Town of Franklin

355 East Central Street Franklin, Massachusetts 02038-1352



Phone: (508) 520-4907 www.franklinma.gov

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

DATE:	September 12, 2023
то:	Franklin Planning Board
FROM:	Department of Planning and Community Development
RE:	<b>Maplegate Solar North</b> Site Plan

The DPCD has reviewed the above referenced Site Plan Modification application for the Monday, September 18, 2023 Planning Board meeting and offers the following commentary:

### **General:**

- 1. The site is accessed through Bellingham at 160 Maple St, and located in the Industrial Zoning District.
- 2. The Planning Board approved an 81-P ANR plan on January 9, 2023, combing the lots indicated on the application, into one single lot.
- 3. The proposed project includes the construction solar panels, along with drainage.
- 4. Conservation Commission has issued a NOI.
- 5. Review letters will be provided from BETA, DPW and Fire.

## Comments from August 21, 2023 Meeting:

- 1. Provide decommission bond that includes line items for tree replacement.
- 2. Provide an update on the PILOT discussion with the Town.
- 3. Provide a plan for Lot 2 public access and recreation.

Potential Conditions:

- 1. Applicant shall enter into a monetary agreement (PILOT) at the sole discretion of Administration and the Town of Franklin prior to commencement of construction.
- 2. A Surety bond in the amount of \$\_\_\_\_\_ shall be issued by a surety company acceptable to the Town of Franklin prior to commencement of construction.

## **DECOMMISSIONING PLAN**

# Ground-Mounted Solar Photovoltaic System

160 Maple St North Franklin, Massachusetts

Applicant & Responsible Party:

NextGrid Mescalbean LLC 177 Huntington Ave Boston, MA 02115 (559) 731-4645 daniel@nextgrid.com

Decommissioning Plan 160 Maple St North Franklin MA

#### I. FACILITY DESCRIPTION

This Decommissioning Plan has been prepared for the proposed solar photovoltaic facility to be constructed at the property located at the Maplegate Golf Course at 160 Maple Street in Franklin MA. This plan describes the process for decommissioning the facility in accordance with state requirements and the Town of Franklin Site Plan review process. The facility will consist of a 4.99 MW (AC) solar array and accompanying equipment secured within a 7-foot high chain-link fence and accessed via an existing access road off of Maple St beginning in The Town of Bellingham.

The Facility will include the following site features, which will require decommissioning at the end of the life of the project:

- An approximate 51± acre limit of disturbance including an array of photovoltaic (PV) modules and racking system within the chain-link fence;
- Pile driven racking;
- Transformers and electrical equipment cabinets and concrete pads
- 7-foot chain-link security fence;
- Underground conduit and wires;
- Battery Storage System with Self Contained Fire suppressant system

#### II. DECOMMISSIONING PLAN

The decommissioning of the facility will be a two-stage process consisting of dismantling, demolition and disposal/recycling followed by site restoration. The following is a description of each process.

#### Dismantlement, Demolition, and Disposal or Recycling

A significant portion of the components that comprise the facility will include recyclable or re-sealable components including copper, aluminum, galvanized steel and the modules. Due to their re-sale monetary value, these components will be dismantled, disassembled, and recycled rather than being demolished and disposed of.

All electrical connections to the system will be disconnected and all connections will be tested locally to confirm that no electric current is running through them before proceeding. The facility will be dismantled following coordination with the utility company regarding timing and required procedures for disconnecting the facility from the utility distribution network. All electrical connections to the PV modules will be severed at each module, and the modules will then be removed from their framework by cutting or dismantling the connections to the supports. Modules will be removed and sold to a purchaser or recycler. In the event of a total fracture of any modules, the interior materials are silicon-based and are not hazardous. Disposal of these materials at a landfill is permissible.

The PV mounting system framework will be dismantled and recycled. The foundation system will be removed and recycled if feasible. All other associated structures will be demolished and removed from

Decommissioning Plan 160 Maple St North Franklin MA

the site for recycling or disposal. This will include the site fencing and gates, which will likely be reclaimed or recycled.

Concrete equipment slabs will be broken and removed to a depth of one foot below grade and clean concrete will be crushed and disposed of off-site or recycled (reused either on or off-site). The paved access road will remain in place.

Aboveground utility poles owned by the project operator will be completely removed and disposed of offsite in accordance with utility best practices. Any overhead wires will be removed from the facility and will terminate at the utility-owned connections within the adjacent overhead transmission line easement. The utility company will be responsible for dismantling the overhead wires and poles under its ownership. The decommissioning contractor will coordinate with utility company personnel to facilitate the utility company's removal of any poles and overhead wires located on the site.

Disposal of all solid and hazardous waste shall be in accordance with local, state, and federal waste disposal regulations.

The infiltration basin, swales and rip-rap areas will remain in place.

A final site walkthrough will be conducted to remove debris and/or trash generated during the decommissioning process. Any debris that may have been wind-blown to areas outside the immediate footprint of the facility being removed. Sanitary facilities will be provided on site for the workers performing the decommissioning of the facility.

#### Site Restoration

Il disturbed area will be re-vegetated with hydro-seed, using a fast-growing seed mix. Native Trees will also be planted where appropriate. Site Restoration will take place at the written request of The Town of Franklin in case The Town has future development plans which are not natural forest.

#### Permitting Requirements

Several approvals will be obtained prior to initiation of the decommissioning process. Permitting requirements will be determined at the time of decommissioning and updated based on then current local, state, and federal regulations. The decommissioning process is anticipated to take approximately six to eight weeks and is intended to occur outside of the winter season. In accordance with the requirements of of the Town of Franklin Zoning Bylaws, the owner/operator shall notify the Site Plan Review Authority (Planning Board) by certified mail of the proposed date of discontinued operations and the decommissioning will be completed no more than 150-days after the date of discontinued operation. Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, the solar photovoltaic installation shall be considered abandoned when is fails to operate for more than one year without the written consent of the Planning Board. Based upon current regulations, a building/demolition permit will be required from the Town of Franklin Building Department for the decommissioning of this site because a building/demolition permit must be obtained for any demolition or change to the use of a structure.

160 Maple St North Solar Project				
Decommissioning Estimate - August 9th, 2023				
System Information Summary				
Total System Module Count	36,140			
Total System Inverter Count	8			
Racking Orientation	2 Up Vertical			
Linear Feet of Racking	36,799			
Estimated Aluminum per Foot of Racking (lbs)	2			
Estimated Steel Per Foot of Racking (lbs)	4.5			
Estimated Length of Interconnection to Street (feet)	400			
Anticipated Project Lifespan for Inflation Calculation (years)	20			
Battery Storage System	Yes			

FEC Decommissioning Estimate Breakdown- Maple St						
Resource	Task	Task Quantity	<b>Task Duration</b>	Hours	Rate	Cost
	Remove	18,000 Module	10 Minutes			
Labor	Modules	Pairs	Per Pair	3000	\$25.00	\$75,000
	Remove		10 Minutes			
Labor	Posts	7,000 Posts	Per Post	1165	\$25.00	\$29,125
	Remove					
Labor	Fencing		40 Hours	40	\$30.00	\$1200
	Find Grade &					¢1250
Labor	Seed Site		45 Hours	45	\$30.00	21220
	Remove					¢1500
Labor	Conduit		50 Hours	50	\$30.00	\$1200
	Remove Pad					
Labor	Equipment		16 Hours	16	\$30.00	\$480.00
	Contingency					
Other						\$10,000
	Excavate					
Equipment	Trenching		50 Hours	50	\$125.00	\$6.250
	Remove					
Equipment	Fencing		40 Hours	40	\$125.00	\$5,000.00
	Remove					
Equipment	Scrap		40 Hours	40	\$125.00	\$5,000.00
	Remove Pad					
Equipment	Equipment		16 Hours	40	\$125.00	\$5,000.00
	Remove					
Equipment	Battery				\$5000.00	\$5,000.00
Totals						
			Resource	Hours	Cost	# of Days
			Labor	4308	\$118,655	28
			Equipment		\$26,250.00	

Salvage Value Summary			
Estimated Copper Salvage (lbs) 14,261.8		14,261.80	
Estimated Aluminum Salvage (lbs) 20,084.80		20,084.80	
Estimated Steel Salvage (Ibs) 158,830.80			
Current Day Salvage Pricing for Copper (\$/Ib)	\$	1.15	Mid City Scrap (9/26/19)
Current Salvage Pricing for Aluminum (\$/lb)	\$	0.23	Mid City Scrap (9/26/19)
Current Salvage Pricing for Steel (\$/lb)	\$	0.06	Mid City Scrap (9/26/19)
Estimated Copper Salvage Value	\$	16,400.15	
Estimated Aluminum Salvage Value	\$	4,619.50	
Estimated Steel Salvage Value	\$	9,529.84	
Estimated Ballast Salvage (@ \$12/Ton With Metal - 2019)	\$	-	
Estimated Total Salvage Value	\$	30,458.02	

Removal Cost Summary - 5 Berry Street					
		Comments			
Array Removal					
Laborers	\$118,650.00	See above calculation See			
Equipment	\$28,250.00	above calculation			
Debris Containers					
w/ Disposal	\$23,800.00	28 Days X \$850.00 per day			
Subtotal	\$170,700.00				
		Material Salvage Value (\$30,458) - 25%			
Salvage Credit	(\$22,844.00)	Hauling/Material Cost Fluctuation Allowance			
Site Restoration Materials					
Seeding and		Assume 10 lb/acre @ \$50/lb			
Landscaping	<i>\$73</i> ,500,000	Plant 500 Trees (4 to 6ft) @ \$100 a tree installed			
Total Site Restoration	\$75,000.00				
Total Cost	\$222,856.00				

# Total Cost With 1.5% Inflation Over 20 Years = \$300,157 or \$302,200.00



September 11, 2023 Via Electronic Submission and FedEx

Town of Franklin Planning Board c/o Amy Love 355 East Central Franklin, MA 02038

> RE: Application to the Planning Board Maplegate Solar Project North Nextgrid Mescalbean, LLC 160 Maple Street Town of Franklin Norfolk County, MA BEMA # W201257A

Dear Ms. Love,

As requested by the planning board, enclosed please find copies of the Decommissioning Bond as well as an estimate for the tree replacement costs. These costs have been provided by our applicant based on prior experiences with other projects of this scale. Since the tree replacement requirements are undefined by the code, we have provided a breakdown based on evaluation of the wooded areas on site. The counts have been conducted using aerial images to determine the approximate number of trees for replacement.

**Enclosed Documents:** 

• Five (5) copies of the *Decommissioning Plan* for Nextgrid Mescalbean LLC

#### Tree Replacement Costs

Using aerial images and mapping provided by Nearmap, which includes aerial photography from March of 2023, we are seeing approximately 20 trees per acre in the areas of the wooded portions of the golf course to be removed. Based on our demolition area of 10 acres of wooded vegetation, we are estimating approximately 200 trees will be removed. We are proposing to provide a 2.5x tree replacement utilizing smaller 4'-6' height trees at installation. These trees would have an average cost of \$100 per tree to be re-established at the time of decommissioning.

#### Cost Calculation = 500 trees x \$100.00 = \$50,000.

Should you have any questions or require additional information, please do not hesitate to contact me at (603) 441-2900. Thank you.

Sincerely,

**BOHLER** 

Huy De Rome

Greg DiBona