

TOWN OF LINCOLN LANDFILL SOLAR PROJECT QUESTIONS AND ANSWERS

1. What would the project entail?

- a. *The Town is planning to engage a professional solar partner to lease the surface of the capped landfill for the exclusive purpose of designing, installing, owning, operating, and ultimately decommissioning a solar photovoltaic array, paired with energy storage.*
- b. *While the ultimate size of the array will be determined during the competitive procurement process, early due diligence undertaken by the Town suggests that a system sized at 1 megawatt is a reasonable expectation.*
- c. *Construction of the system is anticipated to take between 4-6 months after all local, State and Federal permits have been secured, the Eversource interconnection process is completed and all other project entitlement obligations have been satisfied.*
- d. *The power produced by the solar photovoltaic array will feed directly into Eversource Energy's distribution system via the utility poles and overhead power lines along Mill Street. The Town's municipal properties will directly receive financial credits from Eversource Energy for the energy produced as required by State regulation. In addition, the Town will receive annual property tax payments.*
- e. *One hundred percent of the annual solar generation delivered to Eversource Energy is earmarked for the municipal government accounts.*

2. How does this project align with Lincoln's or Massachusetts 'green' or clean energy goals?

- a. *Lincoln is a designated Massachusetts Green Community and is committed to energy efficiency and renewable energy solutions. This solar project is the first of many projects designed to support Greenhouse Gas Reductions.*
- b. *In March 2021, Governor Baker signed into Law climate legislation aimed at achieving Net Zero emissions by 2050 by implementing strategies and programs to combat climate change and protect vulnerable communities. This project is consistent with the objectives of the new Climate Law.*

3. Why was the landfill selected for the project?

- a. *The landfill was permanently closed in 1990 and has since been a "cost center" property for the Town given the State required monitoring and maintenance requirements. Placing a solar array on top of the landfill will turn the asset into a "renewable energy revenue generator", while also helping to meet the environmental sustainability goals of the Town and the Commonwealth.*
- b. *Dozens of neighboring municipalities have engaged solar partners to site solar photovoltaic arrays on their capped landfills. Several examples include the Towns of Weston, Dover, Needham, Acton, Concord, Sudbury, among others.*

4. What are the project's potential impacts on the neighborhood and how are those impacts mitigated?

- a. *During project mobilization and construction, the project is not expected to create nuisance noise concerns within the neighborhood. Since the installation of the equipment is limited to the landfill cap, the solar array must be ballasted atop the landfill cap to ensure that the integrity of the cap is preserved. As a result, there will be no ground penetration and only special low ground-pressure vehicles can be utilized.*
- b. *Construction activities, including equipment deliveries and all provisions of service will be limited to the existing landfill access road located off of North Great Road (Route 2A).*
- c. *Noise impacts will be negligible throughout the anticipated 20-25 years of operation:*
 - i. *Only 2 pieces of equipment associated with the project will make any noise at all:*
 - *The inverters will make a low hum while the sun is shining, and the system is producing power. Otherwise, the inverters are silent.*
 - *Energy storage systems are housed in containers and need to be kept at moderate temperatures. The HVAC systems used to condition the inside of the containers will also make a small amount of noise, similar to residential outdoor condensers.*
 - ii. *The noise associated with the project will only be audible if you are standing close to the equipment and should be negligible at the Transfer Station.*
 - iii. *The vegetative management activities will include lawn mowing. The noise associated with the vegetative management will be the same as under current operations.*
- d. *The solar photovoltaic array will not cause any visual impacts on the neighborhood since it will be situated in an undisturbed heavily forested area that which will serve as a natural vegetative buffer from the abutting properties south of the landfill.*
- e. *To ensure that the solar photovoltaic array does not promote vandalism in the area and/or create safety concerns, per the National Electric Code (NEC), the solar photovoltaic array will be fully enclosed by a 7' high chain-link fence to prevent unauthorized access.*
- f. *Visual impacts will be limited to equipment sited near Mill Street.*
 - i. *It is anticipated that the path of interconnection to the Eversource Energy distribution system will follow the existing natural path from the Transfer Station to Mill Street. It is the Town's goal to integrate sufficient vegetative screening at Mill Street to minimize the visual impact and screen any aboveground conduit in a vegetative berm. A rendering has been developed to illustrate the conceptual layout of the equipment at Mill Street. A more detailed rendering will be prepared and presented to the neighbors once a solar partner has been selected and the design is prepared.*

5. Are there potential environmental impacts associated with the project?

- a. *No! Once operational, the solar photovoltaic array will provide clean, renewable energy for many years to come. The system does not emit radiation or any other hazardous substance and is safe to be around.*
- b. *The solar photovoltaic array will not cause any environmental impact on the capped landfill.*

- i. The existing landfill was permanently closed in 1990 and has been monitored ever since. Part of the closure process was installing a permanent cap over top of the landfill, with a layer of soil on top of the cap that grass can grow on.*
- ii. The Town has done an excellent job of maintaining the closed landfill over the past 30 plus years, and the information contained in the monitoring reports will be used to help the Town's solar partner design the system.*
- iii. Protecting the cap is of the utmost importance to the Town, and a fully ballasted system will be required ensuring that no penetrations of the cap will be required or allowed. Concrete ballast blocks will be placed on top of the landfill and will function as the foundations for the racking structures. Once the racking is constructed, the panels will be mounted to the top of the racking.*

6. What precautions will be taken to minimize any potential environmental impacts?

- a. The Town's solar partner, in collaboration with the Town, will be required to:*
 - i. Obtain a Post Closure Use Permit from the Massachusetts Department of the Environment Protection as a further step to ensure the system will not cause any issues with the closed landfill.*
 - ii. Obtain a permit from the Lincoln Conservation Commission.*
- b. The Town's landfill consulting engineering firm will also be engaged to conduct a peer review on the project design to ensure that the integrity of landfill cap is fully preserved. Environmental monitoring as required under the Town's landfill closure permit will be ongoing throughout the operation of the solar photovoltaic array.*

7. Who will own, operate, and manage the solar array?

- a. Who will pay for this project?*
 - i. The Town's selected solar partner will lease the surface of the capped landfill and design, build, own and operate the solar array. The solar partner is financially responsible for all construction and annual operations and maintenance costs. The solar partner will also be required to provide decommissioning assurance including a surety to ensure that the equipment can be removed at the end of the contract term.*
- b. How many years will the project produce power?*
 - i. The initial term of the project is likely to be 20 to 25 years. It is possible, however, that the system will be in place for longer than 30 years.*

8. How will the Town select a solar partner?

- a. The Town will issue a comprehensive competitive procurement process to identify and select a solar developer that provides the most advantageous design and financial solution for the Town.*

9. What is the project timetable?

- a. Procurement Process:*
 - i. The Town anticipates issuing a comprehensive Request for Proposals in October 2022 and receive competitive proposals by mid-November 2022.*

- b. *The Town is hosting an informational page on the Town's website. Please use the following link: <https://www.lincolntown.org/747/Landfill-Solar-Steering-Committee>*