operational" (as defined below) for more than twelve (12) consecutive months.

In the event the Operator fails to initiate Decommissioning of the Project within ninety (90) days of a Triggering Event (the "Decomm Deadline"), or Operator fails to provide a reasonable explanation for the delay in the construction or cessation of operation of the Project by the Decomm Deadline, then, the Town may issue a notice to Operator (the "Town Decommissioning

Notice”) and Operator shall have thirty (30) days to respond to the Town Decommissioning Notice with a reasonable explanation for the delay in the construction or the cessation of operation of the Project. In the event that (A) the Operator does not respond to the Town Decommissioning Notice in accordance with the forgoing sentence, or (B) Decommissioning is not completed, within six (6) months after a Triggering Event, then the Town shall have the right, but not the obligation, to commence Decommissioning of the Project through use of the Security.

For purposes of this Agreement, “Force Majeure” means any circumstance not within the reasonable control of the Party affected, but only if and to the extent that: (i) such event is not due to the affected Party’s negligence or willful misconduct; (ii) such event is not the result of any failure of the affected Party to perform any of its obligations hereunder; and (iii) the affected Party has given the other Party prompt notice describing such event. Subject to the foregoing conditions, Force Majeure Events include, without limitation: acts of God; war; acts of the public enemy; terrorism; riot; civil commotion; sabotage; fire; floods; landslide; volcanic eruption; epidemics; global pandemics; quarantine restrictions; embargos; and governmental authority decreed official state of emergency.

For the purposes of this Agreement, “ceases to be operational” shall mean no generation of electricity, other than due to Force Majeure, repairs, upgrades, permitting matters, casualty, or other issue regarding the Project that Operator is in good faith attempting to remedy

4. The parties hereto acknowledge that the Decommissioning is intended to occur outside the winter months. Upon removal of the infrastructure and disposal of the components of the Project from the Properties, and restoration of the Properties to its pre-project state, or to the condition designed by a subsequent Operator or developer as agreed upon with the Town. Upon completion of Decommissioning, the Operator shall have no further obligation to the Town provided that the costs of the Decommissioning has been paid for in full by the Security or otherwise by or on behalf of the Operator.

5. In the event that the Town elects to complete Decommissioning under Section 3, Operator (or its successors or assigns) agrees to give the Town the right of reasonable access to the Properties to Decommission the Project. In the event the leases between Landowner and Operator are terminated or Landowner otherwise has control over the Properties at the time of the Decommissioning, Landowner (or its successors or assigns) agrees to give the Town the right of reasonable access to the Properties in order to perform Decommissioning in accordance with this Agreement.

6. This Agreement may not be amended or modified except by written instrument signed and delivered by the Parties. This Agreement is binding upon and shall inure to the benefit of the Parties and their respective successors and assigns. In accordance with the provisions of section 109 of the New York General Municipal Law, Operator is prohibited from assigning, transferring, conveying, subletting or otherwise disposing of this Agreement, or of any right, title or interest in this Agreement, or its power to execute this Agreement, to any other person or corporation without the previous consent in writing of the Town, which consent shall not be unreasonably withheld, conditioned or delayed.

7. Operator, or the operations and maintenance provider of the Operator, shall provide the Town with proof that it either carries sufficient workers' compensation insurance coverage for any employees in New York involved in the Decommissioning as required under applicable law or that it is exempt from such requirement.

8. The Parties agree to execute and deliver any additional documents or take any further action as reasonably requested by another Party to effectuate the purpose of this Agreement.

9. The Parties agree that this Agreement shall be construed and enforced in accordance with and governed by the laws of New York, without regard to its conflict of laws principles. The Parties hereby consent to exclusive venue and jurisdiction in the state and federal courts located in the State of New York. **EACH PARTY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY WITH REGARD TO ANY DISPUTE RELATED HERETO.** If one or more of the provisions hereof are deemed by a court of competent jurisdiction to be unenforceable, in whole or in part, the scope of such provisions shall be reduced to the extent necessary to make them enforceable or, if such reduction is not possible for any reason, such provisions shall be severed from this Agreement entirely, without effect upon the balance hereof.

10. This Agreement may be executed through separate signature pages or in any number of counterparts, and each of such counterparts shall, for all purposes, constitute one agreement binding on all Parties.

11. Any and all notices required to be sent by a Party to another Party hereunder shall be addressed as follows by certified mail or mail courier service:

**To the Town:**

Town of Duanesburg  
Attn: Supervisor  
5853 Western Turnpike  
Duanesburg, NY 12056

**With a copy to:**

Whiteman Osterman & Hanna LLP  
Attn: Teresa Bakner, Esq.  
One Commerce Plaza  
Albany, New York 12260

**To Operator:**

Oak Hill Solar 2 LLC  
c/o AMP Solar Development Inc.  
1550 Wewatta St., 4<sup>th</sup> Floor  
Denver, CO 80202

**With an electronic copy to:**

jdonald@amp.energy

**To Landowner:**

Richard Murray 1206 Oak Hill Rd.  
Esperance, NY 12066

**[Signature Page Follows]**

**IN WITNESS WHEREOF, the undersigned, intending to be legally bound hereby,  
have duly executed this Agreement as of the date first written above.**

**TOWN:**

Town of Duanesburg

By: \_\_\_\_\_

Name: Roger Tidball

Title: Town Supervisor

**OPERATOR:**

Oak Hill Solar 2 LLC

By: AMP Solar Development Inc.

Its: Manager

By: \_\_\_\_\_

Name: David Rogers

Title: President

**LANDOWNER:**

By: \_\_\_\_\_

Name:

Title:

**Schedule A**

**Site Plan**

**{to be attached}**

**Schedule B**  
**Description of Properties**  
**[to be attached]**



**Schedule C**

**Approval Resolution**

**[to be attached]**

**Schedule D**

**Decommissioning Plan**

**[to be attached]**

**Schedule E**  
**Form of Decommissioning Escrow Agreement**

# **SCHEDULE A**

# PROPOSED SITE PLAN FOR

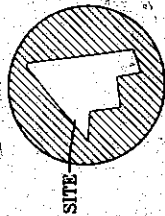
## OAK HILL SOLAR 1&2

APPLICANT:

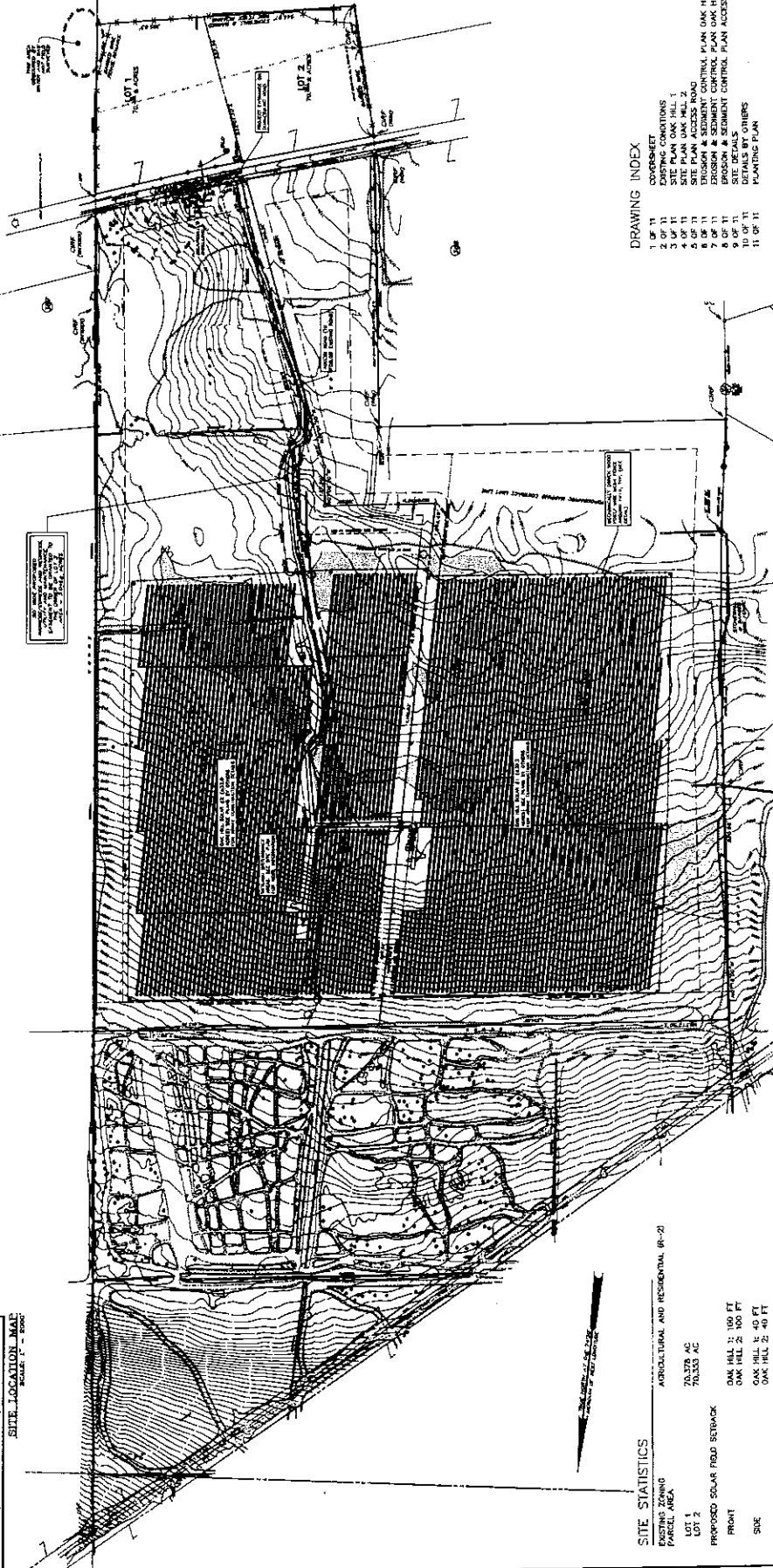
OAK HILL SOLAR 1, LLC & OAK HILL SOLAR 2, LLC

13950 DUANESBURG ROAD

TOWN OF DUANESBURG, SCHENECTADY COUNTY, NEW YORK



SITE LOCATION MAP  
SCALE: 1" = 200'



### SITE STATISTICS

EXISTING ZONING	AGRICULTURAL AND RESIDENTIAL (R-2)
PANEL AREA	70,379 AC
LOT 1	70,333 AC
LOT 2	70,333 AC
LOT 3	70,333 AC
LOT 4	70,333 AC
PROPOSED SOLAR FIELD SETBACK	
FRONT	OAK HILL 1: 100 FT
SIDE	OAK HILL 2: 100 FT
REAR	OAK HILL 3: 100 FT
ACCESS ROAD LENGTH	32,740 FT
SCHOOL DISTRICT	DUANESBURG CENTRAL
PARK DISTRICT	QUAKER ST. FIRE DEPARTMENT
OAK HILL SOLAR 1	32.2% ACRES FENCED AREA
OAK HILL SOLAR 2	33.0% ACRES FENCED AREA
PROPOSED DISTURBANCE	
ACCESS ROAD, ELECTRICAL, TRENCHES, SPARE PARTS, ETC.	40.88 AC
WETLANDS	30.08 AC (2,484 SQ)

### DRAWING INDEX

1 OF 11	COVER SHEET
2 OF 11	EXISTING CONDITIONS
3 OF 11	SITE PLAN OAK HILL 1
4 OF 11	SITE PLAN OAK HILL 2
5 OF 11	SITE PLAN ACCESS ROAD
6 OF 11	EROSION & SEDIMENT CONTROL PLAN OAK HILL 1
7 OF 11	EROSION & SEDIMENT CONTROL PLAN OAK HILL 2
8 OF 11	EROSION & SEDIMENT CONTROL PLAN ACCESS ROAD
9 OF 11	SITE DETAILS
10 OF 11	DETAILS BY OTHERS
11 OF 11	PLANTING PLAN

DATE OF SUBMISSION: February 2018

DESIGNED BY	DATE	BY
ENVIRONMENTAL DESIGN PARTNERSHIP, LLP	2/1/18	JD
CHECKED BY	DATE	BY
ENVIRONMENTAL DESIGN PARTNERSHIP, LLP	2/1/18	JD

PLANS PREPARED BY:



ENVIRONMENTAL DESIGN PARTNERSHIP, LLP



ENVIRONMENTAL DESIGN PARTNERSHIP, LLP  
FEBRUARY 1, 2018  
TAX MAP NO. 74-00-0-8

PROPOSED SITE PLAN FOR  
OAK HILL SOLAR 1&2  
APPLICANT: OAK HILL SOLAR 1, LLC / OAK HILL SOLAR 2, LLC  
TOWN OF DUANESBURG  
SCHENECTADY COUNTY, NEW YORK

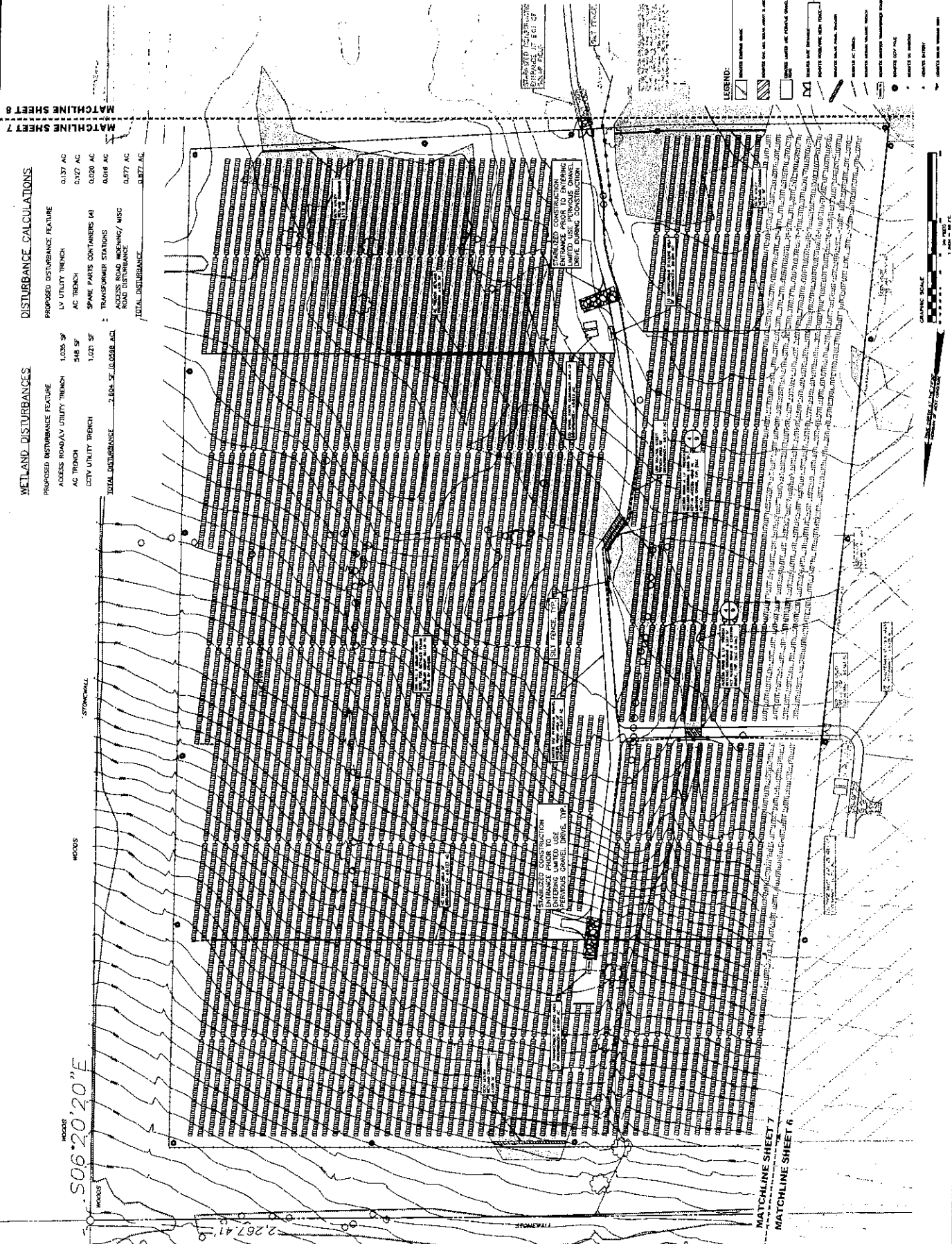














# **SCHEDULE B**



**SUGGESTED DESCRIPTION  
LEASE PARCEL TO BE LEASED TO OAK HILL SOLAR 1, LLC  
WITHIN A PORTION OF LOT 2 OF LANDS OF RICHARD B. MURRAY  
TOWN OF DUANESBURG, NY**

LEASE PARCEL THROUGH ALL THAT CERTAIN TRACT, PIECE OR PARCEL OF LAND SITUATE in the Town of Duanesburg, County of Schenectady, State of New York lying north of the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) and within a portion of Lot 2, said lot as shown on a map entitled "Survey and Minor Subdivision of Lands of Richard B. Murray", dated July 29, 2019 as prepared by The Environmental Design Partnership, LLP and filed in the Schenectady County Clerk's Office on October 8, 2019 in Plat Cabinet "P" as Map No. 39 (Doc No. 2019-39) and being further bounded and described as follows:

**Commencing** at the point of intersection of the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) with the common division line of Lot 1 to the east and Lot 2 to the west as shown on said map;

*Thence* from said *Point of Commencement* along said common division line the following four (4) courses and distances:

- 1) North 22 deg. 01 min. 20 sec. West, 1,048.32 feet to a point;
- 2) North 07 deg. 06 min. 20 sec. West, 137.50 feet to a point;
- 3) South 83 deg. 07 min. 50 sec. West, 399.88 feet to a point;
- 4) North 00 deg. 00 min. 00 sec. East, 253.78 feet to the **Point of Beginning** of the herein described *lease parcel* of land;

*Thence* from said *Point of Beginning* through said Lot 2 the following four (4) courses and distances:

- 1) South 83 deg. 12 min. 50 sec. West, 883.00 feet to a point;
- 2) North 05 deg. 06 min. 10 sec. West, 890.50 feet to a point;
- 3) North 03 deg. 06 min. 30 sec. West, 590.66 feet to a point;
- 4) North 83 deg. 12 min. 50 sec. East, 995.00 feet to a point in the aforesaid common division line of Lot 1 to the east and Lot 2 to the west as shown on said map;

*Thence* along said common division line, South 00 deg. 00 min. 00 sec. West, 1,490.00 feet to the point or place of beginning of said *lease parcel* and containing 32.104± acres of land.

**ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.**

Shaping the physical environment

900 New York 146 Clifton Park, NY 12065

(P) 518.371.7621 (F) 518.371.9540 edpllp.com

TOGETHER WITH A 50-FOOT WIDE UTILITY & MAINTENANCE, INGRESS/ EGRESS AND REGRESS, EASEMENT THROUGH THAT CERTAIN TRACT, PIECE OR PARCEL OF LAND SITUATE in the Town of Duanesburg, County of Schenectady, State of New York lying along the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) and within a portion of Lot 1, said lot as shown on a map entitled "Survey and Minor Subdivision of Lands of Richard B. Murray", dated July 29, 2019 as prepared by The Environmental Design Partnership, LLP and filed in the Schenectady County Clerk's Office on October 8, 2019 in Plat Cabinet "P" as Map No. 39 (Doc No. 2019-39) and being further bounded and described as follows:

**Beginning** at the point of intersection of the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) with the common division line of Lot 2 to the west and Lot 1 to the east as shown on said map;

*Thence* from said *Point of Beginning* and along said common division line, North 22 deg. 01 min. 20 sec. West, 893.68 feet to a point;

*Thence* through said Lot 1 the following seven (7) courses and distances:

- 1) North 14 deg. 45 min. 20 sec. East, 195.87 feet to a point;
- 2) North 10 deg. 43 min. 40 sec. West, 251.17 feet to a point;
- 3) North 16 deg. 30 min. 10 sec. West, 554.76 feet to a point;
- 4) North 04 deg. 08 min. 40 sec. West, 125.00 feet to a point;
- 5) North 39 deg. 45 min. 00 sec. East, 65.00 feet to a point;
- 6) North 15 deg. 04 min. 40 sec. West, 237.63 feet to a point;
- 7) South 83 deg. 20 min. 00 sec. West, 290.23 feet to a point in said common division line of Lot 2 to the west and Lot 1 to the east;

*Thence* along said common division line, North 00 deg. 00 min. 00 sec. East, 50.34 feet to a point;

*Thence* through said Lot 1 the following eight (8) courses and distances:

- 1) North 83 deg. 20 min. 00 sec. East, 327.54 feet to a point;
- 2) South 15 deg. 04 min. 40 sec. East, 306.71 feet to a point;
- 3) South 39 deg. 45 min. 00 sec. West, 70.78 feet to a point;
- 4) South 04 deg. 08 min. 40 sec. East, 99.44 feet to a point;
- 5) South 16 deg. 30 min. 10 sec. East, 551.87 feet to a point;
- 6) South 10 deg. 43 min. 40 sec. East, 265.00 feet to a point;

**ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.**

Shaping the physical environment

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---

7) South 14 deg. 45 min. 20 sec. West, 190.56 feet to a point;

8) South 22 deg. 01 min. 20 sec. East, 881.42 feet to a point in said northerly line of Duanesburg Road;

*Thence* along said northerly line of said Duanesburg Road, South 72 deg. 57 min. 40 sec. West, 50.19 feet to the point or place of beginning of said *easement* and containing 3.046± acres of land.

Said *lease parcel* and *easement* made subject to any and all enforceable covenants, conditions, easements and restrictions of record as they may appear.

December 5, 2019

Prepared By: Timothy J. McAlonen, PLS/ZMB



Oak Hill I Lease Parcel Description.docx



**ENVIRONMENTAL DESIGN  
PARTNERSHIP, LLP.**  
Shaping the physical environment

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**SUGGESTED DESCRIPTION  
LEASE PARCEL TO BE LEASED TO OAK HILL SOLAR 2, LLC  
WITHIN A PORTION OF LOT 1 OF LANDS OF RICHARD B. MURRAY  
TOWN OF DUANESBURG, NY**

LEASE PARCEL THROUGH ALL THAT CERTAIN TRACT, PIECE OR PARCEL OF LAND SITUATE in the Town of Duanesburg, County of Schenectady, State of New York lying north of the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) and within a portion of Lot 1, said lot as shown on a map entitled "Survey and Minor Subdivision of Lands of Richard B. Murray", dated July 29, 2019 as prepared by The Environmental Design Partnership, LLP and filed in the Schenectady County Clerk's Office on October 8, 2019 in Plat Cabinet "P" as Map No. 39 (Doc No. 2019-39) and being further bounded and described as follows:

**Commencing** at the point of intersection of the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) with the common division line of Lot 2 to the west and Lot 1 to the east as shown on said map;

*Thence* from said *Point of Commencement* along said common division line the following four (4) courses and distances:

- 1) North 22 deg. 01 min. 20 sec. West, 1,048.32 feet to a point;
- 2) North 07 deg. 06 min. 20 sec. West, 137.50 feet to a point;
- 3) South 83 deg. 07 min. 50 sec. West, 399.88 feet to a point;
- 4) North 00 deg. 00 min. 00 sec. East, 225.78 feet to the **Point of Beginning** of the herein described *lease parcel* of land;

*Thence* from said *Point of Beginning* continuing along said common division line, North 00 deg. 00 min. 00 sec. East, 1,518.00 feet to the point;

*Thence* through said Lot 1 the following four (4) courses and distances:

- 1) North 83 deg. 12 min. 50 sec. East, 908.00 feet to a point;
- 2) South 05 deg. 58 min. 10 sec. East, 1,476.00 feet to a point;
- 3) South 83 deg. 43 min. 10 sec. West, 724.00 feet to a point;
- 4) South 83 deg. 12 min. 50 sec. West, 343.00 feet to the point or place of beginning of said *lease parcel* and containing 33.891± acres of land.



**ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.**

Shaping the physical environment

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(P) 518.371.7621 (F) 518.371.9540 edpllp.com

TOGETHER WITH AND SUBJECT TO A 50-FOOT WIDE UTILITY & MAINTENANCE, INGRESS/EGRESS AND REGRESS EASEMENT THROUGH THAT CERTAIN TRACT, PIECE OR PARCEL OF LAND SITUATE in the Town of Duanesburg, County of Schenectady, State of New York lying north of the northerly line of Duanesburg Road, NYS Route 7 (State Highway No. 1029) and within a portion of Lot 1, said lot as shown on a map entitled "Survey and Minor Subdivision of Lands of Richard B. Murray", dated July 29, 2019 as prepared by The Environmental Design Partnership, LLP and filed in the Schenectady County Clerk's Office on October 8, 2019 in Plat Cabinet "P" as Map No. 39 (Doc No. 2019-39) and being further bounded and described as follows:

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- 3) North 16 deg. 30 min. 10 sec. West, 554.76 feet to a point;
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- 5) North 39 deg. 45 min. 00 sec. East, 65.00 feet to a point;
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- 6) South 10 deg. 43 min. 40 sec. East, 265.00 feet to a point;

7) South 14 deg. 45 min. 20 sec. West, 190.56 feet to a point;

8) South 22 deg. 01 min. 20 sec. East, 881.42 feet to a point in said northerly line of Duanesburg Road;

*Thence* along said northerly line of said Duanesburg Road, South 72 deg. 57 min. 40 sec. West, 50.19 feet to the point or place of beginning of said *easement* and containing 3.046± acres of land.

Said *lease parcel* and *easement* made subject to any and all enforceable covenants, conditions, easements and restrictions of record as they may appear.

December 5, 2019

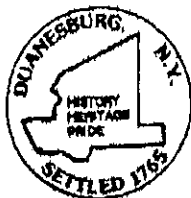
Prepared By: Timothy J. McAlonen, PLS/ZMB



Oak Hill 2 Lease Parcel Description.docx

# **SCHEDULE C**

Phillip Sexton, Planning Board Chair  
Dale Warner, Town Planner  
Melissa Deffer, Clerk  
Teresa Bakner, Board Attorney



TOWN OF DUANESBURG  
SCHENECTADY COUNTY

Jeffrey Schmitt, Vice Chairperson  
Elizabeth Novak, Board Member  
Martin Williams, Board Member  
Thomas Rulison, Board Member  
Michael Harris, Board Member  
Joshua Houghton, Board Member

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Town of Duanesburg  
Planning Board Minutes  
October 17<sup>th</sup>, 2019  
Final Copy

**MEMBERS PRESENT:** Phillip Sexton Chairman, Jeffery Schmitt Vice Chairman, Elizabeth Novak, Martin Williams, Thomas Rulison and Michael Harris. Also, in attending Dale Warner Town Planner, and Melissa Deffer Clerk.

**INTRODUCTION:** Chairman Phillip Sexton opened the meeting at 7:00pm. Phillip welcomed everyone to tonight's Planning Board meeting.

**PLEDGE OF ALLEGIANCE:**

**OPEN FORUM:** Chairman Sexton opened the forum at 7:01

Bruce O'Day of 5394 Western Turnpike wanted to state on the record that he is supporting the Andrew Lucks application.

Lynn Bruning located at 13388 Duanesburg Rd wanted to know what the status of the Comprehensive Plan?

Chairmen Sexton explained to Lynn that they have been working on the Plan for just over a year now and how in the near future he will be asking the public for comments.

**Harris/Rulison** made the motion to close the open forum at 7:07.

Harris yes, Rulison yes, Williams yes, Novak yes, Schmitt yes, Sexton yes. **Approved.**

**SKETCH PLAN REVIEW:**

**PUBLIC HEARINGS:**

**#19-13 Lucks Andrew:** SBL#66.00-3-4.1, (H) located at 5456 Western Turnpike is seeking a Special Use Permit for a retail business under the Town of Duanesburg Zoning Ordinance

Town Hall • 5853 Western Turnpike • Duanesburg, NY 12056 • (518) 895-8920

Over➡

adopted 6/11/15 under section 9.4.(15). Andrew Lucks gave his presentation to the board. Andrew is looking to relocate his business Outlander Survival from 6721 Duanesburg Rd to 5456 Western Turnpike. They will be in the same zone as they are in now. Andrew explained to the public how he will upgrade the building with security Systems and bars on all doors and windows (as a smash and grab is one of their main concerns), fix the parking lot and eventually reface the building. All lights on the building will be down cast with some solar lights around the driveway. Andrew is leasing for now from Bruce O'Day who will be going to have the property subdivided. Once the property is subdivided Andrew will be purchasing.

Cheryl Schrade 1619 Eaton Corners Rd asked Andrew if they will be test firing guns on the property. Andrew explained to Mrs. Schrade that with his business they do not test fire any weapons.

**Harris/Rulison** made a motion to close the Public Hearing for the **#19-13 Lucks Andrew** application at 7:09.

Harris yes, Rulison yes, Williams yes, Novak yes, Schmitt yes, Sexton yes. **Approved.**

**Novak/Sexton** made a motion to approve the **#19-13 Lucks. Andrew** application for a Special Use Permit for a retail business under the Town of Duanesburg Zoning Ordinance adopted 6/11/15 under section 9.4.(15) contingent on down cast lighting.

Novak yes, Sexton yes, Harris yes, Rulison yes, Williams yes, Novak yes, Schmitt yes. **Approved.**

#### **New Business:**

**#19-14 Perog. Steven and Cheryl:** SBL#43.00-2-28, (R-2) located at 21 Lea Drive is seeking a Special Use Permit for a two family dwelling adding a single apartment over an existing garage under the Town of Duanesburg Zoning Ordinance adopted 6/11/15 under section 15.4(I); section 8.4(8); section 13.2.1; section 3.5.60. Steven gave some of his presentation to the board. Due to not enough information the board decided to table it until the November 21<sup>st</sup> meeting.

**Sexton/Harris** made a motion to table the **#19-14 Perog. Steven and Cheryl** application to the November 21<sup>st</sup> meeting.

Sexton yes, Harris yes, Rulison yes, Williams yes, Novak yes, Schmitt yes. **Approved.**

#### **Old Business:**

None

#### **Sketch Plan Review:**

**#19-15 O'Neil. Paul/O'Neil. Gerald:** SBL#43.00-1-14.31, (R-2) located at 327 Hardin Road is seeking a minor subdivision under section 3.4 of the Town of Duanesburg Subdivision Ordinance. They would like to divide an existing lot of 34.30 acres into two portions lot #1 located on Hardin Road is 6.82 (+-) lot #2 located on State Highway 30 is 27.475 acres. Shannon O'Neil gave her presentation on behalf of her father Paul O'Neil.

**Sexton/Williams** made a motion to exempt the minor subdivision application from further planning Board review and refer to the Code Enforcement Officer to complete administratively as the proposed action neither creates nor increases any significant planning issues with respect to the existing or potential future use of any involved parcels. Sexton yes, Williams yes, Rulison yes, Harris yes, Schmitt yes, Novak yes. **Approved.**

**OTHER:**

**#19-12 Murray, Richard/Eden Renewables:** SBL# 74.00-2-5, (R-2) located 1206 Oak Hill Rd Under Local Law # 1-2016 of the Town of Duanesburg Zoning Ordinance Resolution revision.

**Sexton/Rulison** made a motion to amend the resolution approving the project to show the correct amount of lot coverage as shown on the site plans which were approved for the solar project for the **#19-12 Murray, Richard/Eden Renewables** application. Bullet 3B will now show that Lot 1 contains 70.378 acres with 32.8 acres of coverage which is 46 percent and that Lot 2 contains 70.353 acres with 33.0 acres of coverage which is 47 percent.

Sexton yes, Rulison yes, Williams yes, Novak yes, Schmitt yes, Harris yes. **Approved.**

**MINUTES APPROVAL:**

**Novak/Harris** made the motion to approve the September 19<sup>th</sup>, 2019 Planning Board minutes with minor corrections.

Novak yes, Harris yes, Sexton yes, Schmitt yes, Williams yes, Rulison yes. **APPROVED.**

**Sexton/Harris** made a motion to go into **executive session to discuss the enforcement action with the CEO associated with #19-14 Perog, Steven and Cheryl** application.

Sexton yes, Harris yes, Rulison yes, Williams yes, Novak yes, Schmitt yes. **Approved.**

**Sexton/Harris** made a motion to come out of **executive session.**

Sexton yes, Harris yes, Rulison yes, Schmitt yes, Williams yes, Novak yes. **Approved. NO ACTION WAS TAKEN BY THE BOARD DURING OR AFTER the EXECUTIVE Session.**

**ADJOURNMENT:**

**Harris/Novak** made the motion to adjourn at 7:50pm.

Harris yes, Novak yes, Schmitt yes, Sexton yes, Rulison yes, Houghton yes, Williams yes. **APPROVED.**

**TOWN OF DUANESBURG PLANNING BOARD  
RESOLUTION APPROVING SPECIAL USE PERMIT, SUBDIVISION AND SITE PLAN  
FOR THE EDEN RENEWABLES OAK HILL SOLAR ENERGY PROJECTS – 1206 OAK HILL ROAD**

---

Date: September 19, 2019

**WHEREAS**, on or about May 7, 2018, Eden Renewables ("Eden Renewables" or the "Applicant") applied to the Duanesburg Planning Board ("Planning Board") for a Special Use Permit and Site Plan Review pursuant to the Town of Duanesburg Local Law No. 1-2016, for the 5-MW Oak Hill Solar Energy Projects 1 and 2 (collectively, the "Project") to be located at 1206 Oak Hill Road in the Town of Duanesburg, Schenectady County, New York on the lands owned by Richard Murray (SBL# 74.00-2-5) ("Property"); and

**WHEREAS**, on or about May 17, 2018, the Applicant appeared before the Planning Board in furtherance of the proposed Project and the Planning Board requested that the Applicant meet with the Town Planner/Code Enforcement Officer to discuss the proposed application; and

**WHEREAS**, on or about July 18, 2018, the Applicant appeared before the Planning Board and requested a lot line adjustment and minor subdivision in order to install two 5-MW solar fields on each created parcel, in addition to the Special Use Permit sought pursuant to the Town of Duanesburg Local Law No. 1-2016; and

**WHEREAS**, on or about July 18, 2018, the Planning Board adopted a resolution pursuant to the State Environmental Quality Review Act [ECL Article 8 and its implementing regulations at 6 NYCRR Part 617, collectively referred to as "SEQRA"] in which it assumed the role of SEQRA Lead Agency, declared the proposed action as a Type 1 action and conducted a coordinated review;

**WHEREAS**, on or about August 16, 2018, the Planning Board adopted a resolution appointing Doug Cole of Prime AE Group of NY as the Town Designated Engineer to assist in its review of the application from Eden Renewables; and

**WHEREAS**, on or about September 11, 2018, the Town's Designated Engineer provided written comments on the application; and

**WHEREAS**, on or about March 11, 2019, the Applicant submitted revised site plans, minor subdivision and lot line adjustment plans, revised applications, a revised Full Environmental Assessment Form ("Full EAF"), and a decommissioning plan, accompanied by a letter addressing comments from the Town's Designated Engineer; and

**WHEREAS**, on or about March 21, 2019, the Applicant appeared before the Planning Board in furtherance of the site plan review process, and the Planning Board requested receipt of additional information and other actions from the Applicant; and

**WHEREAS**, on or about June 6, 2019, the Applicant submitted additional information to the Planning Board and addressed the outstanding actions identified by the Planning Board; and

**WHEREAS**, on or about June 20, 2019, the Planning Board reviewed the materials submitted by the Applicant, issued a negative declaration of environmental significance for this Type 1 action, after reviewing Part 1 of the EAF and completing Parts 2 and 3 of the EAF, and scheduled the Public Hearing for July 18, 2019; and

**WHEREAS**, on or about July 11, 2019, acting on a referral of the application from the Planning Board pursuant to GML § 239-m, County Planning recommended approval of the Project;

**WHEREAS**, on July 18 and August 16, 2019, the Planning Board held two well-attended public hearings on the applications and heard comments for and against the Project;

**WHEREAS**, the Planning Board directed the applicant to respond in writing to the public comments and the applicant submitted two sets of responses after each public hearing;

**WHEREAS**, the Planning Board directed the Town Designated Engineer, Mr. Cole of Prime AE to review the responses to the public comments and the additional information submitted by the Applicant, all as set forth in Mr. Cole's letter of September 10, 2019 providing comments on the Applicant's materials and recommending that the Town should condition any approval on the Applicant obtaining a permit from the US Army Corps of Engineers, if one is required by the agency, advising that the supplementary Visual Impact Assessment demonstrates that the existing Biggs and Otis and any other nearby residences will be adequately screened by existing vegetation, distance and topography such that the solar array will not be visible; and finding that the revised Decommissioning Plan is reasonable for the proposed system; and

**WHEREAS**, the Planning Board has carefully considered the documentation in the record including the supplemental information provided by the Applicant, the comments by involved and interested agencies, the recommendation of County Planning and the comments, both oral and written, by the members of the public;

**NOW, THEREFORE, BE IT RESOLVED**, by the Planning Board as follows:

1. That the applications for Minor Subdivision, Site Plan Review and Special Use Permit submitted by the Applicant for the Project were determined to be complete under the Town of Duaneburg Solar Law, the Duaneburg Zoning Law, and the Town of Duaneburg Subdivision Regulations; and
2. That having received and reviewed the application materials submitted by the Applicant, including but not limited to, site plans, subdivision plans, lot line adjustment plans, decommissioning plans, a Full Environmental Assessment Form, statements of proposed construction impacts and ongoing operation and maintenance, and having completed Parts 2 and 3 of the Full EAF, hereby determines that the Project will not have a significant adverse impact on the environment (as duly noted in the Full EAF) and, therefore, hereby confirms and issues a Negative Declaration as set forth in the EAF Part 3 and its attached reasons supporting the determination read into the record and incorporated herein based on the following findings;
  - a. The Project will not have any significant impacts on federal wetlands or waterbodies as determined by the full wetland delineation conducted on the Project site, that any necessary approvals would be covered by the ACOE nationwide permit program, and that there are no impacts on State wetlands or streams;
  - b. The Project will not create any permanent impacts from odors, noise or traffic nor to groundwater and surface waters, there will only be insignificant and temporary impacts during construction;



- c. The Project avoids and/or minimizes impacts on plants and animals, due to the very limited vegetative clearing that will result from the Project, once construction is complete vegetation will cover the ground under the panels and the property will continue to be used for limited agricultural purposes, such as sheep grazing and bee keeping;
  - d. The Project will not create any Impacts to historical or cultural resources as shown in the Letter of No Effect from the New York State Office of Parks, Recreation, and Historic Preservation dated June 4, 2019;
  - e. The Project will minimize any visual impacts due to the existing topography, the retention of existing vegetation as shown on the final site plans and will not create any impacts from glare as demonstrated by the Applicant;
  - f. The Planning Board hereby requires that the Project provide evergreen landscaping plan showing the establishment of a substantial evergreen buffer on the Applicant's property within 10 feet of the property boundary currently containing houses within approximately 600 feet of the project site boundary for a length of approximately 1600 feet at the back of the parcel with 2 staggered rows of trees planted 20 feet on center with the trees having the height at the time of planting of 6 to 7 feet and with the trees being species spruce and fir evergreens. The applicant shall also provide a maintenance and replacement agreement for the evergreen buffer to be planted;
  - g. The Project does not impact any Critical Environmental Areas and is not located in a flood zone;
  - h. The Project will have a positive economic benefit as it will result in revenue to the Town pursuant to a Payment-In-Lieu-Of-Taxes ("PILOT") Agreement and it will result in jobs during the construction and operation of the facility;
  - i. The Project will provide renewable energy in the production of electricity and will contribute to the State's goal of replacing fossil fuel generated electricity with renewable sources of electricity;
  - j. The Project will also not change the community character as it has been sited to not be visible to the maximum extent possible to surrounding homes and roadways, and an evergreen landscaped buffer will be created on the property containing the project as set forth above;
  - k. The Project is also a use of land that will be discontinued in the future and as such a decommissioning plan is in place to return the property to its current condition; and
  - l. The Applicant has indicated that it intends to continue to have the property in agricultural uses, such as sheep grazing and beekeeping, which also makes it consistent with the community which contains agricultural uses.
3. That Planning Board's findings set forth below demonstrate the proposed construction of the Project, a Solar Energy System (Major), at the Property satisfies the requirements of the Town of Duanesburg Solar Law:
- a. The Project is in the R-2 Zoning District and as such is a permitted use subject to Special Use Permit and Site Plan approval by the Planning Board;
  - b. The projects are located on parcels in excess of 97.24 and 87.18 acres and when constructed will have a lot coverage of 45.71 and 45.63 acres, respectively, thereby satisfying the lot coverage limitation of 60%;
  - c. The Project provides the required 100' setback between its components and the boundary of the Property, provides the required minimum of 25' buffer of vegetation to screen views of the Project and, in fact, that the Project exceeds this standard to address the concerns of adjoining property owners;
  - d. A fence meeting or exceeding the applicable requirements of the Zoning Law has been proposed;
  - e. The Project preserves existing on site vegetation to the maximum extent practicable and does not propose to clear cut all trees in a single contiguous area exceeding 20,000 square feet on the property;
  - f. The Town of Duanesburg Planning Board reviewed the plans showing brush hogging and tree clearing that had been undertaken by the property owner and determined such tree clearing did not exceed the above requirement;

- g. The SEQRA regulations require that a project sponsor may not commence any physical alteration related to an action until the provisions of SEQR have been complied with and the Planning Board specifically finds that the property owner brush hogging the property and taking down some limited trees for agriculture and silviculture purposes was consistent with the past uses of the property and not directly related to the development of the solar farm;
  - h. The Project is not located within an active farm field but is vacant hay field periodically cut by the property owner and historically used for more intensive agricultural purposes;
  - i. Native grasses and vegetation will be maintained below the arrays;
  - j. The site plans demonstrate that the Project:
    - i. Provides through its siting and through the implementation of an evergreen landscaping plan to be approved by the Town of Duaneburg, a project design that minimize visual impacts from public roads and existing residential dwellings on contiguous parcels to the satisfaction of the Planning Board;
    - ii. layout ensures that the solar panels will not reflect solar radiation or glare onto adjacent buildings, properties and roadways and that the solar panels include a non-glare coating and are designed to absorb the maximum amount of solar rays such that the panels will not misdirect or reflect solar rays onto neighboring properties or public roads in excess of that which already exists;
    - iii. existing vegetation on the site is preserved to the maximum extent practicable;
    - iv. all transmission/interconnection lines on the Property shall be underground and within necessary easements and in compliance with applicable electrical and town codes excepting aboveground lines as required by National Grid;
    - v. no artificial lighting is proposed;
    - vi. that any signage will be in accordance with applicable town requirements and the manufacturers and/or installers identification and appropriate warning signage shall be posted;
    - vii. the average height of the solar panels are 8' feet above grade – below the 20' height limitation;
    - viii. all disturbed areas shall be restored in accordance with the zoning law's requirements.
4. That the decommissioning plan is approved and the Planning Board requires that financial security be provided at least 30 days prior to the commencement of construction to the Town Clerk by the Applicant in the form of a bond or letter of credit in the amount \$422,762.00 (\$211,381.00 per project) with the form of financial security acceptable to the Town's attorney, with such funds to be used for decommissioning of the Project in the event that the Project is not decommissioned by the Project owner or the landowner; and
  5. That this project approval is conditioned upon the Applicant obtaining any other State or federal approvals required for the project including but not limited to any such permits required by the NYSDEC, the USACOE and the NYSDOT; and
  6. That this resolution and negative declaration shall be filed in the office of the Town Clerk and shall take effect immediately and that the notice of negative declaration be published in the ENB, that the negative declaration be provided to all involved agencies and that it be filed as required by SEQRA.

<u>Roll Call Vote:</u>	<u>Yes</u>	<u>No</u>	<u>Abstain/Absent</u>
Phillip Sexton	✓		
Jeffrey Schmitt	✓		
Elizabeth Novak	✓		
Martin Williams	✓		
Thomas Rullson	✓		

Michael Harris  
Joshua Houghton



# **SCHEDULE D**

**OAK HILL COMMUNITY SOLAR 1 AND 2  
DECOMMISSIONING STATEMENT**



**ORIGINAL**

ENTERED ON 8/5/19  
BY: DW 3:35

## CONTENTS:

1. INTRODUCTION
2. DECOMMISSIONING PLAN
3. COST OF DECOMMISSIONING
4. ESTABLISHMENT OF DECOMMISSIONING FUND
5. DEMOLITION INSTRUCTIONS

## APPENDICES:

APPENDIX 1:	SITE LOCATION PLAN
APPENDIX 2:	BREAKDOWN OF DECOMMISSIONING COSTS
APPENDIX 3:	NYSDA FACT SHEET
APPENDIX 4:	IRREVOCABLE STANDBY LETTER OF CREDIT



ORIGINAL

ENTERED ON: 9/5/19  
BY: DW 3:35

### 1. INTRODUCTION

Oak Hill Solar 1 & 2, LLC (the "Applicant"), a New York limited liability company, hereby submits this plan for the eventual decommissioning of the two proposed 5 MWAC/7.5 MWDC community solar electric generation facilities located at 13950 Duanesburg Road, Delanson, NY 12053, in the Town of Duanesburg (the "Town") within Schenectady County in New York State (the "Projects") and the establishment of a decommissioning fund (the "Decommissioning Fund") for review as part of the "Solar Energy Facilities Law" as adopted by the Town of Duanesburg through Resolution NO. 107-2016 (the "Solar Bylaw"), before the planning board of the Town of Duanesburg (the "Board").

A site location plan is provided at Appendix 1 for reference.

### 2. DECOMMISSIONING ACTIVITIES

The Projects are anticipated to operate for 25-30 years. At the time the Projects ceases to operate, Applicant will perform decommissioning which shall include removal of all energy facilities, structures and equipment including any subsurface wires and footings from the parcel. Any access roads created for building or maintaining the system shall also be removed and re-planted with vegetation. The solar panels and all other equipment removed from the project site, unless being reused or repurposed for another project, shall be recycled in accordance with all applicable New York State policies and procedures in effect at the time of decommissioning.

Further, decommissioning will include restoring the property to its pre-installed condition, including grading and vegetative stabilization to eliminate any negative impacts to surrounding properties. Specifically, such decommissioning shall include, but is not limited to, physical removal of all ground-mounted solar collectors, structures, equipment, security barriers and transmission lines from the site.

### 3. COST OF DECOMMISSIONING

The fully inclusive cost to decommission each Project, as defined in Section 2 herein, is estimated at \$211,381 (the "Estimated Decommissioning Cost"), as detailed in Appendix 2.

The Estimated Decommissioning Cost shall be adjusted annually to account for inflation, based upon the current Consumer Price Index ("CPI") as maintained by the Bureau of Labor Statistics (the "Revised Estimated Decommissioning Cost").

#### **4. ESTABLISHMENT OF DECOMMISSIONING FUND**

The Decommissioning Fund will be funded with either (i) a surety bond (the "Bond") or (ii) an irrevocable standby Letter of Credit (the "LC") that is solely for the benefit of the Town. No other entity, including Applicant, shall have the ability to demand payment under the Decommissioning Fund. A draft LC form is attached to this Plan as Appendix 4. The LC or other Board-approved financial security, shall be in place and filed with the Board prior to commencement of construction.

Every five years and for the Project's life, Applicant shall file a report with the Board on the effect of the annual inflation adjustment, as noted above, including a Revised Estimated Decommissioning Cost. If the Revised Estimated Decommissioning Cost exceeds the then current Estimated Decommissioning Cost, Applicant shall create a new or amended Bond (or other appropriate financial security) to be issued to reflect the Revised Estimated Decommissioning Cost. In the event the CPI has a negative value at the time the annual adjustment is calculated, the value of the Bond (or other appropriate financial security) shall not be reduced.

At the end of the Project's useful life, and in the event Applicant does not seek Board approval to repower the Project, Applicant will decommission the Project as required under the Board's Solar Bylaw. Upon completion of decommissioning, Applicant shall seek a certification of completion from the Board. The certification will be provided to the issuing bank with instructions to terminate the LC (or another appropriate financial security).

The Board shall have the right to draw on the LC (or other appropriate financial security) to pay the costs of decommissioning in the event that Applicant (or its successor) is unable or unwilling to commence decommissioning due to dissolution, bankruptcy, or otherwise. Prior to the Board drawing on the LC (or other appropriate financial security), Applicant shall have a reasonable period of time to commence decommissioning, not to exceed ninety days following issuance of a Board order requiring decommissioning of the Project.

#### **5. DEMOLITION INSTRUCTIONS**

The following list is the sequential procedure that should be followed by the town for removal of the system pursuant to this plan:

a. **Project Component Removal**

All control cabinets, electronic components, and internal cables will be removed along with the panels, racks, and inverters. These components will be lowered to the ground where they will be transported whole for reconditioning and reuse, or disassembled/cut into more easily transportable sections for salvageable, recyclable, or disposable components.





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BY: DW 3:35

b. PV Module Removal

The Project's solar photovoltaic panels are manufactured according to the regulatory toxicity requirements based on the Toxicity Characteristic Leaching Procedure (TCLP). Under these regulations, solar panels are not considered hazardous waste. The panels used in the Project will contain:

Glass	75%
Polymers	10%
Aluminum	8%
Silicon	5%
Copper	1%
Silver	1%

All which have recycling or resale value. Modules will be dismantled and packaged per manufacturer, approved recyclers or resellers specifications and shipped to an approved off-site solar panel recycler.

It is important to recognize that solar panels have a minimum 10 year product warranty and a minimum 25 year performance guarantee. Those warranties have a direct impact on the panels' salvage value. The earlier the decommissioning event the higher salvage value.

International Renewable Energy Agency (IRENA) and the International Energy Agency's Photovoltaic Power Systems Programme (IEA-PVPS) published a detailed report titled, "The End-of-Life Management: Solar Photovoltaic Panels" that projects the PV panel waste volumes to 2050 and highlights that recycling or repurposing of solar PV panels at the end of their 30-year lifetime will unlock a large stock of raw materials and valuable components. The report estimates that PV panel waste, comprised could total 78 million tonnes globally by 2050. The value of the recovered material could exceed \$15 billion by 2050. This potential material influx could produce 2 billion new panels or be sold into global commodity markets.

Below is a short list of American companies that already operate in the solar panel recycling or repurposing market.

<http://www.tekoverly.com/>

<http://www.morgenindustries.com/index.html>

<https://echoenvironmental.com/solar-panel-recycling/>

<http://www.glrnow.com/>

<http://www.intercotradingco.com/usa-solar-panel-recycling/>

<https://silrec.com/>

<http://www.solarsilicon.com/>

c. Electric Wire Removal

The copper and aluminum electric wires have a value for recycling. The DC wiring can be removed manually from the panels to the inverter. Underground wire in the project will be pulled and removed from the ground. Overhead cabling for the interconnection will be removed from poles. All wire will be sent to an approved recycling facility.

d. Racking and Fencing removal

All racking and fencing material like posts that were driven into the ground will be pulled, broken down into manageable units, removed from the facility and sent to an approved recycler.

e. Concrete Slab Removal

Concrete slabs used as equipment pads will be broken and removed to a depth of two feet below grade. Clean concrete will be crushed and disposed of off-site and/or recycled and reused either on or off-site. The excavation will be filled with subgrade material of quality and compacted density comparable to the surrounding area.

f. Access Road

The last structure to be removed is the access roads. They will be stripped exposing the geotextile beneath. The geotextile will then be removed and disposed of revealing the original soil surface. The compacted soil beneath the road fill might require ripping with a subsoiler plow to loosen it before it can be returned to crop production. Some of the access road might be retained by the landowner as it will be an improvement for their farm access.

g. Site Restoration Process

The site consists of 65.2 acres of agricultural land. Following the decommissioning activities, the sub-grade material, and topsoil from affected areas will be de-compacted and restored to a density and depth consistent with the surrounding areas. All unexcavated areas compacted by equipment used in decommissioning shall be de-compacted in a manner to adequately restore the topsoil and sub-grade material to the proper density consistent and compatible with the surrounding area.

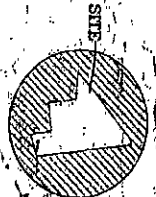
If the subsequent use for the Project site will involve agriculture, a deep till of the project site will be undertaken. The affected areas will be inspected, thoroughly cleaned, and all construction-related debris removed. Disturbed areas will be reseeded to promote the re-vegetation of the area unless the area is to be immediately redeveloped. In all areas restoration shall include, as reasonably required, leveling, terracing, mulching, and other necessary steps to prevent soil erosion, to ensure the establishment of suitable grasses and forbs, and to control noxious weeds and pests. The future use of the land for agricultural purposes would not be prejudiced.



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Appendix 1  
Site Location Plan

ENTERED ON: 9/5/19  
BY: DW 3:55



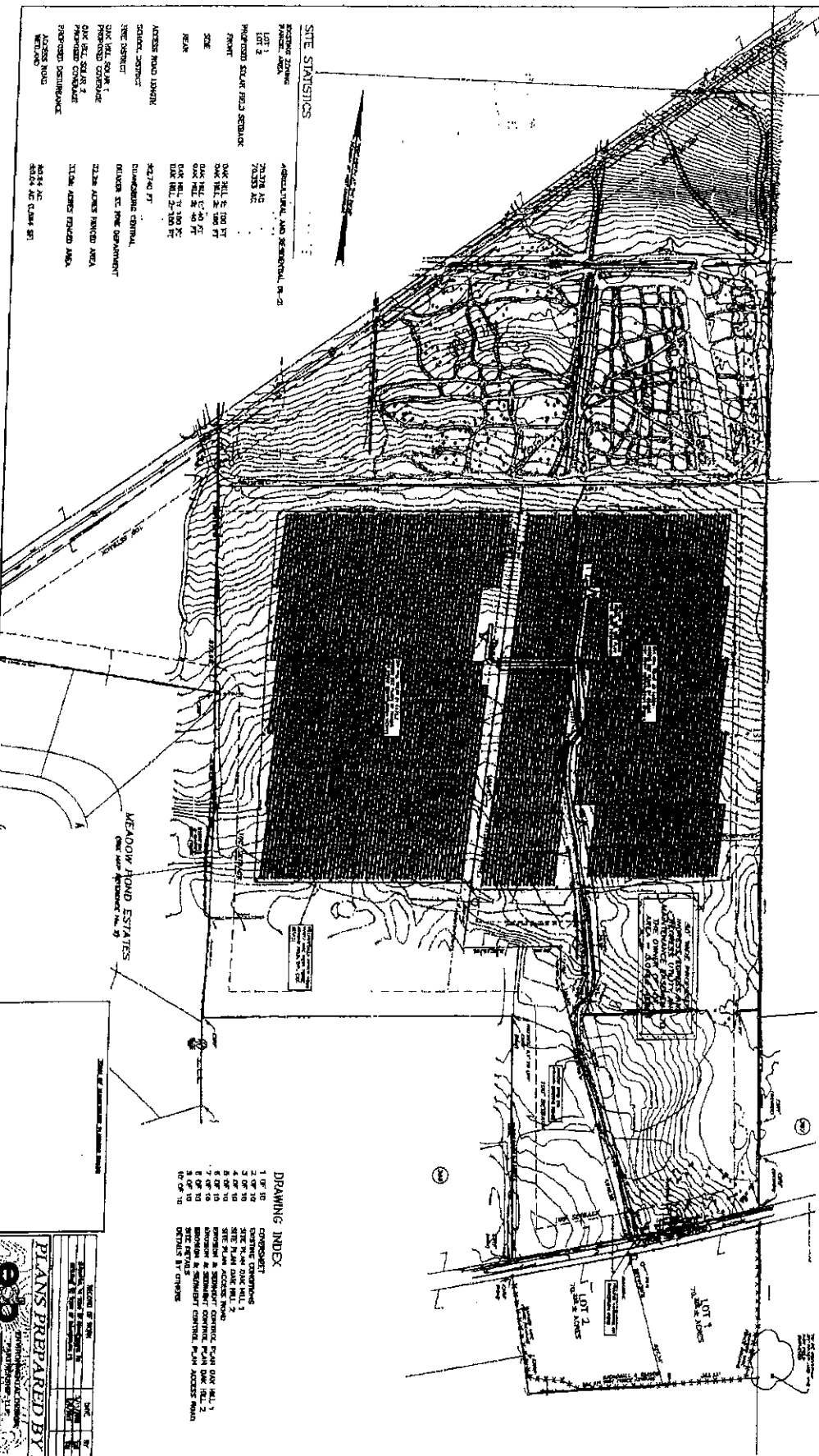
SITE LOCATION MAP  
SCALE: 1" = 1 MILE

# PROPOSED SITE PLAN FOR

## OAK HILL SOLAR 1&2

APPLICANT:

OAK HILL SOLAR 1, LLC & OAK HILL SOLAR 2, LLC  
13950 DUANEBSBURG ROAD  
TOWN OF DUANEBSBURG, SCHENECTADY COUNTY, NEW YORK



### SITE STATISTICS

RECORDING ZONING	AGRICULTURAL AND RECREATIONAL, R-40
PARCEL AREA	70.37 AC
LOT 1	70.37 AC
LOT 2	70.37 AC
PROPOSED SOLAR FIELD SETBACK	
FRONT	OAK HILL 1: 100 FT OAK HILL 2: 100 FT OAK HILL 3: 40 FT OAK HILL 4: 40 FT OAK HILL 5: 40 FT OAK HILL 6: 40 FT OAK HILL 7: 100 FT OAK HILL 8: 100 FT OAK HILL 9: 100 FT OAK HILL 10: 100 FT
SIDE	
REAR	
ACCESS ROAD WIDTH	40.00 FT
SOLAR, DISTRICT	DUANEBSBURG CENTRAL
SITE DISTRICT	DUANEBSBURG CENTRAL
OAK HILL, SOLAR 1	DUANEBSBURG CENTRAL
PROPOSED COVERAGE	72.34 AC (100% COVERAGE)
OAK HILL, SOLAR 2	72.34 AC (100% COVERAGE)
PROPOSED COVERAGE	72.34 AC (100% COVERAGE)
PROPOSED DISTANCE	11.00 AC (100% COVERAGE)
ACCESS ROAD	40.00 AC (100% COVERAGE)

### DRAWING INDEX

- 1 OF 10 COVER SHEET
- 2 OF 10 EXISTING COVERAGE
- 3 OF 10 SITE PLAN OAK HILL 1
- 4 OF 10 SITE PLAN OAK HILL 2
- 5 OF 10 PROPOSED & EXISTING COVERAGE OAK HILL 1
- 6 OF 10 PROPOSED & EXISTING COVERAGE OAK HILL 2
- 7 OF 10 PROPOSED & EXISTING COVERAGE OAK HILL 1 & 2
- 8 OF 10 SITE DETAILS
- 9 OF 10 DETAILS BY OTHERS
- 10 OF 10

### PLANS PREPARED BY:



### PROPOSED SITE PLAN FOR OAK HILL SOLAR 1&2

APPLICANT: OAK HILL SOLAR 1, LLC / OAK HILL SOLAR 2, LLC

13950 DUANEBSBURG ROAD  
TOWN OF DUANEBSBURG  
SCHENECTADY COUNTY, NEW YORK

TAX MAP No. 11-00-04  
FEBRUARY 1, 2011



CONVEYANCE

1 of 10

Appendix 2  
**Breakdown of Decommissioning Costs**

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*gib me*  
**ENTERED ON 1/19/19**

Applicant submits this breakdown of the Estimated Decommissioning Cost to support the proposed decommissioning fund of \$211,381 for each project based on 2019 cost of work estimates following the NYSEDA guidance which is based on the estimating practices followed by the State of Massachusetts and New York Southeast scrap value prices

It should be further noted that while the Decommissioning Fund is established in the amount equal to the gross decommissioning costs of \$211,381.00, there will likely be significant salvage value that would make the net system decommissioning cost lower than the proposed Decommissioning Fund amount.

To better explain the potential salvage value for this project we have completed a more detailed analysis of the current value of the main project components: solar panels, racking system aluminum/steel content and the electric cabling copper/aluminum content. The current published values for these materials can have a fairly large spread. For each item we choose the use the most conservative pricing available to assume current worst case scenario. As you can see from the summary analysis the current salvage value is 3 times higher than the proposed decommission cost.

Estimated Decommissioning Cost				
	Type	Quantity	Cost Per Item	Total
Fence Removal with Gate and CCTV	LF	7,618	\$4.50	\$34,281.00
Remove Transformers & Concrete Pads	Each	2	\$5,000.00	\$10,000.00
Remove Major Switch Gear & Concrete Pad	Each	1	\$5,000.00	\$5,000.00
Remove Modules and Racking	\$/MWac	5	\$9,000.00	\$45,000.00
Removal of Posts	Each	1,975	\$20.00	\$39,500.00
Remove & Dispose String Inverters, Storage and DC Converters	Each	60	\$300.00	\$18,000.00
Removal of Underground Wires and Backfill	LF	3,500	\$10.00	\$35,000.00
Site Restoration, Grade and Seed	Acre	10	\$900.00	\$9,000.00
Removal of Gravel Access Road	Cubic Yards	624	\$25.00	\$15,600.00
Current Total:				\$211,381.00
Total after 25 years of inflation (2.5% inflation rate)				\$346,372.38
Detailed Salvage Value				
	Solar Panels	43,455	\$6.60	\$286,003.00
	Racking Steel (lbs)	1,168,100.00	\$0.05	\$58,405.00
	Racking Aluminum (lbs)	1,760,000.00	\$0.15	\$264,000.00
	Project Cabling (lbs)	75,991.00	\$0.73	\$55,429.63
Total Salvage Value				\$677,837.63
Proposed decommissioning fund				\$211,381.00

Appendix 3

**NYSERDA Fact Sheet**

# FACT SHEET

## DECOMMISSIONING SOLAR PANEL SYSTEMS

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ENTERED ON: 9/5/19  
BY: SW 3:35



NY-Sun

This fact sheet provides information to local governments and landowners on decommissioning of large-scale solar panel systems.

As local governments develop solar regulations and landowners negotiate land leases, it is important to understand the options for decommissioning solar panel systems and restoring project sites to their original status.

From a land use perspective, solar panel systems are generally considered large-scale when they constitute the primary use of the land, and can range from less than one acre in urban areas to 10 or more acres in rural areas. Depending on where they are sited, large-scale solar projects can have habitat, farmland, and aesthetic impacts. As a result, large-scale systems must often adhere to specific development standards.

### Abandonment and decommissioning defined

**Abandonment** occurs when a solar array is inactive for a certain period of time.

- Abandonment requires that solar panel systems be removed after a specified period of time if they are no longer in use. Local governments establish timeframes for the removal of abandoned systems based on aesthetics, system size and complexity, and location. For example, the Town of Geneva, NY, defines a solar panel system as abandoned if construction has not started within 18 months of site plan approval, or if the completed system has been nonoperational for more than one year.<sup>1</sup>
- Once a local government determines a solar panel system is abandoned, and has provided thirty (30) days prior written notice to the owner it can take enforcement actions, including imposing civil penalties/fines, and removing the system and imposing a lien on the property to recover associated costs.

**Decommissioning** is the process for removing an abandoned solar panel system and remediating the land.

- When describing requirements for decommissioning sites, it is possible to specifically require the removal of infrastructure, disposal of any components, and the stabilization and re-vegetation of the site.

### What is a decommissioning plan?

Local governments may require to have a plan in place to remove solar panel systems at the end of their lifecycle, which is typically 20-40 years. A decommissioning plan outlines required steps to remove the system, dispose of or recycle its components, and restore the land to its original state. Plans may also include an estimated cost schedule and a form of decommissioning security (see Table 1).

### What is the estimated cost of decommissioning?

Given the potential costs of decommissioning and land reclamation, it is reasonable for landowners and local governments to proactively consider system removal guarantees. A licensed professional engineer, preferably with solar development experience, can estimate decommissioning costs, which vary across the United States. Decommissioning costs will vary depending upon project size, location, and complexity. Table 1 provides an estimate of potential decommissioning costs for a ground-mounted 2-MW solar panel system. Figures are based on estimates from the Massachusetts solar market. Decommissioning costs for a New York solar installation may differ. Some materials from solar installations may be recycled, reused, or even sold resulting in no costs or compensation. Consider allowing a periodic reevaluation of decommissioning costs during the project's lifetime by a licensed professional engineer, as costs could decrease and the required payment should be reduced accordingly.

Table 1: Sample list of decommissioning tasks and estimated costs

Tasks	Estimated Cost (\$)
Remove Rack Wiring	\$2,450
Remove Panels	\$2,450
Dismantle Racks	\$12,350
Remove Electrical Equipment	\$1,850
Breakup and Remove Concrete Pads or Ballasts	\$1,500
Remove Racks	\$7,800
Remove Cable	\$6,500
Remove Ground Screws and Power Poles	\$13,850
Remove Fence	\$4,950
Grading	\$4,000
Seed Disturbed Areas	\$250
Truck to Recycling Center	\$2,250
<b>Current Total</b>	<b>\$80,200</b>
<b>Total After 20 Years (2.5% Inflation Rate)</b>	<b>\$98,800</b>

<sup>1</sup> Town of Geneva, N.Y. CODE § 130-4(D)(5) (2016);



NYSERDA

Appendix 4  
**IRREVOCABLE STANDBY LETTER OF CREDIT**  
**DATE**

Applicant:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Beneficiary:

Town of Duanesburg  
5853 Western Turnpike  
Duanesburg, NY 12056

Dear Sir or Madam:

By order of \_\_\_\_\_ ("Applicant"), we, [insert name of issuing bank] ("Issuing Bank"), have established this irrevocable Standby Letter of Credit (this "Letter of Credit") in favor of the Town of Duanesburg ("Beneficiary"), , for an aggregate amount of up to \$\_\_\_\_\_, (as reduced pursuant to this Letter of Credit, the "Maximum Stated Amount") effective [insert initial date of this Letter of Credit] and expiring [insert date which is 364 days after the initial date of this Letter of Credit] as may be extended in accordance with the terms hereof (the "Expiration Date"). We are informed by the Applicant that this Letter of Credit is provided in connection with the Payment in Lieu of Taxes Agreement (the "Agreement"), dated [insert date of agreement], as amended from time to time, by and between Beneficiary and Applicant and is for the benefit of the Town of Duanesburg and Duanesburg Central School District.

The Maximum Stated Amount at the time of any drawing hereunder shall be immediately and permanently reduced by the amount of such drawing and otherwise as set forth herein.

Funds hereunder are available to Beneficiary, providing all terms and conditions of this Letter of Credit are strictly complied against Beneficiary's sight draft drawn on Issuing Bank in the form of **Annex A** and when accompanied by Beneficiary's statement purportedly signed by Beneficiary and reading as follows:

Either:

"An Event of Default under Section 6(a)(1) of the Agreement with respect to Applicant's due but unpaid PILOT Payments (as defined in the Agreement) has occurred, and the amount that Beneficiary is drawing under this Letter of Credit is due and owing





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ENTERED ON: 9/5/19  
BY: DW 335

by Applicant to Beneficiary as a result of such Event of Default. A copy of the unpaid PILOT Payment invoice is attached to the sight draft."

Or

"The Letter of Credit Number \_\_\_\_\_ is set to expire on \_\_\_\_\_, 20\_\_ (the "Expiration Date"). Beneficiary has received notice from Issuing Bank that this Letter of Credit will not be extended by Issuing Bank. Applicant is required to maintain a letter of credit securing Applicant's obligation to make PILOT Payments (as defined in the Agreement) under Section 3(o) of the Agreement ("Payment Security") and has failed to provide Beneficiary with alternative Payment Security at least thirty (30) calendar days prior to the Expiration Date, and as of the date of this drawing, has not provided Beneficiary with such Payment Security. As a result of the foregoing, Beneficiary is entitled to draw the Maximum Stated Amount of the Letter of Credit."

Issuing Bank hereby undertakes to honor Beneficiary's sight drafts drawn on Issuing Bank in accordance with this Letter of Credit by the date and time specified below, indicating the Letter of Credit number [insert Letter of Credit number], if presented to Issuing Bank on a Business Day occurring on or before the applicable expiration date for an aggregate amount not to exceed the Maximum Stated Amount.

Any drawings under this Letter of Credit shall be presented to Issuing Bank at its counters by personal presentation, courier or messenger service. In addition, drawings may also be presented by fax transmission to [Insert Issuing Bank fax number] or such other fax number identified by Issuing Bank in a written notice to Beneficiary. To the extent a drawing is presented by fax transmission, Beneficiary must (i) provide telephone notification to Issuing Bank at [Insert Issuing Bank telephone number] prior to or simultaneously with the sending of such fax transmission and (ii) send the original of such drawing to Issuing Bank by overnight courier at [Insert Issuing Bank address], however such original drawing documents will not be examined by us nor form part of the drawing. If a drawing is presented in compliance with the terms of this Letter of Credit to Issuing Bank at such address or fax number by 11:00 a.m., New York City Time, on any Business Day, payment will be made not later than the close of business, New York City Time, on the next Business Day and if such drawing is so presented to Issuing Bank after 11:00 a.m., New York City Time, on any Business Day, payment will be made on the second Business Day no later than the close of business, New York City Time.

If a demand for payment made hereunder does not conform to the terms and conditions of this Letter of Credit, Issuing Bank shall give Beneficiary notice in writing (or by telephone confirmed in writing) that Beneficiary's demand for payment was not effected in accordance with the terms and conditions of this Letter of Credit, stating the reasons therefore and that Issuing Bank will upon Beneficiary's instructions hold any documents at Beneficiary's written direction or return the same to Beneficiary. Upon being notified that the demand for payment was not effected in conformity with this Letter of Credit, Beneficiary may correct any such non-conforming demand if, and to the extent that

Beneficiary is entitled and able to do so on or before the Expiration Date, but in no event shall the Expiration Date of this Letter of Credit be extended.

Issuing Bank has no duty or right to inquire into the validity of, or the basis for, any draw.

This Letter of Credit shall permit multiple partial drawings.

As used herein, "Business Day" means any day on which (A) commercial banks are not closed, or authorized or required to close, in New York City or (B) with respect to a certain drawing request, the bank to which funds are requested to be transferred hereunder as set forth in such drawing request is not closed, or authorized or required to close, and may receive such funds by wire transfer as requested hereunder.

Should Beneficiary have occasion to communicate with Issuing Bank regarding this Letter of Credit, kindly direct the communication to the attention of [insert Issuing Bank address/department] mentioning the Letter of Credit number [insert letter of credit number].

This Letter of Credit, together with sight drafts submitted in accordance with the terms hereof, sets forth in full the terms of our undertaking and this undertaking shall not in any way be modified, amended, limited or amplified by reference to any document, instrument or agreement referred to herein, and any document, instrument or agreement referred to herein, and any such reference shall not be deemed to incorporate herein by reference any document or agreement.

Except as far as otherwise expressly stated herein this Letter of Credit is subject to the International Standby Practices (ISP98), International Chamber of Commerce Publication No. 590 (the "ISP"), and as to matters not governed by the ISP, shall be construed in accordance with the laws of the state of New York without regard to principles of conflicts of law that may result in the application of the laws of another jurisdiction.

As allowed by law, any payments hereunder shall be made free and clear of, and without deduction or set off for or on account of any present or future taxes, duties, charges, fees, deduction or withholding of any nature and by whomever imposed.

The Expiration Date of this Letter of Credit will be automatically extended without amendment for a period of one (1) year from the Expiration Date, or any future Expiration Date, unless at least sixty (60) days prior to the then current Expiration Date Issuing Bank sends notice to Beneficiary by overnight courier at Beneficiary's address shown above, that Issuing Bank elects not to extend the Expiration Date of this Letter of Credit for any such additional period.

ISSUING BANK

Authorized Signature

ANNEX A



ORIGINAL

IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER \_\_\_\_\_

Date \_\_\_\_\_

ENTERED ON: 9/5/19  
BY: DW 8:35

Sight Draft

Pay to the order of the County of Chautauqua Industrial Development Agency the amount of \$ \_\_\_\_\_ drawn under [Name of issuing bank] Irrevocable Standby Letter of Credit Number \_\_\_\_\_ dated \_\_\_\_\_, 20\_\_. A copy of the unpaid PILOT Payment invoice is attached hereto [For a payment default].

[INSERT BENEFICIARY PAYMENT INSTRUCTIONS]

Town of Duanesburg

By:

Name:

Title:

cc:



**TOWN OF DUANESBURG**  
**DECOMMISSIONING ESCROW AGREEMENT**

**THIS DECOMMISSIONING ESCROW AGREEMENT**, made and entered on this \_\_\_\_ day of \_\_\_\_\_ 2020 (the "Agreement") by and between the **Town of Duanesburg**, a municipal corporation duly established in Schenectady County with a principal place of business located at 5853 Western Turnpike, Duanesburg, NY 12056 (referred to as the "Town"), **Oak Hill Solar 1 LLC**, a limited liability company formed under the laws of the State of New York with principal offices at 1550 Wewatta Street, 4<sup>th</sup> Floor, Denver, CO 80202 (referred to as the "Operator") is made upon the following terms and conditions:

**PROJECT NAME:** Oak Hill 1 (the "Project")

**PROJECT LOCATION:** 13590 Duanesburg Road Delanson, NY (Tax Map 74.00-2-5) in the Town of Duanesburg, Schenectady County, New York (the "Project Site").

**PROJECT:** Operator intends to permit, construct, operate and maintain solar energy facilities with battery storage with an estimated aggregate size of five (5) megawatts of alternating-current (AC) nameplate capacity that will generate electric power (the "Project").

1. As a requirement for the approval of the Project, the Town and the Operator have on even date herewith entered into a decommissioning agreement (the "Decommissioning Agreement") setting forth the terms and conditions under which the Operator is required to remove the Project from the Project Site.

2. The Decommissioning Agreement requires the Operator to deposit the amount of ~~\$211,381~~ in escrow with the Town (the "Escrowed Funds"). The Parties agree that the Escrowed Funds shall be used solely to pay for any Decommissioning (as defined in the Decommissioning Agreement) of the Project, and only in the circumstances set forth in the Decommissioning Agreement. Prior to the end of each successive five (5) -year period after the execution of the Decommissioning Agreement, the Operator shall provide the Town with an updated decommissioning plan in accordance with the Decommissioning Agreement and the Escrowed Funds shall be changed to reflect the updated estimate approved by the Town for such Decommissioning of the Project.

3. To properly implement the Decommissioning Agreement, the Operator shall simultaneously with its execution of this Agreement, deliver the Escrowed Funds to the Town. The Escrowed Funds will be placed into an escrow account controlled by the Town (the "Escrow Account"). The purpose of the Escrow Account is to provide the Town funding for the Decommissioning of the Project should a Triggering Event (as defined in the Decommissioning Agreement) occur and should the Town elect to decommission the Project as provided for in the Decommissioning Agreement.

4. In the event of a Triggering Event and the Town's election to decommission the Project, should the costs of Decommissioning incurred by the Town exceed the amount of Escrowed Funds, Operator or its successor in title to the Project shall be responsible for

reimbursing the Town for any and all such excess costs, provided that the Town delivers to the Operator a reasonable written record of such costs.

5. The Town hereby acknowledges and agrees that at any time during the term of the Decommissioning Agreement that the Town receives written request from the Operator, the Town shall provide a complete statement of funds in the Escrow Account and any expenditures thereof.

6. Upon the completion of the Decommissioning of the Project in accordance with the terms and conditions of the Decommissioning Agreement, any balance remaining in the Escrow Account, if any, shall be refunded to Operator within sixty (60) of completion.

7. This Agreement, together with the Decommissioning Agreement, contains all of the terms agreed upon between the Town and Operator with respect to the subject matter hereof. This Agreement has been entered into after full investigation and neither party relies on any oral representations or statements from the other as an inducement to entering into this Agreement.

8. This Agreement may not be altered, amended, changed, modified, waived or terminated in any respect unless the same shall be in writing signed by the party to be bound.

9. The Operator shall have the right, at all times, to assign any of its rights and obligations under this Agreement and any rights to any remaining funds in the Escrow Account provided the Town receives prompt written notice of the identity of and contact information for such assignee.

10. This Agreement and all the rights and remedies of the Town hereunder shall inure to the benefit of and be binding upon the Town and its respective successors, endorser and permitted transferees and assigns. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to its conflicts of law principles. By executing this Agreement, the parties agree that venue for all judicial actions, suits or proceedings commenced with respect to any matters arising out of or in connection with this Agreement or for recognition or enforcement of any judgment rendered in any such proceedings, is proper in a court of competent jurisdiction in Schenectady County, New York or in the United States District Court for the Northern District of New York. By execution and delivery of this Agreement, the parties accept, generally and unconditionally, the jurisdiction of the aforesaid courts. **THE PARTIES HEREBY IRREVOCABLY WAIVE TRIAL BY JURY AND ANY OBJECTIONS, INCLUDING, WITHOUT LIMITATION, ANY OBJECTION TO THE LAYING OF VENUE OR BASED ON THE GROUNDS OF FORUM NON CONVENIENS, WHICH HE/SHE/THEY/IT MAY NOW OR HEREAFTER HAVE TO THE BRINGING OF ANY SUCH ACTION OR PROCEEDING IN ANY SUCH JURISDICTION.**

11. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument. Faxed or e-mailed signatures to this agreement shall be binding for all purposes.

**[SIGNATURE PAGE FOLLOWS]**

**IN WITNESS WHEREOF**, the parties have executed this Agreement the date first above written.

The Town of Duanesburg

Oak Hill Solar 1, LLC

\_\_\_\_\_  
Roger Tidball, Supervisor

\_\_\_\_\_  
By: \_\_\_\_\_  
Its: \_\_\_\_\_

**TOWN OF DUANESBURG**  
**DECOMMISSIONING ESCROW AGREEMENT**

**THIS DECOMMISSIONING ESCROW AGREEMENT**, made and entered on this \_\_\_\_ day of \_\_\_\_\_ 2020 (the "Agreement") by and between the **Town of Duanesburg**, a municipal corporation duly established in Schenectady County with a principal place of business located at 5853 Western Turnpike, Duanesburg, NY 12056 (referred to as the "Town"), **Oak Hill Solar 2 LLC**, a limited liability company formed under the laws of the State of New York with principal offices at 1550 Wewatta Street, 4<sup>th</sup> Floor, Denver, CO 80202 (referred to as the "Operator") is made upon the following terms and conditions:

**PROJECT NAME:** Oak Hill 2 (the "Project")

**PROJECT LOCATION:** 13686 Duanesburg Road Delanson, NY (Tax Map 74.00-2-5) in the Town of Duanesburg, Schenectady County, New York (the "Project Site").

**PROJECT:** Operator intends to permit, construct, operate and maintain solar energy facilities with battery storage with an estimated aggregate size of five (5) megawatts of alternating-current (AC) nameplate capacity that will generate electric power (the "Project").

1. As a requirement for the approval of the Project, the Town and the Operator have on even date herewith entered into a decommissioning agreement (the "Decommissioning Agreement") setting forth the terms and conditions under which the Operator is required to remove the Project from the Project Site.

2. The Decommissioning Agreement requires the Operator to deposit the amount of ~~\$211,381~~ in escrow with the Town (the "Escrowed Funds"). The Parties agree that the Escrowed Funds shall be used solely to pay for any Decommissioning (as defined in the Decommissioning Agreement) of the Project, and only in the circumstances set forth in the Decommissioning Agreement. Prior to the end of each successive five (5) -year period after the execution of the Decommissioning Agreement, the Operator shall provide the Town with an updated decommissioning plan in accordance with the Decommissioning Agreement and the Escrowed Funds shall be changed to reflect the updated estimate approved by the Town for such Decommissioning of the Project.

3. To properly implement the Decommissioning Agreement, the Operator shall simultaneously with its execution of this Agreement, deliver the Escrowed Funds to the Town. The Escrowed Funds will be placed into an escrow account controlled by the Town (the "Escrow Account"). The purpose of the Escrow Account is to provide the Town funding for the Decommissioning of the Project should a Triggering Event (as defined in the Decommissioning Agreement) occur and should the Town elect to decommission the Project as provided for in the Decommissioning Agreement.

4. In the event of a Triggering Event and the Town's election to decommission the Project, should the costs of Decommissioning incurred by the Town exceed the amount of Escrowed Funds, Operator or its successor in title to the Project shall be responsible for



reimbursing the Town for any and all such excess costs, provided that the Town first delivers to the Operator a reasonable written record of such costs.

5. The Town hereby acknowledges and agrees that at any time during the term of the Decommissioning Agreement that the Town receives written request from the Operator, the Town shall provide a complete statement of funds in the Escrow Account and any expenditures thereof.

6. Upon the completion of the Decommissioning of the Project in accordance with the terms and conditions of the Decommissioning Agreement, any balance remaining in the Escrow Account, if any, shall be refunded to Operator within sixty (60) of completion.

7. The Escrow Account shall not be used by the Town for any other purposes other than those set forth in the Decommissioning Agreement.

8. This Agreement, together with the Decommissioning Agreement, contains all of the terms agreed upon between the Town and Operator with respect to the subject matter hereof. This Agreement has been entered into after full investigation and neither party relies on any oral representations or statements from the other as an inducement to entering into this Agreement.

9. This Agreement may not be altered, amended, changed, modified, waived or terminated in any respect unless the same shall be in writing signed by the party to be bound.

10. The Operator shall have the right, at all times, to assign any of its rights and obligations under this Agreement and any rights to any remaining funds in the Escrow Account provided the Town receives prompt written notice of the identity of and contact information for such assignee.

11. This Agreement and all the rights and remedies of the Town hereunder shall inure to the benefit of and be binding upon the Town and its respective successors, endorser and permitted transferees and assigns. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to its conflicts of law principles. By executing this Agreement, the parties agree that venue for all judicial actions, suits or proceedings commenced with respect to any matters arising out of or in connection with this Agreement or for recognition or enforcement of any judgment rendered in any such proceedings, is proper in a court of competent jurisdiction in Schenectady County, New York or in the United States District Court for the Northern District of New York. By execution and delivery of this Agreement, the parties accept, generally and unconditionally, the jurisdiction of the aforesaid courts. **THE PARTIES HEREBY IRREVOCABLY WAIVE TRIAL BY JURY AND ANY OBJECTIONS, INCLUDING, WITHOUT LIMITATION, ANY OBJECTION TO THE LAYING OF VENUE OR BASED ON THE GROUNDS OF FORUM NON CONVENIENS, WHICH HE/SHE/THEY/IT MAY NOW OR HEREAFTER HAVE TO THE BRINGING OF ANY SUCH ACTION OR PROCEEDING IN ANY SUCH JURISDICTION.**

12. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument. Faxed or e-mailed signatures to this agreement shall be binding for all purposes.

**[SIGNATURE PAGE FOLLOWS]**

**IN WITNESS WHEREOF**, the parties have executed this Agreement the date first above written.

The Town of Duanesburg

Oak Hill Solar 2, LLC

\_\_\_\_\_  
Roger Tidball, Supervisor

\_\_\_\_\_  
By: David Rogers  
Title: President

PO Box 160  
Quaker Street, NY 12141

Supervisor Tidball  
Duanesburg Town Board  
5853 Western Turnpike  
Duanesburg, NY 12056

July 23, 2020

Re: Town Board vote on Oak Hill Solar 1 & 2, LLCs decommissioning documents presented by Amp Solar Development, Inc.

Dear Supervisor Tidball,

Please postpone tonight's vote on Amp Solar Development, Inc ("Amp") decommissioning documents for Oak Hill Solar 1, LLC and Oak Hill Solar 2, LLC (the "Project") until the town verifies the decommissioning cost and plan. The documents must protect the town and residents from unnecessary litigation and financial risks which may negatively impact the town budget.

Amp's Decommissioning Plan as shown in tonight's agenda Schedule D includes "Appendix 2", a summary table reflecting the cost of work estimates. This chart omits the removal and transportation of infrastructure for the Project as suggested by NYSERDA Fact Sheet which is found in Schedule D "Appendix 3".

Some items, but not limited to, that should be included in Amp's Decommissioning Plan for both Oak Hill Solar 1, LLC and Oak Hill Solar 2, LLC are:

1. Removal of 4 utility power poles at each interconnection point at Duanesburg Road.
2. Removal of untold number of power poles that may be along the 1,500 foot access road from each power plant to each interconnection point.
3. Removal of possible overhead transmission lines and cables from each power plant to each interconnection point.
4. Transportation and disposal of all utility power poles off-site.
5. Removal of two cement pads and related on-site spare parts storage containers for each power plant as shown on Site Plan Sheet 4.

6. Transportation of 45,455 solar panels to recycling facility. Depending upon panel specifications, which were not provided, this may be in excess of 2 million pounds of panels and may require in excess of 50 semi-truck loads.
7. Transportation of construction debris to landfill.

Clarification is needed:

1. Does each power plant contain 7,618 LF of fence? This may encompass over 35 acres.
2. Does the plan include removal of 7,618 LF of CCTV cables trenched along each fence line?
3. Each power plant indicates 3,500 LF of backfill? Is this correct?
4. Amp's chart reflects 1,975 posts per power plant. Is this correct number of posts to support 22,727 solar panels and associated racking system?
5. Amp's chart reflects 60 inverters per power plant but National Grid Interconnection Documents submitted by Eden Renewables to the Planning Board on September 5, 2019 reflect 111 inverters for each power plant. The site plan does not adequately locate the inverters. What is the correct number?

Please verify Decommissioning Plan Section 5.b. PV Modular Removal list of recycling companies and the cost of transportation to these facilities. My phone calls confirm that landfills such as our local company Cassella's, will not accept solar panels due to products containing toxic chemicals. Town of Westerlo recently enacted legislation prohibiting solar panel disposal in their landfills. Disposal of faulty solar panels replaced during project infancy, damaged during lifespan of the project and at decommissioning may be more difficult than anticipated.

Amp suggests that solar panel recycling may occur at the following companies:

<http://www.tekoverly.com>  
<http://www.morgenindustries.com>  
<https://echoenvironmental.com>  
<http://www.glrnow.com/>  
<http://www.intercotrading.com>  
<https://silrec.com/contact/>  
<https://solarsillicon.com>

This is essentially an identical list Eden Renewables presented to the Planning Board during their application process and Resolution approval September 19, 2019. Last year I spoke with these companies and learned that only two companies on the list recycle solar panels. Echo Environmental, located in Texas and InterCo Trading located in Illinois. Both will require long haul transportation which is not included in Amp's decommissioning estimate.

Please delay tonight's vote until the decommissioning documents and escrow have been updated to reflect the removal, transportation and disposal of ALL power plant infrastructure. The Town Board should not blindly rely on the accuracy of the Planning Board's documentation. The town board should protect itself, our finances and the residents from any possibility of future lawsuits and economic disaster due to inaccurate and incomplete decommissioning costs and planning documentation.

Please delay the vote until the decommissioning plan and escrow amount is accurate.

Thank you for your time and attention.

Regards,

Lynne Bruning

720-272-0956

lynnebruning@gmail.com

Cc: Douglas H. Zamelis, Esq  
Jeffery Schmitt, Planning Board Chairman

PO Box 160  
Quaker Street, NY 12141

Supervisor Tidball  
Duanesburg Town Board  
5853 Western Turnpike  
Duanesburg, NY 12056

July 23, 2020

Re: Town Board vote on Oak Hill Solar 1 & 2, LLCs decommissioning escrow documents

Dear Supervisor Tidball,

Please postpone tonight's vote on Oak Hill Solar 1, LLC and Oak Hill Solar 2, LLC (the "Project") decommissioning agreement, escrow and plan as presented in tonight's Agenda and posted on the town website July 22, 2020 until the town makes revisions to bring these documents into alignment with the Resolution and Site Plan as approved by the Planning Board September 19, 2019.

This letter serves to clarify that the approved Resolution and Site plan do not include battery storage. Failure to bring decommissioning documents into alignment with the approved Resolution and Site Plan places the town at risk for costly litigation and may place the town budget at risk.

September 19, 2019 the Planning Board approved the Resolution and Site Plan for Eden Renewables two solar power plants located at 13590 Duanesburg Road, Delanson, NY 12053. The approved documents do not include or demonstrate the use of battery storage for the Project. In fact "storage" is not mentioned in the Resolution.

The town supervisor and attorney were informed of this April 2020 when they received a copy of Douglas H. Zamelis Esq correspondence to New York State Energy Research and Development Authority ("NYSERDA") reflecting that battery storage was not approved and that any attempts to build anything on the site other than that approved by the Planning Board on September 19, 2019 may incur legal action by adjoining property owners. Exhibit "A"

Additionally National Grid Coordinated Electric System Interconnect Reviews for the Project as supplied by Eden to the Planning Board September 5, 2019 do not include battery storage. Exhibit "B"

The Town, as lead agency, failed to have the Project's negative declaration posted in the Department of Environmental Conservation Environmental Notice Bulletin as required by New York State law. This publication requirement is also stated in the approved September 19, 2020 Resolution item number 6 " notice of negative declaration be published in the ENB, that the negative declaration be provided to all involved agencies and that it be filed as required by SEQRA."

Battery storage was not approved and the town failed to uphold New York State law as well as its own Resolution. Battery storage should not be constructed on the Project site.

I respectfully request that the town board postpone tonight's vote until the decommissioning documents are brought into alignment with the approved Resolution and Site Plan. Failure to do so may place the town at financial risk for the lifetime of the Project.

Thank you for your time and attention to this matter.

Regards,

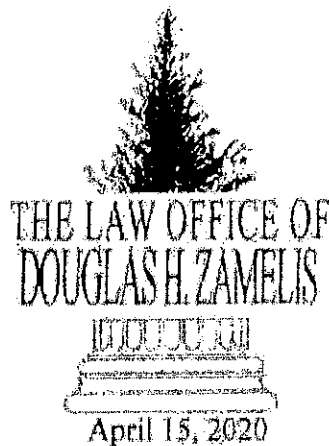
Susan Biggs  
13388 Duanesburg Road, Delanson , NY 12053

Cc: Jeffery Schmitt, Planing Board Chair  
Douglas H. Zamelis, Esq

# **EXHIBIT**

**A**





Hon. Richard F. Kauffman, Chair  
& Members:  
New York State Energy Research and Development Authority  
17 Columbia Circle  
Albany, New York 12203-6399

Re: Oak Hill 1 Solar LLC and Oak Hill 2 Solar LLC, Duanesburg (T), Schenectady County

Dear Chairman Kauffman and Members of the Authority:

This office represents Ms. Susan Biggs and Ms. Lynne Bruning in connection with two community solar projects identified as Oak Hill 1 Solar and Oak Hill 2 Solar (the "Projects") in the Town of Duanesburg, Schenectady County, with listed addresses at 13590 Oak Hill Road and 13686 Duanesburg Road, Delanson, New York, respectively. Ms. Biggs and Ms. Bruning reside at 13388 Duanesburg Road, adjacent to the Projects, and are petitioners in a proceeding pursuant to CPLR Article 78 entitled *Biggs, et al. v. Eden Renewables LLC et al.* presently pending in Schenectady County Supreme Court (Index Number 2019-2217) which seeks invalidation and annulment of the Projects' local land use approvals.

The Authority has awarded funds for the Projects totaling \$7,713,456.00 based on representations by Eden Renewables LLC (and/or a successor-in-interest) concerning the size and capacity of the Projects approved by the Town of Duanesburg Planning Board, and the purported approval of energy storage facilities by that Planning Board. This correspondence clarifies that the combined size and capacity of the Projects approved by the Town of Duanesburg Planning Board is only 65.2 acres and 10 MW, not 95 acres and 15 MW as reportedly represented to the Authority. This correspondence further confirms that, notwithstanding what has been represented to the Authority, the Town of Duanesburg Planning Board did not actually review or approve any energy storage facilities in connection with the Projects.

The Duanesburg Planning Board's September 19, 2019 "Resolution Approving Special Use Permit and Subdivision and Site Plan Approval for the Eden Renewables Oak Hill Solar Energy Projects - 1206 Oak Hill Road" (the "Local Approval Resolution"), a copy of which is attached herewith as Exhibit "A", purported to approve the two 5 MW Projects, for a combined generation capacity of 10 MW. Because Ms. Biggs and Ms. Bruning brought to the Duanesburg

Planning Board's attention that the Local Approval Resolution overstated the size of the Projects, the Local Approval Resolution was amended by resolution embodied in the minutes of the Duanesburg Planning Board's October 17, 2019 meeting, a copy of which are attached herewith as Exhibit "B", which set forth the correct "coverage" for the Projects as "32.8 acres" and "33 acres" for a combined total of 65.8 acres. The Duanesburg Planning Board therefore approved two solar projects with a combined generation capacity of 10 MW to cover a combined +/-65.8 acres.

The combined coverage of +/-65.8 acres for the Projects is consistent with the "Proposed Site Plan for Oak Hill Solar 1&2, Sheets 1 through 11" dated February 8, 2019 (the "Approved Site Plan") prepared by Environmental Design Partnership, LLC resubmitted to the Duanesburg Planning Board on June 6, 2019 which indicates "proposed coverage" of "32.2 acres" and "33 acres" for a combined coverage of +/-65.2 acres.

Sheets 9 and 10 of the Approved Site Plan show site plan details for limited use pervious access roads, limited use pervious wetland crossings, solar field fences, silt fences, construction entrance, trenches, spare parts containers, DC to DC converters, PV tracker systems, CCTV poles, transformer stations, and inverters on poles, the Approved Site Plan does not provide any details for any type battery or energy storage system facilities. Likewise, neither the State Environmental Quality Review Act Full Environmental Assessment Form, Negative Declaration, nor the Local Approval Resolution, as amended, references battery storage anywhere in their texts. The only reference to battery storage in the record of the Duanesburg Planning Board's proceedings is in the minutes of the board's March 21, 2019 meeting where it is indicated "There will be battery storage proposed in ten (10) small enclosures with containment and fire protection". Such facilities were never actually proposed or reviewed though, and both the Approved Site Plan and the Local Approval Resolution, as amended, fail to show, discuss or approve any energy storage facilities in connection with the Projects.

Notwithstanding the omission of energy storage facilities from the Approved Site Plan and absence of any mention of energy storage facilities in the SEQRA documents or Local Approval Resolution, Town of Duanesburg Planner/Building Inspector/Code Enforcement Officer Dale R. Warner somehow acknowledged and confirmed to the Authority on "Confirmation of Local Land Use Approval" forms dated September 23, and 26, 2019 copies of which are attached herewith as Exhibit "C", that "Required Energy Storage Land Use Approvals" had in fact been granted on September 19, 2019, i.e., the date of the Local Approval Resolution which makes no mention of energy storage facilities. Thereafter, Officer Warner acknowledged and confirmed to the Authority on "Presentation to Planning/Zoning Board for Energy Storage" forms dated October 4, 2019 attached herewith as Exhibit "D" which provide "NYSERDA respectfully requests that the municipality sign a copy of this form acknowledging receipt of the below information as part of the Applicant's presentation to the Planning/Zoning Board" for projects of "Energy Storage Size, MW (AC): 5MW AC" and "Solar Project Size, MW (DC) (if applicable): 7.5MW DC". Officer Warner, who is not a member of the Duanesburg Planning Board or Zoning Board of Appeals, acknowledged and confirmed the Authority's "Presentation to Planning/Zoning Board For Energy Storage Facilities Forms" despite the clear indication on the form that they were to be "ACKNOWLEDGED & CONFIRMED BY

MUNICIPALITY Planning/Zoning Board Member". The Duaneburg Planning Board approved no energy storage facilities, and approved only two 5 MW DC community solar projects.

Records obtained from the Authority pursuant to the Freedom of Information Law and filed on the New York State Department of Public Service Document and Matter Management system for matter number 17-02273 indicate that substantial financial incentives by the Authority were contingent and conditioned upon the a) Projects actually comprising a total of 15 MW; and b) approval of associated commercial battery storage facilities by the Duaneburg Planning Board.

By way of demonstration, correspondence from the Authority to Oak Hill Solar 1, LLC dated October 31, 2019 attached herewith as Exhibit "E" states that "Your award in the amount of \$1,498,728 is contingent upon the installation and grid interconnection of a 7,493.64 kW solar electric system for: Oak Hill Solar 1, LLC at 13590 Duaneburg Rd., Delanson, NY 12053 as outlined in the project application. Virtually identical correspondence for Oak Hill Solar 2 LLC of the same date which states that "Your award in the amount of \$1,498,728 is contingent upon the installation and grid interconnection of a 7,493.64 kW solar electric system for: Oak Hill Solar 2, LLC at 13686 Duaneburg Rd., Delanson, NY 12053 as outlined in the project application" is also included herewith as Exhibit "E". Therefore, while awards by the Authority totaling \$2,997,456.00 are contingent on the interconnection of a combined 15 MW of solar electrical systems, the Duaneburg Planning Board's Local Approval Resolution only authorizes the construction of a combined 10 MW.

The "Salesforce" printout for Oak Hill Solar 1, LLC filed with the Authority, a copy of which is attached as Exhibit "F", represents that Oak Hill Solar 1 "Total System Size" is "7,493.640" kW and indicates "Total Number Acres: 46.00". The "Salesforce" printout for Oak Hill Solar 2, LLC filed with the Authority, a copy of which is included in Exhibit "F", represents that Oak Hill Solar 2 "Total System Size" is also "7,493.640" kW and indicates "Total Number Acres: 49.00". These records, filed *after* the issuance of the Duaneburg Planning Board's Local Approval Resolution which authorized a combined 10 MW on only +/- 65.2 acres, purport to represent to the Authority that the Projects would have a combined generation capacity of 15 MW on 95 acres.

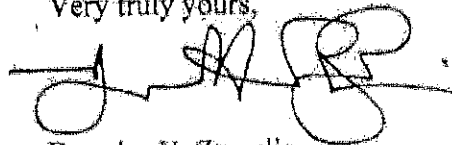
In addition to the \$2,997,456.00 awarded by the Authority for the Projects under the "NY-Sun Program", according to correspondence from the Authority dated October 28, 2019 attached herewith as Exhibit "G" indicates the Authority awarded \$2,358,000.00 each for Oak Hill 1 Solar and Oak Hill 2 Solar under the "Retail Energy Storage Incentive Program" which funds were "contingent upon the installation and grid interconnection of a 5,000.00 kW/11,790.00 kWh (useable installed energy capacity measured in AC) energy storage system". However, as established above, neither the SEQRA EAF, Negative Declaration, Approved Site Plan, nor the Local Approval Resolution reference any energy storage facilities in connection with the Projects, and therefore such storage facilities were never in fact reviewed or approved by the Duaneburg Planning Board. The Authority has therefore granted \$4,716,000.00 in incentives for energy storage systems for the Projects when Eden Renewables LLC never obtained approval from the Duaneburg Planning Board for any energy storage facilities in connection with the Projects.

Please be advised Ms. Biggs and Ms. Bruning reserve all their statutory and common law rights and remedies to enforce the Town of Duanesburg Zoning Law and Final Approval Resolution in a Declaratory Judgment Action in Schenectady County Supreme Court in the event Eden Renewables LLC (or its successor-in-interest) constructs the Projects in excess of 10 MW, 65.8 acres, and/or attempts to install any energy storage facilities.

On behalf of Ms. Biggs and Ms. Bruning, we respectfully request that this matter be investigated, and if the Authority determines that the Projects do not satisfy the contingencies of the \$7,713,456.00 in incentives as set forth above, that it revoke or withhold such incentives as appropriate.

Thank you very much for the Authority's careful consideration of this important matter.

Very truly yours,

A handwritten signature in black ink, appearing to read 'D. H. Zamelis', written over a horizontal line.

Douglas H. Zamelis

cc:

Alicia Barton, NYSEERDA President & CEO

Hon. Letitia James, NYS Attorney General

Hon. Letizia Tagliaferro, NYS Inspector General

Hon. Thomas DiNapoli, NYS Comptroller

Hon. Roger Tidball, Supervisor, Town of Duanesburg

Terresa M. Bakner, Esq., Counsel to Town of Duanesburg

Daniel A. Spitzer, Esq., Counsel to Eden Renewables LLC

# **EXHIBIT**

**B**

nationalgrid	Coordinated Electric System Interconnect Review	Doc. #SP.NY-165990 Page 1 of 9 Version 2.0 - 12/13/2018
	Distributed Energy Resources - NYSSIR	

For  
**Interconnection Customer: Oakhill Solar 1 LLC**  
**Applicant: New PowerCo Inc.**  
**5,000 kW Photovoltaic Generator System**  
**13590 Duaneburg Delanson, NY 12053**

**Interconnection to National Grid**  
**NY Eastern Division**  
**Northeast Region**  
**Cobleskill District**  
**Delanson #269 Substation**  
**13.2 kV Feeder 26951**

THIS DOCUMENT AND ANY ATTACHMENTS HERETO ("DOCUMENT") IS MADE AVAILABLE BY NATIONAL GRID UPON AND SUBJECT TO THE EXPRESS UNDERSTANDING THAT: (A) NEITHER NATIONAL GRID NOR ANY OF ITS OFFICERS, DIRECTORS, AFFILIATES, AGENTS, OR EMPLOYEES MAKES ANY WARRANTY, ASSURANCE, GUARANTY, OR REPRESENTATION WITH RESPECT TO THE CONTENTS OF THE DOCUMENT OR THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED OR REFERENCED IN THE DOCUMENT, AND (B) NATIONAL GRID, ITS OFFICERS, DIRECTORS, AFFILIATES, AGENTS, AND EMPLOYEES SHALL NOT HAVE ANY LIABILITY OR RESPONSIBILITY FOR INACCURACIES, ERRORS, OR OMISSIONS IN, OR ANY BUSINESS OR POLICY DECISIONS MADE BY ANY DIRECT OR INDIRECT RECIPIENT IN RELIANCE ON, THIS DOCUMENT OR THE INFORMATION CONTAINED OR REFERENCED THEREIN. ALL SUCH LIABILITY IS EXPRESSLY DISCLAIMED.

nationalgrid	<b>Coordinated Electric System Interconnect Review</b> Distributed Energy Resources - NYSSIR	Doc. #SP.NY-165990 Page 2 of 9 Version 2.0 - 12/13/2018
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# TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	3
2.0 EXECUTIVE SUMMARY	3
3.0 COMPANY EPS PARAMETERS	3
4.0 INTERCONNECTION CUSTOMER SITE	4
5.0 SYSTEM IMPACT ANALYSIS	5
6.0 MITIGATIONS FOR SYSTEM IMPACT ANALYSIS FAILURES	7
7.0 CONCEPTUAL COST ESTIMATE	8

The following table provides a summary of the key findings and recommendations from the review. The findings are categorized by the type of issue identified, and the recommendations are provided for each category. The findings are as follows:

- Findings:**
  - Category 1:** The review identified several areas where the system parameters were not fully compliant with the applicable standards. These areas include the voltage regulation, the power factor, and the harmonic distortion.
  - Category 2:** The review identified several areas where the interconnection process was not fully compliant with the applicable standards. These areas include the documentation requirements, the communication requirements, and the safety requirements.
  - Category 3:** The review identified several areas where the system impact analysis was not fully compliant with the applicable standards. These areas include the data requirements, the analysis methods, and the reporting requirements.
  - Category 4:** The review identified several areas where the mitigation measures were not fully compliant with the applicable standards. These areas include the design requirements, the implementation requirements, and the monitoring requirements.
  - Category 5:** The review identified several areas where the cost estimate was not fully compliant with the applicable standards. These areas include the data requirements, the calculation methods, and the reporting requirements.
- Recommendations:**
  - Category 1:** The review recommends that the system parameters be revised to comply with the applicable standards. This includes revising the voltage regulation, the power factor, and the harmonic distortion.
  - Category 2:** The review recommends that the interconnection process be revised to comply with the applicable standards. This includes revising the documentation requirements, the communication requirements, and the safety requirements.
  - Category 3:** The review recommends that the system impact analysis be revised to comply with the applicable standards. This includes revising the data requirements, the analysis methods, and the reporting requirements.
  - Category 4:** The review recommends that the mitigation measures be revised to comply with the applicable standards. This includes revising the design requirements, the implementation requirements, and the monitoring requirements.
  - Category 5:** The review recommends that the cost estimate be revised to comply with the applicable standards. This includes revising the data requirements, the calculation methods, and the reporting requirements.

nationalgrid	<b>Coordinated Electric System Interconnect Review</b>	Doc. #SP.NY-185940 Page 3 of 9 Version 2.0 - 12/13/2018
	Distributed Energy Resources - NYSSIR	

## 1.0 INTRODUCTION

This report presents the analysis results of the Niagara Mohawk Power Corporation d/b/a National Grid ("National Grid" or the "Company") interconnection study based on the proposed interconnection and design submittal from the Interconnection Customer in accordance with the National Grid electric System Bulletin No. 75, Appendix B 'Distributed Generation Connected To National Grid Distribution Facilities Per The New York State Standardized Interconnection Requirements'. The intent of this report is to assess this project's feasibility, determine its impact to the existing electric power system (EPS), determine interconnection scope and installation requirements, and determine costs associated with interconnecting the Interconnection Customer's generation to the Company's Electric Power System (EPS). This Coordinated Electric System Impact Review (CESIR) study, according to the NYSSIR Section 1.C Step 6, identifies the scope, schedule, and costs specific to this Interconnection Customer's installation requirements.

## 2.0 EXECUTIVE SUMMARY

The total estimated planning grade cost of the work associated with the Interconnection of the Interconnection Customer is \$283,066.

The interconnection was found to be feasible with modifications to the existing Company EPS and operating conditions, which are described in detail in the body of this study.

The ability to generate is contingent on this facility being served by the interconnecting circuit during normal Utility operating conditions. Therefore, if the interconnecting circuit is out of service, or if abnormal Utility operating conditions of the area EPS are in effect National Grid reserves the right to disengage the facility.

No future increase in generation output beyond that which specified herein for this interconnection has been studied. Any increase in system size and/or design change is subject to a new study and costs associated shall be borne by the Interconnection Customer. An increase in system size may also forfeit the Interconnection Customer's existing queue position.

## 3.0 COMPANY EPS PARAMETERS

Substation	Delanson 269
Transformer Name	TB1
Transformer Peak Load (MW)	8.6
Contingency Condition Load, N-1 Criteria (MW) (as applicable)	3.4
Daytime Light Load (MW)	2.1
Generation, Total, Connected, Queued (MW)	8.1, 3.1, 5.1
Contingency Condition Generation, Total, Connected, Queued (MW)	7.6, 2.6, 3.0
Supply Voltage (kV)	13.2



nationalgrid	<b>Coordinated Electric System</b>	Doc. #SP-NY-185990
	<b>Interconnect Review</b>	Page 4 of 9
	<b>Distributed Energy Resources - NYSSIR</b>	Version 2.0 - 12/13/2018

Transformer Maximum Nameplate Rating (kVA)	14
Distribution Bus Voltage Regulation	Yes
Transmission GFOV Status	Installed
Bus Tie	None
Number of Feeders Served from this Bus	2

Connecting Feeder/Line	26951
Peak Load on feeder (kW)	5.2
Daytime Light Load on Feeder (MW)	1.3
Feeder Primary Voltage at POI (kV)	13.2
Line Phasing at POI	3
Distance to nearest 3-phase, (if applicable)	n/a
Line/Source Grounding Configuration at POI	effective
Other Generation: Total, Connected, Queued (kW)	7.6, 2.6, 5.0

System Fault Characteristics without Interconnection Customer DG at POI	
Interconnection Customer POI Location	P182-1 (Duaneburg Rd.)
1 3-phase (3LLL)	1,303 Amps
1 Line to Ground (3LO)	894 Amps
Z1 (100 MVA base)	1.0860 + j3.1946 PU
Z0 (100 MVA base)	2.7636 + j7.5176 PU

#### 4.0 INTERCONNECTION CUSTOMER SITE

The Interconnection Customer is proposing a new solar photovoltaic primary service connection with Account No. 2858968039.

This location is presently served via National Grid 13.2kV feeder 26951 from Delanson Substation.

The proposed generating system consists of:

- One hundred-eleven HUAWEI SUN2000-45KTL-US, 45kW, 600VAC, 3-Phase inverters connected to
- Nine 800A, 3-Phase Powerboards, having a 800A main circuit breaker, through a 70A circuit breaker (1 per inverter x 11 per powerboard),
- Two 600A, 3-phase Powerboards, having a 450A main circuit breaker, through a 70A circuit breaker (1 per inverter x 9 per powerboard.)
- Two 2500kVA 2 Winding Design 600V - 13.2kV step-up transformers
- The outputs of both transformers are then connected to a customer-owned riser pole. This then continues on to
- A customer-owned primary service that consists of a customer-owned gang operated air break switch.

nationalgrid	<b>Coordinated Electric System Interconnect Review</b>	Doc. #SP.NY-18090 Page 5 of 9 Version 2.0 - 12/13/2018
	Distributed Energy Resources - NYSSIR	

- A 75kVA, 3-Phase grounding transformer with Z= 5% and X/R = 6 configured wye-ground/delta is connected on the primary side of the step-up transformers utilizing a 51G ground overcurrent relay through a customer owner recloser.

## 5.0 SYSTEM IMPACT ANALYSIS

Category	Criteria	Limit	Result
Voltage	Overvoltage	< 105% (ANSI C84.1)	Fail
With the addition of the subject generator the maximum voltage as modeled on the Feeder is 106% of nominal. To alleviate the overvoltage with the addition of the subject generator, the bank of 3-76.2kVA regulators on P.170 Duaneburg Rd. would need to be replaced with 3-333kVA 7.62kV regulators with bi-directional controls and relocated to on or near Pole 115 Duaneburg Rd.			
Voltage	Undervoltage	> 95% (ANSI C84.1)	Pass
With the addition of the subject generator the minimum voltage as modeled on the Feeder is 95% of nominal.			
Voltage	Substation Regulation for Reverse Power	Reverse Power on LTC	Pass
The total generation on Feeders 26951 and 26952, is 8.1 MW. The total minimum load on these Feeders is 2.15 MW. Therefore, the generation to load ratio is 376% and reverse power can flow through TB2 onto the transmission system. TB2 already has a LTC with bi-directional controls and no further action is required.			
Voltage	Feeder Regulation for Reverse Power	Minimum load to generation ratio	Fail
The total generation downstream of voltage regulator P.170 is 5.08 MW. The minimum load downstream of the voltage regulator is 0.217 MW. Therefore, the generation to load ratio is 2341%. Bi-directional controls will be needed on the distribution voltage regulator.			
Voltage	Fluctuation	<3% steady state from proposed generation on feeder	Pass
The greatest voltage fluctuation on the feeder occurs at P.170 Duaneburg Rd. The resulting fluctuation at the feeder location is 3% due to the proposed generation.			
Voltage	Flicker	Screen H Flicker	Pass
The Pst for the location with the greatest voltage fluctuation is 0.256 and the emissions limit is 0.35.			
Equipment Ratings	Thermal (continuous current)	thermal limits	Fail
The subject generator's full output current is 219 A. The total full output current of all DER downstream of the regulators at P.170 is 222A. The 3-76.2kVA regulators on P.170 thermal capabilities are 100A. Regulators on P.170 would need to be increased in size to accommodate the full output current of all DER downstream.			

nationalgrid	Coordinated Electric System Interconnect Review Distributed Energy Resources - NYSSIR	Doc. #SP.NY-185990 Page 6 of 9 Version 2.0 - 12/13/2018
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Equipment Ratings	Withstand (fault current)	<90% withstand limits	Pass
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The additional fault current contribution from the generation does not contribute to interrupting ratings in excess of existing EPS equipment.

Protection	Unintentional Islanding	Unintentional Islanding Document & Company Guidelines	Fail
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The subject generator is a 5 MW PV generation system. The subject generation exceeds the Company's criteria for islanding a distributed resource under light load conditions and will require a National Grid protection and control package.

Protection	Protective device coordination	Company Guidelines	Fail
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There are two reclosers between the subject generator PQI and the substation. Recloser R99541 on Alexander Road and recloser R99543 on Duaneburg Road. The subject generator exceeds the Company's criteria for islanding a distributed resource, necessitating the replacement of the R99543 recloser to enable voltage supervised reclose on the DER side of the recloser. The R99541 recloser is already equipped with this functionality and does not need to be replaced, however setting changes are required to maintain coordination with the R99543 recloser.

The proposed customer owned recloser for site overcurrent protection will provide adequate coordinate with upstream devices on the Company's EPS. Settings for the 51 and 51G protection shall be submitted to the Company for acceptance review.

Protection	Fault Sensitivity	Rated capabilities of EPS equipment	Pass
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Fault studies show that contribution from the subject generator for faults on the feeder will not have a significant increase in fault current seen by utility equipment. Aggregate source fault contribution with the addition of the subject generator is within the rated capabilities of EPS equipment.

Protection	Ground Fault Detection	Reduction of reach > x% (by Utility)	Fail
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The Interconnection Customer has proposed a 13.2kV connected 75kVA grounding bank with an impedance of 5% and X/R ratio of 6. To be within Company guidelines the grounding bank shall have an impedance of 33.685 ohms for a voltage base of 13.2kV. With this grounding bank in place the Interconnection Customer will contribute approximately 76A of 810 current to remote bolted line to ground faults and 328A to faults at the PCC.

Protection	Overvoltage - Transmission System Fault	Company 3V0 criteria	Pass
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The generation to load ratio on the serving distribution system has failed the Company's planning threshold in which transmission ground fault overvoltage become an electrical hazard due to the distribution source contribution. An evaluation of the existing EPS has been performed and it has been determined that protection mitigation methods are required. However, a 3V0 protection scheme has already been installed and no further action is required.

Protection	Overvoltage - Distribution System Fault	< 125 % voltage rise	Pass
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With subject generator interconnected the modeled voltage rise on the unfaulted phases of the system is 121%.

nationalgrid	Coordinated Electric System		Doc. #SP-NY-165990
	Interconnect Review		Page 7 of 9
	Distributed Energy Resources - NYSSIR		Version 2.0 - 12/13/2018

Protection	Effective Grounding	R0/X1 < 1 and X0/X1 < 3	Pass
With subject generator interconnected the modeled R0/X1 is 0.527 PU and the X0/X1 is 2.0577 PU			
SCADA	Required EMS Visibility for Generation Sources	Monitoring & Control Requirements	Fail
The 5 MW subject generator triggers the requirement for SCADA reporting to the Utility.			
Other			

## 6.0 MITIGATIONS FOR SYSTEM IMPACT ANALYSIS FAILURES

Detail below is intended to provide sufficient information and clarity to give the interconnection Customer an understanding to the relationship of costs and scope associated with the DER interconnection and the system modifications due to the DER impact. Where scope items are identified, associated labor, equipment rentals and indirect project support functions (such as engineering and project management) are intended and implied.

Upgrade Required	Option 1	Failures Addressed
3VO Substation cost sharing mechanism	\$0	Overvoltage - Transmission System Fault
National Grid protection and control package	\$102,518	Unintentional Islanding
Recloser R95543 on P96 Duanesburg Rd - Full Replacement	\$70,183	Lack of voltage supervised reclosing
Removal of existing 3-phase regulator bank and installation of 3-phase regulator bank on P116 Duanesburg Rd	\$85,518	Overvoltage - Distribution
SCADA Integration	\$6,848	Required EMS Visibility for Generation Sources

Additional details on the scope of each option can be found below:

### Option 1:

The substation upgrades required to facilitate the proposed installation include the following:

- ITC bi-directional control capability is already incorporated in TB 1 at Delanson
- A 3VO protection scheme is already incorporated at Delanson station

nationalgrid	<b>Coordinated Electric System Interconnect Review</b> Distributed Energy Resources - NYSSIR	Doc. #SP,NY-165990 Page 8 of 9 Version 2.0 - 12/13/2018
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The Distribution upgrades required to facilitate the proposed installation include the following:

- National Grid Protection and Control Package
- SCADA Integration (equipment integrated into the PCC recloser)
- The R95543 recloser on pole 95 Duaneburg Road will be replaced in its entirety to enable voltage supervised reclosing on the DER side of the recloser.
- Replacing 3-76.2kVA regulators P.170 Duaneburg Rd with 3-393kVA 7.62kV regulators cluster mounted on or near P.115 Duaneburg Rd

## 7.0 CONCEPTUAL COST ESTIMATE

The following items are a good faith estimate for the scope and work required to interconnect the project estimated under rates and schedules in effect at the time of this study in accordance with the most recent version of the New York State Standardized Interconnection Requirements ("SIR").

### Planning Grade Estimate

Table 7-1: Estimate

National Grid Work Segment	Planning Grade Cost Estimate not including Tax Liability				Capital portion for calculating tax liability	Tax Liability Applied to Capital	Customer Cost Totals
Description of Scope	Material	Labor	Overheads	Pre-Tax Total	Capital Costs	Rate	Total
Distribution System Modifications						14.14%	
National Grid Protection and Control Package (Recloser, Switches, and Poles)	\$ 40,289	\$ 30,573	\$ 29,348	\$ 90,210	\$ 90,210	\$ 12,812	\$ 102,517
SCADA Integration (equipment integrated into PCC Recloser)	\$ 4,000	\$ -	\$ 2,000	\$ 6,000	\$ 6,000	\$ 848	\$ 6,848
New Mid-Line Recloser in the vicinity of P.149 Riverview Road	\$ 41,083	\$ 11,985	\$ 3,485	\$ 61,553	\$ 61,553	\$ 8,630	\$ 70,183
Removal of existing 3-phase regulator bank and installation of 3 phase regulator banks P.115 Duaneburg Rd	\$ 16,674	\$ 9,595	\$ 30,844	\$ 77,113	\$ 77,113	\$ 9,404	\$ 85,518
Substation Modifications						14.11%	
Non-System Costs						0%	
Customer Documentation Review, Field Verification and Witness Testing		\$ 12,500	\$ 5,000	\$ 18,000	\$ -	\$ -	\$ 18,000
<b>Total Project Costs</b>	\$ 122,047	\$ 54,153	\$ 76,673	\$ 252,872	\$ 213,533	\$ 30,193	\$ 283,066
Online Summary	\$ 122,047	\$ 54,153	\$ 76,673	\$ 252,872	\$ 213,533	\$ 30,184	\$ 283,066
Station Summary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ 122,047	\$ 54,153	\$ 76,673	\$ 252,872	\$ 213,533	\$ 30,194	\$ 283,066

nationalgrid	<b>Coordinated Electric System Interconnect Review</b> Distributed Energy Resources - NYSSIR	Doc. #SP.NY-155090 Page 9 of 9 Version 2.0 - 12/13/2018
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Notes:

1. These estimated costs are based upon the results of this study and are subject to change. All costs anticipated to be incurred by the Company are listed.
2. The Company will reconcile actual charges upon project completion and the Interconnection Customer will be responsible for all final charges, which may be higher or lower than estimated according to the SIR I.C step 11.
3. This estimate does not include the following:
  - additional interconnection study costs, or study rework
  - additional application fees,
  - applicable surcharges,
  - property taxes,
  - overall project sales tax,
  - future operation and maintenance costs,
  - adverse field conditions such as weather and Interconnection Customer equipment obstructions,
  - extended construction hours to minimize outage time or Company's public duty to serve,
  - the cost of any temporary construction service, or
  - any required permits.
4. Cost adders estimated for overtime would be based on 1.5 and 2 times labor rates if required for work beyond normal business hours. Per Diems are also extra costs potentially incurred for overtime labor.



nationalgrid	Coordinated Electric System Interconnect Review Distributed Energy Resources - NYSSIR	Doc. #SP-NY-166610 Page 1 of 10 Version 3.1 - 4/19/2019
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For  
Interconnection Customer: Oakhill Solar 2 LLC  
Applicant: New PowerCo Inc.  
5,000 kW PV Generator System

Interconnection to National Grid  
NY East  
Northeast Region  
Cobleskill District  
Delanson Substation  
13.2 kV Feeder 26951

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nationalgrid	Coordinated Electric System Interconnect Review	Doc. #SP.NY-166010 Page 2 of 10 Version 3.1 - 4/19/2010
	Distributed Energy Resources - NYSSIR	

# TABLE OF CONTENTS

Section	Page
1.0 INTRODUCTION	3
2.0 EXECUTIVE SUMMARY	3
3.0 COMPANY EPS PARAMETERS	3
4.0 INTERCONNECTION CUSTOMER SITE	5
5.0 SYSTEM IMPACT ANALYSIS	5
6.0 MITIGATIONS FOR SYSTEM IMPACT ANALYSIS FAILURES	8
7.0 CONCEPTUAL COST ESTIMATE	9



## 1.0 INTRODUCTION

This report presents the analysis results of the Niagara Mohawk Power Corporation d/b/a National Grid ("National Grid" or the "Company") interconnection study based on the proposed interconnection and design submittal from the Interconnection Customer in accordance with the National Grid electric System Bulletin No. 75, Appendix B "Distributed Generation Connected To National Grid Distribution Facilities Per The New York State Standardized Interconnection Requirements". The intent of this report is to assess this project's feasibility, determine its impact to the existing electric power system (EPS), determine interconnection scope and installation requirements, and determine costs associated with interconnecting the Interconnection Customer's generation to the Company's Electric Power System (EPS). This Coordinated Electric System Impact Review (CESIR) study, according to the NYSSIR Section I.C Step 6, identifies the scope, schedule, and costs specific to this Interconnection Customer's installation requirements.

## 2.0 EXECUTIVE SUMMARY

The total estimated planning grade cost of the work associated with the interconnection of the Interconnection Customer is \$153,177.

The Interconnection with the Company EPS was found to not be feasible unless the following modifications to the Interconnecting Customer's system are completed, which are described in further detail in the body of this Study.

The interconnection was found to be feasible with modifications to the existing Company EPS and operating conditions, which are described in detail in the body of this Study.

The proposed Energy Storage System (ESS) in combination with the generation component of this project shall at no time exceed the generation component of this project or 5,000 kW. The ESS is approved to release energy to the EPS 24 hours a day.

The ability to generate is contingent on this facility being served by the interconnecting circuit during normal Utility operating conditions. Therefore, if the Interconnecting circuit is out of service, or if abnormal Utility operating conditions of the area EPS are in effect National Grid reserves the right to disengage the facility.

No future increase in generation output beyond that which specified herein for this interconnection has been studied. Any increase in system size and/or design change is subject to a new study and costs associated shall be borne by the Interconnection Customer. An increase in system size may also forfeit the Interconnection Customer's existing queue position.

## 3.0 COMPANY EPS PARAMETERS

Substation	Delanson 269
Transformer Name	TB1
Transformer Peak Load (MW)	8.6

nationalgrid	<b>Coordinated Electric System</b>	Doc. #SP.NY-106610
	<b>Interconnect Review</b>	Page 4 of 10
	<b>Distributed Energy Resources - NYSSIR</b>	Version 3.1 - 4/10/2019

Contingency Condition Load, N-1 Criteria (MW) (as applicable)	3.4
Daytime Light Load (MW)	2.1
Generation: Total, Connected, Queued (MW)	13.1, 3.1, 10.0
Contingency Condition Generation: Total, Connected, Queued (MW)	12.6, 2.6, 10.0
Supply Voltage (kV)	13.2
Transformer Maximum Nameplate Rating (MVA)	14
Distribution Bus Voltage Regulation	Yes
Transmission GFOV Status	Installed
Bus Tie	None
Number of Feeders Served from this Bus	2

Connecting Feeder/Line	26951
Peak Load on feeder (MW)	5.2
[Daytime, 24 hour] Light Load on Feeder (MW)	1.3
Feeder Primary Voltage at POI (kV)	13.2
Line Phasing at POI	3
Distance to nearest 3-phase, (if applicable)	n/a
Line/Source Grounding Configuration at POI	effective
Other Generation: Total, Connected, Queued (MW)	12.6, 2.6, 10.0

System Fault Characteristics without Interconnection Customer DG at POI	
Interconnection Customer POI Location	P182-2 Duaneburg Rd.
I 3-phase (3LLL)	1,425 Amps
I Line to Ground (3IG)	1,116 Amps
Z1 (100 MVA base)	1.4877 + j2.7113 PU
Z0 (100 MVA base)	1.4289 + j5.5790 PU

nationalgrid	<b>Coordinated Electric System Interconnect Review</b>	Doc. #SP-NY-100610 Page 5 of 10 Version 3.1 - 4/10/2019
	Distributed Energy Resources - NYSSIR	

#### 4.0 INTERCONNECTION CUSTOMER SITE

The Interconnection Customer is proposing new solar photovoltaic primary service connection with Account No. 1638576030.

This location is presently served by the Company's 13.2kV radial distribution feeder 26951 from Delanson Substation.

The proposed generating system consists of:

- One hundred-eleven HUAWEI SUN2000-45KTL-US, 45kW, 600VAC, 3-Phase Inverters connected to
- Nine 800A, 3-Phase Powerboards, having a 800A main circuit breaker, through a 70A circuit breaker (1 per inverter x 11 per powerboard),
- Two 600A, 3-phase Powerboards, having a 450A main circuit breaker, through a 70A circuit breaker (1 per inverter x 6 per powerboard),
- Two 2500kVA 2 Winding Design 600V - 13.2kV step-up transformers
- The outputs of both transformers are then connected to a customer-owned riser pole. This then continues on to
- A customer-owned primary service that consists of a customer-owned gang operated air-break switch.
- A 75kVA, 3-Phase grounding transformer with Z= 5% and X/R = 6] configured wye-ground/delta is connected on the primary side of the step-up transformers utilizing a 51G ground overcurrent relay through a customer owner recloser.

#### 5.0 SYSTEM IMPACT ANALYSIS

Category	Criteria	Limit	Result
Voltage	Overvoltage	< 105% (ANSI C84.1)	Fail
With the addition of the subject generator the maximum voltage as modeled on the Feeder is 105.27% of nominal.			
Voltage	Undervoltage	> 95% (ANSI C84.1)	Pass
With the addition of the subject generator the minimum voltage as modeled on the Feeder is 98.7% of nominal.			
Voltage	Substation Regulation for Reverse Power	Reverse Power on LTC	Pass
The total generation on Feeders 26951 and 26952 is 13.1 MW. The total minimum load on these Feeders is 2.15 MW. Therefore, the generation to load ratio is 609% and reverse power can flow through TB2 onto the transmission system. TB2 already has a LTC with Bi-directional controls and no further action is required.			
Voltage	Feeder Regulation for Reverse Power	Minimum load to generation ratio	Fail

nationalgrid	<b>Coordinated Electric System Interconnect Review</b>	Doc. #EP-NY-156610 Page 6 of 10 Version 3.1 - 4/19/2019
	Distributed Energy Resources - NYSSIR	

The total generation downstream of 3-333kVA voltage regulator on P.115 Duaneburg Rd is 10.08 MW. Due to downstream DG in queue, the subject voltage regulators will have bi-directional controls installed and will experience reverse power flow.

Voltage	Fluctuation	<3% steady state from proposed generation on feeder	Pass
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The greatest voltage fluctuation on the feeder occurs at P.23 Old HWY.30 Tax District 7225, Line #86. The resulting fluctuation at the feeder location is 2.1% due to the proposed generation and < 1% on the substation bus due to the aggregate generation.

Voltage	Flicker	Screen H Flicker	Pass
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The Pst for the location with the greatest voltage fluctuation is 0.178 and the emissions limit is 0.35.

Equipment Ratings	Thermal (continuous current)	< 100% thermal limits	Fail
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The subject generator's full output current is 219 A. The total full output current of all DER downstream of 3-333kVA regulators on P.115 Duaneburg Rd is 441 A. The 3-333kVA regulators thermal capabilities are 437 A.

Additionally, the Delanson substation getaway conductor consists of 4/0 Bare conductor which has a thermal capability of 440 A. Due to the proposed generation, approximately 200' of conductor must be replaced with 366.4 SAL.

Equipment Ratings	Withstand (fault current)	<90% withstand limits	Pass
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The additional fault current contribution from the generation does not contribute to interrupting ratings in excess of existing EPS equipment.

Protection	Unintentional Islanding	Unintentional Islanding Document & Company Guidelines	Fail
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The subject generator is a 5 MW PV generation system. The subject generation exceeds the Company's criteria for islanding a distributed resource under light load conditions and will require a National Grid protection and control package.

Protection	Protective device coordination	Company Guidelines	Fail
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There are two reclosers between the subject generator POI and the substation. Recloser R99541 on Alexander Road and recloser R99543 on Duaneburg Road. The subject generator exceeds the Company's criteria for islanding a distributed resource, necessitating the replacement of the R99543 recloser to enable voltage supervised reclose on the DER side of the recloser. The R99541 recloser is already equipped with this functionality and does not need to be replaced. Setting changes to the R99541 recloser are required to maintain coordination with the R99543 recloser. However the replacement of R99543 and setting changes for R99541 are already planned under an in-process DER project higher in the queue.

The proposed customer owned recloser for site overcurrent protection will provide adequate coordinate with upstream devices on the Company's EPS. Settings for the 5L and 5LG protection shall be submitted to the Company for acceptance review.

nationalgrid	<b>Coordinated Electric System Interconnect Review</b>	Doc. #EP-NY-188610 Page 7 of 10 Version 3.1 - 4/19/2019
	Distributed Energy Resources - NYSSIR	

Protection	Fault Sensitivity	Rated capabilities of EPS equipment	Pass
Fault studies show that contribution from the subject generator for faults on the feeder will not have a significant increase in fault current seen by utility equipment. Aggregate source fault contribution with the addition of the subject generator is within the rated capabilities of EPS equipment.			
Protection	Ground Fault Detection	Reduction of reach > x% (by Utility)	Fail
The Interconnection Customer has proposed a 13.2kV connected 500kVA grounding bank with an impedance of 5%. To be within Company guidelines the grounding bank shall have an impedance of 33.686 for a voltage base of 13.2kV. With this grounding bank in place the interconnection Customer will contribute approximately 60A of 310 current to remote bolted line to ground faults and 308A to faults at the PCC.			
Protection	Overvoltage - Transmission System Fault	Company 3V0 criteria	Fail
The generation to load ratio on the serving distribution system has failed the Company's planning threshold in which transmission ground fault overvoltage become an electrical hazard due to the distribution source contribution. An evaluation of the existing EPS has been performed and it has been determined that protection mitigation methods are required. However, 3V0 is already incorporated at Delanson Station.			
Protection	Overvoltage - Distribution System Fault	< 125 % voltage rise	Pass
With subject generator interconnected the modeled voltage rise on the unfaulted phases of the system is 124%.			
Protection	Effective Grounding	$R0/X1 < 1$ and $X0/X1 < 3$	Pass
With subject generator interconnected the modeled $R0/X1$ is 0.3874 PU and the $X0/X1$ is 1.9712 PU			
SCADA	Required EMS Visibility for Generation Sources	Monitoring & Control Requirements	Fail
The 5 MW subject generator triggers the requirement for SCADA reporting to the utility.			
Other			

## 6.0 MITIGATIONS FOR SYSTEM IMPACT ANALYSIS FAILURES

Detail below is intended to provide sufficient information and clarity to give the Interconnection Customer an understanding to the relationship of costs and scope associated with the DER Interconnection and the system modifications due to the DER impact. Where scope items are identified, associated labor, equipment rentals and indirect project support functions (such as engineering and project management) are intended and implied.

Upgrade Required	Option 1	Failures Addressed
3VO Substation cost sharing mechanism	\$0	Overvoltage - Transmission System Fault
National Grid protection and control package	\$102,518	Unintentional Islanding
Reconductor ~ 200ft of primary overhead 4/0 CU conductor	\$25,812	Thermal Limits
SCADA Integration	\$6,848	Required EMS Visibility for Generation Sources

Additional details on the scope of each option can be found below:

The Distribution upgrades required to facilitate the proposed installation include the following:

- National Grid Protection and Control Package
- SCADA Integration (equipment integrated into the PCC recloser)
- Reconductor ~ 200ft of primary overhead 4/0 CU conductor from the Delanson Substation to P.11. Replace 4/0 CU with 336.4 SAl



nationalgrid	Coordinated Electric System Interconnect Review	Doc. #SP.NY-160610 Page 9 of 10 Version 3.1 - 4/19/2019
	Distributed Energy Resources - NYSSIR	

## 7.0 CONCEPTUAL COST ESTIMATE

The following items are a good faith estimate for the scope and work required to interconnect the project estimated under rates and schedules in effect at the time of this study in accordance with the most recent version of the New York State Standardized Interconnection Requirements ("SIR").

### Planning Grade Estimate

Table 7-1: Estimate

National Grid Work Segment	Planning Grade Cost Estimate not including Tax Liability				Capital portion for calculating tax liability	Tax Liability Applied to Capital	Customer Cost Totals
Description of Scope	Material	Labor	Overheads	Pre-Tax Total	Capital Costs	Rate	Total
Distribution System Modifications						14.14%	
National Grid Protection and Control Package (Recloser, Switches, and Poles)	\$ 30,389	\$ 30,573	\$ 39,314	\$ 90,205	\$ 90,205	\$ 12,792	\$ 102,997
SCADA Integration (equipment integrated into PCC Rater)	\$ 4,000	\$	\$ 2,000	\$ 6,000	\$ 6,000	\$ 849	\$ 6,849
Reconductor "200' of primary overhead"	\$ 1,832	\$ 10,168	\$ 10,805	\$ 22,805	\$ 22,805	\$ 3,207	\$ 26,012
Substation Modifications						14.14%	
Non-System Costs						0%	
Customer Documentation Review, Field Verification and Witness Testing		\$ 12,000	\$ 6,000	\$ 18,000	\$	\$	\$ 18,000
Total Project Costs:	\$ 47,121	\$ 42,741	\$ 47,949	\$ 137,810	\$ 137,810	\$ 15,357	\$ 153,167
Dine Summary	\$ 47,121	\$ 42,741	\$ 47,949	\$ 137,810	\$ 137,810	\$ 15,357	\$ 153,167
Station Summary	\$	\$	\$	\$	\$	\$	\$
Total	\$ 47,121	\$ 42,741	\$ 47,949	\$ 137,810	\$ 137,810	\$ 15,357	\$ 153,167

#### Notes:

1. These estimated costs are based upon the results of this study and are subject to change. All costs anticipated to be incurred by the Company are listed.
2. The Company will reconcile actual charges upon project completion and the Interconnection Customer will be responsible for all final charges, which may be higher or lower than estimated according to the SIR I.C step 11.
3. This estimate does not include the following:
  - additional interconnection study costs, or study rework
  - additional application fees,
  - applicable surcharges,
  - property taxes,
  - overall project sales tax,
  - future operation and maintenance costs,
  - adverse field conditions such as weather and Interconnection Customer equipment obstructions,
  - extended construction hours to minimize outage time or Company's public duty to serve.

nationalgrid	Coordinated Electric System Interconnect Review	Doc. #SP-NY-168610 Page 10 of 10 Version 3.1 - 4/19/2019
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- the cost of any temporary construction service, or
- any required permits.

4. Cost adders estimated for overtime would be based on 1.5 and 2 times labor rates if required for work beyond normal business hours. Per Diem are also extra costs potentially incurred for overtime labor.





