

**DECISION  
GRAFTON PLANNING BOARD**

**SPECIAL PERMIT (SP 2018-8) & SITE PLAN APPROVAL  
Construct a Solar Electric Generating Facility**

**44 Estabrook Avenue, Grafton MA**

**BWC Lake Ripple, LLC (Applicant)  
Knowlton Farms Nominee Trust, Patricia K. Knowlton Trustee (Owner)**

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Decision of the Grafton Planning Board (hereinafter the Board) on the petition of BWC Lake Ripple, LLC, 137 Newbury Street, 4<sup>th</sup> Floor, Boston, MA 02116 (hereinafter the Applicant), for a Special Permit and Site Plan Approval under Section 3.2.3.1 (Use Regulation Schedule) of the Grafton Zoning Bylaw (ZBL) to construct a solar electric generating station on property located at 44 Estabrook Avenue, Grafton, MA 01519 (hereinafter the Site), and shown on Grafton Assessor's Map 49, Lot 6 and owned by Knowlton Farms Nominee Trust, Patricia K. Knowlton, Trustee (hereinafter the Owner) by deed recorded in the Worcester District Registry of Deeds in Book 35401, Page 337.

**I. BACKGROUND**

The application for the above referenced Special Permit and Site Plan Approval (hereinafter Application) was submitted on June 13, 2018. Notice of the public hearing and the subject matter thereof was published in the Grafton News on July 5 and 12, 2018 and posted with the Town Clerk's Office and abutters were notified by First Class Mail. The public hearing on the Application was held on July 23, continued to August 13 and August 27, 2018. At the public hearing, all those wishing to speak to the petition were heard. Following public input the hearing was closed on August 27, 2018.

The following Board members were present throughout the public hearing: Chairman Robert Hassinger, Vice Chairman Linda Hassinger, Clerk Sharon Carroll-Tidman, Members David Robbins, Michael Scully, and Associate Member Paul Monroe. At the hearing the following people presented the Application: David Kelley, P.E. of Meridian Associates, Inc. and Andrew Pierson of BWC Lake Ripple, LLC. During the Board's deliberation on the decision on August 27<sup>th</sup>, Chairman Hassinger appointed Mr. Monroe to vote on the decision due to the absence of Ms. Carroll-Tidman.

**II. EXHIBITS**

The following items were submitted to the Board for its consideration of this application:

1. Unbound application materials submitted by Meridian Associates, Inc., received June 13, 2018, and consisting of the following:
  - Application for Special Permit; received by the Town Clerk on June 13, 2018; 1 page.
  - Application for Site Plan Review; received by the Town Clerk on June 13, 2018, 1 page.
  - Certificate of Good Standing; signed by the Treasurer/Collector's office on June 5, 2018; 1 page.
  - Certified Abutters List; signed by the Assessor's Office; dated June 1, 2018; 1 page.

2. Project Narrative prepared by Meridian Associates, Inc.; dated June 12, 2018; received June 13, 2018; 14 pages.
3. Waiver Request prepared by Meridian Associates, Inc.; dated June 12, 2018; received June 13, 2018, 1 page.
4. Stormwater Analysis and Calculations prepared by Meridian Associates, Inc.; dated June 12, 2018; received June 13, 2018; 108 pages.
5. Plan Set; “Knowlton Farms Solar Development, 44 Estabrook Avenue, [Phase Three]”, prepared by Meridian Associates, Inc.; 11”x17”, black and white; dated June 12, 2018; received June 13, 2018; includes the following fourteen (14) sheets:
  - Sheet 1: Cover Sheet & Locus Context Map
  - Sheet 2: Record Conditions Plan
  - Sheet 3: Permit Site Plan of Land (Dual-Use)
  - Sheet 4: Permit Site Plan of Land (Conventional)
  - Sheet 5-7: Grading and Drainage Plans
  - Sheet 8-10: Sediment and Erosion Control Plan
  - Sheet 11: Wetland Crossing and Replication Details
  - Sheet 12: Sedimentation Basin Grading Details
  - Sheet 13: Sediment and Erosion Control Details
  - Sheet 14: Site Details
6. Email correspondence: Re: 44 Estabrook; Board of Health; dated & received July 2, 2018; 1 page.
7. Email correspondence: Re: 44 Estabrook Avenue – Knowlton Farms – Solar Farm; Grafton Police Department, dated & received July 2, 2018; 1 page.
8. Public Hearing Notice, stamped by Town Clerk on July 3, 2018, 1 page.
9. Email correspondence: Re: 44 Estabrook Avenue – Knowlton Farms – Solar Farm; Zoning Board of Appeals; dated & received July 3, 2018; 1 page.
10. Letter Correspondence: Re: Knowlton Farms Solar Development Phase 3; Grafton Fire Department; dated & received July 6, 2018; 1 page.
11. Email correspondence: Re: 44 Estabrook Avenue – Knowlton Farm – Solar Farm; Conservation Commission; dated & received July 12, 2018; 1 page.
12. Memorandum to Meridian Associates, Inc. from Planning Department, cc: Planning Board, Re: 44 Estabrook Ave. Application Review; dated & received July 19, 2018; 1 page.
13. Photos: “Dual-Use Project, UMASS Amherst, Stockbridge School of Agriculture,” no date; received July 23, 2018, 3 pages.

14. Correspondence: Graves Engineering, Inc. – Re: Knowlton Farms Solar Development – Phase 3, 44 Estabrook Ave., Special Permit, Site Plan, Stormwater Management Regulations and Wetland Regulations Review; dated July 26, 2018; received July 30, 2018, 4 pages.
15. Correspondence: Meridian Associates, Inc. – Re: Knowlton Farms Solar Development – Phase 3, 44 Estabrook Ave., Special Permit, Site Plan, Stormwater Management Regulations and Wetland Regulations Review; dated August 3, 2018; received August 7, 2018, 3 pages.
16. Revised Stormwater Analysis & Calculations Report prepared by Meridian Associates, Inc.; revised August 3, 2018; received August 7, 2018, 91 pages.
17. Revised Plan Set: “Knowlton Farms Solar Development, 44 Estabrook Avenue, [Phase Three],”; prepared by Meridian Associates, Inc.; 24”x36”, black and white, revised August 3, 2018; received August 7, 2018; includes the following fourteen (14) sheets:
  - Sheet 1: Cover Sheet & Locus Context Map
  - Sheet 2: Record Conditions Plan
  - Sheet 3: Permit Site Plan of Land (Dual-Use)
  - Sheet 4: Permit Site Plan of Land (Conventional)
  - Sheet 5-7: Grading and Drainage Plans
  - Sheet 8-10: Sediment and Erosion Control Plan
  - Sheet 11: Wetland Crossing and Replication Details
  - Sheet 12: Sedimentation Basin Grading Details
  - Sheet 13: Sediment and Erosion Control Details
  - Sheet 14: Site Details
18. Correspondence: Graves Engineering, Inc. re: Knowlton Farms Solar Development – Phase 3, 44 Estabrook Ave., Special Permit, Site Plan, Stormwater Management Regulations and Wetland Regulations Review; dated August 10, 2018; received August 13, 2018, 5 pages.
19. Rendered Plan Set: 44 Estabrook Avenue prepared by Meridian Associates, Inc., 24”x36”, color, dated June 12, 2018; received August 13, 2018; to include the following four (4) sheets:
  - Sheet 2: Record Conditions Plan of Land
  - Sheet 5-7: Grading and Drainage Plan
20. Revised Operation & Maintenance Program prepared by Meridian Associates, Inc., dated June 12, 2018, revised August 17, 2018; received August 20, 2018; 9 pages.
21. Nutrient Management Plan prepared by LEC Environmental Consultants, Inc., no date, received August 20, 2018; 13 pages.
22. Correspondence: Paul Knowlton – Proposed Dual-Use Solar Projects on Estabrook Avenue; dated August 20, 2018; received August 21, 2018; 2 pages.

23. Land Lease “Option Agreement”, 44 Estabrook Avenue; signed by Patricia Knowlton, Trustee of Knowlton Farm Nominee Trust May 2, 2017; signed by Trevor Hardy, Manager of BWC Lake Ripple, LLC; received August 21, 2018; 12 pages.

### III. FINDINGS

At their meeting of August 27, 2018, after due consideration of the exhibits submitted and the entire record of proceedings introduced and accepted in this matter, the Grafton Planning Board (motion by Mr. Robbins, seconded by Ms. Hassinger) voted 5-0 in **FAVOR** to make the following Findings:

1. That determinations regarding the following findings are based upon the plans identified in this Decision, as well as the information and materials submitted and presented in association with the Application.
2. That determinations regarding the following findings are also predicated upon satisfactory completion of the work shown on the Plans in accordance with this Decision, as well as all applicable Federal, State and Local regulations, except where modified by this Decision.
3. That per ZBL Section 3.2.3.1, the proposed use of a Solar Electric Generating Station is authorized with the issuance of a Special Permit within the Low Density Residential (R40) zoning district.
4. That the Site, as identified by the Applicant and shown in Exhibit #1 of this Decision, is located within the Low Density Residential (R40) zoning district. The site is not located within the Water Supply Protection Overlay District.
5. That during the public hearing the Board and Applicant discussed the nature of the application. The current site is 171.64 acres consisting of wetlands, uplands and forested areas. The site had historically been used as a dairy farm and has building remnants along the Estabrook Avenue street line. Those buildings are not being altered as part of this Application.
6. That during the public hearing the Applicant discussed that the Site was currently enrolled in the State’s Chapter 61A protection and that they would be removing the portion that would be taken up by the proposed solar electric generating facility.
7. That during the public hearing the Applicant discussed the proposed solar electric generating facility. The Applicant stated that they are pursuing a grant through the State to utilize a “Dual-Use” facility, which would allow the owners to graze cattle under elevated solar panels. The Applicant is proposing the lowest end of the solar panels be set between eight (8) to twelve (12) feet high. The Applicant also noted that in order for equipment to move in between the panels the solar panel row spacing would be eighteen (18) feet.
8. That during the public hearing the Applicant discussed the components of the proposed solar electric generating facility. The solar electric generating facility will cover fifteen (15) acres of the Site, and generate 2.9 Megawatts of Direct Current (MWDC) which will step down to 2.0 Megawatts of Alternating Current (MWAC) before connecting to the National Grid system via

450 feet of underground cables along the proposed twenty (20) foot wide gravel drive on site to power poles along the Estabrook Avenue Right of Way.

9. That during the public hearing the Applicant noted that due to the owner's intent on grazing cattle under the solar panels the seed mix would have to be altered to accommodate their nutrient needs (Exhibit #21).
10. That during the public hearing the Board and the Applicant discussed the need for some form of surety that could be accessed by the Town in the event that the facility is abandoned or requires decommissioning. The Applicant submitted their "Option Agreement" between BWC Lake Ripple, LLC and the Owner which has provisions for the eventual decommissioning or abandonment of the facility and therefore an additional surety with the Town would not be needed (Exhibit #22).
11. That ZBL Section 1.3.3.2, requires that the procedure for Site Plan Review be incorporated into the procedure for reviewing Special Permits.
12. That ZBL Section 1.3.3.3 defines the procedure for Site Plan Review, including a description of the plans and materials to be submitted to the Planning Board. The Board further finds that Section 1.3.3.4 of the ZBL allows an applicant to request waivers from certain requirements of the Site Plan Review procedure.
13. That pursuant to Section 1.3.3.4 of the ZBL, the Applicant requested waivers from the following requirements for preparing site plans, as follows (Exhibit #3):
  - Section 1.3.3.3 (d) – Scale of Plan at 1"=40 feet,
  - Section 8.2.1 – Traffic Study
14. That with respect to the nature of this particular Application (Exhibit #1), the waivers requested, and the resulting site plan are not contradictory or inconsistent with the intent and purposes set forth in Section 1.2 and 1.3.3.1 of the ZBL.
15. With regard to Section 1.5.5(a) of the ZBL that based upon the Findings stated within this Decision ingress and egress to the property and proposed structures thereon with particular reference to automotive and pedestrian safety and convenience, traffic flow and control and access in case of fire or catastrophe, is adequate.
16. With regard to Section 1.5.5(b) of the ZBL, that based upon the Findings stated within this Decision, off-street parking and loading areas where required, and the economic, noise, glare, or odor effects of the Special Permit on adjoining properties and properties generally in the district are satisfactory. The Board finds that this requirement does not apply to this Application based on the nature of the proposal.
17. With regard to Section 1.5.5(c) of the ZBL, that based upon the Findings stated within this Decision, refuse collection or disposal and service areas do not change. The Board finds that this requirement does not apply to this Application based on the nature of the proposal.

18. With regard to Section 1.5.5(d) of the ZBL, that based upon the Findings stated within this Decision, screening and buffering with reference to type, dimensions and character are not applicable to this Application based on the nature of the proposal.
19. With regard to Section 1.5.5(e) of the ZBL, that based upon the Findings stated within this Decision, signs and exterior lighting with reference to glare, traffic safety, economic effect are not applicable to this Application based on the nature of the proposal.
20. With regard to Section 1.5.5(f) of the ZBL that based upon the Findings stated within this Decision the required yards and other open space requirements do not change. The Board finds that this requirement does not apply to this Application based on the nature of the proposal.
21. With regard to Section 1.5.5(g) of the ZBL, that the proposed sign and its use (as presented in the Exhibits stated within this Decision and by the Applicant during the public hearing) is generally compatible with adjacent properties and properties in the district.
22. With regard to Section 1.5.5(h) of the ZBL, that upon satisfying and complying with all applicable Board of Health requirements, and based upon the Findings stated within this Decision, there will not be any significant adverse impact on any public or private water supply.
23. With regard to Section 1.5.5(i) of the ZBL, that upon satisfying and complying with all applicable Board of Health requirements, and based upon the Findings stated within this Decision, there will not be any significant or cumulative impact upon municipal water supplies.
24. With regard to Section 1.5.5(j) of the ZBL, that based upon the Findings stated within this Decision, protection of important historic, cultural and scenic landscapes with regard to the proposed development does not change. The Board and Applicant discussed the historic significance of the Knowlton Farms and the importance of preserving the historic landscape of the area. The Owner submitted a letter stating that this project will aid in the diversification of agricultural uses on site (Exhibit #22) in order for the family to continue the historic use of farming operations.

#### **IV. WAIVERS**

At their meeting of August 27, 2018 after due consideration of the Exhibits submitted and the entire record of proceedings introduced and accepted in this matter, and based on Findings stated within this Decision, the Grafton Planning Board (motion by Mr. Robbins, seconded by Ms. Hassinger) voted 5-0 to **GRANT** the Applicant's request for waivers from the following Sections of the ZBL:

1. Section 1.3.3.3 (d) Preparation of Site Plan: Scale of Plan 1 inch = 40 feet. The Board noted that that granting this waiver was based on the lack of objection from the peer review engineer and the Board as well as the absence of specific concerns during the public hearing.
2. Section 8.2.1 – Traffic Study. The Board noted that the vote to grant this waiver was based on the scope of the project as well as the absence of specific concerns during the public hearing.

**V. DECISION and CONDITIONS**

At their meeting of August 27, 2018, after due consideration of the exhibits submitted and the entire record of proceedings introduced and accepted in this matter, the Grafton Planning Board (motion by Mr. Robbins, seconded by Ms. Hassinger) voted 5-0 to **APPROVE** this Special Permit (2018-8) and Site Plan Approval with **CONDITIONS** as follows:

**A. Standard Conditions**

1. This Special Permit and Site Plan Approval specifically authorizes the construction of an electric generation station that captures energy from the sun, associated equipment, installation of an access road, and security features as described within the Exhibits and Findings of this Decision.
2. Any changes to the plan presented in this Application may be made only upon authorization from the Planning Board. Such authorization shall only be granted provided the Board finds that any change(s) requested by the Applicant is not substantially different than the plan presented within the Exhibits of this Decision, and is consistent with the intent and purpose of this Decision. Requests for such change(s) shall be submitted in writing to the Planning Board. Any proposed change deemed substantial in nature shall require a modification of the original Special Permit and Site Plan Approval application and decision. Any modification shall be made pursuant to Section 1.3.3 of this Bylaw.
3. Signage for, and associated with, the use authorized by this Decision shall be installed in accordance with, and conform to, the Town of Grafton Zoning Bylaw. This Decision shall not be construed as approving or authorizing any such signage.
4. Notice of change of Ownership shall be sent via certified mail to the Planning Board within thirty (30) days of sale.
5. In accordance with ZBL Section 1.5.8, this Special Permit and Site Plan Approval shall lapse within one (1) year from the date of the expiration of the appeal period if substantial use, or construction, has not been commenced except in accordance with the law. Any request for an extension of said period of validity shall be considered a Modification of this Special Permit and Site Plan Approval, and such request shall be filed and reviewed in accordance with the procedure specified in ZBL Section 1.5.
6. This Special Permit and Site Plan Approval shall not take effect until the Decision has been recorded at the Worcester District Registry of Deeds (WDRD) and a copy of the recording provided to the Planning Board and the Building Department to include the WDRD Book and Page Number and/or Instrument Number within thirty (30) days.
7. Unless specifically modified by this Decision, the solar electric generating station and appurtenant equipment authorized by this Special Permit shall be installed in accordance with, and maintained to conform to, the Conditions stated within this Decision, all applicable requirements of the Grafton Zoning Bylaw, and all applicable Federal, State and Local regulations.

8. By recording this Special Permit Decision in the Worcester District Registry of Deeds, the Applicant agrees to and accepts the conditions set forth in this Special Permit Decision. Any inability, failure or refusal by the Applicant to comply with the requirements of this Special Permit Approval, when notified of failure of compliance, shall be grounds for the immediate denial of building, construction or occupancy permits with respect to this project.

**B. Conditions to be Met Prior to the Start of Construction**

1. Prior to the start of any construction activity on the Site, an initial inspection of the delineated limits of work, erosion control and site stabilization measures shall be performed by agents of both the Planning Board and Conservation Commission in the presence of a representative of the Applicant/developer, and notice of such inspection forwarded to both Boards.
2. No construction activity shall occur on the Site until the Applicant/developer received written authorization from both the Planning Board and Conservation Commission regarding the adequacy of the initial erosion control and site stabilization measures, The Planning Board reserves the right to require additional erosion control and site stabilization measures at any time during the construction process should the Planning Board, Conservation Commission, or their agent(s) deems such measure necessary. The Applicant/developer shall be notified in writing of the necessity for such additional measures, and shall complete all such requirements within ten (10) days of receiving said notice, or other time as may be agreed upon by both the Planning Board and Conservation Commission.
3. Prior to the issuance of the building permit, the Applicant shall submit a final plan set to be reviewed and endorsed by the Planning Board with the Conditions set forth in this Decision inscribed on a sheet of the Plans suitable for recording at the Worcester District Registry of Deeds.
4. Prior to commencement of work, the Planning Board shall be provided with the following:
  - Five (5) full size sets, 24" x 36", endorsed and recorded plan sets, one of which shall be sent directly to the Town's peer review consulting engineer.
  - An electronic copy, in a "PDF" compatible format, of the endorsed and recorded plan set.
5. The Applicant shall provide the Planning Board with written documentation from National Grid granting the Applicant the necessary permissions to cross their easement area for the purposes of construction and post construction maintenance of the site.
6. The Applicant will not commence construction of the solar facilities until the roadway has been completed to the satisfaction of the Town in order to ensure that the emergency access requirements are met.

**C. Conditions to be Met During Construction**

1. Hours of construction and earthwork proposed shall only occur Monday through Friday between the hours of 7:00 a.m. and 5:00 p.m. and Saturdays from 8:00 a.m. and 5:00 p.m. There shall be no construction activity on Sundays or state and federal holidays.



2. All storage and parking during construction shall be on-site and shall not impede traffic along Estabrook Avenue at any time.
3. All grading and construction shall be performed in accordance with the approved Plans, as well as all applicable Local, State and Federal regulations, and shall be accomplished so as not to discharge any pollutants or siltation into waterways or resource areas during construction, and after completion, from the site and its associated improvements.

**D. Conditions to be Met After Construction**

1. The access road, gate and security facilities shall be maintained at all times to the satisfaction of the Grafton Fire and Grafton Police departments to ensure that emergency services providers will have adequate access and maneuverability at all times. The emergency access road must be and remain a minimum width of 18 feet. The access road will be maintained at all times to ensure proper emergency service access including but not limited to snow removal.
2. Once the solar electric generating station has reached the end of its useful life or has been abandoned it shall be removed. The Owner or Operator shall physically remove the installation no more than 150 days after the date of discontinued operations. The Owner or Operator shall notify the Planning Board by certified mail of the proposed date of discontinued operations and plans for removal. Decommissioning shall consist of but not limited to:
  - Physical removal of all ground mounted solar panels, structures, equipment, security barriers and transmission lines from the site.
  - Disposal of all solid and hazardous waste in accordance with local, state and federal waste disposal regulations.
  - Stabilization or re-vegetation of the site as necessary to minimize erosion. The Planning Board may allow the owner or operator to leave landscaping or designated below-grade foundations in order to minimize erosion and disruption to vegetation.
3. The Owner / Operator shall submit notice of proposed date of decommissioning. Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, the solar electric generating facility shall be considered abandoned when it fails to operate for more than one year without the written consent of the Planning Board.
4. The Applicant shall comply with all requirements of Section 1.3.3 – Site Plan Review – of the Grafton Zoning Bylaw. Pursuant to Section 1.3.3.9, all work shown on the approved site plan shall be completed and all related conditions of approval shall be satisfied prior to the issuance of an occupancy permit.

**VI. RECORD OF VOTE**

Constituting a majority of the Planning Board, the following members voted to **APPROVE** the Applicant's Special Permit (SP 2018-8) and Site Plan Approval application to construct a solar electric generating station as described in this Decision with Conditions on property located at 44 Estabrook Avenue, Grafton, based on the information received at the public hearing, exhibits, and the aforementioned Findings:

Robert Hassinger, Chairman

David Robbins, Member

Linda Hassinger, Vice Chairman

Michael Scully, Member

Paul Monroe, Associate Member

**DATE OF FILING OF DECISION:            BY ORDER OF THE BOARD**

  
\_\_\_\_\_  
Joseph Laydon, Town Planner

8-28-2018  
\_\_\_\_\_  
Date

cc:    Applicant/Owner  
      Building Inspector  
      Assessor

Board of Health  
Conservation Commission  
Graves Engineering

**To Whom It May Concern:** This is to certify and verify that twenty (20) days have elapsed since this decision was filed in the Town Clerk's office and that no appeals have been filed in reference to same, or that, if such appeal has been filed, it has been dismissed or denied.

\_\_\_\_\_  
Kandy Lavalley, Town Clerk

\_\_\_\_\_  
Date