March 11, 2021

TO: Gray Town Council

Nate Rudy, Town Manager

FROM: Doug Webster, Community Development

RE: Proposed Zoning Changes for proposed Solar Array

100 +/- acre parcel located at end of Hillcrest Drive

Introduction

In accordance with policy direction provided by the Town Council at the 2-2-21 meeting and input from OAC, I have prepared this memo detailing the proposed changes to the Town's Zoning Ordinance (Chapter 402).

I have divided the proposed changes into two categories: (1) Changes to Chapter 402 that are not in 402.8.10, and, (2) Changes to Section 402.8.10 (Commercial Solar Energy System Overlay District).

Under each category, I have numbered the proposed changes to enable referencing for discussion purposes.

Proposed Changes to Zoning Ordinance (Chapter 402) not in 402.8.10:

- 1. Changes to definitions (402.2.2) related to Ground-Mounted Solar Energy Systems:
 - a. Add new Def of "Commercial Solar Energy Production Site" (CSEPS): A component of a Commercial Solar Energy System that includes the maximum cumulative area of the solar array footprint, typically fenced for security purposes, which commonly includes any of the following: ground-mounted solar arrays, transformers, inverters, and buildings housing equipment functionally necessary for the solar energy system.
 - b. Add new Def of Small CSEPS's: CSEPS's less than .5 of an Acre
 - c. Change current Def of Medium from 2,000-16,999 SF to CSEPS's .5-20 Acres
 - d. Current Def of Large from 17K SF+ to CSEPS's 20-40 acres
- 2. Additional parcel added to existing Commercial Solar Energy Systems Overlay <u>District:</u>
 - a. Amend the Town's existing Zoning Map (402.3.1) to show the entirety of the 100-acre parcel at end of Hillcrest Drive (Tax Map 36, lot 33-1) in the Commercial Solar Energy System Overlay District (CSESOD).

- 3. Amend Footnote "D" in Table 402.5.4.A addressing impervious cover measurement: Add to end of existing language "provided that the maximum size of any individual solar array panel is thirty (30) square feet when measured horizontally".
- 4. Amend Footnote "F" in Table 402.5.4.B by adding the following language to the end of the existing footnote: "provided that the maximum size of any individual solar array panel is thirty (30) square feet when measured horizontally".
- 5. Amend both Footnotes "G" in Table 402.5.4.B by adding the following <u>underlined</u> language: Lot coverage in RRA can be increased to 30% for <u>any portion of a parcel</u> lots in the Commercial Solar Energy Overlay District and only for Commercial medium and large-scale ground-mounted solar energy system installations <u>provided</u> that the maximum size of any individual solar array panel is thirty (30) square feet when measured horizontally. Planning Board approval subject to the requirements of Section 402.8.4.L for recharge protection is required.
- 6. Re-word Footnote "H" in Table 402.5.4.B addressing setbacks in RRA as follows (underlined portions proposed to be added): Setbacks for ground-mounted solar panels and arrays less than 15 feet in height on parcels within five-hundred (500) feet of a publicly owned road shall be a minimum of twenty-five (25) feet from any lot line. Setbacks for Commercial Solar Energy Production sites on parcels at least five-hundred (500) feet from a publicly owned road shall be a minimum of fifty (50) feet or one-hundred (100) feet from any property line as established is Section 402.8.10 of this Ordinance.

Proposed Changes to standards to existing Section of CSESOD (402.8.10):

- 1. New "B": Required Information & Submittals: In addition to submittals required in Articles 9 and 10 of this Ordinance, the applicant shall submit the following information to the Planning Board as part of the application. The Planning Board shall have the authority to determine if one (1) or more of the following are not applicable.
 - a. A description of the owner of the system, the operator if different, and detail of qualifications and technical ability of the owner or operator to construct, maintain, and operate the facility.
 - b. If the operator is leasing the stie, a copy of the lease agreement (minus financial compensation) and any and all related easements clearly outlining the relationship of the respective parties, inclusive of the rights and responsibilities of the operator, landowner, and any other responsible party with regard to the large-scale solar energy system and the term or duration of the agreement. Further, the operator shall identify any and all agreements or obligations of the landowner to the operator regarding any premises that are not specifically subject to the lease agreement, but which the operator has certain rights to use as part of the operation of the solar energy system.

- c. A description of the anticipated quantity of energy to be produced and to whom it will be sold.
- d. A copy of the agreement and schematic details of the connection arrangement with the transmission system that clearly indicates who is responsible for various requirements and how such will be operated and maintained.
- e. A basic description of the number, size, and configuration of panels to be installed, including make, model, and associated major system components.
- f. A construction plan and timeline that identifies all known contractors, site control, when the project construction will commence and the anticipated date that the system will be on-line.
- g. An operations and maintenance plan for the projected operating life of the system.
- h. An emergency management plan that identities potential hazards and the response to such hazards. The applicant shall submit a copy of the emergency management plan to Gray Fire Rescue and include any of their comments.
- i. Evidence of financial capacity to construct, operate, and decommission the proposed facility including the abandonment guarantee as required in this Ordinance.
- j. Identification of methods that the operator shall use to manage on-site vegetation.
- k. Identification of how the applicant shall address required buffering as required in this Ordinance.
- 1. Submission of a decommissioning plan that addresses applicable standards.
- m. Evidence that the owner or operator has applied for any and all non-municipal permits that may be required for the installation of the proposed system; for example, a stormwater management permit from the Maine Department of Environmental Protection (MeDEP).
- **NOTE:** Re-lettering of current Ordinance standards is necessary from current 402.8.10.B to end of Section 402.8.10.
- 2. Existing 402.8.10.C.1, after "height", insert the following: "for parcels located adjacent to or entirely within five-hundred (500) feet of a publicly owned road(s)".
- 3. New 402.8.10.C.2: Minimum setbacks for any large scale Commercial Solar Energy Production Site with ground-mounted solar panels and arrays less than fifteen (15) feet in height on parcels located in an RRA District that are at least five-hundred (500) feet from a publicly owned road shall be determined by the following standards:
 - a. The minimum setback for any Commercial Solar Energy Production Site shall be one-hundred (100) feet from any of the following based upon conditions existing when the application is filed and deemed sufficiently complete by Town Staff to be placed on a Planning Board agenda for review:
 - 1. Any parcel in a Village Center (VC) or Village Center Proper (VCP) Zoning District

- 2. Any abutting parcel utilized primarily for residential purposes that is less than double the minimum lot area required for the respective Zoning District
- 3. Any abutting parcel that contains a structure utilized primarily for residential purposes located less than fifty (50) feet from the property line of the parcel proposed for the ground-mounted solar panels and/or arrays.
- b. Provided that none of the conditions specified in 402.8.10.C.2.a exist, the Planning Board shall have the authority to require the setback for the ground-mounted solar energy system project site to a minimum of fifty (50) feet after reviewing the following elements:
 - 1. Any input received from abutting property owners after being duly-notified as part of the Town's review
 - 2. Location of any structure(s) on abutting parcels in relationship the project site
 - 3. Ability to meet and maintain Visual Impact standards specified in (new) Section 402.8.10.H (currently 402.8.10.F.7).
- 4. Add to the beginning of current 402.8.10.D.1: "Provided that the maximum size of any individual solar array panel is thirty (30) square feet when measured horizontally".
- 5. Add to end of current 402.8.10.E.1: "provided that the maximum size of any individual solar array panel is thirty (30) square feet when measured horizontally".
- 6. Retitle current 402.8.10.F: to "General Standards for Medium & Large-scale...."
- 7. Add to 402.8.10.F new "General Standards for Medium & Large Scale Ground-Mounted Solar Energy Systems" an additional standard as follows: **Energy Storage:**Battery storage of electricity generated from the Commercial Solar Energy Production Site of any type is specifically prohibited including but not limited to lead-acid and lithium ion.
- 8. Add to 402.8.10.F new "General Standards for Medium & Large Scale Ground-Mounted Solar Energy Systems" an additional standard as follows: Copies of Permits Required: If the owner, operator, or applicant has approvals from non-municipal entities such as MeDEP upon applying to the Planning Board (PB), these shall be submitted as part of the PB application. If such permit(s) are not approved upon PB submittal, the owner or operator shall provide full copies of all permits to the Code Enforcement Officer prior to the issuance of permits to construct any portion of the Solar Energy System.
- 9. Create new 402.8.10.G: "Utility Connection Standards". Utilize existing language as G.1.
- 10. New Section/language 402.8.10.G.2: Utility Connections for Existing Residential Areas: Any Commercial Solar Energy Production Site and/or connection to the main utility grid that is located adjacent to, or in the immediate proximity to, an existing

residentially utilized area as determined by the Planning Board, shall be required to place all utility lines underground unless the utility company owning/operating the main transmission lines requires the lines to be above ground on utility poles. The Planning Board shall have the authority to require the applicant to provide documentation from duly qualified parties regarding the utility companies requirements.

11. New Section/language 402.8.10.3: Utility Connections for areas not residentially utilized: The Planning Board shall have the authority to make the determination of if the Commercial Solar Energy Production Site and connection to the main power grid is in, or in the immediate proximity of, an existing residentially utilized area. If the Planning Board makes the determination that it is not, the determination of underground or above ground utility lines shall be as established in this Section.

The Planning Board is encouraged to make a distinction between the necessary switching required by the utility company owning/operating the transmission lines and the utility lines originating from the Commercial Solar Energy Production Site to point of connection to the main power "grid". The Planning Board (or designee) shall notify neighboring property owners and request their input.

The applicant shall be responsible for providing information relevant to the criteria listed below. The Planning Board shall review and consider the following elements in making the determination of underground or above ground utilities:

- a. Any input from neighboring property owners after being duly notified as part of the Town's review
- b. Estimated visual implications to neighboring property owners based on renderings provided by the applicant and/or field conditions observed as part of a sitewalk by the Planning Board (if one is held)
- c. Location and number of existing utility poles (if any)
- d. Overall purpose, intent, and use of the Zoning District in which the utility connection is located i.e. is the District predominantly residential
- e. Number of residences that the utility lines will need to be adjacent to
- f. Number and location of any new and/or upgraded utility poles that are necessary
- g. Input from the utility company owning/operating the main transmission lines
- h. Documented existing physical site conditions that substantially complicate placing utilities underground such as bedrock
- 12. Re-number current 402.8.10.F.6 to (new) 402.8.10.F.5
- 13. Add new Section 402.8.10.H Visual Impact: Current language (402.8.10.F.7) is new 402.8.10.H.1.
- 14. New 402.8.10.H.2: For any Medium or Large Scale Commercial Solar Energy Production Site (CSEPS) in a Rural Residential & Agricultural Zoning District, the Planning Board shall have the authority to require sufficient vegetative buffering

and/or screening, as determined by the Board, to minimize the adverse visual impacts of solar array from any existing residential property. The objective is to provide adequate year-round buffering of the CSEPS, on the property where the CSEPS is proposed, for any abutting parcel utilized primarily for residential purposes when the application is submitted to the Town and deemed complete.

- 15. New 402.8.10.H.3: The Applicant and Planning Board shall follow the steps below to minimize the adverse impacts of the project site from all abutting properties utilized primary for residential purposes:
 - a. In addition to all required Planning Board submittals, the applicant shall submit a scaled legible plan, with supporting documentation as appropriate, showing the following:
 - i. The entire parcel proposed for the Commercial Solar Energy Production Site (CSEPS), property boundaries, and parcels within two-hundred and fifty (250) feet
 - ii. The proposed location of the CSEPS, proposed buildings, vehicular access(es), and any structure fifteen (15) feet or more in height including utility poles
 - iii. All parcels shown on the submitted plan shall be identified with the Tax Map/lot, owners last name, and lot size in acres.
 - iv. All existing structures located on the parcel proposed for the CSEPS and within one hundred (100) feet of the parcel proposed accurate to ten (10) feet
 - v. For all portions of the perimeter of the CSEPS proposed property that abut a residentially utilized property, the approximate location of existing trees at least fifteen (15) feet high and other significant woody vegetation on the CSEPS parcel that is proposed to remain when the project is completed to provide a vegetative buffer
 - vi. Locations and associated details (size, type, spacing, etc.) of native evergreen trees proposed to be planted on the CSEPS parcel to provide reasonable year-round vegetative buffering for residentially utilized properties within five (5) years of completing the CSEPS
 - vii. Any replanting plan shall be completed by a duly qualified professional, such as registered Landscape Architect, and shall include descriptions and/or renderings of anticipated buffering at appropriate time intervals to enable the Planning Board and abutting property owners to understand the anticipated timeframe for the growth to be an effective buffer
 - b. The Planning Board shall review the plan submitted by the applicant and any input from neighboring property owners to determine if the proposed vegetative screening is, or will be in five (5) years, sufficient for residential properties abutting the CSEPS parcel. The Board may wish to consider a site walk to view field conditions.
 - c. The Planning Board shall have the authority to require the applicant to provide photographs of existing conditions, renderings of vegetative screening, or

- documentation from similar completed projects. If the Planning Board determines that the existing vegetative screening, together with any proposed replanting, is not sufficient, it shall have the authority to require the applicant to revise the plan as deemed appropriate by the Board.
- d. The Board shall have the ability to hire a qualified consultant, at applicants' expense, per 402.10.9 (Technical Review Fees). The Board shall consider and have the authority to require a performance bond for any necessary replanting per 402.10.17 in accordance with professionally accepted practices such as 80% survival rate for a 5-year period.
- 16. Re-number current 402.8.10.F.8 to (new) 402.8.10.F.6 and continue this renumbering to end of current "F" and/or adjust numbering/lettering as necessary.
- <u>17. Adjust current Section 402.8.10.F.2</u> (mis-labeled) addressing performance guarantee for abandonment as follows: F.2: Performance Guarantee for Abandonment Requirements:
 - a. The owner and/or operator of the Commercial Solar Energy System shall be responsible for establishing and maintaining the performance guarantee for abandonment in accordance with standards established in this Ordinance throughout the lifetime of the system until all components of the Commercial Solar Energy System have been properly removed. Any proposed replacements, changes, or adjustments to the performance guarantee must be approved by the Code Enforcement Officer with input from the Town Planner as necessary. Owners/operators are reminded of Section 402.8.10.XX.XX (currently 402.8.10.F.15) above that requires Staff Review Committee approval for a change of ownership and/or operator(s).
 - b. As an integral part of the submittal to the Planning Board, the owner/operator of the proposed Commercial Solar Energy System shall provide an estimate of all costs that the Town would incur to employ the services of duly qualified contractor(s) to remove all components of Commercial Solar Energy System and all associated abandoned structures from the respective parcel(s). The cost estimate must include sufficient detail for the Planning Board to ensure the accuracy of the submitted figures and address all necessary aspects of the abandonment. The Board may request input from the Town Engineer and other duly qualified professionals at the applicant's expense for making this determination.
 - c. The amount of the performance guarantee shall be at least one hundred and fifty (150) percent, as determined by the Planning Board, of the estimated cost for demolition and complete removal of the system. The form of the performance guarantee shall be approved by the Planning Board, with input from the Town's legal counsel as necessary at the applicant's expense, and duly established with

- the Town prior to the Code Enforcement Officer issuing any permits for the Commercial Solar Energy System.
- d. If the Commercial Solar Energy System is required to establish and maintain a financial surety for abandonment by another governmental entity, such as the Maine Department of Environmental Protection, the applicant is encouraged to ensure that the posting of the financial performance guarantee for abandonment complies with Town standards to streamline the administrative process. The applicant shall submit information about any such performance guarantee as part of the Planning Board's review and the Board shall determine if Town standards are met with input from duly qualified professionals as necessary at applicant's expense.
- e. If the Planning Board determines that the financial surety for abandonment required by another governmental entity meets Town standards, the performance guarantee for abandonment requirement shall be deemed acceptable provided that the Planning Board also determines that sufficient written documentation is submitted ensuring that the Town will be kept apprised of any changes to the surety for the lifetime of the Commercial Solar Energy System.
- f. If the Planning Board determines that the financial surety for abandonment required by another governmental entity does not meet Town standards, the applicant shall have two options. The first is to make the necessary adjustments to the financial surety for the Planning Board to determine that Town standards are met. The second option for the applicant is to request to be on the agenda for the next available meeting of the Gray Town Council.
- g. The Gray Town Council shall have the authority to determine if the financial surety is sufficient in the event that the applicant for the Commercial Solar Energy System chooses to approach the Council per above. Prior to being placed on a Council agenda, the applicant shall provide written documentation, with attachments as necessary, that specifically lists all deviations from Town requirements for the performance guarantee for abandonment. The applicant shall also provide information regarding the reasoning for not meeting Town requirements.
- h. In the event that the applicant decides to approach the Gray Town Council, and Planning Board has deemed the application complete and that all applicable standards are met except the Town Council resolution of the performance guarantee for the abandonment, the Planning Board shall have the authority to consider a conditional approval of the application. Any such approval shall include a specific condition that the Code Enforcement Officer shall not issue permits for the Commercial Solar Energy System until the Town Council has determined that the performance guarantee for abandonment is acceptable.

i. Once the owner and/or operator has properly removed all components of Commercial Solar Energy System and associated abandoned structures, the owner and/or operator shall notify the Town Planner in writing and request an inspection by the Code Enforcement Officer (CEO). The CEO shall have the authority to employ the services of the Town's Engineer or other qualified professionals, at the owner/operators expense, to verify that the abandonment complies with all applicable standards. If the CEO, in consultation with the Town Planner, determines that such removal is satisfactory, the CEO shall notify the Town Planner or designee in writing to release the abandonment performance guarantee.