

COMMONWEALTH OF MASSACHUSETTS

FRANKLIN COUNTY, ss.

LAND COURT DEPARTMENT OF THE
TRIAL COURT

BWC ASHUELA BROOK, LLC, and
BLUEWAVE ORINATION, LLC

Plaintiffs,

v.

PLANNING BOARD OF THE TOWN OF
NORTHFIELD, and
MARGARET RIORDAN, TAMMY
PELLETIER, VICTORIA LUKSHA, JOE
GRAVELINE, and MICHELE WOOD, in their
official capacities,

Defendants.

CIVIL ACTION NO.

VERIFIED COMPLAINT

On January 27, 2025, the Town of Northfield Planning Board denied the application of BWC Ashuela Brook, LLC and its managing member, BlueWave Origination, LLC (collectively, “BlueWave” or the “Applicant”) for a special permit to construct a 2.29 megawatt DC ground-mounted solar photovoltaic array at 0 Pine Meadow Road in Northfield (the “Project”). The denial exceeded the Board’s authority, was based on a legally untenable ground, was arbitrary and capricious. *See MacGibbon v. Board of Appeals of Duxbury*, 356 Mass. 635, 639 (1970).

Forty years ago, the Legislature amended the state Zoning Act, G.L. c. 40A, § 3, to provide heightened zoning protections for “solar energy facilities and related structures” under what is commonly known as the Dover Amendment. The purpose was to specifically prevent municipalities from doing what the Board did here: using local zoning to either prohibit or

unreasonably regulate solar facilities. G.L. c. 40A, § 3, ¶ 9.

Ironically, this Project is precisely the type of innovative solar facility the Commonwealth of Massachusetts has emphatically encouraged, to help the state meet its ambitious 2050 net zero greenhouse gas emissions goals. The Project will be constructed on a 16.1 acre portion of 0 Pine Meadow Road, which is currently in active agricultural use. Importantly, as an agrivoltaic “dual use” project, the site will continue operating primarily and directly for active agricultural purposes, in addition to hosting a renewable energy generating resource. The solar modules will be mounted in a manner that enables the Applicant’s local family-owned farming partner, Finicky Farms LLC, to continue using the entire Project site for commercial organic vegetable production (including beets, cabbage, garlic, and tomatoes), as well as hay and baleage.

The Board’s denial rests primarily on the conclusory speculation that in the event of flooding, there might be adverse ramifications to the surrounding area from the Project. Yet there was simply no evidence — let alone substantial evidence — before the Board to support this speculation. To the contrary, the record shows that the Board received the written conclusions from the expert peer reviewer for the Northfield Conservation Commission, a fellow municipal board, stating that there was “more than adequate” compensatory flood storage for the Project. Moreover, the Board ignored the inconvenient fact that the Project’s interconnection equipment will be located outside the 100-year floodplain as shown on the preliminary 2024 FEMA Flood Insurance Rate Maps. The Board’s additional grounds for denial are similarly unsupported by anything other than speculation or opinion. These grounds are insufficient as a matter of law to support the denial of a special permit — much less denial of a special permit for a Dover-protected use.

The Board willfully ignored the evidence and the law. The Decision is in direct contravention of the Zoning Act and a long line of cases squarely holding that while permitting authorities may condition solar energy facilities, they may not prohibit them in fact or in effect. The Applicant requests annulment of the Decision, and a declaratory judgment that the Decision is preempted by and violates G.L. c. 40A, § 3, ¶ 9.

The Applicant also requests that the Court issue the special permit directly, without remand to the Board. Under these circumstances there is no basis for remand. At the same time the Board denied the special permit (and the conditions proposed by its own peer reviewer, Beacon Integrated Solutions), it granted site plan approval for the Project (with the conditions proposed by its own peer reviewer, Beacon Integrated Solutions). Where the Project has already been appropriately conditioned, a remand is both inequitable and unwarranted. A remand would reward the Board's improper behavior, giving it the opportunity to engage in further pretextual mischief and further delay of the construction of an essential clean energy project.

The Parties

1. BWC Ashuela Brook, LLC is the applicant for the Project with a principal business address of 116 Huntington Avenue, Suite 601, Boston, MA 02116, and is a "person aggrieved" within the meaning of G.L. c. 40A, § 17.
2. BlueWave Origination, LLC is the managing member of BWC Ashuela Brook, LLC with a principal business address of 116 Huntington Avenue, Suite 601, Boston, MA 02116, and is a "person aggrieved" within the meaning of G.L. c. 40A, § 17.
3. The Planning Board of the Town of Northfield ("Board") is a duly organized municipal board, which has its principal office at 69 Main Street, Northfield, MA 01360.
4. Margaret Riordan is a duly elected member and the chair of the Board, with an official

address of 69 Main Street, Northfield, MA 01360.

5. Tammy Pelletier is a duly elected member and the vice chair of the Board, with an official address of 69 Main Street, Northfield, MA 01360.
6. Victoria Luksha is a duly elected member of the Board, with an official address of 69 Main Street, Northfield, MA 01360.
7. Joe Graveline is a duly elected member of the Board, with an official address of 69 Main Street, Northfield, MA 01360.
8. Michele Wood is a duly elected member of the Board, with an official address of 69 Main Street, Northfield, MA 01360.

Jurisdiction and Venue

9. The Land Court has original, concurrent jurisdiction over claims arising under the Zoning Act, G.L. c. 40A, § 17, pursuant to G.L. c. 185, § 1(p).
10. Venue is proper in Franklin County, where the Property is located, where the Board operates, and where the Board issued the Decision that is the subject of this appeal.

The Dual-Use Agrivoltaic Project Preserves Agricultural Land and Is Allowed By Special Permit

11. An agrivoltaic array is a project in which solar generation and agricultural activities are co-located on the same land.
12. The Project is a 2.29 MW DC agrivoltaic array located on 16.1 acres at 0 Pine Meadow Road (Northfield Assessor Parcels 55-A4, 55-A5, 55-A7 and a portion of 72-A1) (the “Property”), interconnecting to existing Eversource-owned power lines on Pine Meadow Road.
13. The Property is owned by Thomas R. Shearer, Trustee of the Thomas R. Shearer Investment Trust, and Patricia E. Shearer, Trustee of the Patricia E. Shearer Investment Trust (the “Trusts”).

14. The Trusts authorized the Applicant to apply for the necessary land use permits.
15. The Project will not include battery energy storage, because the Applicant received an exemption from this requirement from the Department of Energy Resources (“DOER”) in connection with qualifying the Project for the Solar Massachusetts Renewable Target (“SMART”) program.
16. The Project has received a determination from DOER that the Project likely qualifies for SMART program certification as an “Agricultural Solar Tariff Generating Unit,” or ASTGU.
17. The Property is currently in active agricultural use, and will remain in active agricultural use following the Project’s installation and during the Project’s operation.
18. The Project’s “dual-use” agrivoltaic design (and expected designation as an ASTGU) allows for generating solar energy and maintaining active agricultural use on the same land simultaneously.
19. The Project’s agrivoltaic design utilizes panels installed with sufficient vertical clearance to enable the free movement of people, livestock, and agricultural equipment under the array.
20. The agricultural component of the Project is anticipated to consist of continued crop rotation including organic beets, cabbage, garlic, and tomatoes under the interior portion of the array, and hay and baleage production in the exterior rows as a buffer from adjacent, conventionally-managed farmland.
21. Access to the Project will be via a gravel access road from Pine Meadow Road, with an adequate emergency vehicle turnaround located near the proposed equipment pad.
22. The Project will be completely enclosed with a fixed knot wire farm fence, and the equipment pad will be completely enclosed with a secondary internal fence.

23. Because the Project will not require regular staffing on-site, no water or sewer utilities will be required.

The State Zoning Act Preempts Municipalities from Prohibiting or Unreasonably Regulating Solar Facilities

24. Forty years ago, in 1985, the Legislature declared it “the policy of the commonwealth to encourage the use of solar energy.” St. 1985, c. 637, §§ 7, 8.

25. In so doing, the Legislature amended the state Zoning Act, G.L. c. 40A, § 3, to provide heightened zoning protections for “solar energy systems or the building of structures that facilities the collection of solar energy”. *Id.*

26. The Supreme Judicial Court has stated that the legislative purpose behind Section 3, known as the “Dover Amendment,” was the Legislature’s decision that it was necessary “to take away” local municipalities’ “power to limit the use of land” within their borders in certain discrete instances. *Attorney General v. Dover*, 327 Mass. 601, 604 (1951) (discussing predecessor to G.L. c. 40A, § 3).

27. Under G.L. c. 40A, § 3, ¶ 9, municipalities are expressly prohibited from using local zoning bylaws to either prohibit or unreasonably regulate solar energy systems:

No [local] zoning . . . bylaw shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare.

28. The Project is a “solar energy system” within the meaning of G.L. c. 40A, § 3, ¶ 9.

29. The Supreme Judicial Court has held that “large-scale systems, not ancillary to any residential or commercial use, are key to promoting solar energy in the Commonwealth.” *Tracer Lane II Realty, LLC v. City of Waltham*, 489 Mass. 775, 781 (2022) (citing Executive Office of Energy and Environmental Affairs, *Massachusetts 2050 Decarbonization*

Roadmap, at 4, 59 n.43 (Dec. 2020) (“the amount of solar power needed by 2050 exceeds the full technical potential in the Commonwealth for rooftop solar, indicating that substantial deployment of ground-mounted solar is needed under any circumstance in order to achieve [n]et [z]ero [greenhouse gas emissions by 2050]”).

30. Section 200-10.3(C) of the Northfield Zoning Bylaw affirmatively allows large-scale ground-mounted solar photovoltaic installations in all zoning districts by special permit.

31. In precisely such circumstances, this Court has held that local permitting authorities may condition, but **not** prohibit, solar energy systems:

“[T]he better, and correct view of the limits of local regulation of solar energy facilities allowed by G.L. c. 40A, § 3, is that such local regulation may not extend to prohibition except under the most extraordinary circumstances, **and that special permits regulating solar energy facilities must be treated like site plan approval, which allows for regulation but not for prohibition.**”

Summit Farm Solar, LLC v. Planning Board for Town of New Braintree, 30 LCR 61 (Mass. Land Ct. 2022) (Speicher, J.) (emphasis added).

32. As this Court has held, “[w]hile § 3 does not necessarily bar subjecting a solar energy system to a special permit, it does limit the scope of any required special permit.” *NextSun Energy LLC v. Fernandes*, 29 LCR 52 (Mass. Land Ct. 2021) (Foster, J.) (denial of special permit annulled).

33. As this Court has held in *PLH LLC v. Ware*, 27 LCR 674 (Mass. Land Ct. 2019) (Piper, C.J.) (emphasis added):

“a special permit for a solar generation facility, cannot unreasonably regulate, cannot impose conditions that go beyond statutory limits provided under § 3, **cannot be used either directly or pretextually as a way to prohibit or ban the use, and cannot be used to allow the board any measure of discretion on whether the protected use can take place in the district**”

34. Because of the preemptive protections of Section 3, the local permitting process for a solar energy facility differs from the conventional special permit process applicable to other types

of uses.

35. Under Section 3, a local permitting authority does not retain broad discretion to deny a special permit application for a solar energy facility.
36. Instead, a municipality — acting through its legislative body, Town Meeting — may impose reasonable restrictions on solar energy systems by bylaw “where necessary to protect the public health, safety or welfare” consistent Section 3.
37. However, the Attorney General has repeatedly ruled that the basis for a “health, safety, or welfare” restriction on solar energy systems must have been affirmatively and specifically articulated at the time the restriction was adopted by Town Meeting. *See, e.g., Town of Hubbardston* (Attorney General Municipal Law Unit, Decision No. 10663) (Dec. 19, 2023) (“It is not enough for the [Town Meeting] by-law record to contain general statements reciting public health, safety or welfare goals. The record must articulate why each restriction is necessary to achieve the specific goal.”).
38. As this Court held in *Waller v. Alqaraghuli*, 25 LCR 529, 532 n.7 (Mass. Land Ct. 2017) (Scheier, J.), Section 3 “allows reasonable regulation [of solar arrays] through the Ordinance, not by a case-by-case determination by the Board” (Emphasis supplied).
39. The “public health, safety, or welfare” exception under Section 3 applies only to properly-adopted municipal bylaws that address impacts affecting the community generally. It does not authorize a permitting board to impose ad hoc standards or restrictions on a project-by-project basis.

The Northfield Zoning Bylaw

40. Section 200-10.3(C) of the Northfield Zoning Bylaw (“Zoning Bylaw”) allows large-scale ground-mounted solar photovoltaic installations, such as the Project, in the RA Zoning

District with a special permit and site plan review from the Planning Board. The Zoning Bylaw is attached as Exhibit A.

41. The Project is located in the Residential Agricultural (“RA”) Zoning District.
42. The Town has a Solar Overlay District where large-scale ground-mounted solar photovoltaic installations are allowed by right, but the Project is not within the boundaries of the Solar Overlay District.
43. The Solar Overlay District is approximately 151 acres, and the total acreage of the Town is approximately 22,029 acres, making the Solar Overlay District approximately 0.685% of the Town’s total area.
44. The Applicant reported to the Board in writing that the Project would not be physically or commercially feasible at any location in the Solar Overlay District.
45. Section 200-3.4(C) of the Zoning Bylaw establishes the general special permit criteria as follows:

Decision Criteria. Unless otherwise specified herein, special permits shall be granted by the special permit granting authority only upon its written determination that the adverse effects of the proposed use will not outweigh its beneficial impacts to the town or the neighborhood, in view of the particular characteristics of the site, and of the proposal in relation to that site. The determination shall include findings that all of the following criteria for granting a special permit are met:

1. The use is in harmony with the general purpose and intent of this Zoning Bylaw;
2. The use is in an appropriate location and is not detrimental to the neighborhood and does not significantly alter the character of the zoning district;
3. Adequate and appropriate facilities will be provided for the operation of the proposed use;
4. The proposed use will not be detrimental or otherwise offensive to the adjoining zoning districts and neighboring properties due to the effects of lighting, odors, smoke, noise, sewage, refuse materials, or visual or other nuisances;
5. The proposed use will not cause undue traffic congestion in the immediate area;
6. To the maximum extent possible, the proposed use conforms to the Principles of Rural Design in Section 8.1.1 of this Bylaw; and
7. The proposed use is consistent with the Northfield Master Plan.

46. The Project is also partially located in the Floodplain Overlay District.
47. Section 200-10.1(I) of the Zoning Bylaw provides as follows with respect to the Board’s review role as to the Floodplain Overlay District:
- (1) All subdivision proposals and development proposals subject to site plan review or requiring a special permit for property in the Floodplain Overlay District shall be reviewed by the Planning Board or Zoning Board of Appeals to assure that:
 - (a) Such proposals minimize flood damage potential and, to the maximum extent feasible, locate all structures, roads, utilities and other infrastructure out of the Floodplain Overlay District;
 - (b) Public utilities and facilities are located and constructed so as to minimize flood damage potential; and
 - (c) Adequate drainage is provided.
 - (2) Where such development is subject to a special permit or site plan review under Sections 3.4 and 3.5 and any other sections of the Northfield Zoning Bylaws, the Planning Board or Zoning Board of Appeals shall incorporate these standards into their review. Where such development is subject to the Subdivision Regulations of the Town of Northfield, the Planning Board shall incorporate these standards into their subdivision plan review.
48. The Zoning Bylaw (Sections 200-10.1(D) & (P)) expressly delegates administration of and project review under the floodplain provisions to the Town Administrator, who is designated as the “official Floodplain Administrator for the Town.”
49. Section 200-10.1(D) of the Zoning Bylaw assigns the followings duties to the Floodplain Administrator:
- (1) Applying the regulations for development in the Floodplain Overlay District;
 - (2) Ensuring that permits are applied for when development of any kind is proposed in the Floodplain Overlay District;
 - (3) Oversight of the application and review process for development in the Floodplain Overlay District;
 - (4) Coordination with other local departments and municipal officials including the Building Inspector, Highway Department, Planning Board, Zoning Board of Appeals, and Conservation Commission;
 - (5) Notifying adjacent communities prior to any alteration of a watercourse;
 - (6) Coordinating compliance issues and enforcement actions with the Building Inspector such as activities to correct violations of the Zoning Bylaw, and working with the appropriate local staff to coordinate such efforts;

- (7) Maintaining records of floodplain development, and keeping current and historic FEMA maps available for public inspection; and
- (8) Notifying FEMA if the Town acquires data that changes the base flood elevation in the FEMA mapped special flood hazard areas, within six months of such changes by submitting the technical or scientific data that supports the changes to [FEMA].

50. Sections 200-10.3(E) through (H) of the Zoning Bylaw establish general requirements for large-scale ground-mounted solar photovoltaic installations, including setback, height, lighting, signage, utility connection, noise, and surety requirements.

The Applicant Submits a Detailed Application and Numerous Plans and Updates

51. On or about March 6, 2024, the Applicant filed an application for a special permit and site plan review for the Project pursuant to Sections 200-3.4 (special permits), 200-3.5 (site plan review), and 200-10.3 (large-scale ground-mounted solar photovoltaic installations) of the Zoning Bylaw. A true and accurate copy of the application is available at

https://www.northfieldma.gov/sites/g/files/vyhlf991/f/uploads/special_permit_app_other_docs.pdf.

52. The Board engaged Beacon Integrated Solutions, LLC (“Beacon”) to provide independent peer review of the Project for compliance with the Zoning Bylaw, and to present its findings and recommendations to the Board.

53. On April 30, 2024, the Applicant provided the Board with a written response addressing informational inquiries issued by Beacon on April 8, 2024, and April 9, 2024. A true and accurate copy of these responses is available at

https://www.northfieldma.gov/sites/g/files/vyhlf991/f/uploads/bwc_ashuela_brook_special_permit_response_to_initial_comments.pdf.

54. Also on April 30, 2024, the Applicant provided the Board with additional written information, including revised site plans, flood storage calculations, a battery storage

exemption request and DOER approval, archaeological permit, and transformer and inverter specification sheets.

55. On May 23, 2024, the Board opened a public hearing on the application, which was continued to multiple successive dates.
56. On June 4, 2024, the Applicant provided the Board with further information on its plans for interconnection with Eversource Energy, the electric distribution company serving the Town.
57. On September 6, 2024, the Applicant submitted to the Board revised site drawings (showing a reduction in the Project footprint and updates to the fencing plan, the access road, the equipment pad, and utility interconnection design) (the “September 6, 2024 Site Plan”) and the revised predetermination application (including an updated farming plan) as submitted to DOER, the Massachusetts Department of Agricultural Resources, and the UMass Clean Energy Extension.
58. On October 2, 2024, the Applicant submitted to the Board additional information on a potential alternative utility interconnection design that (if approved in the sole discretion of Eversource) would reduce the number of Eversource-owned utility poles from three to one, communications with the Town of Northfield Fire Department, and an agreement to install and warranty approximately 600 linear feet of vegetative screening along Pine Meadow Road.
59. On October 8, 2024, the Applicant submitted a letter of filing consent from FirstLight Power Resources, Inc., a pumped storage hydroelectric facility located downstream of the Project. This letter was submitted as a courtesy to indicate FirstLight’s acknowledgment of and support for the Applicant’s application to the Board.

The Applicant Submits the Northfield Conservation Commission’s Peer Review Report Concerning Flood Compliance

60. On October 17, 2024, the Applicant submitted to the Board the revised peer review report on the Project, which had been prepared for the Northfield Conservation Commission by the Northfield Conservation Commission’s own peer review consultant, Larner Consulting. A true and accurate copy of this report is attached as Exhibit B.
61. Larner Consulting concluded that with respect to the floodplain, “[t]he Project as proposed provides a more than adequate volume of compensatory [flood] storage.” (Emphasis in original). Exhibit B.
62. Larner Consulting concluded that the Applicant “demonstrate[d] compliance with [Bordering Land Subject to Flooding] performance standards” in the Wetlands Protection Act regulations, 310 C.M.R. § 10.57. Exhibit B.
63. Larner Consulting concluded that as a whole, “the project as presented meets all performance standards under the Wetlands Protection Act” Exhibit B.

The Board’s Peer Reviewer Concluded the Project Complied with the Zoning Bylaw

64. On November 19, 2024, Beacon submitted to the Board a final peer review report (Exhibit C) that concluded that the Project complied with the Zoning Bylaw.
65. Beacon reached the following conclusions regarding the special permit decision criteria in Section 200-3.4(C) of the Zoning Bylaw:
- a. With respect to Section 200-3.4(C)(1) (The use is in harmony with the general purpose and intent of this Zoning Bylaw), Beacon wrote that the continued agricultural use (and solar use as modified to provide certain mitigation) **“supports the Applicant’s position that the use is in harmony with the general purpose and intent of the By-Law and is consistent with the Town’s Master Plan.”** Exhibit C at 6 (emphasis supplied).

- b. With respect to Section 200-3.4(C)(2) (The use is in an appropriate location and is not detrimental to the neighborhood and does not significantly alter the character of the zoning district), Beacon noted without objecting or identifying any inadequacy that the Applicant asserted that the use “ will not be detrimental or alter the character of the zoning district, will generate minimal traffic or noise, will be set back from the existing roadway and will require minimal site grading.” Exhibit C at 6.
- c. With respect to Section 200-3.4(C)(3) (Adequate and appropriate facilities will be provided for the operation of the proposed use), Beacon had no comments other than to state that the Applicant provided detailed plan sets. Exhibit C at 8.
- d. With respect to Section 200-3.4(C)(4) (The proposed use will not be detrimental or otherwise offensive to the adjoining zoning districts and neighboring properties due to the effects of lighting, odors, smoke, noise, sewage, refuse materials, or visual or other nuisances), Beacon noted without objecting or identifying any inadequacy that the Applicant stated that the Project will not involve lighting, odors, smoke, sewage or refuse materials, inverters and transformers (which generate noise) will be situated in a location where the audible radius would not impact any of the abutting properties. Beacon further noted without objecting or identifying any inadequacy that during the Applicant had addressed visual concerns by proposing to “install and warranty vegetative screening along Pine Meadow Road of approximately 600 feet,” and had “increased the buffer area from Pine Meadow Road to the first solar module to approximately 264 feet from the property line.” Exhibit C at 9-10.

- e. With respect to Section 200-3.4(C)(5) (The proposed use will not cause undue traffic congestion in the immediate area), Beacon noted without objecting or identifying any inadequacy the Applicant's assertion that the Project will not require regular on-site staffing, will be remotely monitored, and that the underlying agricultural use will remain unchanged. Beacon took no issue with the assertion that the Project will not cause undue traffic congestion in the immediate area. Exhibit C at 10.
- f. With respect to Section 200-3.4(C)(6) (To the maximum extent possible, the proposed use conforms to the Principles of Rural Design in Section 8.1.1 of this Bylaw), Beacon noted that the Zoning Bylaw "encourages" the reuse and retention of existing roads and lanes, and reiterated the Applicant's statements (without objecting or identifying any inadequacy) that the proposed gravel access road offers the minimal footprint necessary to install, operate and maintain the solar equipment, to facilitate farming operations, and to provide emergency access. Beacon acknowledged that there are no existing stone walls or hedgerows, no proposed building structures, and no significant changes in the grade (except for under the proposed equipment pad due to its proximity to the floodplain) or clearing of trees. Beacon confirmed that the Project would not impede access for wildlife frequenting the Connecticut River. Exhibit C at 10.
- g. With respect to Section 200-3.4(C)(7) (The proposed use is consistent with the Northfield Master Plan), Beacon did not identify any provisions of the Northfield Master Plan with which the Project was inconsistent, Exhibit C at 10, and concluded that the continued agricultural use, and solar use as modified to provide

certain mitigation, “**supports the Applicant’s position that the use . . . is consistent with the Town’s Master Plan.**” Exhibit C at 6 (emphasis supplied).

66. Beacon recommended that any special permit for the Project include the following conditions (Exhibit C at 6-11):

- a. Require that any material modifications to the Project, specifically as it relates to the DC capacity, AC capacity, or changes to the size or location of the concrete equipment pad as shown on the Site Drawings dated 9/6/2024, among others, be reported to the Board for approval.
- b. Require the Applicant to use best commercial practices to screen aboveground interconnection assets.
- c. Require the Applicant to install and warranty vegetative screening along Pine Meadow road of approximately 600 feet.
- d. Require the Applicant to provide a landscape management plan prior to applying for the Building Permit.
- e. Require the Applicant to conduct balloon testing at various locations across the parcel to demonstrate the visual impact to the neighboring properties prior to applying for the Building Permit.
- f. Require the Applicant to provide an annually renewing irrevocable tree performance bond with the Town of Northfield as the named bond holder.
- g. Require the Applicant to provide written documentation from the Northfield Historical Commission that the Applicant has addressed all concerns and requirements pertaining to preserving areas of historic significance.
- h. Require the Applicant to provide any written communication with the Northfield

Fire and Police Departments and a summary of actions taken in response, in advance of securing the Building Permit.

- i. Require the Applicant to provide copies of annual reports filed with the Massachusetts Department of Agricultural Resources and DOER in compliance with SMART Program qualifications.
- j. Require the Applicant under any sale or lease of the parcel to address decommissioning requirements and surety provisions and provide evidence of such to the Board.
- k. Require the Applicant to provide prior supporting documentation of actual decommissioning costs for projects owned by the Applicant of similar size and on parcels with similar characteristics, and post a financial security in the form of an annual renewing irrevocable bond.

67. Beacon's recommendations were consistent with the principle established by this Court in *Summit Farm Solar LLC* that for permitting purposes, solar facilities "must be treated like site plan approval, which allows for regulation but not for prohibition."

68. The Applicant indicated to the Board at the December 19, 2024 hearing its material concurrence with Beacon's recommended conditions.

69. On December 19, 2024, the Applicant informed the Board during the public hearing that earlier that day, Eversource affirmatively declined to approve the alternative interconnection design that would have reduced the number of Eversource-owned utility poles from three to one.

70. On December 19, 2024, the Board closed the public hearing and deliberated on the application.

71. The Town posted a video recording of the December 19, 2024 public hearing at

<https://drive.google.com/file/d/10PqnEL890JLyzB2tEdoUGFHzzd51FK4T/view>.

The Board Approves the September 6, 2024 Site Plan with the Recommended Conditions

72. On December 19, 2024, the Board voted 3-1-1 to approve the September 6, 2024 Site Plan submitted by the Applicant, subject to the conditions recommended by Beacon.

73. The Site Plan Approval was filed with the Northfield Town Clerk on January 27, 2025. A true and accurate copy of the Site Plan Approval is attached as Exhibit D.

The Board Denies the Special Permit Without Acknowledging the Limitations of G.L. c. 40A, § 3, ¶ 9, and Based on Factual Errors and Speculation Lacking Record Support

74. On December 19, 2024, the Board voted 0-5 on a motion to approve the application for a special permit subject to the conditions recommended by Beacon.

75. G.L. c. 40A, § 15 provides that a board “shall cause to be made a detailed record of its proceedings . . . and setting forth clearly the reason for its decision,” which “shall be filed within fourteen days in the office of the city or town clerk”

76. The Board failed to file its decision with the Northfield Town Clerk by January 2, 2025.

77. The Board filed its decision denying the special permit (“Decision”) with the Northfield Town Clerk on January 27, 2025. A true and accurate copy of the Decision is attached as Exhibit E.¹

78. The Decision enumerates multiple reasons for denial, each of which is preempted by state law, unsupported by substantial evidence, and/or are arbitrary and capricious.

79. First, the Decision states that under Zoning Bylaw Section 200-3.4(C)(1), the “benefits do not outweigh the hazards.” The Decision asserts that “hazardous materials” will be installed

¹ A certified copy of the Decision was requested of the Town Clerk in writing on February 12, 2025.

within a floodplain and within an overflow area utilized by FirstLight, and speculates that in the event of a flooding event, the Project “could potentially destroy, through debris or contamination, sensitive habitat and prime farmland” Exhibit E at 8.

80. No substantial evidence in the record supports either this factual assertion or this speculation.

81. Second, the Decision asserts that under Zoning Bylaw Section 200-3.4(C)(1), the Project is not in harmony with the general purpose of the Zoning Bylaw, because the Project will change the use of the land from farming to industrial. Exhibit E at 8.

82. As a dual-use agrivoltaic project, the Project by definition continues to utilize the subject Property for farming purposes.

83. Third, the Decision asserts that under Zoning Bylaw Section 200-3.4(C)(2), the Project is not proposed in an appropriate location because the neighborhood is “predominately a historic farming and residential neighborhood.” Exhibit E at 8.

84. Approximately 95% of the Town of Northfield is zoned either “Residential Agricultural” or “Residential Agricultural Forested.”

85. Fourth, the Decision asserts that under Zoning Bylaw Section 200-3.4(C)(2) the Project would be significantly detrimental and offensive to abutting and neighboring properties by negatively affecting their property values and restricting their sightlines. Exhibit E at 8.

86. No substantial evidence in the record supports these factual assertions.

87. Fifth, the Decision asserts that under Zoning Bylaw Section 200-3.4(C)(6) and 200-8.1(A) & (F), the Project does not conform to “Principles of Rural Design” because it does not “retain and reuse existing farmland” and “will be seen from public places and roads.”

88. As a dual-use agrivoltaic project, the Project by definition retains and reuses existing farmland.

89. Section 200-3.4(C)(6) of the Zoning Bylaw requires only that the proposed use conform to the principles of rural design “to the maximum extent possible.”
90. Sixth, the Decision asserts under Zoning Bylaw Section 200-3.4(C)(6) and 200-8.1(A) & (F) that the Project “eliminat[es] significant existing wildlife corridors and stifl[es] the elasticity of flood plans [sic] ability to move water during the flood event.” Exhibit E at 8-9.
91. No substantial evidence in the record supports these factual assertions.
92. Seventh, the Decision asserts that under Zoning Bylaw Section 200-3.4 (C)(7), that the Project is in “direct conflict’ with four isolated statements allegedly found in the Town’s 160-page Master Plan. Exhibit E at 9.
93. No substantial evidence in the record supports these factual assertions.
94. Nor are the referenced statements even found in the Master Plan itself, a copy of which is available at https://www.northfieldma.gov/sites/g/files/vyhlf991/f/uploads/a_master_plan_for_northfield.pdf
95. The citations in the Decision reference “Inventory: Appendix B” (which supplements the Town Master Plan), not the actual Master Plan itself. “Inventory: Appendix B” is available at https://www.northfieldma.gov/sites/g/files/vyhlf991/f/uploads/appendix_b_-_inventory.pdf.
96. Lastly, the Decision asserts that the Project violates Zoning Bylaw Section 200-10.1(I)(1), which provides that all “development proposals subject to site plan review or requiring a special permit” in the Floodplain Overlay District should “minimize flood damage potential and, to the maximum extent feasible, locate all structures, roads, utilities and other infrastructure out of the Floodplain Overlay District;” and provide “adequate drainage.”

97. The Decision asserts and speculates that:

- a. The fence surrounding the Project will result “in congestion of flood waters and debris and stifling the elasticity of the flood plans [sic] ability to allow a path down to the channel of the River to eliminate as much as possible flooding to the local neighborhood;”
- b. The Project encroaches a regulatory floodway; and
- c. Because the “Project is solely located in the NIFP waterways [based on the FEMA 1980 Maps] and subject to flowage easements, there is a high likelihood that this Project is prone to being inundated during a major flood event.”

Exhibit E at 11-12.

98. No substantial evidence in the record supports these factual assertions or this speculation.

99. The Decision does not reference or cite any study, analysis or determination by an engineer, hydrogeologist, or any other expert on flooding or flood protection.

100. The Decision does not acknowledge that under G.L. c. 40A, § 3, ¶ 9, the Board has no authority to use the zoning permitting process to prohibit or unreasonably regulate solar energy facilities.

101. The Decision includes numerous additional factual and legal errors.

COUNT I
G. L. c. 40A, § 17

The Decision Exceeded the Authority of the Planning Board, was Based on Legally Untenable Grounds, Lacked Substantial Evidence to Support the Findings, and was Arbitrary and Capricious

102. The Applicant incorporates by reference each allegation contained each and every preceding paragraph herein.

103. Under G.L. c. 40, § 17, a decision may not be based on legally untenable ground or

exceed the authority of the Board.

104. For the reasons stated further in Count II, the denial exceeded the authority of the Board because it contravenes the express protections afforded to solar energy facilities under the state Zoning Act, G.L. c. 40A, § 3, ¶ 9.

Asserted Floodplain Impacts

105. The Decision’s speculation about theoretical future flood impacts from the Project — including that such a flood could “potentially destroy” the farmland on which the Project is located, or generate “potential exposure of residents” to certain speculative impacts (Exhibit E at 7-8) — was unsupported by substantial evidence in the record, and is arbitrary and capricious.
106. Appellate precedent holds that a board errs “when it [takes] into account, as bearing upon present decision, a putative problem to be faced in the indefinite future upon now uncertain facts.” *Fitzsimonds v. Bd. of Appeals of Chatham*, 21 Mass. App. Ct. 54, 57 (1985).
107. The Board further acted arbitrarily and capriciously by ignoring the only expert evaluation of flood impacts in the record: the determination of the Conservation Commission’s expert peer reviewer (Larner Consulting) that the Project would not have adverse flooding impacts, and that the Project provided “more than adequate” compensatory flood storage. Exhibit B.
108. Had the Board endeavored to learn the facts rather than rely upon pretextual and speculative concerns, it also could have consulted the documents expressly referenced in the Larner Consulting report (Exhibit B) as forming the “basis for [Larner’s] review,” including the October 15, 2024 memorandum of the Project Engineer, Richard R. Riccio, P.E., of Field Engineering.

109. Field Engineering explained in that memorandum that the proposed Project solar infrastructure is raised above the “base flood elevation” as shown on Federal Emergency Management Agency 1980 Flood Insurance Rate Maps (“FIRM”), which indicate the 1%-chance floodplain area (“FEMA 1980 Maps”).
110. Field Engineering further noted that FEMA has published new preliminary FIRM Maps dated May 22, 2024 (the “FEMA 2024 Maps”), which revise the 100-year floodplain for the Project site.
111. Under the FEMA 2024 Maps, while a portion of the array would remain within the floodplain, the proposed equipment pad location is no longer within the floodplain. Exhibit F at 2.
112. Field Engineering also observed that the detail on the FEMA 2024 Maps show that the Regulatory Floodway associated with the Connecticut River does not extend into any portion of the Project area. Exhibit F at 2.
113. The Decision was further arbitrary and capricious because as a matter of law, the Board was required under Zoning Bylaw Section 200-10.1(I)(2) to incorporate the floodplain standards into its review of both the site plan approval and the special permit in an identical manner.
114. Zoning Bylaw Section 200-10.1(I)(2) provides that where a “development is subject to a special permit or site plan review under Sections 3.4 and 3.5 and any other sections of the Northfield Zoning Bylaws, the Planning Board or Zoning Board of Appeals shall incorporate these [floodplain] standards into their review.” (Emphases supplied)
115. The Board demonstrated the pretextual (and therefore arbitrary and capricious) basis for its Decision by first granting Site Plan Approval for the Project — thereby concluding as a

matter of law under Section 200-10.1(I)(2) that the Project complied with the floodplain provisions of Section 200-10.1(I)(1) — and immediately thereafter denying the special permit for the exact same Project, on the stated assertion that the Project violated the exact same floodplain provisions of Zoning Bylaw Section 200-10.1(I)(1).

116. The Supreme Judicial Court has held that when a permit granting authority emphasizes a certain concern (like floodplain compliance) when denying a permit, yet grants a separate permit in identical circumstances without “credible explanation for the distinction made,” this “indicates that the [denial] was made for reasons not related to the purposes of the zoning law.” *Bask, Inc. v. Municipal Council of Taunton*, 490 Mass. 312, 321 (2002) (internal citation omitted).
117. The Decision was further arbitrary and capricious and exceeded the Board’s authority because the Board impermissibly arrogated to itself the substantive evaluation of potential floodplain impacts, which Zoning Bylaw Section 200-10.1(D) & (P) exclusively delegates to the Town’s Floodplain Administrator.
118. Zoning Bylaw Section 200-10.1(I)(2) expressly limits the Planning Board’s floodplain review only to a single provision: Section 200-10.1(I)(1).
119. The provisions of Zoning Bylaw Section 200-10.1(I)(1)(a) require only that development proposals “minimize flood damage potential and, to the maximum extent feasible, locate all structures, roads, utilities and other infrastructure out of the Floodplain Overlay District.”
120. The express use of the words “minimize” and “to the maximum extent feasible” are facially inconsistent with the Decision’s broad assertion that “the location and siting of a large-scale solar array in the floodplain is a serious threat” justifying outright denial. *See NextEra Energy Resources LLC v. Dep’t of Public Utilities*, 485 Mass. 595, 605 (2020)

(observing the “commonsense” nature of an agency’s interpreting the term “without interruption” to mean “to the maximum extent feasible” as opposed to being synonymous with a guarantee no interruption will ever occur.)

Aesthetics, Neighborhood Character, Rural Design, and Property Values

121. The Board’s assertion that the Project violates Zoning Bylaw Section 200-3.4(C)(1), 200-3.4(C)(2), 200-3.4(C)(4), 200-3.4(C)(6) and 200-8.1(A) & (F) exceeded the authority of the Board and are based on legally untenable grounds, since each assertion rests on the conclusion that the Project would adversely impact neighborhood aesthetics, the neighborhood’s rural or scenic character, or local property values.
122. As a matter of law, subjective aesthetics — whether characterized as impacts on historic or rural character, scenic roads, viewsheds, or the “look and feel of a neighborhood” — are irrelevant to an application for zoning relief unless “a municipality’s zoning bylaw specifically provides” for “consideration [of] the visual impact.” *Kenner v. Zoning Bd. of Appeals*, 459 Mass. 115, 120 (2011).
123. The Zoning Bylaw does not establish aesthetics or “visual impact” as an interest the Zoning Bylaw is intended to protect, rendering the Decision in excess of the authority of the Board and based on a legally untenable ground.
124. To the extent Section 200-3.4(C)(4) requires that “the proposed use will not be detrimental or otherwise offensive to the adjoining zoning districts and neighboring properties due to the effects of lighting, odors, smoke, noise, sewage, refuse materials, or visual or other nuisances,” there is neither a legal basis nor any evidence in the record on which the Board could conclude that a solar facility in any way constitutes visual “nuisance.”
125. Moreover, the heightened protections afforded to solar facilities by G.L. c. 40A, § 3, ¶ 9

mean that permit-granting authorities may not use bylaw provisions concerning aesthetics — *even if present* — to deny a special permit. This Court has previously held in the specific context of the denial of a special permit for a solar facility that the “aesthetic concerns upon which the Planning Board’s decision prohibiting the facility was based violated the protections afforded solar energy facilities by G. L. c. 40A, § 3.” *Summit Farm Solar, LLC v. Planning Board for Town of New Braintree*, 30 LCR 61(Mass. Land Ct. 2022) (Speicher, J).

126. As a matter of law, with respect to “rural character,” the Appeals Court has held that “[a]s to the [Town’s] argument that [a solar facility can be denied because] the bylaw protects a rural residential zone for agriculture, open space, and lower density single-family residential land use, the Supreme Judicial Court rejected a similar argument in *Tracer Lane*.” *Kearsarge Walpole LLC v. Zoning Bd. of Appeals of Walpole*, 104 Mass. App. Ct. 1119 (2024) (Rule 23.0), *affirming Kearsarge Walpole LLC v. Lee*, 2022 Mass. LCR 92 (2022) (Smith, J.).

127. As a matter of law, impacts on property values are irrelevant to an application for zoning relief unless “diminished value of the property” is a “direct interest” affirmatively established by the relevant zoning scheme. *Epstein v. Bd. of Appeal*, 77 Mass. App. Ct. 752, 761 n.17 (2010); *Kenner v. Zoning Bd. of Appeals*, 459 Mass. 115, 123-24 (2011).

128. Nothing in the Zoning Bylaw establishes property values as an interest the Zoning Bylaw is intended to protect, rendering the Decision in excess of the Board’s authority and based on legally untenable grounds.

129. Nor does the record contain any substantial or credible evidence demonstrating that the Project would actually diminish property values, rendering such an assertion entirely speculative.

Consistency with the Master Plan

130. The Decision asserts that the Project violates Zoning Bylaw Section 200-3.4(C)(7) by being in “direct conflict with the Northfield Master Plan.”
131. The Decision does not actually cite the *Northfield Master Plan*, but instead cites to pages in the *Northfield Master Plan Appendix B: Inventory*, which describes itself as “the complete inventory and assessment of existing conditions.” *Id.* at 1 (emphasis supplied).
132. “Appendix B” is not the Master Plan, but is instead the Town’s hired consultant’s subjective “understanding of the Town’s existing resources,” compiled by “reviewing relevant documents, and interviewing Town department heads, and committee, board and commission members.” *Master Plan*, at i-ii.
133. In contrast, the actual Master Plan states, under the heading “Goal Statement: To Promote Economic Development Town-Wide by Promoting a Business-Friendly Environment and Supporting Local Businesses” that “the Town’s zoning allows industrial and commercial uses to be located anywhere (with special permits),” that “Building construction and agriculture are important in the Town’s economic activities,” and that “Potential exists to increase economic activities through retailing, services, tourism (including heritage, agriculture, and recreation), agriculture, **and solar energy-related businesses**.” (Emphasis supplied). *Master Plan*, at 59-61.
134. The Project is consistent with the Northfield Master Plan.
135. The Master Plan also expressly states that “[z]oning is the principal tool to implement the Master Plan,” correctly recognizing that the Master Plan is not a zoning bylaw, has not been adopted by a two-thirds vote of Town Meeting pursuant to G.L. c. 40A, § 5, and does not provide a lawful basis upon which zoning determinations can be made. *Master Plan*, at 133.

See Canton v. Bruno, 361 Mass. 598, 603 (1972) (“The Legislature mandated a rule of strict compliance by the plain language [in G.L. c. 40A, § 5], ‘[Zoning] ordinances or by-laws may be adopted . . . *but only in the manner . . . provided*’” (emphasis in original)).

Requirement of Substantial Evidence

136. The Board concedes that the Project complies with all dimensional requirements of the Zoning Bylaw, including the height and setback provisions of the RA Zoning District.
137. The Board concedes that the Project complies with all requirements of Section 200-10.3(C) of the Zoning Bylaw, pertaining to large-scale ground-mounted solar photovoltaic installations.
138. To survive a challenge under G.L. c. 40A, § 17, “there must be set forth in the record substantial facts which rightly can move an impartial mind acting judicially, to the definite conclusion reached,” *Wendy’s Old Fashioned Hamburgers of N.Y., Inc. v. Bd. of Appeal of Billerica*, 454 Mass. 374, 386 (2009), and “a definite statement of rational causes and motives, founded upon adequate findings.” *Brackett v. Board of Appeal*, 311 Mass. 52, 54-55 (1942).
139. “Substantial evidence” is “such evidence as a reasonable mind might accept as adequate to support a conclusion.” *New Boston Garden Corp. v. Bd. of Assessors of Boston*, 383 Mass. 456, 466 (1981). Where asserted conclusions of a government official or board “appear to be simply conclusory statements without factual support,” they “fail[] the substantial evidence test. *Zarette v. Eastham Conservation Comm’n*, 2005 Mass. Super. LEXIS 627, at *10–11, citing *Mass. Inst. of Tech. v. Dep’t of Pub. Utils.*, 425 Mass. 856, 870–71 (1997).
140. The Board’s conclusion that the Project violates Zoning Bylaw Sections 200-3.4(C)(2), 200-3.4(C)(6), 200-8.1(A) & (F), and 200-10.1(I) all are predicated on the speculative

conclusion that the Project will cause adverse impacts, including spread of hazardous materials and destruction from debris, in 100-year flood events.

141. The determination of legal controversies involving allegations of flood impacts require expert evaluation. *See, e.g., Duquette v. McGuire*, 15 LCR 455, 457 (Mass. Land Ct. 2007) (concluding that “fail[ure] to offer any expert testimony to substantiate their hydrological and geological claims” of “runoff” rendered plaintiffs’ allegations “unfounded speculation”).
142. The Board does not have specialized or technical expertise in flooding or flood control.
143. Statements regarding hydrological impacts in a floodplain are highly technical and require specialized expertise.
144. The Decision contained zero references to expert opinions on flooding and flood control.
145. The only expert evaluation of flood impacts in the record is the determination of the Conservation Commission’s expert peer reviewer (Larner Consulting) that the Project would not have adverse flooding impacts, and that the Project provided “more than adequate” compensatory flood storage. Exhibit B.
146. Where asserted conclusions of a government official or board “appear to be simply conclusory statements without factual support,” they “fail[] the substantial evidence test.” *Zarette*, 2005 Mass. Super. LEXIS 627, at *11.
147. There is no substantial evidence in the record that the Project would diminish property values, other than speculation and conjecture.
148. There is no substantial evidence in the record that the Project “intends to block views of the Connecticut River entirely,” would “massively impact the viewshed, restricting sightlines

of . . . abutters and neighboring residents,” or have “massive impacts on recreational use of local and statewide visitors,” other than speculation and conjecture.

149. Other assertions in the Decision are directly contradicted by the facts in the record. For instance, the assertion that the Project does not “retain and reuse farmland” is directly contradicted by the fact that the Project is a “dual use” agrivoltaics facility that by definition incorporates significant agricultural use.

150. The Board’s reliance on statements that are contradicted by facts in the record and lack substantial evidence is arbitrary and capricious.

151. Accordingly, the Decision exceeded the authority of the Board, was arbitrary and capricious, lacked substantial evidence, and was based on legally untenable grounds.

COUNT II

G. L. c. 231, § 1

The Decision is Preempted by G.L. c. 40A, § 3, ¶ 9

152. The Applicant incorporates by reference each allegation contained each and every preceding paragraph herein.

153. There exists an actual controversy between the Applicant and the Defendants concerning, *inter alia*, the lawfulness of the Decision under G.L. c. 40A, § 3, ¶ 9.

154. Under G.L. c. 40A, § 3, ¶ 9, a municipal zoning bylaw may not prohibit or unreasonably regulate a solar energy facility such as the Project:

No [local] zoning . . . bylaw shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare.

155. The Project is a solar energy facility for purposes of G.L. c. 40A, § 3, ¶ 9.

156. By codifying solar energy as a protected use under Section 3, the Legislature made a

determination that “neighborhood hostility” or contrary local “preferences” should not dictate whether solar energy systems and related structures are constructed in sufficient quantity to meet the public need. *See Newbury Junior Coll. v. Brookline*, 19 Mass. App. Ct. 197, 205, 207- 08 (1985) (discussing educational-use provision of Section 3).

157. The Supreme Judicial Court has held that the fundamental purpose of Section 3 is to “facilitate the provision of public requirements” that may be locally disfavored. *City*.

Comm’rs of Bristol v. Conservation Comm’n of Dartmouth, 380 Mass. 706, 713 (1980).

158. In precisely such circumstances, this Court has held that local permitting authorities may condition, but **not** prohibit, solar energy systems:

“[T]he better, and correct view of the limits of local regulation of solar energy facilities allowed by G.L. c. 40A, § 3, is that such local regulation may not extend to prohibition except under the most extraordinary circumstances, **and that special permits regulating solar energy facilities must be treated like site plan approval, which allows for regulation but not for prohibition.**”

Summit Farm Solar, LLC v. Planning Board for Town of New Braintree, 30 LCR 61 (Mass. Land Ct. 2022) (Speicher, J.) (emphasis added).

159. As this Court has held, “[w]hile § 3 does not necessarily bar subjecting a solar energy system to a special permit, it does limit the scope of any required special permit.” *NextSun Energy LLC v. Fernandes*, 29 LCR 52 (Mass. Land Ct. 2021) (Foster, J.) (denial of special permit annulled).

160. As this Court has held in *PLH LLC v. Ware*, 27 LCR 674 (Mass. Land Ct. 2019) (Piper, C.J.) (emphasis added):

“a special permit for a solar generation facility, cannot unreasonably regulate, cannot impose conditions that go beyond statutory limits provided under § 3, **cannot be used either directly or pretextually as a way to prohibit or ban the use, and cannot be used to allow the board any measure of discretion on whether the protected use can take place in the district**”

161. The Board considered a motion to approve the application with the findings and

conditions outlined in Beacon’s revised peer review report.

162. The Board then unanimously voted to deny the motion to approve with conditions, asserting that the Project contravened certain provisions of the local Zoning Bylaw.
163. The Board’s conclusion that there were no conditions that could adequately address its concerns was arbitrary and capricious, contrary to law, and contrary to G.L. c. 40A, § 3, ¶ 9.
164. Appellate precedent holds that “a board may not deny a permit simply by conjuring a parade of horrors, particularly when it has the power to prevent them.” *Britton v. Zoning Bd. of Appeals of Gloucester*, 59 Mass. App. Ct. 68, 75 (2003).
165. The principle articulated in *Britton* is even stronger when the denial is of special permit for a Dover-protected use like the Project. *See, e.g., Summit Farm Solar, LLC*.
166. The Board’s assertion that any of its stated reasons for denial qualify for the “health, safety or welfare” exception to G.L. c. 40A, § 3 preemption is also contrary to law. A permissible health, safety, or welfare restriction on the siting of a solar energy system must be affirmatively and specifically articulated by Town Meeting in the zoning bylaw itself.
167. In contrast, a municipal board has no authority to impose a health, safety, or welfare restrictions (or prohibitions) on solar energy facility applications on a case-by-case basis. As this Court held in *Waller v. Alqaraghuli*, 25 LCR 529, 532 n.7 (Mass. Land Ct. 2017) (Scheier, J.), Section 3 “allows reasonable regulation [of solar arrays] **through the Ordinance**, not by a case-by-case determination by the Board” (Emphasis supplied).
168. The “public health, safety, or welfare” exception under Section 3 applies only to properly adopted municipal bylaws. It does not authorize a permitting board to impose ad hoc standards or restrictions on a project-by-project basis.

169. In adopting Section 200-10.3(C) of the Zoning Bylaw, Town Meeting determined that those bylaw provisions were adequate and appropriate for protecting health, safety, and welfare with respect to large-scale ground-mounted solar photovoltaic installations, consistent with G.L. c. 40A, § 3, ¶ 9.
170. The Board concedes that the Project complies with all requirements of Section 200-10.3(C) of the Zoning Bylaw.
171. The Decision is preempted by G.L. c. 40A, § 3, ¶ 9, and therefore is legally untenable and in excess of the Board's authority.
172. The Applicant respectfully requests that the Court declare the Decision unlawful, preempted by, and in violation of the protections for solar energy facilities established by the Legislature in G.L. c. 40A, § 3, ¶ 9.

PRAYER FOR RELIEF

WHEREFORE, the Applicant respectfully prays that this Court:

- a. Enter judgment in favor of the Applicant and against the Board on Count I;
- b. Enter judgment in favor of the Applicant and against the Board on Count II;
- c. Declare that the Decision exceeds the authority of the Board;
- d. Annul the Decision;
- e. Declare that remand of the Decision to the Board would be futile and postpone an inevitable result, as there are no material facts in dispute, as the Board has already imposed appropriate Project conditions under its Site Plan Approval, and as the questions presented as to the invalidity of the Decision under G.L. c. 40A, § 3 are ones of law;
- f. Order the Board to issue the special permit to the Applicant;

- g. Award costs and reasonable attorneys' fees to the Applicant; and
- h. Award such other and further relief as the Court may deem just and proper.

Respectfully submitted,

BWC ASHUELA BROOK, LLC, and
BLUEWAVE ORIGINATION, LLC

By their attorneys,



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Dated: February 18, 2025

VERIFICATION

I, Michael Zhe, am a Senior Director of Project Development for BlueWave Project Development, LLC, of which BWC Ashuela Brook, LLC and BlueWave Origination, LLC are indirect wholly-owned subsidiaries. I have reviewed the allegations in the Verified Complaint, have personal knowledge of the facts stated above, and hereby swear that those facts are true and accurate.

Signed under the penalties of perjury this 18th day of February, 2025.

A handwritten signature in black ink, appearing to read 'Michael Zhe', written over a horizontal line.

Michael Zhe

Exhibit A

Town of Northfield Zoning Bylaw

ARTICLE 1
General Provisions

§ 200-1.1. Title. [Amended 1-24-2022 STM by Art. 16]

The full title of this bylaw shall be the "Zoning Bylaw of the Town of Northfield, Massachusetts." This bylaw shall be referred to herein as "this Zoning Bylaw," or "this bylaw."

§ 200-1.2. Purposes.

This Zoning Bylaw is enacted in order to promote the general welfare of the Town of Northfield, to protect the health and safety of its inhabitants, to support the most appropriate use of land throughout the Town, and to further the goals and policies of the Northfield Master Plan, and to preserve and increase the amenities of the Town, consistent with but not limited by the provisions of the Zoning Act, MGL c. 40A, as amended, and Section 2A of Chapter 808 of the Acts of 1975.

§ 200-1.3. Authority.

This Zoning Bylaw is enacted in accordance with the provisions of MGL c. 40A, any and all amendments thereto, and Article 89 of the Amendments to the Constitution of the Commonwealth of Massachusetts.

§ 200-1.4. Applicability. [Amended 1-24-2022 STM by Art. 16]

All buildings or structures hereinafter erected, constructed, reconstructed, altered, enlarged, or modified, and the use of all premises in the Town, shall be in conformity with the provisions of this bylaw. No building, structure, or land shall be used for any purpose or in any manner other than as expressly permitted within the district in which such building, structure, or land is located. Where the application of this Zoning Bylaw imposes greater restrictions than those imposed by any other regulations, permits, restrictions, easements, covenants, or agreements, the provisions of this Zoning Bylaw shall control.

§ 200-1.5. Amendment.

This Zoning Bylaw may from time to time be changed by amendment, addition or repeal by the Town Meeting in the manner provided for in MGL c. 40A, § 5.

§ 200-1.6. Severability.

The invalidity of any section or provision of this Zoning Bylaw shall not invalidate any other section or provision herein.

ARTICLE 2 Definitions

§ 200-2.1. Word usage and definitions.

In this Zoning Bylaw, the following terms and constructions shall apply unless a contrary meaning is required by the context or is specifically prescribed in the text of the bylaw. Words used in the present tense include the future. The singular includes the plural and the plural includes the singular. The word "and" includes "or" unless the contrary is evident from the text. The word "includes" or "including" shall not limit a term to specified examples, but is intended to extend its meaning to all other instances, circumstances, or items of like character or kind. Terms and words not defined herein but defined in the State Building Code shall have the meaning given therein unless a contrary intention is clearly evident in this Zoning Bylaw. In addition, other sections of this Zoning Bylaw contain definitions particular to the subject matter for which they have been established.

ACCESSORY BUILDING OR USE — A building or use customarily incidental to and located on the same lot with a principal building or use or on an adjoining lot under the same ownership.

ACCESSORY DWELLING — A separate and complete housekeeping unit contained within, or being an extension of, a single-family dwelling to accommodate additional family members of a resident of the primary dwelling.

ADULT DAY-CARE FACILITY — A professionally staffed nonresidential facility that provides health, nutritional, and social support services to meet the daily living needs of adults in a group setting. Services may include transitional care and short-term rehabilitation following hospital discharge.

AFFORDABLE HOUSING — A dwelling unit that is affordable to and occupied by a low- or moderate-income household and meets the requirements for inclusion on the Massachusetts Department of Housing and Community Development (DHCD) Chapter 40B, Subsidized Housing Inventory. Affordable units shall remain as affordable units in perpetuity. These units shall have the same construction methods and physical characteristics as and be intermingled with other units in the subdivision or development.

AFFORDABLE HOUSING RESTRICTION — A contract, mortgage agreement, deed restriction or other legal instrument, acceptable in form and substance to the Town, that effectively restricts occupancy of an affordable housing unit to a qualified purchaser or renter, and which provides for administration, monitoring, and enforcement of the restriction during the term of affordability. An affordable housing restriction shall run with the land in perpetuity or for the maximum period allowed by law, and be entered into and enforceable under the provisions of MGL c. 184, §§ 31 to 33, or other equivalent state law.

AGRICULTURAL TOURISM (or AGRITOURISM) — The practice of visiting a farm business, horticultural, or agricultural operation, including, but not limited to, a farm, orchard, winery, a companion animal or livestock show, for the purpose of purchase, recreation, education, or active involvement in the operation, other than as a contractor or employee of the operation.

AGRICULTURALLY RELATED PRODUCTS — Items sold at a farm market or farm store to attract customers and promote the sale of agricultural products. Such items include, but are not limited to, all agricultural and horticultural products; animal feed; cottage foods such

as baked goods, ice cream and ice cream-based desserts and beverages, jams, or honey; gift items, foodstuffs, clothing and other items promoting the farm and agriculture in Massachusetts, and value-added agricultural products and on-site production. However, items not connected to farming or the farm operation, such as novelty T-shirts or other clothing, crafts, and knickknacks imported from other states or countries, shall not be deemed agriculturally related products.

AGRICULTURALLY RELATED USES — Activities conducted on a farm and predominantly using agricultural products, buildings or equipment, such as pony rides, petting zoos, corn mazes, pumpkin rolling, barn dances, sleighrides/hay rides, and educational events, such as farming and food preserving classes. However, activities that are part of an agricultural tourism operation's total offerings but not tied to farming or the farm's buildings, equipment, or fields, such as amusement rides or concerts, or farm-affiliated businesses, shall not be deemed agriculturally related uses.

AGRICULTURE, EXEMPT — As defined in MGL c. 40A, § 3 and c. 128, § 1A.

AGRICULTURE, NONEXEMPT — A commercial agricultural use of land that does not qualify as a farm for purposes of this bylaw. (See definition of "farm.")

ALTERATION — As defined in the State Building Code.

ALTERNATIVE ENERGY — Energy derived from combined heat and power; and electric- and hydrogen-powered vehicles and associated technologies, including advanced batteries and recharging stations.

APPLICANT — The person or entity having the legal authority and who is seeking a permit or approval from the Town of Northfield to construct or use property subject to the provisions of this Zoning Bylaw, or the authorized agent of any such person or entity.

AQUIFER — Geologic formation composed of rock, sand, or gravel that contains significant amounts of potentially recoverable water.

BASEMENT — That portion of a building which is partially below and partially above grade.

BED-AND-BREAKFAST — A transient lodging establishment in an owner-occupied, detached single-family dwelling, with not more than six rooms used as sleeping accommodations for paying guests, and which may include breakfast as part of the lodging charge.

BUILDING — An independent structure having a roof supported by columns or walls resting on its own foundations and designed for the shelter, housing, or enclosure of persons, animals, chattels, or property of any kind.

BUILDING HEIGHT — The vertical distance from the mean finish grade on the street side of a building to the highest point of the roof for flat or shed roofs, the deckline on mansard roofs, and the mean height between eaves and ridge for gable, hip, and gambrel roofs. Not included are spires, cupolas, chimneys, antennas, or other parts of structures which do not enclose potentially habitable floor space.

BUILDING INSPECTOR — The Building Inspector of the Town of Northfield.

BUSINESS — Any lawful commercial endeavor to engage in the purchase, sale, lease, exchange or provision of goods and for the provision of services or instruction.

CAMP, YOUTH OR CHILDREN'S DAY OR OVERNIGHT — A camp providing facilities for

groups of young people, such as YMCA camps, Boy Scout or Girl Scout camps, or a similar recreation establishment, operated by a public or private organization, with indoor or outdoor activities for children, including sports, arts and crafts, entertainment, recreation, educational activities, swimming, fishing, horseback riding, and incidental food service.

CAMPGROUND — Any area that is occupied or intended or designed or improved for seasonal occupancy by transients using recreational vehicles, motor homes, tents, or mobile trailers for dwelling, lodging, or sleeping purposes and is held out as such to the public. The term "campground" does not include a manufactured housing community or mobile home park.

CHILD-CARE CENTER — A facility, other than a private residence, operated on a regular basis and licensed by the Commonwealth of Massachusetts under MGL c. 15D to receive children not of common parentage under seven years of age, or under 16 years of age if those children have special needs, for nonresidential custody and care during part or all of the day separate from their parents. As used in this bylaw, "child-care center" includes a facility known as "child nursery," "nursery school," "kindergarten," "child play school," "progressive school," "child development center," or "preschool."

COMMERCIAL MOTOR VEHICLE — Any vehicle licensed by the Commonwealth of Massachusetts as a commercial motor vehicle (540 CMR 4.02, Special Definitions).

COMMON DRIVEWAY — A privately owned driveway, paved or not, providing vehicular access between two or more separately owned lots and a street. A common driveway does not serve as legal frontage for a lot.

CONTRACTOR'S YARD — The premises of a building, construction, plumbing, wiring, landscaping, excavating, or other similar contracting or subcontracting business where any of the following purposes may be conducted for the contractor's business: indoor or outdoor storage of equipment, supplies and materials; the fabrication of subassemblies; servicing of equipment; the parking of wheeled equipment; the parking of two or more motorized vehicles with six wheels or more; the parking of one or more "commercial motor vehicles" as defined by the Massachusetts Registry of Motor Vehicles in 540 CMR 4.02; wholesale or retail sales; or showrooms of finished and unfinished products or materials.

CRAFT SHOP — A business establishment that produces, on the premises, articles for sale of artistic quality or effect or handmade workmanship, e.g., candlemaking, glassblowing, weaving, pottery making, custom woodworking, sculpting, painting, and other associated activities, but not including a contractor's yard.

DRIVE-THROUGH FACILITY — A place of business, which serves customers who remain in motor vehicles, that provides goods or services to the exterior of the building by means of a service window, counter, or similar method or device.

DWELLING — A building or portion thereof designed exclusively for residential occupancy, including single-family, two-family, and multifamily dwellings, but not including hotels, motels, boardinghouses, trailers, or structures solely for transient or overnight occupancy.

DWELLING UNIT — One or more rooms providing complete living facilities for one family, including equipment for cooking or provisions for same, and including room or rooms for living, sleeping, sanitation, and food preparation.

DWELLING, MULTIFAMILY — A building intended and designed to be occupied by three or

more households living independently in separate dwelling units.

DWELLING, SINGLE-FAMILY — A dwelling intended and designed to be occupied by a single family, but not including a trailer whether detached or attached to the ground.

DWELLING, TOWNHOUSE — A residential building of two or more stories in height, containing a single dwelling that is one of a group of three or more such buildings that are attached or semiattached to one another, sharing at least one common or party or fire wall and with each building having at least one floor at ground level with a separate entrance.

DWELLING, TWO-FAMILY — A dwelling intended and designed to be occupied by two families living independently in separate dwelling units.

EAVE — The projecting lower edges of a roof overhanging the walls of a building.

EDUCATIONAL USE, NONEXEMPT — Educational facilities not exempt under MGL c. 40A, § 3, such as a commercial or for-profit educational use.

ELDERLY HOUSING; ASSISTED LIVING RESIDENCE — An assisted living residence as defined by MGL c. 19D. An assisted living residence may include a licensed adult day-care center as an accessory use.

ELDERLY HOUSING; CONGREGATE RESIDENCE — A shared living environment designed to integrate the housing and services needs of the elderly and younger individuals with disabilities. Congregate housing is neither a nursing home nor a medical care facility. Services are made available to aid residents in managing activities of daily living (ADL) but not in a custodial environment. Each resident has a private bedroom, but shares one or more of the following: kitchen facilities, dining facilities, and/or bathing facilities.

ELDERLY HOUSING; CONTINUING CARE RETIREMENT FACILITY — A facility that includes a combination of types of dwellings or a lifetime continuum of accommodations and care for elder residents, including independent living, congregate residence, assisted living, and other long-term care facilities such as skilled nursing.

ESSENTIAL SERVICES — Services provided by a public service corporation or by governmental agencies through erection, construction, alteration, or maintenance of gas, electrical, steam, or water transmission or distribution systems and collection, communication, supply, or disposal systems whether underground or overhead, but not including wireless communications facilities. Facilities necessary for the provision of essential services include poles, wires, drains, sewers, pipes, conduits, cables, fire alarm boxes, police call boxes, traffic signals, hydrants and other similar equipment in connection therewith, but not including wind towers.

ESTABLISHMENT — A separate and distinct use, business, enterprise, institution, or organization occupying space within a building.

FAMILY — One or more persons occupying a dwelling unit as a single nonprofit housekeeping unit, who are living together as a bona fide, stable and committed living unit, being a traditional family unit or the functional equivalent thereof, exhibiting the generic character of a traditional family. **[Amended 1-24-2022 STM by Art. 16]**

FARM — A parcel of land or contiguous parcels together containing five or more acres devoted primarily to commercial agriculture (see definition of "agriculture"), aquaculture, silviculture,

horticulture, floriculture or viticulture, including roadside sale of agricultural products grown on the premises and other agriculturally related products as permitted pursuant to MGL c. 40A, § 3. "Farm" may also include commercial agriculture on two or more acres if the sale of products produced from the agriculture, aquaculture, silviculture, horticulture, floriculture or viticulture use of the parcel annually generates at least \$1,000 per acre based on gross sales dollars.

FARM-AFFILIATED BUSINESS — A commercial business operated on a farm, as defined in this bylaw, related to or supportive of agricultural activities, such as a licensed winery or farm-to-table restaurant with not more than 50 seats, a gift shop for the sale of agriculturally related products, or the leasing of farm facilities for nonagricultural purposes, such as weddings or parties.

FRONTAGE — That portion of a lot which fronts on a street or streets from which physical access to the principal building on the lot can be provided. Frontage is measured as the distance between the points of intersection of the side lot lines with the front lot line. In the case of a corner lot bounding more than one street, the measurement on both streets may be used to determine if the lot meets the minimum frontage requirements of the particular zoning district. With a corner lot, the frontage is measured from the side lot line to the midpoint of the arc that constitutes the corner rounding at the intersection of the two streets.

GASOLINE SERVICE STATION — A structure or lot used for the sale of gasoline and oil for servicing motor vehicles, other than a private garage.

GROSS FLOOR AREA — The sum of the gross horizontal area of the several floors of a building, measured from the exterior faces of the exterior walls or from the center of the common walls of attached buildings. "Gross floor area" includes basement floors, attic floor space, halls, closets, stairwells, space devoted to mechanical equipment, and enclosed porches.

HOME OCCUPATION — An occupation or business activity conducted in whole (or in part) within a dwelling or structure accessory thereto by a person residing on the premises which results in the sale of a product or service for financial gain. A home occupation is an accessory use, incidental and subordinate to the primary residential use of the property. **[Amended 1-24-2022 STM by Art. 16]**

HOTEL — A building or buildings containing rooming units for transient overnight lodging accommodations, without individual cooking facilities, and having a common entrance or entrances and which may include accessory uses such as a conference facility or restaurant. As used in this bylaw, "hotel" shall not include a boardinghouse, lodging house or rooming house, or multifamily dwelling.

HOUSEHOLD — Any number of individuals living and cooking together on the premises as a single housekeeping unit, as distinguished from a group occupying a boardinghouse or lodging house, motel, or hotel.

IMPERVIOUS SURFACE — Material or structure on, above, or below the ground that does not allow precipitation or surface water to penetrate directly into the soil.

INDUSTRIAL USE — Assembling, fabrication, finishing, manufacturing, packaging, or processing of goods, or mineral extraction.

INSTITUTIONAL USE — Public or public/private group use of a nonprofit nature, typically engaged in public services, e.g., house of worship, nonprofit cultural center, charitable organization, or a government-owned or operated structure or land used for public purposes.

JUNKYARD/DUMP — Any area, lot, land, parcel, building or structure or part thereof used for the storage, collection, processing, purchase, sale, or abandonment of wastepaper, rags, scrap metal, or other scrap or discarded goods, materials, machinery or two or more unregistered, inoperable motor vehicles or other type of junk.

KENNEL — One pack or collection of dogs on a single premises, whether maintained for breeding, boarding, sale, training, hunting or other purposes, and including any shop where dogs are on sale, and also including every pack or collection of more than three dogs three months old or over owned or kept on a single premises irrespective of the purposes for which they are maintained.

LONG-TERM CARE FACILITY — A building or group of buildings which is licensed or approved by the Massachusetts Department of Public Health to provide twenty-four-hour, intensive, skilled and supportive nursing care, together with common areas and medical and treatment facilities for the care of residents.

LOT — A single area of land in one ownership defined by bounds or boundary lines in a recorded deed or shown on a recorded plan.

LOT AREA — The total area of a lot, not including the area of any street rights-of-way.

LOT COVERAGE — That portion of the lot that is covered by buildings, including accessory buildings. Lot coverage shall be determined by dividing the area of the footprint of all buildings on a lot by the total area.

LOT DEPTH — The mean horizontal distance between the front and rear lot lines measured in the mean direction of the side lot lines.

LOT FRONTAGE — The length of a lot line(s) measured at the street right-of-way line.

LOT LINE — A line of record bounding a lot that divides one lot from another lot or from a way or any public space.

- A. **LOT LINE, FRONT** — A lot line separating a lot from a street right-of-way.
- B. **LOT LINE, REAR** — A line separating a lot from other lots or from land in a different ownership, being the boundary of a lot which is opposite or approximately opposite the front lot line.
- C. **LOT LINE, SIDE** — Any lot line other than a front or rear lot line.

LOT, CORNER — A lot or parcel of land abutting upon two or more streets at their intersection or upon two parts of the same street having street side lines or tangents to side lines forming an interior angle of less than 135°. A lot which has legal frontage on both a public way and a proposed subdivision way and one which shall be shown on a subdivision shall be considered part of that plan. **[Amended 1-24-2022 STM by Art. 16]**

MAJOR ROAD — Includes numbered federal and state highways (Routes 10, 63 and 142), Warwick Road, Maple Street, Gulf Road, and Gill Center Road, as defined by Article 23 of Northfield Town Meeting, May 6, 1986.

MANUFACTURING — The indoor manufacturing, assembly, fabrication, packaging, or other industrial processing of finished parts or products, primarily from previously prepared materials, or the indoor provision of industrial services. "Manufacturing" includes but is not limited to the

processing, fabrication, assembly, treatment, or packaging of food, textile, leather, wood, paper, chemical, plastic, or metal products, but does not include basic industrial processing from raw materials.

MAXIMUM AFFORDABLE PURCHASE PRICE OR RENT — A selling price or monthly rent that does not exceed the maximum purchase price or rent guidelines of the program used to qualify affordable dwelling units for inclusion on the DHCD Chapter 40B Subsidized Housing Inventory.

MEDICAL OFFICE OR CLINIC — An establishment primarily engaged in delivering medical, surgical, psychiatric, or other health-related services to individuals on an outpatient basis, including the offices of physicians, dentists and other health practitioners, and/or outpatient care facilities.

MINING — The removal or relocation of geologic materials such as topsoil, sand, gravel, metallic ores, or bedrock.

MOBILE HOME OR TRAILER — The following shall be considered a mobile home or trailer:

- A. **MOBILE HOME** — A manufactured home as defined in MGL c. 140, § 32Q.
- B. **PICK-UP COACH** — A structure mounted on a vehicle chassis (self-propelled or otherwise) intended for use as a dwelling for travel, recreation or vacation use.
- C. **MOTOR HOME** — A portable dwelling used for travel, recreation or vacation and constructed as an integral part of a self-propelled vehicle.

MODULAR HOME — A dwelling that is prefabricated at a factory or other off-site location and containing complete electrical, plumbing and sanitary facilities, which is designed to be installed on a permanent foundation for permanent living quarters, excluding mobile homes and trailers. A modular home shall comply with the State Building Code.

MOTEL — A building intended and designed solely for transient or overnight occupancy divided into separate rooms within the same building, each of which has a separate outside entrance leading directly to the room, without a common entrance to the rooms, and with or without public dining room facilities, but shall not include a boardinghouse, lodging house or rooming house, or multifamily dwelling.

OFFICE — A room or group of rooms lawfully used and maintained for conducting the affairs of a business, profession, service industry, or government exclusive of the receipt, retail sale or processing of merchandise.

OPEN SPACE — Lot area not covered by any structure, and not used for drives, parking, or storage.

PERSON — An individual, corporation, owner(s), lessee, or licensee, as well as the agent for each of them.

PREMISES — A lot together with all buildings, structures, and uses thereon.

PROFESSIONAL SERVICE — The lawful use of a building or premises by a person or persons involved in the dispensation of a service that involves some specialized skills or knowledge, a learned occupation, or special education in the liberal arts or sciences, or that requires connections to other businesses not easily or readily available to the general public, including, but not limited to, medical practitioners, lawyers, accountants, architects, financial services, insurance agents,

stockbrokers, engineers, realtors or other members of a recognized profession which may or may not require licensing by the Commonwealth of Massachusetts, or certification by a private accreditation society.

PUBLIC UTILITY — A public service corporation, either private or municipal, supplying or transmitting gas, water, electricity, or communications to any or all members of the public and subject to federal, state, or Town regulations by virtue of its natural or legal monopoly.

RECORDED or OF RECORD — Recorded with the Franklin County Registry of Deeds or Registry District of the Land Court, or a record title to a parcel of land disclosed by any or all pertinent public records.

RECREATION-AFFILIATED BUSINESS — A commercial use on the premises of a public or nonprofit recreation facility, such as a hotel or inn, a licensed winery, restaurant, theater, gift shop, or the leasing of recreation facilities for non-recreation-related purposes, such as weddings or parties.

RENEWABLE ENERGY —

- A. Energy derived from natural resources which are regenerated over time through natural processes. Such energy sources include the sun (solar); wind; moving water (hydro and wave); organic plant materials (biomass); and the earth's heat (geothermal).
- B. Renewable energy resources may be used directly, or used indirectly to create more convenient forms of energy. Renewable energy sources also include landfill gas, fuel cells, and advanced biofuels.

RESEARCH AND DEVELOPMENT FACILITIES — Those used primarily for research, development and/or testing of innovative information, concepts, methods, processes, materials, or products. This can include the design, development and testing of biological, chemical, electrical, magnetic, mechanical, and/or optical components in advance of product manufacturing. The accessory development, fabrication, and light manufacturing of prototypes or specialized machinery and devices integral to research or testing may be associated with research and development facilities.

RETAIL SALES, OUTDOORS — Retail sales establishments where the display of products occurs primarily outside of a building or structure, such as automotive and recreational vehicles, boats, garden supplies, farm equipment, motor homes, burial monuments, building and landscape materials, and lumberyard.

RETAIL STORE — A commercial enterprise that provides goods and/or services directly to the consumer, where such goods are available for immediate purchase and removal from the premises by the purchaser. Said merchandise being offered shall be stocked and displayed primarily within the building.

ROOF — The primary outside protective covering of the top of a building. This includes but is not limited to hip, gable, flat, gambrel, mansard, and shed roof types. "Roof" shall also mean the exterior protective covering affixed to the top of all other elements projecting from a building facade or its roof, including but not limited to porches, dormers, or other similar appurtenances.

SERVICES, PERSONAL — Establishments engaged primarily in providing assistance to individuals or businesses and other enterprises, including but not limited to business, social,

personal, or professional services.

SERVICES, PROFESSIONAL OR BUSINESS — Service to the public which typically requires the provider of the service to obtain a license or other legal authorization. Without limiting the generality of this definition, "professional services" include services rendered by certified public accountants, public accountants, engineers, chiropractors, dentists, osteopaths, physicians and surgeons, podiatrists, chiropodists, architects, veterinarians, attorneys at law, physical therapists, and life insurance agents.

SETBACK — The distance between a structure and any lot line.

SHED — A detached accessory structure not exceeding 120 square feet in gross floor area and 10 feet in height.

SIGN — See § 200-8.4, Signs. **[Amended 1-24-2022 STM by Art. 16]**

STORY — The portion of a building between the upper surface of any floor and the upper surface of the floor next above, having more than 1/2 of its height above the average elevation of the finished grade adjoining the building. Any part of a building between the topmost floor and the roof shall be deemed a half story.

STREET —

- A. A public way or way which the Town Clerk certifies is maintained and used as a public way.
- B. A way shown on a definitive subdivision plan approved and endorsed under the Subdivision Control Law¹ and recorded with the Franklin County Registry of Deeds that is constructed or secured through a covenant or suitable performance guarantee.
- C. A way already physically in existence on the ground when the Subdivision Control Law became effective in Northfield and having, in the opinion of the Planning Board, adequate width, construction, and grades for the needs of vehicular traffic for the existing and future buildings and uses abutting thereon or to be served thereby.

STRUCTURE — Any construction, erection, assemblage, or other combination of materials upon the land made in such a manner as to indicate a purpose that remains in its position indefinitely.

SUBSIDIZED HOUSING INVENTORY — The Massachusetts Department of Housing and Community Development Chapter 40B, Subsidized Housing Inventory, pursuant to state regulations as may be amended from time to time.

TOXIC OR HAZARDOUS MATERIAL — Any substance or mixture of physical, chemical, or infectious characteristics posing a significant hazard, actual or potential, to water supplies or other hazards to human health if such substance or mixture were discharged to land or water of the Town. Toxic or hazardous materials include, without limitation, synthetic organic chemicals, petroleum products, heavy metals, radioactive or infectious wastes, acids and alkalis, and all substances defined as toxic or hazardous under MGL c. 21C and c. 21E and 310 CMR 30.00, and also include such products as solvents and thinners in quantities greater than normal household use.

1. Editor's Note: See MGL c. 41, §§ 81K to 81GG.

TRAILER — A vehicle without motive power designed to be drawn by a motor vehicle.

USABLE FLOOR SPACE (NET FLOOR AREA) — The total area of all floors of principal and accessory buildings or structures on a lot, excluding stairwells and elevator shafts, equipment/utility rooms, rooms used for the storage of merchandise not accessible to the public, rooms/areas dedicated exclusively for employee use, interior vehicular parking or loading; and also including all floors below the first or ground floor, except when used or intended to be used for permitted uses.

VALUE-ADDED AGRICULTURAL PRODUCT — Enhancement or improvement of the overall value of an agricultural commodity or of an animal or plant product to a higher value. The enhancement or improvement includes, but is not limited to, marketing, agricultural processing, transforming, packaging, and educational presentation, activities and tours that relate to agriculture or agricultural products. Storage, retail or wholesale marketing, or processing of agricultural products into a value-added agricultural product is permitted on any farm of five or more acres if more than 50% of the stored, processed, or merchandised products are produced by the farm operator for at least three of the immediately preceding five years.

VEHICLE REPAIR — Any building, land area, or other premises, or portion thereof, used for the maintenance, painting, servicing, repair or leasing of motor vehicles.

WINERY — The retail and/or manufacturing premises of a farmer brewery, farmer distillery, or farmer winery licensed by the Commonwealth under MGL c. 138, § 19, 19B, or 19C, respectively.

ARTICLE 3
Administration

§ 200-3.1. Enforcement; violations and penalties.

- A. The Building Inspector is hereby designated and authorized as the officer charged with the interpretation and enforcement of this Zoning Bylaw.
- B. It shall be unlawful for any owner or person to erect, construct, reconstruct, convert, or alter a structure, or change the use, increase the intensity of use, or extend or displace the use of any structure or lot without applying for and receiving from the Building Inspector the required permit therefor.
- C. No premises, and no building erected, altered, or in any way changed as to construction or use under a permit or otherwise, shall be occupied or used without a certificate of occupancy issued by the Building Inspector. Such certificate of occupancy shall not be issued until the premises, structure, and its uses and accessory uses comply in all respects with this Zoning Bylaw and, if applicable, a site plan certificate of completion shall be issued. **[Amended 1-24-2022 STM by Art. 16]**
- D. Enforcement.
- (1) Any person may file a written request to the Building Inspector for enforcement of this Zoning Bylaw with reference to an alleged violation. If upon investigation and inspection the Building Inspector finds evidence of such violation, he shall give notice thereof, in writing, to the owner and occupant of said premises and demand that such violation be abated within such time as the Building Inspector deems reasonable. Such notice and demand may be given by mail, addressed to the owner at his address as it then appears on the records of the Board of Assessors and to the occupant at the address of the premises.
- (2) If after such notice and demand the violation has not been abated within the time specified therein, the Building Inspector shall institute appropriate action or proceedings in the name of the Town of Northfield to prevent, correct, restrain or abate such violation of this Zoning Bylaw.
- (3) If the Building Inspector determines that there is no violation, he shall give written notice of his decision to the complaining person within 14 days after the receipt of such request.
- E. Appeal. As provided in MGL c. 40A, § 8, any person aggrieved by reason of inability to obtain a permit or enforcement action from the Building Inspector may appeal to the Board of Appeals.
- F. Penalty.
- (1) Anyone who violates a provision of this Zoning Bylaw, or any condition of a variance, site plan review decision or special permit, shall be punishable by a fine of not more than \$300 for each offense. Each day during which any portion of a violation continues shall constitute a separate offense.

- (2) As an alternative means of enforcement, the Building Inspector may impose noncriminal penalties pursuant to MGL c. 40, § 21D, in accordance with the following schedule:
 - (a) First offense: warning (verbal or written).
 - (b) Second offense: \$100.
 - (c) Third offense: \$200.
 - (d) Fourth and each subsequent offense per violation: \$300.

§ 200-3.2. Zoning Board of Appeals.

- A. Establishment. There shall be a Zoning Board of Appeals (herein sometimes referred to as the "Board of Appeals") consisting of five members and up to three associate members appointed by the Selectboard. Each member shall serve for a five-year term, except that the term for associate members shall be one year. The appointment, service, and removal or replacement of members and associate members and other actions of the Board of Appeals shall be as provided for in MGL c. 40A.
- B. Powers. The Board of Appeals shall have the following powers:
 - (1) To hear and decide appeals in accordance with MGL c. 40A, § 8, as amended.
 - (2) To hear and decide, in accordance with the provisions of MGL c. 40A, § 9, applications for special permits when designated as the special permit granting authority herein.
 - (3) To hear and decide, in accordance with the provisions of MGL c. 40A, § 6, applications for special permits to change, alter, or extend lawfully preexisting nonconforming uses and structures to the extent allowed by Article 6.
 - (4) To hear and decide petitions for variances in accordance with MGL c. 40A, § 10.
 - (5) To hear and decide applications for comprehensive permits for construction of low- or moderate-income housing, as set forth in MGL c. 40B, §§ 20 to 23.
- C. Rules and regulations. The Board of Appeals shall adopt rules and regulations for the administration of its powers and shall file a copy of such regulations with the Town Clerk.
- D. The Board of Appeals may adopt reasonable administrative fees and procedures and fees for employing outside consultants to assist the Board with its review of special permits, variances, administrative appeals, and applications for comprehensive permits in accordance with its regulations.

§ 200-3.3. Planning Board.

- A. Establishment. There shall be a Planning Board consisting of five elected members. Each member shall serve for a five-year term.
- B. Powers. The Planning Board shall have and exercise all the powers granted to Planning Boards by the General Laws, including MGL c. 40, c. 40A, and c. 41, and by this Zoning

Bylaw, including but not limited to the following:

- (1) To hear and decide applications for special permits when designated as the special permit granting authority herein.
 - (2) To review site plans pursuant to § 200-3.5.
- C. Rules and regulations. The Planning Board shall adopt rules and regulations not inconsistent with the provisions of the Zoning Bylaw for conduct of its business and otherwise carrying out the purposes of MGL c. 40A and this Zoning Bylaw, and shall file a copy of such rules in the office of the Town Clerk.
- D. Fees. The Planning Board may adopt reasonable administrative fees for petitions for special permits and site plan review, and procedures and fees for employing outside consultants to assist the Board with its review of special permits in accordance with its regulations.

§ 200-3.4. Special permits.

- A. Procedures. Application for a special permit shall be filed in accordance with the rules and regulations of the applicable special permit granting authority and MGL c. 40A.
- B. Public hearing. The special permit granting authority shall hold a public hearing within 65 days of receipt of a special permit application, and shall issue a decision no later than 90 days from the closing of the public hearing. Notification requirements for a public hearing shall be in accordance with MGL c. 40A, § 11.
- C. Decision criteria. Unless otherwise specified herein, special permits shall be granted by the special permit granting authority only upon its written determination that the adverse effects of the proposed use will not outweigh its beneficial impacts to the Town or the neighborhood, in view of the particular characteristics of the site, and of the proposal in relation to that site. The determination shall include findings that all of the following criteria for granting a special permit are met:
- (1) The use is in harmony with the general purpose and intent of this Zoning Bylaw;
 - (2) The use is in an appropriate location and is not detrimental to the neighborhood and does not significantly alter the character of the zoning district;
 - (3) Adequate and appropriate facilities will be provided for the operation of the proposed use;
 - (4) The proposed use will not be detrimental or otherwise offensive to the adjoining zoning districts and neighboring properties due to the effects of lighting, odors, smoke, noise, sewage, refuse materials, or visual or other nuisances;
 - (5) The proposed use will not cause undue traffic congestion in the immediate area;
 - (6) To the maximum extent possible, the proposed use conforms to the principles of rural design in § 200-8.1 of this bylaw; and
 - (7) The proposed use is consistent with the Northfield Master Plan.

- D. Conditions. Special permits may be granted with such reasonable conditions, safeguards, or limitations on time or use, including performance guarantees, as the special permit granting authority may deem necessary to serve the purposes of this Zoning Bylaw. Such conditions may include but shall not be limited to the following:
- (1) Deadline to commence construction.
 - (2) Dimensional standards more restrictive than those set forth in Article 7 of this Zoning Bylaw.
 - (3) Limitations on signage, number of vehicles or parking spaces, noise, or hours of operation of construction equipment.
 - (4) Limitation of size, method or hours of operation, extent of facilities, or other operating characteristics of a use.
 - (5) Requirements pertaining to integrated emergency or alarm systems, maintenance, landscaping, dust control, wastewater disposal or water supply, bond or other performance guarantee.
 - (6) Requirements for independent monitoring, at the expense of the applicant, and reporting to the Building Inspector, if necessary to ensure continuing compliance with the conditions of a special permit or of this Zoning Bylaw.
 - (7) Term for years with or without automatic renewals, to the extent allowed by law.
 - (8) Other limitations as may be reasonably related to reducing any adverse impact on, or increasing the compatibility of the proposed use, structure or activity with, the surrounding area.
- E. Lapse. Special permits shall lapse within two years, which shall not include such time required to pursue or await the determination of an appeal under MGL c. 40A, § 17, from the grant thereof, if a substantial use thereof has not sooner commenced except for good cause, or, in the case of a special permit for construction, if construction has not begun by such date except for good cause.
- F. Special permits shall not take effect until recorded with the Registry of Deeds or Registry District of the Land Court, as applicable, as provided in MGL c. 40A, § 11. Proof of recording shall be presented to the Building Inspector.
- G. Use of outside consultants. Any special permit granting authority may hire professional consultants at the applicant's expense pursuant to MGL c. 44, § 53G, to assist with review of a special permit application, provided that the procedures for hiring outside consultants are set forth in the applicable board's rules and regulations.

§ 200-3.5. Site plan review.

- A. Purposes. Site plan review is a means of managing the aesthetics and environmental impacts of land use by the regulation of permitted uses, not their prohibition. Its purpose is to assure protection of the public interest consistent with a reasonable use of the site for the purposes permitted in the district. Accordingly, no building permit shall be issued for any use, site, or

building alteration, or other improvement that is subject to this section, unless an application for site plan review has been prepared in accordance with the requirements herein and unless such application has been approved by the Planning Board (hereinafter referred to in this section as the "Board").

B. Applicability. Site plan review shall apply to the following:

- (1) New construction or any alteration, reconstruction, or renovation of any multifamily, commercial, industrial, institutional, or municipal use involving 1,500 square feet or more of gross floor area.
- (2) New construction or any alteration, reconstruction, or renovation of an existing building, or any change in use of an existing building requiring five or more parking spaces.
- (3) Any use or structure or expansion thereof, and any use of land, exempt under MGL c. 40A, § 3, if one or both of the above criteria in Subsection B(1) or (2) also apply, and only to the extent allowed by law.
- (4) Construction, expansion, redesign, or alteration of an existing parking area involving the addition of five or more new parking spaces.

C. Relationship to other permits and approvals.

- (1) For uses requiring a special permit in Table 1, Schedule of Uses,² the Planning Board or Board of Appeals shall review site plans prior to acting on applications for special permits. In such cases, the site plan shall serve as the plan of record for the proposed special permit; no separate site plan approval under this section shall be required.
- (2) The Building Inspector shall not issue a building permit for any project subject to this section unless the Board has approved a site plan therefor or allowed 90 calendar days to elapse from the site plan submission date unless the applicant has requested an extension, in writing. Any work done in deviation from an approved site plan shall be a violation of this bylaw unless such deviation is approved, in writing, by the Board or determined by the Building Inspector to be an insubstantial change. **[Amended 1-24-2022 STM by Art. 16]**

D. Exemptions. The following shall be exempt from site plan review under this section:

- (1) Single-family and two-family homes, including additions or enlargements.
- (2) Residential subdivisions approved by the Board under the Northfield Subdivision Rules and Regulations.³
- (3) Projects in which the only exterior change that is visible from a public or private way, requiring a building permit, pertains to:
 - (a) Architectural barrier removal to comply with the Americans with Disabilities Act

2. Editor's Note: See § 200-5.4, Schedule of Uses.

3. Editor's Note: See Ch. 315, Subdivision of Land.

(ADA)⁴ or regulations of the Massachusetts Architectural Access Board (AAB); or

- (b) Installation of awnings, exterior siding, or roofing, or replacement of windows or doors.

E. Procedures for site plan review.

- (1) The Board shall promulgate, after public notice and hearing, Site Plan Rules and Regulations to effectuate the purposes and intent of this section, including submission requirements and procedures, modification of approved site plans, delegating administrative review to the Board's designee for review of small-scale projects without a public meeting, and standards of review consistent with Subsection F below.
- (2) Applicants shall submit an application for site plan review to the Board.
- (3) The site plan submission date shall be the date the site plan application is filed with the Town Clerk and the Board, unless the Board notifies the applicant within 21 days of submission that the application is incomplete. In such case, the site plan application will not be deemed to have been submitted.
- (4) The Board shall review the site plan at a duly posted open meeting. Any public notice to abutters and other parties of interest shall be conducted in accordance with the Site Plan Rules and Regulations.
- (5) The Board shall review and act upon the site plan, requiring such conditions as necessary to satisfy the site plan review standards under Subsection F below, and notify the applicant of its decision. The decision shall be in writing and shall be filed with the Town Clerk within 90 days of the application date. The applicant may request, and the Board may grant by majority vote of the membership, an extension of the time limit set forth herein. **[Amended 1-24-2022 STM by Art. 16]**
- (6) The Board may approve the site plan or approve it with the conditions, or deny a site plan only if the plan does not include adequate information as required by the Site Plan Rules and Regulations, or if the plan depicts a use or structure so contrary to health, safety and welfare of the public that no set of conditions would render the project tenable. The Board's decision shall be by majority vote of the membership, and the decision shall be in writing.
- (7) The applicant shall satisfy or comply with all conditions of the site plan review decision prior to the issuance of a building permit except for those conditions that by their terms are intended to be satisfied during construction or later.
- (8) Unless specifically authorized by the terms of the site plan review decision, a final certificate of occupancy shall not be issued until the applicant has complied with or satisfied all conditions of the site plan review decision.

F. Site plan review standards. The Board's Site Plan Rules and Regulations shall adopt standards for site plan review that will at a minimum address the following:

4. Editor's Note: See 42 U.S.C. § 12101 et seq.

- (1) Principles of rural design in § 200-8.1 of this bylaw;
- (2) Siting of facilities;
- (3) Design guidelines for buildings and sites;
- (4) Open space and natural features;
- (5) Pedestrian, bicycle, and vehicular safety and circulation;
- (6) Water quality;
- (7) Stormwater;
- (8) Utilities, exterior lighting, parking, and snow removal;
- (9) Trees and landscaping;
- (10) Historic significance;
- (11) Signage;
- (12) Energy-efficient site design;
- (13) Potential adverse effects and mitigation thereof.

ARTICLE 4
Zoning Districts

§ 200-4.1. Establishment of districts. [Amended 1-24-2022 STM by Art. 16]

For purposes of this Zoning Bylaw, the Town of Northfield is divided into the following districts:

- Residential Agricultural (RA)
- Residential Agricultural-Forestry (RAF)
- Village Center (VC)
- Planned Development
- Recreational Tourism
- Overlay Districts
 - Floodplain Overlay District
 - Water Supply Protection District
 - Solar Overlay District

§ 200-4.2. Zoning Map.

- A. Except for the Floodplain Overlay District and Water Supply Protection District, the boundaries of these districts are located and bounded as shown on a map entitled "Town of Northfield, Massachusetts Zoning Map," as most recently amended by Town Meeting, on file in the office of the Town Clerk. Said map, with the boundaries of the districts and all explanatory matter thereon, is hereby made a part of this bylaw.⁵ **[Amended 1-24-2022 STM by Art. 16]**
- B. The Floodplain Overlay District shall be located and bounded as shown on the map described in § 200-10.1 herein, which map is incorporated in and made a part of this Zoning Bylaw.
- C. The Water Supply Protection District shall be located and bounded as shown on maps described in § 200-10.2 herein, which maps are incorporated in and made part of this Zoning Bylaw. **[Amended 1-24-2022 STM by Art. 16]**

§ 200-4.3. Boundaries of districts.

- A. Where the boundary lines on the Zoning Map or the Water Supply Protection District Map are within the street lines of public or private ways, the center lines of such ways shall be the boundary lines. **[Amended 1-24-2022 STM by Art. 16]**
- B. Where the boundary lines are shown approximately on the location of property or lot lines and the exact location of property, lot or boundary lines is not indicated by means of dimensions shown in figures, then the property or lot lines shall be the boundary lines.

5. Editor's Note: The Zoning Map is included as an attachment to this chapter.

- C. Where the boundary lines are located outside of such street lines and shown approximately parallel thereto, they shall be regarded as parallel to such street lines, and dimensions shown in figures placed upon said map between such boundary lines and street sidelines are the distances in feet of such boundary lines from such street sidelines, such distances being measured at right angles to such street lines unless otherwise indicated.
- D. Where the location of boundary lines is uncertain, it shall be determined by the distance in feet, if given, from other lines upon said map, by the use of identifications as shown on the map or by the scale of the map.
- E. Where boundary lines are contour lines, they are at an indicated elevation above the datum which is mean sea level of the United States Geological Survey.

ARTICLE 5
Use Regulations

§ 200-5.1. General provisions.

- A. No building or structure shall be erected and no building or structure, or land or water area shall be used for any purpose or in any manner except as provided herein.
- B. No building permit shall be issued for any use that is subject to § 200-3.5 unless a site plan has been reviewed and approved in accordance with the requirements therein.
- C. Accessory uses. An accessory use shall not alter the character of the premises on which it is located or have an adverse impact on the surrounding area.

§ 200-5.2. Prohibited uses.

- A. Any use not listed in § 200-5.4, Schedule of Uses, or otherwise allowable under the provisions of this Zoning Bylaw is prohibited.
- B. All uses that pose a present or potential hazard to human health, safety, welfare, or the environment through emission of smoke, particulate matter, noise or vibration, or through fire or explosive hazard, or glare are expressly prohibited in all zoning districts. In addition, the following uses are expressly prohibited in all zoning districts:
 - (1) Manufacturing and storage of corrosive, poisonous or malodorous acids and chemicals;
 - (2) Cement, lime, gypsum and plaster of paris manufacture;
 - (3) Fertilizer manufacture or fat rendering in manufacture of tallow, grease, and oils;
 - (4) Petroleum and kerosene refining or distillation and derivation of by-products;
 - (5) Manufacture, use, storage, transport or treatment, disposal and/or processing of explosive, toxic or hazardous materials;
 - (6) Asphalt plants;
 - (7) Concrete batch plants;
 - (8) Reclamation and reprocessing of asphalt and/or concrete; or
 - (9) Any other use that produces disturbing or offensive noise, vibration, smoke, gas, fumes, odors, dust or other objectionable or hazardous features.
- C. Mobile homes are prohibited, except that pursuant to MGL c. 40A, § 3, a mobile home or temporary manufactured home may be placed on the site of a residence destroyed by fire or natural disaster, for a period not to exceed 12 months while the residence is being rebuilt.

§ 200-5.3. Permitted in all districts.

The following uses are permitted in all districts:

- A. Federal government use.
- B. State government uses to the extent that this Zoning Bylaw would prohibit the exercise of an essential government function. **[Amended 1-24-2022 STM by Art. 16]**
- C. Uses to the extent protected or exempt pursuant to MGL c. 40A, § 3, or other state law.

§ 200-5.4. Schedule of Uses. [Amended 12-10-2018 STM by Art. 3]

Table 1 Legend:

Y: Permitted by right

N: Prohibited use

SP: Allowed by special permit from the Zoning Board of Appeals

PB: Allowed by special permit from the Planning Board

Table 1. Schedule of Uses					
	RA	RAF	VC	PD	RT
A. Agriculture, Conservation, Recreation Uses					
Agriculture	Y	Y	Y	Y	Y
Agriculturally related uses on a farm (§ 200-9.5)	Y	Y	Y	Y	Y
Greenhouse	Y	Y	Y	Y	Y
Conservation, wildlife preserve	Y	Y	N	Y	Y
Camp for children and youth, day or overnight	PB	PB	N	PB	PB
Campground	PB	PB	N	PB	PB
Boathouse, ski tow, golf course, driving range	SP	SP	Y	SP	Y
Recreation-affiliated business (§ 200-9.6)	N	N	Y	PB	PB
B. Public Service					
Municipal use	Y	Y	Y	Y	Y
Public utility	SP	SP	SP	SP	SP
Wireless communication facility (§ 200-9.7)	PB	PB	PB	PB	PB
C. Institutional or Semipublic Uses					
Museum or library	Y	Y	Y	Y	Y
Hospital, sanitarium	N	N	N	PB	N
Urgent care center	N	N	N	PB	N
Cemetery	SP	SP	N	N	N
Public recreation facility	PB	PB	N	PB	Y
Emergency shelter	PB	N	N	PB	N
Nonprofit club or membership organization	SP	SP	SP	N	SP
D. Residential Uses					
Detached single-family dwelling	Y	Y	Y	Y	Y
Two-family dwelling	Y	Y	Y	Y	Y
Multifamily dwelling, maximum of 4 units per building	PB	PB	Y	Y	Y
Multifamily dwelling, more than 4 units per building	PB	N	PB	PB	PB

Table 1. Schedule of Uses					
	RA	RAF	VC	PD	RT
Open space residential development (§ 200-9.3)	Y	Y	N	Y	Y
Elderly housing; congregate residence, not to exceed 6 units	Y	Y	Y	Y	Y
Elderly housing; retirement community	PB	PB	N	PB	PB
Elderly housing; assisted living residence	PB	PB	N	Y	N
Skilled nursing facility	N	N	N	PB	N
Dwelling units above the ground floor of commercial space (§ 200-3.5)	N	N	Y	N	Y
Master plan special permit (§ 200-9.4)	N	N	N	PB	N
Accessory uses					
Accessory dwelling (§ 200-9.1)	SP	SP	Y	PB	SP
Home occupation (§ 200-9.2)	Y	Y	Y	Y	Y
Bed-and-breakfast, up to 6 rooms (§ 200-3.5)	SP	SP	Y	Y	Y
Family home day care, not to exceed 6 children	Y	Y	Y	Y	Y
Family home day care, more than 6 children	PB	PB	PB	PB	PB
Storage or parking of 1 camper	Y	Y	Y	Y	Y
E. Business Uses					
Retail Trade					
Retail, up to 1,500 square feet of gross floor area (§ 200-3.5)	SP	SP	Y	N	Y
Retail, 1,500 square feet or more of gross floor area	N	N	PB	PB	PB
Craft shop	SP	SP	Y	PB	Y
Sale and storage of building materials to be sold on the premises	SP	SP	N	N	N
Hospitality and Food Services					
Farm-affiliated business	See § 200-9.5				N
Restaurant providing food within a building, which may include outdoor seating on an adjoining patio (§ 200-3.5)	N	N	Y	PB	Y
Hotel, motel, inn	SP	SP	PB	PB	PB
Cultural and Entertainment Uses					
Studio for artists, photographers, interior decorators, other design-related uses	Y	Y	Y	Y	Y
Auditorium or theater for live performing arts	N	N	PB	PB	PB
Professional Uses and Financial Services					
Bank or other financial institution (§ 200-3.5)	N	N	Y	Y	Y
Professional or business office (§ 200-3.5)	SP	SP	Y	Y	Y
Services					
Barbershop, beauty shop, nail salon, and similar personal service establishments	N	N	Y	N	N
Commercial indoor amusement or recreation, or similar place of assembly	N	N	N	PB	PB

Table 1. Schedule of Uses					
	RA	RAF	VC	PD	RT
Personal services, such as a dry cleaner, laundry, florist, shoe repair, photography studio, tailor, and similar businesses and services	SP	N	Y	PB	N
Educational use, nonexempt	N	N	N	PB	PB
Funeral home	N	N	PB	PB	N
Kennel	SP	SP	N	PB	N
Repair shop for small equipment, bicycles, appliances, tools	SP	SP	PB	PB	N
Veterinary hospital	SP	SP	N	PB	N
Automotive Uses					
Motor vehicle sales	SP	SP	N	N	N
Gasoline service station	SP	N	N	N	N
Vehicle repair	SP	N	PB	N	N
Accessory Uses					
Drive-through, limited to banks, financial institutions	N	N	PB	N	N
Outdoor dining accessory to a restaurant	N	N	Y	PB	Y
F. Industrial and Related Uses					
Warehouse and distribution facility, or wholesale showroom	SP	SP	N	N	N
Manufacturing, processing, fabrication, packaging and assembly, and storage of goods manufactured on the premises	SP	SP	N	PB	N
Contractor's yard	SP	SP	N	N	N
Auto body shop	SP	SP	N	N	N
Gravel, loam, sand, or stone removal; quarry	SP	SP	N	N	N
Sawmill	SP	SP	N	N	N
Research and development	N	N	N	PB	N
Research and development and/or manufacturing of renewable or alternative energy products	SP	SP	N	PB	N
Accessory Uses					
Outdoor storage of materials and parking of vehicles and equipment associated with a business operated in a building on the premises	N	N	N	N	PB
G. Marijuana-Related Uses¹ (§ 200-9.8)					
Marijuana cultivator	N	PB	N	PB	N
Marijuana product manufacture	N	PB	N	PB	N
Marijuana research facility or independent testing laboratory	N	PB	N	PB	N
Marijuana retail establishment, up to 1,500 square feet of gross floor area	N	N	PB	PB	N
Marijuana retail establishment, greater than 1,500 square feet of gross floor area	N	N	N	N	N
Marijuana transporter	N	PB	N	PB	N
Marijuana micro-business	N	PB	N	PB	N
Medical marijuana treatment center	N	PB	PB	PB	N

Table 1. Schedule of Uses				
RA	RAF	VC	PD	RT

Notes:

- ¹ Land within the Marijuana Overlay District may be used for marijuana establishments subject to the provisions of this bylaw; provided, however, that no marijuana retail establishment shall exceed 1,500 square feet of gross floor space.

ARTICLE 6
Nonconforming Uses and Structures

§ 200-6.1. Applicability.

Except as hereinafter provided, this Zoning Bylaw shall not apply to structures or uses lawfully in existence or lawfully begun, or to a building permit or special permit issued before the first publication of notice of the public hearing on this Zoning Bylaw or any amendments thereto, but shall apply to any change or substantial extension of such use, to a building permit or special permit issued after the first notice of said public hearing, to any reconstruction, extension or structural change of such structure and to any alteration of a structure begun after the first notice of said public hearing to provide for its use in a substantially different purpose or for the same purpose in a substantially different manner or to a substantially greater extent except where alteration, reconstruction, extension or a structural change to a one-family or two-family residential structure does not increase the nonconforming nature of said structure.

§ 200-6.2. Nonconforming uses. [Amended 1-24-2022 STM by Art. 16]

- A. Change or substantial extension. The Board of Appeals may grant a special permit to change or substantially extend or alter a nonconforming use only if it determines that such change, extension, or alteration shall not be substantially more detrimental than the existing nonconforming use to the neighborhood.
- B. Substitution. The Board of Appeals may grant a special permit to substitute one nonconforming use for another nonconforming use only if it determines that the new use shall be less detrimental than the existing use to the neighborhood.

§ 200-6.3. Nonconforming structures.

- A. Nonconforming structures other than one-family and two-family residential structures. The Board of Appeals may grant a special permit in conformity with the requirements of § 200-3.4 to reconstruct, extend, alter or structurally change a nonconforming structure other than a one-family or two-family structure (which are governed by Subsection B below), or to alter said structure to provide for a substantially different purpose or for the same purpose in a substantially different manner or to a substantially greater extent, in accordance with this section, only if:
 - (1) Said reconstruction, alteration or extension itself conforms with all the provisions of the Zoning Bylaw; and
 - (2) There is a finding by the Board of Appeals that such reconstruction, alteration or extension will not be substantially more detrimental to the neighborhood than the existing nonconforming structure.
- B. Alteration, reconstruction, extension or structural changes to preexisting nonconforming single- and two-family residential structures.
 - (1) A nonconforming single- or two-family dwelling or structure accessory thereto may be altered, reconstructed, extended or otherwise structurally changed upon a determination

by the Building Inspector that the proposed alteration, extension or structural change will not increase the nonconforming nature of the structure. The following circumstances, singly or in any combination, shall not be deemed to increase the nonconforming nature of said structure:

- (a) Alteration to a structure which complies with all current setback, building coverage, and building height requirements but is located on a lot with insufficient area, insufficient frontage, nonconforming lot shape, or any combination of those, where the alteration will also comply with all of said current requirements.
 - (b) Alteration to a structure which encroaches upon one or more required setback areas, where alteration will comply with all current setback, building coverage and building height requirements.
- (2) If the Building Inspector determines that proposed alteration, extension, or change exceeds one or more of the criteria listed above, the Board of Appeals may allow such alteration, extension or change if it finds that the proposed modification will not substantially increase the nonconforming nature of the existing structure.
 - (3) For purposes of this section, an "increase in the nonconforming nature of the structure" may include intensification of existing nonconformities. The creation of new nonconformities (i.e., relief from height, setback, lot coverage or other dimensional requirements with which the existing nonconforming structure complies) shall require the issuance of a variance from the Board of Appeals.
- C. Alterations to multiple dwellings on a single lot. Any alteration, extension, reconstruction or structural change to a dwelling on a lot containing more than one dwelling shall require a special permit and a finding by the Board of Appeals that such alteration, extension, reconstruction or structural change shall not be more detrimental to the neighborhood than the existing dwelling.
- D. Abandonment, discontinuance and restoration of nonconforming structures destroyed by fire or other casualty.
- (1) Any nonconforming use or any nonconforming buildings or structures which have been abandoned or discontinued for more than two years shall not be reestablished and any future use shall conform to the regulations of this bylaw.
 - (2) A nonconforming structure or structure occupied by a nonconforming use which has been destroyed by fire or other casualty may be reconstructed, provided that the reconstruction is substantially completed within three years of the date of destruction.

ARTICLE 7 Dimensional Regulations

§ 200-7.1. Schedule of Dimensional and Density Regulations.

No building or structure in any district shall be located, constructed, changed, enlarged or permitted and no use of premises or land in any district shall be permitted which does not conform to the density and dimensional regulations as set forth herein.

Requirement	RA	RAF	VC	PD	RT
Minimum lot area (square feet)	50,000	100,000	35,000	100,000	100,000
Lot served by municipal sewer (square feet)	35,000	N/A	35,000	80,000	N/A
Minimum lot frontage (feet)	150	250	150	250	150
Minimum lot depth (feet)	200	300	200	300	200
Minimum front, side, and rear setbacks (feet)	25	25	25	25	25
Maximum building height (feet)	35	35	35	35	40

§ 200-7.2. General provisions.

- A. One dwelling per lot. More than one dwelling on a lot is prohibited unless specifically authorized by other provisions of this Zoning Bylaw.
- B. Computation of lot area. In computing the area of any lot, no part of a public or private way and no part of a pond or river shall be included. For every lot laid out for residential use, at least 50,000 contiguous square feet or 100% of the required lot area, whichever is less, in the RA District and at least 100,000 contiguous square feet or 100% of the required lot area, whichever is less, in the RAF District shall be land exclusive of area subject to protection under the Wetlands Protection Act, MGL c. 131, § 40. Each lot shall be capable of containing a 150-foot-diameter circle within which there is no area subject to protection under the Wetlands Protection Act and within which any principal building may be located. All easements, except easements specifically serving the individual dwelling, shall not intersect with the 150-foot-diameter circle.
- C. Lot frontage.
 - (1) Minimum lot frontage required. Every lot must have at least the minimum frontage set forth in Table 2 for the district in which the lot is located on a street as defined in Article 2 of this bylaw.
 - (2) Measurement of lot frontage. Frontage is measured in a continuous line along the side line of the street right-of-way between the points of intersection of the side lot lines with the street right-of-way line. The measurement of lot frontage excludes jogs in the street width, backup strips and other irregularities in the street line.
 - (3) Access. An owner shall provide a means of access for vehicles from the frontage to a principal building for emergency services, for deliveries, and for off-street parking. All access to lots shall be through the lot frontage, except that other access may be

accomplished by special permit issued by the Planning Board through the procedures outlined in § 200-3.4 of this bylaw. An exemption may be granted by the Building Inspector for corner lots upon written request by the owner of a corner lot to the Building Inspector. The Building Inspector may grant approval for access across the side lot line having road frontage if, in the opinion of the Building Inspector, it provides adequate access for emergency vehicles and safe access for other vehicles entering and exiting the corner lot.

- D. Lot width. No lot shall at any point between a principal building and the lot frontage have less width than 75% of the required lot frontage for the district in which the frontage is located.
- E. Yard requirements.
 - (1) No part of a yard or other open space required in connection with any building shall be used to meet the requirements for any other building unless specifically permitted in this bylaw.
 - (2) No required yard abutting a public street shall be used for the storage or display or abandonment of merchandise, lumber, building material, equipment, salvable secondhand items, or any type of junk, scrap, trash, rubble, or discarded or abandoned equipment or materials.
- F. Building height. Building height shall be determined consistent with the definition in Article 2.
- G. Height limitations. Limitations of height shall not apply to such structures as steeples, belfries, flagpoles, chimneys, radio and television antennas, windmills, silos, water tanks and similar nonhabitable structures.
- H. Appurtenant open space. No building setback area or other open space required for a building under this Article 7 shall, during the life of such building, be occupied by or counted as open space for another building.

ARTICLE 8
Site Development Standards; Signs

§ 200-8.1. Principles of rural design.

Uses and structures that are subject to site plan or special permit approval or proposed for open space residential development shall conform wherever possible to the principles of rural design listed below. These standards are recommended but not required for the siting of individual residences on existing lots where no site plan or special permit review is required.

- A. Wherever feasible, retain and reuse existing old farm or forestry woods roads and lanes rather than constructing new roads or driveways. This minimizes clearing and disruption of the landscape and takes advantage of the attractive way that old lanes are often lined with trees and stone walls. (However, this would not be appropriate where reuse of a road requires widening in a manner that destroys trees or stone walls or where an existing road is aligned in a way that disrupts drainage or accelerates erosion.)
- B. Preserve stone walls and hedgerows. These traditional landscape features define outdoor areas in a natural way and create corridors useful for wildlife. Using these features as property lines is often appropriate, as long as setback requirements do not result in constructing buildings in the middle of fields.
- C. Avoid placing buildings in the middle of open fields. Place them either at the edges of fields or in wooded areas. Septic systems and leach fields may be located in fields, however.
- D. Use existing vegetation and topography to buffer and screen new buildings if possible, unless they are designed and located close to the road in the manner historically found in the Town. If vegetative buffers are used, a minimum depth of 50 feet of mixed ground covers, shrubs, and trees should be provided. Group buildings in clusters or tuck them behind tree lines or knolls rather than spreading them out across the landscape in a sprawl pattern.
- E. Minimize clearing of vegetation at the edge of the road, clearing only as much as is necessary to create a driveway entrance with adequate sight distance. Use curves in the driveway to increase the screening of buildings.
- F. Site buildings so that they do not protrude above treetops and crest lines of hills as seen from public places and roads. Use vegetation as a backdrop to reduce the prominence of the structure. Wherever possible, open up views by selective cutting of small trees and pruning lower branches of large trees, rather than by clearing large areas or removing mature trees.
- G. Minimize crossing of steep slopes with roads and driveways. When building on slopes, take advantage of the topography by building multilevel structures with entrances on more than one level (e.g., walk-out basements, garages under buildings), rather than grading the entire site flat. Use the flattest portions of the site for subsurface sewage disposal systems and parking areas.
- H. Where feasible, site buildings and other areas to be developed in a manner that does not block trails or paths that have traditionally provided access to back land. This provision shall not be construed to create any public access rights that do not otherwise exist.

§ 200-8.2. Off-street parking and loading.

- A. **Purposes.** The purposes of this section are to ensure the availability of safe and convenient vehicular parking areas; to encourage economic development; to promote safety for pedestrians, bicyclists, motor vehicle occupants, and property and business owners; to reduce impervious surfaces; and to protect adjoining lots and the general public from nuisances and hazards associated with off-street parking areas.
- B. **Applicability.** No building or structure shall be used or changed to a category of greater parking demand, determined in accordance with Table 3 below, except in accordance with this section. Single-family and two-family dwellings shall be exempt from the requirements herein.
- C. **Administration.** This section shall be administered by the Planning Board as part of site plan review pursuant to § 200-3.5 or, for a use or activity not subject to site plan review, by the Building Inspector.
- D. **Schedule of Off-Street Parking Requirements.** The minimum number of off-street parking and loading spaces shall be as set forth in Table 3. Off-street parking requirements for a use not specifically listed in Table 3 shall be as specified by the Building Inspector based on a listed use of similar characteristics of parking demand generation.

Table 3. Schedule of Off-Street Parking Requirements	
Use	Minimum Number of Parking Spaces
Multifamily dwelling	1 space per 1 bedroom unit; 2 spaces for units with 2 or more bedrooms
Dwelling units above the ground floor of a commercial building	1.5 spaces per unit
Age-restricted housing or elderly housing, independent living	1 space per unit, plus 1 space per 4 units for visitor parking
Elderly housing, assisted living residence or congregate residence, or nursing home	0.5 space per room, plus 1 space per 4 units for visitor parking
Place of assembly with fixed seating, such as a church, stadium, assembly hall	Minimum 1 space for every 4 seats or, when benches are used, 1 space per 8 linear feet of bench
Business, professional, or governmental office, bank	1 space per 300 square feet on the first floor; 1 space per 400 square feet on the second floor
Medical office or clinic	1 space per 200 square feet
Veterinary hospital	1 space per 300 square feet
Retail store	1 space per 300 square feet
Service establishment	1 space per 300 square feet

Table 3. Schedule of Off-Street Parking Requirements	
Use	Minimum Number of Parking Spaces
Warehouse/distribution facility	1 space per each 2 employees on the largest shift and 1 additional space for each 1,000 square feet
Manufacturing	1 space per each 2 employees on the largest shift and 1 additional space for each 1,000 square feet
Restaurant	1 space for every 4 seats, plus 2 spaces for employees
Gasoline service station	1 space per fueling position, plus 1 space per 300 square feet, including service areas and retail/convenience store areas. Temporary parking at fueling positions shall not count toward the square feet parking requirement.
Vehicle repair shops	1 space per 300 square feet, plus 2 spaces per service bay
Other uses not specified herein	Where a use is not specifically referenced in this table, the parking requirement for the most nearly comparable use or industry standards shall apply as determined by the Building Inspector

* In all instances in Table 3, "square feet" shall mean net floor area.

E. General parking requirements. Except as may be determined pursuant to Subsection J herein, the following parking requirements shall be met:

(1) Computation of required parking spaces.

- (a) The minimum number of parking spaces shall be the largest whole number obtained after calculating the parking requirements in accordance with Table 3. Any fractional parking space shall be rounded up to the next whole number.
- (b) For a parcel with two or more uses, the minimum number of parking spaces shall be the sum of the minimum number of spaces required for each use, determined in accordance with Table 3, except as may be authorized pursuant to Subsection J herein.

(2) Location of parking areas. All required off-street parking spaces shall be located on the same premises as the uses they serve except as provided in Subsection J below.

(3) Dimensional standards. An off-street parking space is an all-weather, surfaced area having a width of not less than nine feet and a length of not less than 18 feet for angle parking or 22 feet for parallel parking.

F. Parking area design.

- (1) Surface. Parking areas shall have durable, all-weather paved surfaces and shall provide for the satisfactory management of surface water. Parking areas composed of pervious or semipervious surfaces are encouraged in low traffic areas, such as reserve parking, and may be used to meet all or any part of the required parking, subject to environmental limitations.
 - (2) Parking areas shall be designed that no vehicle will be required to back onto a public way in order to enter or exit from a parking space.
 - (3) As part of its Site Plan Rules and Regulations, the Planning Board may supplement the requirements herein with parking lot design standards.
- G. Location of parking. To the maximum extent feasible, off-street parking for retail, office, and other commercial uses shall be located behind or beside buildings. Vehicular parking between the front building line and the street alignment is permitted if no other reasonable alternative exists.
- H. Off-street parking areas shall be designed and constructed so as to maximize safety for pedestrians, bicyclists, motor vehicle occupants, and property and business owners and their customers. Impacts on scenic roads, historic districts, natural resources and community character shall be minimized.
- I. Bicycle parking.
- (1) Bicycle parking facilities that provide secure storage of bicycles shall be provided for any new building, addition or enlargement of an existing building, or for any change in the occupancy of any new building that results in the need for additional vehicular parking facilities.
 - (2) Bicycle parking facilities shall be securely anchored and located in a clearly designated, safe, and convenient location. Whenever possible, the bicycle parking shall be placed within 50 feet of building entrances and in well-lit areas.
- J. Reduced parking. The number of parking spaces required pursuant to Table 3 may be reduced by special permit from the Planning Board, subject to the provisions herein. Where the Board of Appeals is the special permit granting authority for the proposed use, the Board of Appeals shall have the authority to administer this section.
- (1) The applicant shall demonstrate to the Board's satisfaction that a reduction is warranted due to circumstances such as but not limited to:
 - (a) Peak parking needs generated by the proposed uses occur at different times.
 - (b) Demographic or other characteristics of site users.
 - (c) Safe, convenient forms of pedestrian access between the proposed development and nearby residential uses.
 - (d) The presence of a public or private parking lot within 400 feet of the proposed use.
 - (2) The Board may grant a special permit for reduced parking only upon finding that:

- (a) The reduced number of parking spaces is consistent with the general purposes of this section.
 - (b) The proposed number of parking spaces will be sufficient for the proposed uses.
 - (c) The decrease in required off-street parking is supported by a parking analysis prepared by a registered professional engineer. Such analysis shall consider existing and proposed uses on the site; rate of parking turnover for various uses; expected peak traffic and parking loads for various uses based on customary hours of operation; availability of public transportation; industry parking standards for various uses; and other factors.
- (3) In granting a special permit for reduced parking, the Board may impose reasonable conditions, including but not limited to requiring additional parking should uses change over time, or requirements to designate green space for reserve parking.

§ 200-8.3. Outdoor lighting.

A. Purposes. The purposes of this section are to create a standard for outdoor lighting so that its use is consistent and provides functionality and convenience; to enhance public safety and security; to minimize light trespass, glare and obtrusive light by limiting outdoor lighting that is misdirected, excessive or unnecessary and providing for lighting that will complement the character of the community; to reduce the cost and waste of unnecessary energy consumption by promoting energy conservation; and to preserve the night sky as a natural resource to enhance nighttime enjoyment of property in Northfield.

B. Definitions. Unless the context clearly indicates otherwise, the following terms shall have the following meanings in this section:

DIRECT LIGHT — Light emitted directly by a lamp, off a reflector, or through a refractor of an outdoor light fixture.

FILTERED — When referring to an outdoor light fixture, means that the fixture is to be fitted with a glass, acrylic, or other translucent enclosure of the light source.

INDIRECT LIGHT — Direct light that has been reflected off other surfaces not part of the luminaire.

LAMP — The component of an outdoor light fixture that produces the actual light.

LIGHT TRESPASS — Direct light emitted by an outdoor lamp fixture that shines beyond the boundaries of the property on which the outdoor light fixture is installed.

LUMEN — A measure of light energy generated by a light source. One footcandle is one lumen per square foot. For this purpose, the lumen output shall be the initial lumen output of a lamp, as rated by the manufacturer.

LUMINAIRE — A complete lighting system, including a lamp or lamps and a fixture.

SHIELDED — When referring to an outdoor light fixture, "shielded" means that the fixture allows no up lighting.

UP LIGHT — Direct light emitted by an outdoor light fixture above a horizontal plane

through the fixture's lowest light-emitting part.

C. Applicability.

- (1) Except as exempted herein, this section shall apply to all municipal, industrial, commercial, business, institutional, and residential uses, including modification, extension, or expansion of an existing outdoor lighting installation.
- (2) Exemptions. The following types of lighting are exempt from this section:
 - (a) Lighting in swimming pools and other water features governed by Article 680 of the National Electrical Code (NEC).
 - (b) Exit signs and other illumination required by the Building Code.
 - (c) Lighting for stairs and ramps as required by the Building Code.
 - (d) Temporary decorative or holiday lighting (less than 30 days use in any one year).
 - (e) Low-voltage landscape lighting, but such lighting should be shielded in a way as to eliminate glare and light trespass.
 - (f) Lighting of flagpoles.
 - (g) Signage lighting shall be subject to § 200-8.4, but all lights for signs should be fully shielded.
 - (h) Public roadway illumination or other lighting installed on streets or ways to control traffic or other lighting for public safety as may be required or installed by governmental agencies.

D. Requirement for lighting plan. Wherever outside lighting is proposed, the applicant for a building permit, special permit, site plan review, or variance, or an electrical permit, shall submit a lighting plan to the applicable approval authority which shall include the following information:

- (1) Location, orientation, type and height of all proposed outdoor luminaires, including those around all structures, driveways, driveway entrances, walkways, pathways and parking areas.
- (2) Luminaire manufacturer's specification data, including lumen output and photometric data showing cutoff angles.
- (3) The type of lamp, such as metal halide, compact fluorescent, high pressure sodium, LED, etc.
- (4) A photometric plan showing the intensity of illumination, expressed in footcandles, at ground level in the interior of the property and at the property boundaries.
- (5) Times of illumination.

E. Standards for the control of glare and light trespass.

- (1) Lighting shall meet the requirements of the Building Code for Energy Efficiency, Chapter 13, or current requirement. Light trespass onto any street or abutting lot is not permitted. Lighting shall be directed onto the site. This may be demonstrated by manufacturer's data, cross-section drawings or other means. Footcandle readings at property lines between residential and nonresidential properties shall not exceed 0.01 footcandle at any elevation.
- (2) Any outdoor luminaire subject to these provisions with a lamp or lamps rated at a total of more than 2,000 lumens shall be fully shielded and shall not emit any direct light above a horizontal plane passing through the lowest part of the light-emitting luminaire.
- (3) Hours of operation. Outdoor lighting shall not be illuminated between 11:00 p.m. and 6:00 a.m., with the following exceptions:
 - (a) Outdoor lighting shall be permitted on the premises of a business open to customers or where employees are working; or for an institution or place of public assembly where an activity is being conducted, outdoor lighting shall be permitting during the activity and for not more than 1/2 hour after the activity ceases.
 - (b) Low-level lighting sufficient for the security of persons or property, provided the average illumination on the ground or on any vertical surface is not greater than 0.5 footcandle.
- (4) Lighting shall be provided at the lowest brightness and intensity levels possible to allow for emergency nighttime access.

F. Special permit.

- (1) The Planning Board may grant a special permit for lighting that exceeds the limitations imposed herein, provided it determines that the requested relief is not inconsistent with the purposes of this section. In such cases, the burden of proof shall be on the applicant to demonstrate to the Board's satisfaction that:
 - (a) An extraordinary need for additional security lighting exists due to a history of vandalism or other reasonable data;
 - (b) Conditions hazardous to the public, such as steep embankments or stairs, may exist in traveled ways or areas;
 - (c) Such a minor change is proposed to an existing nonconforming lighting installation, that it would be unreasonable to require complete replacement of the entire installation; or
 - (d) The complete shielding of direct light is technically infeasible due to the geometry of a lot, building, or structure.
- (2) The Board of Appeals may also authorize a special permit for athletic field or stadium lighting, but only after identifying steps to be taken to minimize glare and light trespass, and to utilize sensible curfews.

§ 200-8.4. Signs.

No sign as defined in this bylaw shall be displayed or located except as provided in this section.

- A. Definitions. For the purpose of this section, the following terms shall have the following meanings:

AGRICULTURAL SIGN — A sign which may have wording that may be changed periodically to advertise products raised or grown principally on the premises.

BILLBOARD SIGN — A sign which advertises a business, service, product, commodity, entertainment or similar object or activity which is conducted, sold or offered on a lot other than the lot on which the sign is erected.

DIRECTIONAL OR INFORMATIONAL SIGN — A sign which is necessary for the safety and direction of vehicular or pedestrian traffic.

EXTERIOR SIGN — A wall sign, projecting sign, or awning sign placed on or about the exterior of any structure.

FREESTANDING SIGN — A nonmovable sign not affixed to any building but constructed in a permanently fixed location off the ground with its own support structure, including a monument sign, and displaying a sign face on not more than two sides.

PERMANENT SIGN — A sign that is permanently attached to a building or having in-ground supporting structure(s) or braces.

PROJECTING SIGN — A sign which is permanently affixed to the exterior surface of a building or structure with the display area positioned perpendicular to the wall to which the sign is mounted.

SIGN — Any words, lettering, parts or letters, figures, numerals, phrases, sentences, emblems, devices, designs, trade names or trademarks, whether stationary or portable, by which anything is made known, such as are used to designate or locate an individual, a firm, an association, a corporation, a profession, a business or a commodity or product, which are visible from a public or private street or right-of-way and used to attract attention.

SIGN AREA — The area of the smallest horizontally or vertically oriented rectangle which could enclose all the display area of the sign, together with any backing different in color or material from the finish material of the building face, without deduction for open space or other irregularities. Structural members not bearing advertising matter shall not be included unless internally or decoratively lighted. Where sign faces are placed back-to-back and face in opposite directions, the "sign area" shall be defined as the area of one face of the sign.

TEMPORARY SIGN — A sign that is used only temporarily, for a specific length of time, and is not permanently mounted.

WALL SIGN — A sign which is painted or otherwise permanently affixed to a vertical exterior surface of a building or structure with the display area positioned parallel with the wall to which the sign is mounted, and including such a sign affixed to a parapet or to the lower slope of a gambrel or mansard roof.

WINDOW SIGN — A sign, picture, symbol or message that is placed inside a window, drawn, painted or etched on the window pane or glass or otherwise attached in or on a

window and visible from the exterior of the window, not including any part of a customary window display of merchandise or other product.

B. Basic requirements.

(1) Prohibited signs. The following signs are expressly prohibited:

- (a) Billboard signs.
- (b) Flashing, moving, or animated signs.
- (c) Signs illuminated with neon.
- (d) Signs containing electronic streaming messages.

(2) Sign permits.

- (a) Except as provided under Subsection B(1) above, no sign shall be erected on the exterior of any building or on any land unless and until the Building Inspector has issued a sign permit. Application for a sign permit shall be on the form prescribed by the Building Inspector and shall include such information and drawings as the Building Inspector requires.
 - (b) All signs erected hereunder shall be erected in the exact location and manner described in the permit.
 - (c) No freestanding signs shall be erected if they create a safety hazard to vehicular or pedestrian traffic, in the opinion of the Building Inspector.
 - (d) The relettering of a sign shall be equivalent to the erecting of a sign, except when the original wording is reproduced.
 - (e) Paper or cardboard signs inside display windows are allowed if illuminated only by interior illumination within the building.
- (3) Special permit required. No sign shall be erected for any nonresidential use requiring a special permit under this bylaw unless the applicable special permit granting authority has approved the number, location, size, and design of such signs as part of the special permit granted for the use.
- (4) Exempt signs. The following types of signs do not require a permit from the Building Inspector:
- (a) Real estate signs advertising rent, lease or sale are permitted, provided that:
 - [1] The sign shall not exceed 32 square feet in area.
 - [2] The sign shall advertise only the premises on which it is located.
 - [3] The sign shall be removed no more than one week after the completion of the sale or rental.
 - (b) Agricultural sign not exceeding 32 square feet in area.

- (c) Construction signs.
 - [1] The sign shall not exceed 32 square feet in area.
 - [2] The sign shall be maintained on the premises during construction and shall be removed upon completion of the construction or issuance of a certificate of occupancy and use, whichever occurs first.
 - (d) Real estate signs advertising an open house event.
 - [1] The sign shall not exceed nine square feet in area.
 - [2] The sign may be erected on private property, provided permission from the property owner has been granted. Upon request by the Building Inspector, a copy of the letter granting such permission shall be provided to the Building Inspector.
 - [3] The sign shall only be erected on the day of the open house and shall be removed at the conclusion of the open house each day. The date of the open house shall be included on the sign.
 - (e) Signs not exceeding one square foot in area and bearing only property numbers, post box numbers, or names of occupants of premises.
 - (f) "No hunting, fishing, etc.," signs not to exceed one square foot are allowed.
 - (g) Flags and insignia of any government, except when displayed in connection with commercial promotion.
 - (h) Legal notices, identification information, or direction signs erected by governmental bodies.
 - (i) Integral decorative or architectural features of buildings, except letters, trademarks, moving parts, or moving lights.
 - (j) Signs directing and guiding traffic and parking on private property, but bearing no advertising matter.
- (5) Sign standards.
- (a) Lighting. Signs shall be illuminated in a manner than no glare is visible from any way or residential lot.
 - (b) Size. Freestanding commercial or industrial signs shall not exceed 24 square feet in area. No freestanding sign shall at any point extend more than 10 feet above the adjacent average grade.
 - (c) Signs affixed to any planar or curved surface of a structure shall be limited in area to 10% of the area of that surface, devoted to the attendant use. Signs affixed to structures shall not extend more than 18 inches beyond the vertical mean building surface, nor more than three feet above the eaves.

C. Construction and maintenance of signs.

- (1) All signs shall be constructed of durable and weatherproof material. They shall be maintained in safe structural condition and good visual appearance at all times, and no sign shall be left in a dangerous or defective state. The Building Inspector shall have the authority to inspect any sign and order the owner to paint, repair or remove a sign which constitutes a hazard or a nuisance due to improper or illegal installation, dilapidation, obsolescence or inadequate maintenance.
- (2) No sign shall be painted or posted directly on the exterior surface of any wall, including windows and doors. All signs must be painted, posted or otherwise securely affixed to a substantial intermediate removable surface, and such surface shall be securely affixed to the wall of the building. However, the foregoing shall not prevent installation of a sign by individual letters or devices cut into or securely affixed to the exterior wall of a building, provided that such letters or devices have a minimum depth or projection of 1/4 inch. The material of the sign and intermediate surface, and the manner of affixing the sign to the intermediate surface and of the intermediate surface to the wall of the building, shall be subject to the approval of the Building Inspector for the purpose of protecting the safety of the public. Notwithstanding the foregoing, signs may be painted or posted on the interior surface of any wall, including windows and doors.

ARTICLE 9
Special Regulations

§ 200-9.1. Accessory dwelling unit.

- A. Purposes. The purposes of this section are to assist Northfield residents with creating suitable housing to accommodate a family member.
- B. Applicability. The Board of Appeals may grant a special permit for an accessory family dwelling unit in accordance with this section and Table 1, Schedule of Uses.⁶
- C. Basic requirements.
- (1) An accessory family dwelling unit shall be located within a detached single-family dwelling and designed so as to preserve the appearance of the single-family dwelling.
 - (2) There shall be only one accessory family dwelling unit on a lot, and no accessory family dwelling unit shall have more than two bedrooms.
 - (3) There shall be at least one off-street parking space for the accessory family dwelling unit in addition to parking for the principal dwelling. The off-street parking shall be located in a garage or carport, or in the driveway, and shall not be permitted within any required yard area or setback. There shall be no additional driveway or curb cut providing access to the accessory family dwelling unit.
 - (4) Occupancy of the single-family dwelling and accessory family dwelling unit shall be restricted as follows:
 - (a) The owners of the property shall reside in one of the units as their primary residence. For purposes of this section, "owners" shall mean one or more individuals who hold legal or beneficial title to the premises.

§ 200-9.2. Home occupation.

- A. Purposes. The purpose of this section is to provide for the conduct of home occupations while preserving the residential character of the premises and preventing adverse effects on the neighborhood.
- B. Basic requirements. A home occupation shall be allowed by right as shown in Table 1⁷ if it meets the requirements of this section:
- (1) It is incidental to a permitted principal use on the same premises;
 - (2) It is not detrimental to a residential or rural neighborhood, and the existing character of the neighborhood is preserved;
 - (3) It is clearly secondary and subordinate to the residential use of the premises;
 - (4) It has no more than two nonresident employees working primarily on the premises;

6. Editor's Note: See § 200-5.4, Schedule of Uses.

7. Editor's Note: See § 200-5.4, Schedule of Uses.

- (5) Adequate off-street parking is available;
 - (6) There are no exterior alterations that change the residential appearance of the dwelling;
 - (7) Except as provided in Subsection B(8) and (9) below, there is no exterior indication of the accessory use and no exterior display of merchandise of greater than 100 square feet in total area;
 - (8) All storage of materials, supplies, or equipment is within the principal building, suitable accessory buildings, and/or within no greater than 500 square feet of total outdoor yard area; and
 - (9) No more than one sign, not exceeding four square feet in area, is used to identify the home occupation.
- C. Special permits. A home occupation that does not comply with all of the above standards shall only be allowed by special permit from the Zoning Board of Appeals. Special permits granted hereunder shall be based upon the criteria in § 200-3.4. **[Amended 1-24-2022 STM by Art. 16]**

§ 200-9.3. Open space residential development.

A. Purpose.

- (1) The primary purpose of this section is to preserve the open space resources of Northfield as identified in the Master Plan, especially large contiguous blocks of forested back land that must be maintained as large-acreage holdings in order to remain economically viable for commercial forestry. This is necessary for the continuation of forestry as a significant resource-based local agricultural activity and for the protection of the Town's water resources and other unique environmental assets. This section is also intended to foster compact development patterns, using flexible regulations for density and lot dimensions, and to promote and encourage creativity in neighborhood design.
- (2) The Town wishes to encourage the use of open space residential development because it results in the preservation of contiguous open space and important environmental resources while allowing design flexibility. Open space residential development reduces development impacts on farmland, forests, wildlife habitats, large tracts of contiguous open space, environmentally sensitive areas, steep slopes, hilltops, and historically significant areas.
- (3) To encourage this type of development, open space residential development is allowed by right, subject only to the requirements of the Planning Board's Regulations Governing the Subdivision of Land.⁸ An open space residential development that does not require approval as a subdivision is allowed by right subject to site plan approval by the Planning Board. In order to encourage small subdivisions to follow open space residential development principles, there is no minimum parcel size or number of lots required for an open space residential development.

8. Editor's Note: See Ch. 315, Subdivision of Land.

B. Applicability.

- (1) An open space residential development may be proposed anywhere in Northfield except the Village Center Districts. All subdivisions shall comply with the open space residential development provisions of this section unless the Planning Board allows a development that deviates from the requirements of said section by special permit. Such deviations may be approved if the applicant demonstrates that the proposed alternative development configuration provides adequate protection of the site's environmental resources and fulfills the purposes of this section as well as or better than an open space residential development.
- (2) Subsection B(1) above applies only to subdivisions of land as defined in MGL c. 41, § 81L, and not to construction of homes or businesses on individual lots that existed prior to May 3, 2008, or to lots created through the "Approval Not Required" process with frontage on public ways existing as such as of May 3, 2008, described in the Regulations for the Subdivision of Land (the "Subdivision Regulations"). However, if subdivision approval is not required because a new roadway is not proposed, an applicant may nevertheless apply for open space residential development approval under this section. In such a case, the application shall be subject to site plan review as described in § 200-3.5. If the proposed open space residential development also involves one or more common driveways, density bonuses, transfer of development rights, or any other use that requires a special permit, the proceedings for all such special permits and the site plan review for the lot configuration shall occur in one consolidated special permit proceeding before the Planning Board.

C. Development impact statement and conservation analysis.

- (1) In order to enable the Planning Board to determine whether or not a proposed open space residential development (or development by special permit that deviates from the requirements for open space residential development) satisfies the purposes and standards of this section, an applicant must present sufficient information on the environmental and open space resources for the Board to make such determination. The required information shall be provided in the form of a development impact statement, including a conservation analysis as described in Subsection C(2) of this section. In the case of an open space residential development that is not a subdivision, and that is presented as a site plan review application, the applicant shall not be required to submit a full development impact statement. However, the Planning Board may require the submission of all or part of a conservation analysis as described in the Subdivision Regulations. **[Amended 1-24-2022 STM by Art. 16]**
- (2) Conservation analysis and findings.
 - (a) Prior to filing an application, the applicant is encouraged to meet with the Planning Board to discuss the conservation resources on the site. At such meeting, the Planning Board shall indicate to the applicant which land is likely to have the most conservation value and be most important to preserve and where development may be most appropriately located. This meeting shall constitute the conservation analysis. **[Amended 1-24-2022 STM by Art. 16]**

- (b) In the case of a proposed plan that deviates from the requirements of this section, if the Planning Board determines that the land with the greatest conservation value cannot be protected except by the use of an open space residential development plan, the Planning Board shall deny the special permit for the deviation and require that the applicant submit a plan that complies with the requirements for an open space residential development.
 - (c) The Planning Board, in consultation with the Conservation Commission, shall study the conservation analysis, may conduct field visits, and shall formally determine which land should be preserved and where development may be located. The Planning Board shall make written findings supporting this determination (the "conservation findings"). The Planning Board shall deny any application that does not include sufficient information to make conservation findings or that does not preserve land that the Planning Board determines should be preserved from development as a result of the conservation analysis and findings.
 - (d) The Planning Board's conservation findings shall be incorporated into its decision to approve, approve with conditions, or deny an application. The conservation findings shall show land to be permanently preserved by a conservation restriction, as well as recommended conservation uses, ownership, and management guidelines for such land. The conservation findings shall also indicate preferred locations for development if the plan is denied based upon such findings.
- (3) Minimum preserved open space. The plan shall show that at least the percentages of the total acreage listed below will be preserved by conservation restriction, based upon the conservation findings.
- (a) Residential Agricultural-Forestry District: minimum of 75%.
 - (b) Residential Agricultural, Planned Development Districts: minimum of 60%.
- D. Maximum number of dwelling units. The maximum number of residential units in an open space residential development is calculated by a formula based upon the net acreage of the property. This formula is intended to take into account site-specific development limitations that make some land less developable than other land. This calculation involves two steps: calculating the net acreage and dividing by the base allowed density.
- (1) Net acreage calculation. The factors named below are included in this subsection for net acreage calculation purposes only and do not convey or imply any regulatory constraints on development siting that are not contained in other applicable provisions of law, including this Zoning Bylaw.
 - (a) To determine net acreage, subtract the following from the total (gross) acreage of the site:
 - [1] Half of the acreage of land with slopes of 20% or greater (2,000 square feet or more of contiguous sloped area at least 10 feet in width); and
 - [2] The total acreage of lakes, ponds, land subject to easements or restrictions prohibiting development, FEMA 100-year floodplains, and all freshwater

wetlands as defined in MGL c. 131, § 40, as delineated by an accredited wetlands specialist and approved by the Northfield Conservation Commission.

- (b) At the Planning Board's discretion, any of the information described above may be taken from current geographic information systems data available from the Massachusetts Department of Environmental Protection, Mass GIS, and other credible sources, including delineations registered by the use of global positioning systems.
 - (2) Unit count calculation. To determine the base maximum number of allowable residential dwelling units on the site, divide the net acreage by the minimum lot area for the applicable zoning district. Fractional units of less than 0.5 shall be rounded down and 0.5 or more shall be rounded up.
- E. Density bonus. The unit count determined in Subsection D above may be increased through density bonuses in order to advance important goals of the Northfield Master Plan. Density bonuses are given by special permit at the discretion of the Planning Board, based upon the expected public benefit. They are calculated by first determining the allowable unit count under Subsection D without rounding fractional units up or down, and then multiplying that number by 100%, plus the percentages that follow. Resulting fractional units, if any, shall be rounded up or down as in Subsection D.
- (1) If the applicant allows deeded public access to the open space portion of the property and the Planning Board finds that such public access provides a significant recreational benefit to the Town (such as access to an important natural area or a trail system): a maximum of 10%.
 - (2) If the applicant permanently restricts ownership and occupancy of units allowed by Subsection D as affordable housing (as defined in this bylaw), and makes a binding commitment to construct such affordable residences: a maximum of 25%. For every unit included in the allowable unit count under Subsection D that is built and dedicated as an affordable unit, two bonus market rate units may be permitted, up to the maximum of 25% of the allowable unit count.
 - (3) If the applicant preserves as permanent open space more than the minimum required percentage: a maximum 10% density bonus per additional 5% of the parcel preserved as open space.
 - (4) If the applicant has designed the development to protect solar access and agrees to provide solar-ready construction for the proposed dwellings: a maximum of 25%. For purposes of this section, "protect solar access" shall mean that streets and lots in the open space residential development shall be oriented to maximize the solar resource available to each lot or to as many lots as possible as determined by the Planning Board. "Solar-ready construction" shall mean construction of homes in such a way that installing and connecting a solar energy system (whether photovoltaic or solar thermal) does not require additional wiring, plumbing, or building modification.
- F. Density transfer (transfer of development rights). The Town of Northfield encourages

flexibility in the location and layout of development within the overall density standards of this Zoning Bylaw. Toward these ends, the Town will permit residential density to be transferred from one parcel (the "sending parcel") to another (the "receiving parcel") in open space residential developments under this section. Density transfers may only be permitted from sending parcels in the RAF District to receiving parcels in either the RA or PD District. If a sending parcel is located in both the RAF and another district, only those portions of the sending parcel that actually lie within the RAF District may be considered in determining the number of units allowed to be transferred. The process of density transfer is as follows:

(1) Procedure.

- (a) All density transfers require a special permit from the Planning Board.
- (b) The special permit application for a density transfer shall be signed by the owners (or their authorized representatives) of both the sending and receiving parcels.
- (c) The special permit application shall show a proposed development plan for the receiving parcel (subdivision and/or site plan) as well as a base unit count calculation prepared according to the provisions of Subsection D. For the sending parcel, the applicant may calculate the allowable number of units eligible to transfer by either:
 - [1] Calculating the net acreage pursuant to Subsection D and dividing by 10; or
 - [2] Dividing the total (gross) acreage by 20.
- (2) Fractional units of less than 0.5 shall be rounded down and 0.5 or more shall be rounded up.
- (3) Sending parcels existing as such on May 3, 2008, may have development rights calculated by either method Subsection F(1)(c)[1] or [2] at the applicant's election. Sending parcels which have been modified by lot line changes since May 3, 2008, must employ method Subsection F(1)(c)[1]. The density calculation for the sending parcel shall not include any of the density bonuses available under Subsection E.
- (4) In reviewing an application for density transfer, the Planning Board shall first determine the number of allowable residential units permitted on the receiving parcel using all of the relevant standards in Subsection D and any density bonuses sought under Subsection E. The Planning Board shall then determine the number of residential units available to transfer from the sending parcel(s) pursuant to Subsection F(1)(c)[1] or [2] above.
- (5) The Planning Board may then grant a special permit allowing the transfer to the receiving parcel of some or all of the allowable residential units from the sending parcel(s).
- (6) As a condition of the Planning Board's approval of the density transfer, a conservation restriction on the sending parcel(s) satisfying the requirements of Subsection E shall be executed and recorded with the Franklin County Registry of Deeds. The conservation restriction shall require that the total area of land used in the calculation required under Subsection F(1)(c)[1] or [2] above be permanently restricted. Those portions of the

sending parcel(s) not required to be subject to the conservation restriction may be used in accordance with this Zoning Bylaw.

- (7) Findings required. The Planning Board shall not approve any residential density transfer unless it finds that:
 - (a) All requirements for the granting of a special permit have been satisfied.
 - (b) The addition of the transferred units to the receiving parcel will not increase the maximum allowable unit count under Subsection D by more than 50% and will not adversely affect the area surrounding the receiving parcel.
 - (c) The density transfer will benefit the Town by protecting a substantial area of developable land with conservation value on the sending parcel(s) in a manner that furthers the purposes of the Residential Agricultural-Forestry District.
 - (d) The density transfer will advance the goals of the Northfield Master Plan.
- G. Maximum density bonus and/or density transfer. The density bonuses and transfers of development rights allowed in this section may be combined to result in a total unit count increase not exceeding 25% of that established in Subsection D above. Density bonuses and/or transfers may only be used if the resulting development complies with Title 5 of the State Environmental Code as determined by the Board of Health.
- H. Lots in more than one district. For lots in more than one district, the allowable unit count (excluding bonuses or transfers) and required open space for each district shall be computed separately first. These totals shall be added together and the allowable maximum bonus and transfer of development rights for the entire development shall be calculated based upon this combined total number of units. The permitted location of the units and protected open space shall be wherever the Planning Board determines best fits the characteristics of the land, based upon the conservation analysis and findings.
- I. Permitted housing types. The allowable residential units may be developed as single-family, two-family, or multifamily dwellings, provided that applicable special permit or site plan review requirements for the land use district are satisfied and that the number of dwelling units does not exceed the allowable unit count in Subsection D above. The subdivision approval and special permit/site plan requirements shall be fulfilled concurrently in one proceeding to the extent practical. Any open space residential development application involving two-family or multifamily dwellings shall include a site plan that shows the location, layout, height, and setbacks of such dwellings. Accessory apartments shall be permitted in open space residential developments and shall not be counted toward the total allowable unit count. Such apartments shall comply with the requirements of Article 7, except that the lot area and setback requirements shall not apply.
- J. Dimensional and design requirements.
 - (1) Minimum lot sizes in open space residential developments. The limiting factor on lot size in open space residential developments is the need for adequate water supply and sewage disposal. Therefore, there is no required minimum lot size for zoning purposes. This does not affect the powers of the Board of Health to require areas on a lot for the

disposal of sewage and the protection of water supply.

- (2) Setbacks, road frontage, and road requirements. The minimum setback shall be 10 feet from any property line. There shall be no numerical requirements for road frontage in an open space residential development, provided that each lot has legally and practically adequate vehicular access to a street across its own frontage or via a shared driveway approved under § 200-3.5. All dwellings must comply with applicable Board of Health requirements. The Planning Board may modify the applicable road construction requirements for new roads within an open space residential development as provided in the Regulations Governing the Subdivision of Land if it finds that such modifications will be consistent with the purposes of this section and the Master Plan.
- (3) Arrangement of lots.
 - (a) Lots shall be located and arranged in a manner that protects views from roads and other publicly accessible points; farmland; wildlife habitat; large, intact forest areas; hilltops; ponds; steep slopes; and other sensitive environmental resources while facilitating pedestrian circulation. Generally, residential lots shall be located the minimum feasible distance from existing public roadways. The Planning Board shall take into consideration the conservation analysis and findings in approving the arrangement of lots.
 - (b) Lot, roadway, and driveway layouts, land alterations, and placement of structures shall follow applicable portions of the rural siting principles in § 200-8.1 and any design guidelines for open space residential development which may be adopted by the Planning Board.

K. Permanent open space.

- (1) Open space set aside in an open space residential development or as a condition of any special permit or site plan approval shall be permanently preserved from development as required by this section. The Planning Board may not require such open space land to be accessible to the public, unless a density bonus is allowed under Subsection E. Any development permitted in connection with the setting aside of open space land shall not compromise the conservation value of such open space land, based upon the conservation findings of the Planning Board.
- (2) Permanent preservation of open space land. All land required to be set aside as open space in connection with any open space residential development shall be so noted on any approved plans and shall be protected by a permanent conservation restriction to be held by the Town of Northfield, the Commonwealth of Massachusetts, or a nonprofit conservation organization qualified to hold conservation restrictions under MGL c. 184, § 31. All references to conservation restrictions in this bylaw shall mean a conservation restriction meeting the requirements of MGL c. 184, § 31. The restriction shall specify the permitted uses of the restricted land which may otherwise constitute development. The restriction may permit, but the Planning Board may not require, public access or access by residents of the development to the protected open space land. **[Amended 1-24-2022 STM by Art. 16]**

(3) Ownership of open space land.

- (a) Protected open space land may be held in private ownership, owned in common by a homeowners' association (HOA), dedicated to the Town or state governments with their consent, transferred to a nonprofit organization acceptable to the Planning Board, or held in such other form of ownership as the Planning Board finds appropriate to manage the open space land and protect its conservation value.
- (b) If the land is owned in common by an HOA, such HOA shall be established in accordance with the following:
 - [1] The HOA must be created before final approval of the development, and must comply with all applicable provisions of state law.
 - [2] Membership must be mandatory for each lot owner, who must be required by recorded covenants and restrictions to pay fees to the HOA for taxes, insurance, and maintenance of common open space, private roads, and other common facilities.
 - [3] The HOA must be responsible for liability insurance, property taxes, the maintenance of recreational and other facilities, private roads, and any shared driveways.
 - [4] Property owners must pay their pro rata share of the costs in Subsection K(3)(b)[3] above, and the assessment levied by the HOA must be able to become a lien on the property.
 - [5] The HOA must be able to adjust the assessment to meet changed needs.
 - [6] The applicant may make a conditional offer of dedication to the Town, binding upon the HOA, for all open space to be conveyed to the HOA. Such offer may be accepted by the Town, at the discretion of the Selectboard, upon the failure of the HOA to take title to the open space from the applicant or other current owner, upon dissolution of the association at any future time, or upon failure of the HOA to fulfill its maintenance obligations hereunder or to pay its real property taxes.
 - [7] Ownership shall be structured in such a manner that real property taxing authorities may satisfy property tax claims against the open space lands by proceeding against individual owners in the HOA and the dwelling units they each own.
 - [8] The HOA documents shall be reviewed by Town Counsel, at the applicant's expense, to assure that they satisfy the conditions in Subsection K(3)(b)[1] through [7] above, and such other conditions as the Planning Board shall deem necessary.

(4) Maintenance standards.

- (a) Ongoing maintenance standards shall be established as a condition of development approval to ensure that the open space land is not used for storage or dumping of

refuse, junk, or other offensive or hazardous materials. Such standards shall be enforceable by the Town against any owner of open space land, including an HOA.

- (b) If the Selectboard finds that the provisions of Subsection K(4)(a) above are being violated to the extent that the condition of the land constitutes a public nuisance, it may, upon 30 days' written notice to the owner, seek a court order allowing the Town to enter the premises for necessary maintenance, and to assess the cost of such maintenance by the Town ratably against the landowner or, in the case of an HOA, the owners of properties within the development and, if such costs are not paid, to impose a property tax lien on such property or properties.

§ 200-9.4. Campus planned development master plan special permit.

- A. Purposes. The purpose of the campus planned development (CPD) master plan special permit (MPSP) is to encourage master-planned developments that preserve large tracts of land in the Planned Development District. Accordingly, this section provides a project review process for residential, institutional, and mixed-use developments that will be constructed in phases. It also establishes regulations and guidelines to minimize adverse impacts on water resources and the natural features of a proposed site, and encourages creative reuse of large historic structures for a variety of uses.
- B. Applicability. Any development involving 30 or more acres of land in the Planned Development District may be considered for CPD approval in accordance with the provisions of this section.
- C. Basic requirements.
 - (1) Use regulations. The following uses may be proposed in a CPD:
 - (a) Any use allowed as of right or by special permit in the Planned Development District in Article 5 of this bylaw.
 - (b) Elderly housing; retirement community.
 - (c) Hospital.
 - (d) Day surgery center.
 - (e) Urgent care facility.
 - (f) Professional offices.
 - (g) Research and development, including accessory manufacturing.
 - (h) Educational use, nonexempt.
 - (i) Health club or spa.
 - (j) Indoor recreation.
 - (k) Camp, day or overnight.

- (l) Club, lodge, meeting hall.
 - (m) Community center.
 - (n) Hotel.
 - (o) Restaurant.
- (2) Design and performance standards. The intent of the CPD is to provide for development in accordance with master plans that meet the following standards:
- (a) Overall unity of site design and attention to the public realm, including coordinated patterns for streets, ways and pedestrian paths; distributed open space, appropriate landscaping; aesthetic harmony of features, including building architecture, street furniture, pedestrian amenities and signage;
 - (b) Preservation and use or reuse of buildings listed or eligible for listing on the National Register of Historic Places;
 - (c) Preservation and integration of open spaces, wetlands, mature trees and other features of environmental significance into the design of the site;
 - (d) Drainage systems that protect and appropriately employ open spaces and wetlands, utilizing best management practices (BMPs) and other measures to manage stormwater runoff in accordance with applicable regulations and guidelines from the Massachusetts Department of Environmental Protection (DEP);
 - (e) Underground utilities shall be used, except for existing aboveground electric and telephone lines;
 - (f) Mitigation of the adverse effects of development on traffic circulation and street capacity; air quality; noise (including that generated by traffic); stormwater runoff on adjacent and downstream surface water bodies; flooding, erosion, sedimentation, changes in water tables; wildlife, wildlife habitat, rare or endangered plant or animal species; water supply, including adverse impacts on aquifers and the public water distribution system; and adverse effects of sewage disposal on groundwater, aquifers, surface water and, where applicable, the municipal sewer system;
 - (g) Compatibility with uses of abutting properties, including aesthetic compatibility; or appropriate separation and buffers from such abutting property by plantings or terrain;
 - (h) Availability of public services and impacts on municipal services, including but not limited to police and fire services, public road maintenance, traffic control and solid waste disposal;
 - (i) Costs and benefits to the Town of Northfield, showing net benefits;
 - (j) Facilities for meeting transportation needs, and planning for control and reduction of vehicle trips by means such as ride sharing, use of vans or shuttles, or provision

of employer-assisted housing within the proposed development; and

- (k) Organizational and management arrangements and documents pursuant to which the master plan will be implemented and common facilities will be maintained, including provisions for architectural review and control, enforcement of applicable restrictions, and the planning with respect to transportation.
- (3) Procedures.
- (a) Campus planned development application requirements, including fees, shall be in accordance with the rules and regulations of the Planning Board and the following requirements.
 - (b) The master plan submission shall contain the necessary plans, information, data and documents to indicate the anticipated scope and intensity of development, size and location of structures, layout of streets and ways, and impacts on the environment, municipal services and traffic, and shall conform with the design criteria and guidelines in this section to the maximum feasible extent. A CPD approved by the Planning Board under this section shall govern the development of the tract of land included therein and shall be a public record.
 - (c) The Planning Board shall hold a public hearing on a CPD application no later than 65 days from the date of submission. Notice of the hearing shall be in accordance with MGL c. 40A, § 11. Review authorities shall forward their comments, in writing, to the Planning Board within 35 days of receiving an MPSP application for review.
 - (d) No later than 90 days from the close of the public hearing, the Planning Board shall grant the CPD/MPSP as proposed, or approve it with conditions, or deny the request. If no action is taken within 90 days, the application shall be deemed approved as submitted except where the Planning Board and the applicant have agreed, in writing, to an extension.
- (4) Special permit decision criteria. The Planning Board shall approve a CPD/MPSP only upon its determination that:
- (a) The master plan meets all applicable requirements of this bylaw;
 - (b) Given the location, type and extent of land use proposed by the applicant, building location, egress points, anticipated grading, and other elements of the master plan could not reasonably be altered to address the criteria in § 200-3.4, where applicable; and
 - (c) Any variances required from the Board of Appeals have been granted.
- (5) Master plan special permit amendments. The applicant may propose to amend, modify, or supplement a CPD/MPSP from time to time in order to bring the site master plan into conformity with changed circumstances, ongoing development in an MPSP, and information disclosed through detailed study and engineering of particular development sites within the project. The Planning Board may approve such amendments and may in

its discretion hold a public hearing, with notice given as set forth above, if it deems the proposed modification and supplementation to be substantial.

- (6) Lapse. A CPD/MPSP shall lapse if a substantial use thereof or construction thereunder has not begun, except for good cause, no later than two years following the filing of the special permit approval with the Town Clerk, including such time required to pursue or await the determination of an appeal referred to in MGL c. 40A, § 17. Such approval may, for good cause, be extended, in writing, by the Planning Board upon written request of the applicant. For purposes of this section, "substantial use" shall mean the issuance of at least one building permit for a use included in the CPD.

D. Project plan submissions and procedures.

- (1) Prior to application for a building permit for a use allowed under a CPD/MPSP, the applicant shall submit a project plan to the Planning Board.
- (2) For project plans submitted under an approved CPD, application requirements, review and decision procedures shall be in accordance with site plan approval under § 200-3.5, except as follows:
 - (a) In addition to meeting the requirements of § 200-3.5, the applicant shall provide written statements that the project for which a building permit is sought complies with the MPSP and all requirements of this section, and shall provide such plans, information, analyses, computations and other data as are reasonably necessary to document such statements.
 - (b) If no action is taken on a project plan within 60 days, the application shall be deemed approved as submitted except where the Planning Board and the applicant have agreed, in writing, to extend the review period.
 - (c) Where applicable, the applicant shall submit for endorsement of an approval not required plan or approval of a subdivision plan, if required, in accordance with the Planning Board's Subdivision Regulations.
- (3) Signs. Signs in a CPD shall be in accordance with § 200-8.4 and this section. Where a conflict exists between this section and § 200-8.4, this section shall govern.
 - (a) At each public street entrance to a CPD, a sign shall be permitted to identify the development as a whole. No such sign shall exceed 300 square feet in size nor eight feet in height, nor be located less than 20 feet from the street line.
 - (b) At an appropriate location within a CPD, a directory map shall be permitted to identify organizations and enterprises. With the approval of the Planning Board, additional directory signs may be permitted. No such sign shall exceed 300 square feet in size nor 12 feet in height, nor shall any lettering thereon exceed eight inches in height. If such sign includes a locator map, at least two adjacent parking spaces shall be provided.
 - (c) Each principal building shall be permitted to have one identifying sign designating the names and/or logos of the organizations or enterprises occupying the same. No

such sign shall exceed 300 square feet in size nor 12 feet in height, nor be pole-mounted, but may be located in front of the building or mounted thereon.

- (d) Traffic direction and control signs are permitted when required or authorized by state and local officials with jurisdiction over such signs. Temporary signs are permitted to identify construction, financing, sale, leasing or pending tenancy with respect to buildings, or the occurrence of a special event, a hazard or a restriction or limitation of access or use.
 - (e) No signs shall be moving or flashing, but may be illuminated by nonflashing, nonblinking lights.
- E. Regulations. To implement this section, the Planning Board may adopt regulations consistent with the provisions herein, further specifying and defining submission requirements and procedures, fees, design guidelines, and procedures.

§ 200-9.5. Agricultural tourism and farm businesses.

- A. Purpose. The purpose of this section is to promote and maintain local farming. Toward that end, this section provides for a variety of agriculturally related uses and farm-affiliated businesses that are not explicitly exempt under MGL c. 40A, § 3, but which the Town of Northfield deems important for the preservation of a rural economy in order to:
- (1) Maintain and promote agriculture and its related activities, such as agricultural tourism;
 - (2) Preserve open space and farmland;
 - (3) Maintain both an agricultural heritage and a rural character;
 - (4) Increase community benefits by having fresh, local produce for sale; and
 - (5) Increase positive growing businesses that contribute to the general economic conditions and cycle of the area and the Commonwealth.
- B. Applicability. The provisions of this section shall apply to any farm as defined in this bylaw on five or more acres of land.
- C. Use regulations. The following agriculturally related uses are permitted in any district:
- (1) Seasonal outdoors mazes of agricultural origin, such as straw bales or corn.
 - (2) Petting farm, animal display, and pony rides.
 - (3) Wagon, sleigh- and hayrides.
 - (4) Nature trails.
 - (5) Open-air or covered picnic area with restrooms.
 - (6) Educational classes, lectures, seminars.
- D. The following farm-affiliated businesses and uses are permitted in any district, subject to site plan review by the Planning Board:

- (1) Storage, retail or wholesale marketing, or processing of agricultural products into a value-added agricultural product is permitted if more than 50% of the stored, processed, or merchandised products are produced by the farm operator for at least three of the immediately preceding five years.
 - (2) Cider mill or winery selling product, in a tasting room, derived from crops grown primarily on site for at least three of the immediately preceding five years.
 - (3) Historical agricultural exhibits.
 - (4) Gift shop for the sale of agricultural products and agriculturally related products.
 - (5) Designated parking for 20 or more vehicles.
 - (6) Commercial or cooperative kitchen, cannery, or copacking facility.
- E. The following uses are allowed only by special permit from the Planning Board:
- (1) Bed-and-breakfast.
 - (2) Restaurant related to the agricultural use on the site.
 - (3) Non-agriculturally related uses, such as small-scale entertainment venue or organized meeting space made available for rent for weddings, corporate picnics, birthday parties, and the like.

§ 200-9.6. Recreational tourism businesses.

- A. Purposes. The purpose of this section is to promote and maintain outdoor recreation as a vital part of the local economy by providing for related business uses that attract visitors seeking recreational opportunities in the Town of Northfield. In addition, this section is intended to address the following purposes consistent with the Northfield Master Plan:
- (1) To provide for shops, restaurants, and cultural activities;
 - (2) To promote open space and recreation as a means of encouraging community gathering;
 - (3) To develop a resilient economy that connects to natural features and open space; and
 - (4) To promote recreational tourism.
- B. Applicability. This section applies to uses and activities in the Recreational Tourism District.
- C. Use regulations. The following uses are permitted:
- (1) Outdoor recreation, such as cross-country skiing, hiking, mountain biking, and similar uses.
 - (2) Boating.
 - (3) Nature trails.
 - (4) Open-air or covered picnic area with restrooms.

- (5) Educational classes, lectures, seminars.
- D. The following uses are permitted, subject to site plan review by the Planning Board:
 - (1) Bicycle and boat rental facilities.
 - (2) Restaurant with not more than 40 seats.
 - (3) Gift shop.
- E. The following uses are allowed only by special permit from the Planning Board:
 - (1) Hotel, motel, or inn.
 - (2) Restaurant with more than 40 seats.
 - (3) Take-out food service, such as an ice cream stand or coffee shop, where food prepared on the premises is served to patrons at a walk-up window. Drive-through service is prohibited.
 - (4) Campground.

§ 200-9.7. Wireless communications facilities.

- A. Purposes. The purpose of this section is to minimize adverse impacts of communication structures, monopoles, buildings and appurtenances on adjacent properties and residential neighborhoods and to protect, to the maximum extent practicable, the rural character and aesthetic qualities of the Town of Northfield, the property values of the community and safety of the citizens. This section is promulgated under the authority of MGL c. 40A, the Home Rule Amendment of the Massachusetts Constitution and the 1996 Telecommunications Act, 47 U.S.C. § 332(c)(7)(A). A wireless communications facility shall not be placed, constructed or modified except in accordance with the provisions of this bylaw.
- B. Applicability. Unless exempted in accordance with Subsection H of this section, any wireless communications facility (WCF) as defined hereunder shall require a special permit from the Planning Board.
- C. Definitions. Where used in this section, the following terms shall have the following meanings:
 - COMMUNICATION BUILDING — Any building utilized primarily for the installation and operation of equipment for generating or receiving electromagnetic radiation and which is accessory to a communication structure.
 - COMMUNICATION MONOPOLE — Any cylindrical pole intended to support equipment used for the transmission and reception of electromagnetic radiation, including antennas, wiring or other devices attached thereto.
 - COMMUNICATION STRUCTURE — Any structure intended to support equipment used for the transmission and/or reception of electromagnetic radiation, including communication monopoles, antennas, wiring or other devices attached thereto. Such a structure shall not

include a lattice tower.

ELIGIBLE FACILITIES REQUEST — Any request for modification of an existing wireless tower or base station that involves co-location of new transmission equipment, removal of transmission equipment, or replacement of transmission equipment.

LATTICE TOWER — A type of mount that is self-supporting with multiple legs and cross-bracing of structural steel.

MOUNT — The structure or surface upon which antennas are mounted, including the following four types of mounts:

- (1) **ROOF-MOUNTED** — Mounted on the roof of a building.
- (2) **SIDE-MOUNTED** — Mounted on the side of a building.
- (3) **GROUND-MOUNTED** — Mounted on the ground.
- (4) **INTERIOR-MOUNTED** — Mounted within a building such that the WCF is not visible from the exterior of the building/structure.

RADIOFREQUENCY (RF) ENGINEER — An engineer specializing in electrical or microwave engineering, especially the study of radio frequencies.

RADIOFREQUENCY RADIATION (RFR) — The emissions from WCFs.

WIRELESS COMMUNICATIONS FACILITY (WCF) — A facility used for the purpose of commercial or public wireless communications uses, such as cellular telephone services, enhanced specialized mobile radio services, microwave communications, personal wireless communications services, paging services and the like, as defined in Section 704 of the federal Telecommunications Act of 1996,⁹ as amended. Such facilities shall include towers, antennas, antenna support structures, panels, dishes, communication buildings, communication structures and accessory structures in their entirety or as separate components.

D. Application process. Every special permit application for a WCF shall be made under the provisions of § 200-3.4 and filed on the applicable application form available from the Planning Board.

- (1) An application for a special permit for a WCF may be approved if the applicant satisfies the requirements of this section and § 200-3.4.
- (2) Applications for special permits shall be denied if the applicant cannot fulfill or address the requirements of this section to the satisfaction of the Planning Board.
- (3) When considering an application for a new WCF, the Planning Board shall place great emphasis on the proximity of the WCF to residential dwellings and its impact on these residences.
- (4) A locus plan at a scale of one inch equals 100 feet shall be submitted which shall show all property lines, the exact location of the proposed structure(s), streets, landscape

9. Editor's Note: See 47 U.S.C. § 332.

features, residential dwellings, and all buildings within 500 feet of the WCF. Such plan shall also include an engineer's certification stating that all property lines of the lot on which the WCF is proposed to be located are not within 1,000 feet of any school property line. **[Amended 1-24-2022 STM by Art. 16]**

- (5) The following information shall be prepared by one or more professional engineers:
 - (a) A description, including illustrations and photographs, of the monopole and the technical, economic and other reasons for the proposed location, height and design.
 - (b) Confirmation that the monopole complies with, or is exempt from, all applicable federal and state standards.
 - (c) A description of the capacity of the monopole, including the number and type of panels, antennas and/or transmitter receivers that it can accommodate and the basis for these calculations.
 - (d) Material describing a specific plan for a balloon or similar test, including the date and time, as well as a rain date and time, shall be submitted with the application. The Planning Board shall approve the plan and specify the manner by which the applicant shall give notice to the public.
- (6) In addition to the filing fees, the applicant shall pay any additional cost of retaining professional services if such services are deemed necessary by the Planning Board.
- (7) Any special permit granted under this section shall lapse within two years of the date of the grant, not including the time required to pursue or await the termination of an appeal under MGL c. 40A, § 17, if substantial use thereof has not sooner commenced except for good cause or, in the case of a permit for construction, if construction has not begun within two years of the date of grant, except for good cause.

E. General requirements.

- (1) No WCF shall be placed, constructed or modified except in compliance with this Zoning Bylaw.
- (2) All WCFs shall be co-located, to the maximum extent practicable and technologically feasible, with one or more WCFs for which a special permit has been previously granted and whose height, location and characteristics meet the needs of the proposed new WCF. The applicant shall demonstrate to the Planning Board that it has made a reasonable effort to co-locate the proposed WCF upon an existing structure or WCF.
- (3) All new wireless communication monopoles or support structures shall be designed and constructed, to the maximum extent practicable with existing technology and with height limits set forth in this bylaw, for co-location of antennas and other necessary facilities for at least three other wireless communication providers, and shall offer space to all other providers at market rates. Any special permit granted for a new WCF under this section shall be conditioned upon the written agreement of the WCF operator to allow the co-location of at least three other wireless communication providers on commercially reasonable terms. If co-location facilities are not installed at the time of

- construction of the WCF, then, at the time of any addition of a co-located facility, the holder of the special permit and the new provider shall notify the Planning Board and the Building Inspector that the installation has occurred and certify that the installation has been performed in accordance with the special permit for the WCF.
- (4) No WCF shall contain more than one monopole, tower or other structure for elevating an antenna or dish. No more than one WCF, except co-locators, shall be constructed on one lot. In no event shall any WCF be located closer than one mile to any other such WCF, unless the applicant can show that no existing space on the existing WCF can be leased or procured.
 - (5) The maximum height of the WCF, measured from the mean finished ground level, shall not exceed 120 feet. The Planning Board may waive such requirement in exceptional circumstances to allow a greater height where such action is in the public interest and is not inconsistent with the purpose and intent of the Zoning Bylaw.
 - (6) No tower shall be located within 500 feet of any residence.
 - (7) The property line of a WCF shall be a minimum of 1,000 feet from any school property line.
 - (8) All structures associated with a WCF shall be removed within one year of the cessation of said use.
 - (9) Radiofrequency radiation measurement. After the WCF is operational, the applicant shall submit to the Planning Board and the Building Inspector, within 90 days of beginning operations, and at annual intervals, existing measurements of RFR from the WCF. All annual reports shall be due July 1 of each year. Such measurements shall be performed by an independent consultant and shall be signed and certified by an RF engineer, stating that RFR measurements are accurate and meet FCC regulations. Testing shall be done for all freestanding facilities and all mounted facilities. The RFR shall not exceed FCC regulations.
 - (10) Noise measurement. After the WCF is operational, the applicant shall submit to the Planning Board and the Building Inspector, within 90 days of beginning of operations, and at annual intervals, existing measurements of noise from the WCF. All annual reports shall be due July 1 of each year. Such measurements shall be performed by an independent consultant and shall be signed by an acoustical engineer, stating that noise measurements are accurate. Testing shall be done for all freestanding facilities and all mounted facilities.
 - (11) As a condition for any special permit for the placement, construction or modification of a WCF, the applicant shall provide a bond, in a form acceptable to the Planning Board, or shall place into escrow a sum of money sufficient to cover the costs of removing the WCF from the subject property and, furthermore, said funds shall be held by the Town Treasurer or an independent escrow agent to be appointed by the carrier and the Planning Board. The amount of the surety shall be certified by an engineer, architect or other qualified professional registered to practice in the Commonwealth of Massachusetts. The applicant shall authorize and, as necessary, shall provide the

authorization of the owner of the property to allow the Town or the escrow agent to enter upon the subject property to remove the WCF when the WCF has been abandoned or discontinued.

- (12) A WCF shall be deemed to be abandoned or discontinued if it has not been used for the purpose for which it was constructed for a period of one year or more. Once abandonment or discontinuance has occurred, the applicant shall remove the WCF from the subject property within 90 days. In the event that the applicant fails to remove the WCF, the Town shall give notice to the applicant and, if appropriate, the independent escrow agent that the WCF shall be removed forthwith and the Town or the escrow agent, after affording written notice seven days in advance to the applicant, shall remove the WCF.
 - (13) The special permit shall further state that, in the event the amount of surety is insufficient to cover the costs of removal, the Town may place a lien upon the property to cover the difference in cost.
 - (14) The applicant shall provide to the Planning Board a contact for emergencies, and said contact person and phone number and the owner of the WCF and phone number shall be posted on the fence surrounding the WCF.
 - (15) A qualified, independent structural engineer shall perform a structural safety inspection of the WCF at least every two years and shall deliver a copy of said reports to the Town Engineer on July 1. All structural safety deficiencies noted in any such report shall be remedied and the Town Engineer notified by the structural engineer within 60 days of the date of the report.
- F. Design provisions. Design provisions for each WCF shall include, but are not limited to:
- (1) No new WCF shall be placed or constructed that uses a lattice-type construction which requires three or more legs or guy wire supports or both.
 - (2) Except as provided herein, every WCF shall comply with all applicable signage regulations set forth in this section. Notwithstanding any other regulation, however, no WCF shall place any signage above the height of 10 feet as measured from the ground to the highest point of the sign or 12 feet to the top of the sign structure.
 - (3) All monopoles, antennas, antenna support structures and similar facilities shall be of neutral colors that are harmonious with, and blend with, the natural features, buildings and structures of the surrounding environment. Such structures shall be constructed out of nonreflective materials.
 - (4) Every building-mounted WCF shall be designed and located so as to appear to be an integral part of the existing architecture of the building and shall be of colors that match and/or blend with those of the building.
 - (5) The related unmanned equipment and/or building, per carrier, shall not contain more than 200 square feet of gross floor area or be more than 10 feet in height.
 - (6) There shall be a minimum of one parking space for each WCF, to be used in connection

with the maintenance of the site, and not to be used for the permanent storage of vehicles or other equipment.

- (7) Every WCF shall be protected against unauthorized climbing or other access by the public. The fencing shall be compatible with the scenic character of the Town and shall not be constructed of barbed wire or razor wire.
- (8) Wireless communications facilities shall be lighted only if required by the Federal Aviation Administration (FAA). Lighting of equipment structures and any other facilities on site shall be shielded from abutting properties.
- (9) Applicants shall submit eight view lines shown in a one-mile radius from the site, beginning at true north and continuing clockwise at forty-five-degree intervals. Said view lines shall, to the extent feasible, be taken from existing vantage points commonly used by the public, such as public ways, buildings or facilities. The submittal shall include unaltered photographs taken from eye level, five feet above grade, which show the existing condition of these view lines, as well as accurate scale perspective elevation drawings, computer-altered photographs or other accurate representations showing said view lines with the WCF in place.
- (10) Landscape plans submitted with the application shall identify all existing vegetation, shall indicate which vegetation is to be removed or altered, and shall show all proposed new vegetation and other landscape treatments.
- (11) Every WCF shall be located on the landscape in such a manner so as to minimize visibility from abutting streets and structures and to limit the need to remove existing vegetation. All equipment shall be colored, molded and/or installed to blend into the structure and/or landscape.

G. Environmental standards.

- (1) No hazardous waste shall be discharged on the site of any WCF. If any hazardous materials are to be used on site, there shall be provisions for full containment of such materials. An enclosed containment area shall be provided with a sealed floor, designed to contain at least 110% of the volume of the hazardous materials stored or used on the site.
- (2) Ground-mounted equipment for a WCF shall not generate noise in such concentrations and of such duration as to:
 - (a) Be greater than 50 dB at any audible frequency measured at the WCF property line;
 - (b) Be injurious or be, on the basis of current information, potentially injurious to human or animal life, to vegetation, or to property; or
 - (c) Unreasonably interfere with the comfortable enjoyment of life and property or the conduct of business.

H. Exemptions.

- (1) The following types of WCFs are exempt from the requirements of this section but shall

comply with all other applicable requirements of the Zoning Bylaw:

- (a) A television antenna or satellite dish which is accessory to a use permitted as of right in a business or residential district, provided such use does not include the provision of wireless communications services for a fee. Such antenna or dish must be:
 - [1] Less than two meters in diameter; and
 - [2] Not visible from any neighboring property or public way.
 - (b) Amateur radio towers used in accordance with the terms of any amateur radio service license issued by the FCC, provided that the tower is not used or licensed for any commercial purposes.
- (2) The following types of WCFs shall not require a special permit, but shall comply with all other requirements of this section and shall require Planning Board site plan review in accordance with § 200-3.5:
- (a) An interior-mounted WCF installed wholly within and not protruding from the interior space of an existing building or structure, excluding buildings used for residential use.
 - (b) A roof-mounted WCF installed on the roof of an existing building, providing no part of the WCF extends more than 10 feet above the existing roof and the roof of such building is at a higher elevation than any other building within 1,000 feet.
 - (c) A side-mounted WCF not projecting above the height of the existing building and not extending by more than 18 inches out from the face of the building to which it is attached.
 - (d) Any eligible facilities request as defined in this section and the Spectrum Act, 47 U.S.C. § 1455(a). Applications to modify eligible facilities shall be acted upon in accordance with the provisions of Subsection I.

I. Eligible facilities requests.

- (1) Submission requirements. Applications for an eligible facilities request shall be filed with the Planning Board and Building Department. The Building Inspector shall conduct an initial review of the application within 30 days of receipt to determine whether the application is complete. A determination of completeness by the Building Inspector shall not preclude the Planning Board from requesting additional information from the applicant if new or additional information is required by the Planning Board in conducting its review. The Building Inspector shall notify the applicant within 30 days of receipt of the application if the application is deemed incomplete. Such notice shall delineate all missing documents or information.
- (2) Review of application. The Planning Board shall conduct a limited-scope review of an eligible facilities request to determine if the proposed eligible facilities modification will result in a substantial change to the physical dimensions of an eligible facility. An eligible facilities request substantially changes the physical dimensions of an eligible

facility if it meets any of the criteria established in the FCC Eligible Facilities Request Rules.

- (3) Approval. Within 60 days of the filing of a complete eligible facilities request, less any time period that may be excluded pursuant to a tolling agreement between the applicant and the Planning Board, the Planning Board shall complete its limited-scope site plan review and approve the application unless the Planning Board determines that the application does not meet the definition of an existing eligible facility subject to the Spectrum Act, or the proposed eligible facility request proposes modifications that will substantially change the physical dimension of an eligible facility.

§ 200-9.8. Adult use recreational marijuana establishments. [Added 12-4-2017 STM by Art. 2; amended 12-10-2018 STM by Art. 2]

- A. Purpose and intent. The purpose of this bylaw is to allow for the siting of state-licensed marijuana establishments in appropriate locations consistent with MGL c. 94G and 935 CMR 500.00 and any other applicable state laws and regulations regarding adult use marijuana, also known as "adult use, recreational or nonmedical marijuana," and to impose reasonable time, place and manner restrictions on such establishments to ensure public health, safety and well-being and mitigate against undue impacts on the natural and built environment of the Town and its residents.
- B. Special permit granting authority and site plan review. Marijuana establishments shall be permitted only in accordance with this Zoning Bylaw and pursuant to a special permit and site plan review approval. The Planning Board shall be the special permit granting authority (SPGA) under this section.
- C. Definitions. Where not expressly defined herein, terms used in this bylaw shall be interpreted as defined in the regulations governing adult use of marijuana (935 CMR 500.00) and otherwise by their plain language.
- D. Marijuana Overlay District.
 - (1) Establishment. There is hereby established in the Town of Northfield a Marijuana Overlay District, the boundaries of which are shown on the Zoning Map on file with the Town Clerk.
 - (2) Marijuana Overlay District (MOD) uses.
 - (a) Land within the MOD may be used for:
 - [1] All marijuana establishments, as defined herein, subject to the provisions of this bylaw; or
 - [2] A use allowed in the underlying district, in which case the requirements of the underlying district shall apply.
 - (b) Within the MOD, all requirements of the underlying zoning district remain in effect, except where this bylaw provides an alternative to such requirements. If the provisions of this bylaw are silent on a zoning regulation, the requirements of the

underlying district shall apply. If the provisions of the MOD conflict with the requirements of the underlying district, the requirements of the MOD shall control.

E. Location and dimensional controls.

- (1) Marijuana establishments may be permitted only in the MOD and the designated locations set forth in the Schedule of Uses, § 200-5.4 of this Zoning Bylaw.
- (2) Marijuana establishments shall not be located within 500 feet of any existing public, parochial, or private school providing K-12 education, or college or state-approved day-care center. The distances under this subsection shall be measured in a straight line from the nearest point of the property line of the protected uses identified above to the nearest point of the property line of the proposed marijuana establishment.
- (3) Marijuana establishments shall be located only in permanent buildings and not within trailers, cargo containers, motor vehicles or other similar nonpermanent, movable enclosures.
- (4) No marijuana establishment shall be permitted to provide a drive-through service.
- (5) Unless explicitly stated otherwise, marijuana establishments shall meet the setback requirements of § 200-7.1 and all other dimensional requirements of the appropriate district as specified in this bylaw. **[Amended 1-24-2022 STM by Art. 16]**
- (6) Marijuana establishments shall employ odor-control technology such that no odor from any marijuana establishment can be detected by a person with an unimpaired and otherwise normal sense of smell at the exterior of the marijuana establishment or at any adjoining use or property.
- (7) Lighting at marijuana establishments shall comply with this bylaw and be shielded so as not to shed light onto adjacent properties. The Planning Board may require any artificial lighting system to employ only LED components equipped with deflectors in order to mitigate potential light pollution.

F. Site development, permitting standards and application. In addition to the special permit requirements found in § 200-3.4 and the site plan review requirements found in § 200-3.5 of this bylaw, the following shall also apply to all marijuana establishments:

- (1) Site screening. Rear and side property lines shall be screened from any neighboring residential, educational, child care or recreational uses or properties. Screening shall be determined per site plan review.
- (2) Signs. All signs for a marijuana establishment must meet the requirements of § 200-8.4 of this bylaw and the state regulations (935 CMR 500.00 et seq.).
- (3) Buildings. Appearance of buildings for marijuana establishments shall be consistent with the appearance of other buildings in Northfield, not employing unusual color or building design which would attract attention to the premises; provided, however, that marijuana retailers are limited to 1,500 square feet of gross floor area.
- (4) Cultivation. Marijuana shall be only grown indoors in greenhouses, barns or other

buildings to minimize public nuisances, including odors, noise, and lighting, to neighboring properties.

- (5) **Marketing.** Marijuana establishments shall not be allowed to disseminate or offer to disseminate marijuana marketing materials to minors or suffer minors to view displays or linger on the premises. No free samples may be provided by marijuana establishments to consumers.
- (6) **Applications.** Any applicant requesting permission to operate a marijuana establishment must file their application with the Planning Board and the Town Clerk. In addition to the information required by § 200-3.4, Special permits, the application shall also include:
 - (a) The name and address of the legal owner and licensee of the marijuana establishment;
 - (b) The name and address of all persons having lawful, equity or security interests in the marijuana establishment;
 - (c) The name and address of the manager of the licensed marijuana establishment;
 - (d) The number of proposed employees;
 - (e) Proposed security precautions;
 - (f) A detailed floor plan of the premises of the proposed marijuana establishment that identifies the square footage available and describes the functional areas of the facility.
 - (g) A site plan that includes the following information:
 - [1] Compliance with the requirements for parking and loading spaces, for lot size, frontage, yards and heights and coverage of buildings, signage and all other applicable provisions of the Zoning Bylaw;
 - [2] Convenience and safety of vehicular and pedestrian movement on the site to provide secure and safe access and egress for clients and employees arriving to and from the site;
 - [3] Convenience and safety of vehicular and pedestrian movement off the site, if vehicular and pedestrian traffic off site can reasonably be expected to be substantially affected by on-site changes;
 - [4] Adequacy as to the arrangement and the number of parking and loading spaces in relation to the proposed use of the premises, including designated parking for home delivery vehicle(s), as applicable;
 - [5] Site design such that it provides convenient, secure and safe access and egress for clients and employees arriving to and from the site;
 - [6] Design and appearance of proposed buildings, structures, freestanding signs, screening and landscaping; and

- [7] Adequacy of water supply, surface and subsurface drainage and light.
- (h) Submission of a complete list of chemicals, pesticides, fertilizers, fuels, and other potentially hazardous materials to be used or stored on the premises in quantities greater than those associated with normal household use. Depending on the quantities proposed to be used or stored on site, the Planning Board may request that a hazardous materials management plan be prepared to protect against the discharge of hazardous materials or wastes to the environment due to spillage, accidental damage, corrosion, leakage, or vandalism. The plan should include spill containment and cleanup procedures, and provisions for indoor, secured storage of hazardous materials and wastes with impervious floor surfaces.
 - (i) Submission of a water management and efficiency plan. Applicants shall provide expected water usage amounts for cultivation or processing and shall address whether such amounts will impact nearby public or private drinking water supplies or other water resources in the area.
 - (j) Submission of an odor-control plan detailing the specific odor-emitting activities or processes to be conducted on site, the source of those odors, the locations from which they are emitted from the establishment, the frequency of such odor-emitting activities, the duration of such odor-emitting activities, and the administrative of odor-control technology, including maintenance of such controls.
 - (k) Evidence that the applicant has executed a host community agreement with the Town of Northfield for the marijuana establishment.
- (7) Change in license or owner. The owner and licensee of any marijuana establishment issued a special permit under this bylaw shall report, in writing, within 10 business days any change in the name of the legal owner of the marijuana establishment or any expiration or suspension of a license to the Building Inspector and Planning Board. Any failure to meet this requirement of this bylaw will result in the immediate issuance of a cease and desist order by the Building Inspector, ordering that all activities conducted under the special permit cease immediately.
- (8) Change of ownership. A special permit issued under this section shall lapse upon any transfer of ownership or legal interest of more than 10% or change in contractual interest in the subject premises or property. The special permit may be renewed thereafter only in accordance with this section and § 200-3.4 (special permits) and § 200-3.5 (site plan review) of this bylaw. **[Amended 1-24-2022 STM by Art. 16]**
- (9) Conditions. The Planning Board may impose conditions reasonably appropriate to improve site design, traffic flow, and public safety, protect water quality, air quality, and significant environmental resources, preserve the character of the surrounding area and otherwise serve the purpose of this section. In addition to any specific conditions applicable to the applicant's marijuana establishment, the Planning Board may include the following conditions in any special permit granted under this section:
- (a) Hours of operation shall be required for all retail marijuana establishments.
 - (b) A security plan shall be required for all marijuana establishments, which shall be

subject to approval by the Fire and Police Chiefs and submitted to the Planning Board and updated on an annual basis.

- (c) Marijuana establishments may not operate, and the special permit will not be valid, until the applicant has obtained all licenses and permits issued by the Commonwealth of Massachusetts and any of its agencies for the marijuana establishment.
 - (d) A special permit may be transferred to a new owner/operator of the marijuana establishment only with the approval of the Planning Board in the form of a modification to the special permit.
 - (e) The special permit shall lapse upon the expiration or termination of the applicant's license by the Cannabis Control Commission.
 - (f) The special permit holder shall notify the Building Inspector and Planning Board, in writing, within 48 hours of the cessation of operation of the marijuana establishment or the expiration or termination of the permit holder's license with the Cannabis Control Commission. **[Amended 1-24-2022 STM by Art. 16]**
- (10) Waiver. When reviewing an application for a special permit, the Planning Board may waive any submission requirement or design guideline it determines to be unnecessary or not applicable to the review of the project, provided that the Planning Board determines that the project will not have a significant impact on the site, its relationship with abutting properties, traffic impacts to public ways, public infrastructure or services, or environmental or historic resources. Waiver requests shall be made by the applicant, in writing, with stated reasons for requesting the waiver(s). Any waivers acted on by the Planning Board shall be in writing as part of its written decision on the plan filed with the Town Clerk.
- (11) Outside consultants. The Planning Board may hire professional consultants at the applicant's expense pursuant to MGL c. 44, § 53G, to assist with review of a special permit application, provided that the procedures for hiring outside consultants are set forth in the Planning Board's rules and regulations.
- G. Expiration. A special permit to operate a marijuana establishment shall expire after a period of five calendar years from its date of issuance but shall be renewable for successive five-year periods thereafter, provided that a written request for such renewal is made to the Planning Board at least 60 calendar days prior to said expiration and further provided that no objection to said renewal is made and sustained related to compliance with the conditions of the special permit as well as public safety factors applied at the time the special permit renewal is requested.
- H. Designated number of marijuana retailers. The number of licensed marijuana retailers establishments permitted under this bylaw in the Town of Northfield shall be limited to 20% of the number of licenses issued within the Town for the retail sale of alcoholic beverages not to be drunk on the premises where sold under MGL c. 138, § 15. For the purposes of determining this limit and in the event that 20% of said licenses is not a whole number, any fraction shall be rounded up to the next highest whole number.

- I. Prohibition against on-site consumption. No marijuana shall be smoked, eaten, or otherwise consumed or ingested in public or on the premises of a marijuana establishment unless expressly permitted under this law and permitted by state law or regulation. The prohibition on on-site consumption shall also include private social clubs or any other establishment which allows for social consumption of marijuana or marijuana products on the premises, regardless of whether the product is sold to consumers on site.
- J. Prohibition against nuisances. No use shall be allowed at a marijuana establishment which creates a nuisance to abutters or to the surrounding area, or which creates any hazard, including but not limited to fire, explosion, fumes, gas, smoke, odors, obnoxious dust, vapors, offensive sound or vibration, flashes, glare, objectionable effluent or electrical interference, which may impair the normal use and peaceful enjoyment of any property, structure or dwelling in the area.
- K. Severability. The provisions of this bylaw are severable. If any provision, paragraph, sentence, or clause of this bylaw or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this bylaw.

ARTICLE 10
Special District Regulations

§ 200-10.1. Floodplain Overlay District. [Amended 5-1-2023ATM by Art. 21]

- A. Purpose. The purposes of the Floodplain Overlay District are to:
- (1) Ensure public safety through reducing flood threats to life and personal injury;
 - (2) Eliminate new hazards to emergency response officials;
 - (3) Prevent the contamination and pollution of water resources resulting from flooding, so as to protect public safety and avoid damage to wildlife habitat;
 - (4) Avoid the loss of utility services which if damaged by flooding would disrupt or shut down the utility network and impact regions of the community beyond the site of flooding;
 - (5) Eliminate costs associated with the response and cleanup of flooding conditions; and
 - (6) Reduce damage to public and private property resulting from floodwaters.
- B. Floodplain District. The Floodplain Overlay District is herein established as an overlay district. The District includes all special flood hazard areas designated on the Town of Northfield's Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency for the administration of the National Flood Insurance Program, dated September 30, 1980, and on the Flood Boundary and Floodway Map (FBFM) dated September 30, 1980. These maps indicate the 1% chance regulatory floodplain. The exact boundaries of the District shall be defined by the 1% chance base flood elevations shown on the FIRM and further defined by the Flood Insurance Study (FIS) report dated March 1980 prepared by the U.S. Department of Housing and Urban Development Federal Insurance Administration and any amendments thereto. The effective FIRM, FBFM, and FIS report are incorporated herein by reference and are on file with the Town Clerk and Building Inspector. (<https://msc.fema.gov/portal/advanceSearch>)
- C. General information.
- (1) The floodplain management regulations found in this Floodplain Overlay District section shall take precedence over any less restrictive conflicting local laws, bylaws or codes. The degree of flood protection required by this bylaw is considered reasonable by the Town but does not imply total flood protection.
 - (2) If any section, provision or portion of this bylaw is deemed to be unconstitutional or invalid by a court, the remainder of the bylaw shall be effective.
- D. Designation of a community floodplain administrator. The Town of Northfield hereby designates the position of Town Administrator to be the official Floodplain Administrator for the Town. In the event the Town Administrator position is vacant, the Building Inspector will fulfill the duties of the Floodplain Administrator. The duties of the Floodplain Administrator include:

- (1) Applying the regulations for development in the Floodplain Overlay District;
- (2) Ensuring that permits are applied for when development of any kind is proposed in the Floodplain Overlay District;
- (3) Oversight of the application and review process for development in the Floodplain Overlay District;
- (4) Coordination with other local departments and municipal officials including the Building Inspector, Highway Department, Planning Board, Zoning Board of Appeals, and Conservation Commission;
- (5) Notifying adjacent communities prior to any alteration of a watercourse;
- (6) Coordinating compliance issues and enforcement actions with the Building Inspector such as activities to correct violations of the Zoning Bylaw, and working with the appropriate local staff to coordinate such efforts;
- (7) Maintaining records of floodplain development, and keeping current and historic FEMA maps available for public inspection; and
- (8) Notifying FEMA if the Town acquires data that changes the base flood elevation in the FEMA mapped special flood hazard areas, within six months of such changes by submitting the technical or scientific data that supports the changes to:

FEMA Region I Risk Analysis Branch Chief

and copy of notification to:

Massachusetts NFIP State Coordinator MA Dept. of Conservation and Recreation

E. State variances to Building Code Floodplain Standards.

- (1) The Northfield Floodplain Administrator will request from the State Building Code Appeals Board a written and/or audible copy of the portion of any hearing related to a State Building Code variance granted for a property in the Town of Northfield, and will maintain this record in the Town's files.
- (2) The Floodplain Administrator shall also issue a letter to the property owner regarding potential impacts to the annual premiums for the flood insurance policy covering that property, in writing over the signature of a Town official that i) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for each \$100 of insurance coverage and ii) such construction below the base flood level increases risks to life and property.
- (3) Such notification shall be maintained with the record of all variance actions for the referenced development in the Floodplain Overlay District.

F. Variances from the Northfield Zoning Bylaw related to community compliance with the National Flood Insurance Program (NFIP). An application for a variance from the requirements of the Floodplain Overlay District, requested from the Zoning Board of

Appeals, must meet all the requirements set out by state law and the Zoning Bylaw (see Section 3.2). In addition to those requirements, a variance may only be granted if: 1) good and sufficient cause and exceptional non-financial hardship exist; 2) the variance will not result in additional threats to public safety, extraordinary public expense, or fraud or victimization of the public; and 3) the variance is the minimum action necessary to afford relief.

- G. Review by the Conservation Commission. The Town of Northfield, in addition to any building permit or other local, state or federal permits needed, requires a review and approval by the Conservation Commission for all proposed construction or other development in the Floodplain Overlay District. This includes new construction or changes to existing buildings, placement of manufactured homes, placement of agricultural facilities (with such review to be consistent with and to the extent permitted by MGL c. 40A, § 3), fences, sheds, storage facilities or drilling, mining, paving and any other development that might increase flooding or adversely impact flood risks to other properties. The application for review by the Conservation Commission is available from the Conservation Commission or Floodplain Administrator.
- H. Other necessary permits. The proponent must submit documentation that all necessary local, state and federal permits have been received in order to receive approval for the proposed development in the Floodplain Overlay District. Documentation must be submitted to the town's Floodplain Administrator for their review and approval.
- I. Subdivision and development proposals.
- (1) All subdivision proposals and development proposals subject to site plan review or requiring a special permit for property in the Floodplain Overlay District shall be reviewed by the Planning Board or Zoning Board of Appeals to assure that:
- (a) Such proposals minimize flood damage potential and, to the maximum extent feasible, locate all structures, roads, utilities and other infrastructure out of the Floodplain Overlay District;
- (b) Public utilities and facilities are located and constructed so as to minimize flood damage potential; and
- (c) Adequate drainage is provided.
- (2) Where such development is subject to a special permit or site plan review under Sections 3.4 and 3.5 and any other sections of the Northfield Zoning Bylaws, the Planning Board or Zoning Board of Appeals shall incorporate these standards into their review. Where such development is subject to the Subdivision Regulations of the Town of Northfield,¹⁰ the Planning Board shall incorporate these standards into their subdivision plan review.
- J. Base flood elevation data for subdivision proposals. When proposing a subdivision or other development greater than 50 lots or five acres (whichever is less), the proponent must provide technical data to establish base flood elevations for each developable parcel shown on the

10. Editor's Note: See Ch. 315, Subdivision of Land.

design plans.

- K. Unnumbered A Zones. In A Zones, in the absence of FEMA base flood elevation data and floodway data, the Building Inspector will obtain, review and reasonably utilize base flood elevation and floodway data available from a federal, state, or other source as criteria for requiring new construction, substantial improvements, or other development in Zone A to comply with one or more of the following: elevating residential structures to or above base flood level; floodproofing or elevating nonresidential structures to or above base flood level; and prohibiting encroachments in floodways.
- L. Floodway encroachment.
- (1) In Zones A, A1-30, and AE, along watercourses that have not had a regulatory floodway designated, the best available federal, state, local, or other floodway data shall be used to prohibit encroachments in floodways which would result in any increase in flood levels within the community during the occurrence of the base flood discharge.
 - (2) In Zones A1-30 and AE, along watercourses that have a regulatory floodway designated on the Town of Northfield's FIRM and/or FBFM map, encroachments in the regulatory floodway which would result in any increase in flood levels within the community during the occurrence of the base flood discharge are prohibited.
- M. Watercourse alterations or relocations in riverine areas. In a riverine situation, the Floodplain Administrator shall notify the following of any alteration or relocation of a watercourse:
- (1) Adjacent communities, especially upstream and downstream.
 - (2) Bordering states, if affected.
 - (3) NFIP State Coordinator.
 - (4) NFIP Program Specialist.
- N. AO and AH Zones drainage requirements. Within Zones AO and AH on the FIRM, adequate drainage paths must be provided around structures on slopes, to guide floodwaters around and away from proposed structures.
- O. Recreational vehicles. In A1-30, AH, AE Zones, all recreational vehicles to be placed on a site must be elevated and anchored in accordance with the Zone's regulations for foundation and elevation requirements or be on the site for less than 180 consecutive days or be fully licensed and highway ready.
- P. Local enforcement. The Floodplain Administrator and/or Zoning Enforcement Officer will be responsible for issuing a notice of noncompliance to the property owner for any noncompliant floodplain development in the Floodplain Overlay District. Such notice will identify the noncompliant development and will contain instructions regarding the actions that the property owner must take in order to come into compliance. Such actions may include, but are not limited to, removal of the structures or paving that might increase flooding or adversely impact flood risks to other properties. Any person violating the Floodplain Overlay District Bylaw shall be subject to a penalty of \$300 for each offense. Each day that such violation continues shall constitute a separate offense.

Q. Definitions.

DEVELOPMENT — Any man-made change to improved or unimproved real estate, including but not limited to building or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. (44 CFR 59)

FLOOD BOUNDARY AND FLOODWAY MAP — An official map of a community issued by FEMA that depicts, based on detailed analyses, the boundaries of the 100-year and 500-year floods and the 100-year floodway. (For maps prepared in 1987 and later, the floodway designation is included on the FIRM.)

FLOODWAY — The channel of the river, creek or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. (Base Code - 2015 International Building Code, Chapter 2, Section 202)

FUNCTIONALLY DEPENDENT USE — A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding and ship repair facilities, but does not include long-term storage or related manufacturing facilities. (44 CFR 59) Also (Referenced Standard ASCE 24-14)

HIGHEST ADJACENT GRADE — The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure. (44 CFR 59)

HISTORIC STRUCTURE — Any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior;
or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (a) By an approved state program as determined by the Secretary of the Interior;
or
 - (b) Directly by the Secretary of the Interior in states without approved programs.
(44 CFR 59)

NEW CONSTRUCTION — Structures for which the start of construction commenced on or after the effective date of these provisions (May 1, 2023) of the Northfield Floodplain Overlay District Bylaw. In addition, any subsequent substantial improvements to structures existing on or after September 30, 1980 (the adoption date of Northfield's first Floodplain Bylaw) will also be subject to the provisions of this bylaw. New construction includes work

determined to be substantial improvement. (Referenced Standard ASCE 24-14)

RECREATIONAL VEHICLE — A vehicle which is:

- (1) Built on a single chassis;
- (2) Four hundred square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by a light duty truck; and
- (4) Designed primarily for use as temporary living quarters for recreational, camping, travel, or seasonal use but not for use as a permanent dwelling. (44 CFR 59)

REGULATORY FLOODWAY — See "floodway."

SPECIAL FLOOD HAZARD AREA — The land area subject to flood hazards and shown on a Flood Insurance Rate Map or other flood hazard map as Zone A, AE, A1-30, A99, AR, AO, or AH. (Base Code — 2015 International Building Code, Chapter 2, Section 202)

START OF CONSTRUCTION — The date of issuance of a building permit for new construction and substantial improvements to existing structures, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement is within 180 days after the date of issuance. The actual start of construction means the date of the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of a slab or footings, installation of pilings or construction of columns. For the purposes of establishing the start of construction, permanent construction does not include land preparation (such as clearing, excavation, grading or filling), the installation of streets or walkways, excavation for a basement, footings, piers or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building. (Base Code - 2015 International Building Code, Chapter 2, Section 202)

STRUCTURE — For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. (44 CFR 59)

SUBSTANTIAL REPAIR OF A FOUNDATION — When work to repair or replace a foundation results in the repair or replacement of a portion of the foundation with a perimeter along the base of the foundation that equals or exceeds 50% of the perimeter of the base of the foundation measured in linear feet, or repair or replacement of 50% of the piles, columns or piers of a pile, column or pier supported foundation, the building official shall determine it to be substantial repair of a foundation. Applications determined by the building official to constitute substantial repair of a foundation shall require all existing portions of the entire building or structure to meet the requirements of 780 CMR. (As amended by 9th Edition of the State Building Code)

VARIANCE — A grant of relief by a community from the terms of a floodplain management regulation. (44 CFR 59)

VIOLATION — The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in 44 CFR § 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided. (44 CFR 59)

- R. Definitions of Flood Zones. All of the terms below are defined in the 44 CFR 64.3.

ZONE A — An area of special flood hazard without water surface elevations determined.

ZONE A1-30 and ZONE AE — Area of special flood hazard with water surface elevations determined.

ZONE A99 — Area of special flood hazard where enough progress has been made on a protective system, such as dikes, dams, and levees, to consider it complete for insurance rating purposes. (Flood elevations may not be determined.)

ZONE AH — Areas of special flood hazards having shallow water depths and/or unpredictable flow paths between one and three feet, and with water surface elevations determined.

ZONE AO — Area of special flood hazards having shallow water depths and/or unpredictable flow paths between one and three feet. (Velocity flow may be evident; such flooding is characterized by ponding or sheet flow.)

ZONES B, C, AND X — Areas of minimal or moderate flood hazards or areas of future-conditions flood hazard. (Zone X replaces Zones B and C on new and revised maps.)

- S. Regulations. The Floodplain Administrator may adopt regulations and standard forms for the purpose of administering and implementing this bylaw.

§ 200-10.2. Water Supply Protection District.

- A. Purpose. The purpose of the Water Supply Protection District is to promote the health, safety, and welfare of the community by preserving and maintaining the existing and potential groundwater and surface water supply resources for private and public water wells and reservoirs within the Town of Northfield. The bylaw's provisions are intended to protect these resources and their recharge areas from any use of land or structures which reduces the quality or quantity of those water supplies.
- B. District boundaries. The Water Supply Protection District is an overlay district and shall be superimposed on other existing districts. The "Water Supply Protection District" is defined as all those areas delineated as Water Supply Protection Zones on the overlay map entitled "Northfield Water Supply Protection District Map," dated 1987, at a scale of one inch to 1,000 feet, on file with the Town Clerk. The boundaries indicated on the map reflect the best hydrogeologic information available as of the date of this map. The district shall include the following zones:
- (1) Zone 1: All land within 400 horizontal feet of the Strowbridge Well.
 - (2) Zone 2: All land greater than 400 horizontal feet but less than 2,640 horizontal feet of the Strowbridge Well, per State Division of Water Supply, June 1982.

- (3) Zone 3: Within the Wait Brook watershed, all land upgradient of the Wait Brook Well, and all land within a 400-foot radius of the well.
 - (4) Zone 4: Within the Louisiana Brook watershed, all land upgradient of the East Northfield Water Company Reservoir which recharges the reservoir.
 - (5) Zone 5: Within the Minot and Warwick Brooks watershed, all land area upgradient of the Strowbridge Well not already included in Zone 2, and all land upgradient of the Northfield Reservoir.
 - (6) Zone 6: Within the Millers Brook watershed, all land upgradient and east of Capt. Beers Plain Road and north of New Plain Road.
 - (7) Zone 7: All land within an area bounded by School Street to the north, a line parallel to and 500 feet east of East Street on the west, Maple Street on the south, and Zones 5 and 6 on the east. **[Amended 1-24-2022 STM by Art. 16]**
- C. Where the bounds of the Water Supply Protection Overlay District are in doubt or in dispute, the burden of proof shall be upon the owner(s) of the land in question to show where those bounds should be properly located. The Planning Board may inspect the site for evidence of direction of surface flow. The Planning Board shall make a final determination of a boundary dispute. If the results of further investigation by the Planning Board reveal that the bounds delineated on the map are incorrect, the Board shall propose that the map be amended accordingly, per MGL c. 40A, § 5.
- D. All uses and other provisions of Northfield's Zoning Bylaw applying to existing districts shall remain in force and effect, except that where this district imposes greater or additional restrictions and requirements, those restrictions and requirements shall prevail. Potential pollution sources, such as on-site wastewater disposal system, and any activities or uses not permitted within the district shall, to the degree feasible, occur on that portion of the lot that is outside the district, and at a distance of at least 100 feet from its boundary. Existing-by-right, permitted, and nonconforming uses can continue.
- E. Within the Water Supply Protection District, the following uses are prohibited:
- (1) Zone 1: All uses are prohibited with the exception of conservation of soil, water, plants, and wildlife; proper operation and maintenance of water control, supply, and conservation devices; maintenance and repair of any existing structure, provided there is no increase in impermeable area; nonintensive agricultural uses (pasture, light grazing, hay), provided that pesticides are not applied; where the application of fertilizers is made, the groundwater quality resulting from such application shall not fall below the standards established by the Drinking Water Standards of Massachusetts, 310 CMR 22.
 - (2) Zones 2 through 7:
 - (a) Manufacture or disposal of toxic or hazardous materials. Use, storage or transport of toxic or hazardous materials except for household or agricultural uses;
 - (b) Sanitary landfill, junkyard, salvage yard, road salt stockpile;

- (c) Trucking or bus terminals, gasoline stations, car washes, auto repair shops (including auto repair shops considered to be a home occupation);
 - (d) Business and industrial uses, not agricultural, which involve on-site disposal of process wastes;
 - (e) Underground or aboveground storage of fuel oil, gasoline or hazardous materials;
 - (f) Commercial mining of land;
 - (g) Disposal of liquid or leachable wastes other than sanitary domestic wastes or land application of manure for agricultural use;
 - (h) Outdoor storage of any hazardous substances, including pesticides, except in product-tight containers which are protected from the elements, leakage, accidental damage, and vandalism;
 - (i) Coverage of lots with impervious or semipervious materials, including driveways, paving, buildings, and structures, to a degree greater than 25% of total lot area.
- F. Site plan review, as required under § 200-3.5, shall be a prerequisite to all special permits issued in the Water Supply Protection District. Uses requiring a special permit from the Board of Appeals in Zones 2 through 7 are: **[Amended 1-24-2022 STM by Art. 16]**
- (1) Replacement of an underground fuel storage system, with evidence of compliance with the provisions of 527 CMR 1.00 (Massachusetts Comprehensive Fire Safety Code).
 - (2) Business and industrial activities other than agricultural.
 - (3) Uses which generate design flow, as defined in 310 CMR 15.002, which exceeds 1,500 gallons per day.
 - (4) Installation of a septic tank, or construction of a septic tank leach field or other individual waste installation within a horizontal distance of 100 feet on each side of the center line of each and every stream.
 - (5) Construction of any building or structure intended for human residence within a horizontal distance of 100 feet on each side of the center line of each and every stream.
 - (6) Grading or construction on slopes in excess of 25%, which shall be granted only upon demonstration that adequate provisions have been made to protect against erosion, soil instability, uncontrolled surface water runoff, or other environmental degradation.

§ 200-10.3. Solar Overlay District.

A. Purposes.

- (1) The purpose of the Solar Overlay District is to promote the creation of new large-scale ground-mounted solar photovoltaic installations by providing standards for the placement, design, construction, operation, monitoring, modification and removal of such installations that address public safety, minimize impacts on scenic, natural and historic resources and provide adequate financial assurance for the eventual

decommissioning of such installations.

- (2) The provisions set forth in this section shall apply to the construction, operation, modification, and/or repair of large-scale ground-mounted solar photovoltaic installations with a total solar photovoltaic array area of more than 1,500 square feet proposed to be constructed after the effective date of this section. Smaller-scale systems (not more than 1,500 square feet of solar photovoltaic array area) need not comply with this section but shall require a building permit and must comply with all applicable local, state and federal requirements and other provisions of this bylaw.
- B. District boundaries. The Solar Overlay District is hereby established as an overlay district and shall be superimposed on other existing districts. The "Solar Overlay District" is defined as all those areas delineated as Solar Overlay Zone on the overlay map entitled "Northfield Solar Overlay Zone Map," dated 2011 and on file with the Town Clerk. The district shall include the following zones:
- (1) Zone 1: The eastern end of Town parcel 25-A-1, the western boundary being defined by the following three straight-line segments: beginning at point (42° 42.332 N, 72° 29.069 W), then proceeding to point (42° 42.076 N, 72° 29.127 W), then proceeding to point (42° 42.030 N, 72° 29.301 W), and then proceeding to point (42° 41.933 N, 72° 29.285 W).
 - (2) Zone 2: Entire Town parcel 29-E-1, approximately 80 acres, bordered roughly by the Connecticut River on the east, the railroad on the north, and Bennett Brook Road on the west.
- C. Applicability. Large-scale ground-mounted solar photovoltaic installations that occupy no more than five acres of land on one or more adjacent parcels in common ownership (including those separated by a roadway) proposed to be constructed in the Solar Overlay District are permitted as of right, subject to site plan review under § 200-3.5 and this section. All other proposed large-scale ground-mounted solar photovoltaic installations require a special permit and site plan review in accordance with this bylaw.
- D. Definitions. As used in this section, the following terms shall have the meanings indicated:
- APPURTENANT STRUCTURES — All structures, the use of which is appurtenant to a large-scale ground-mounted solar photovoltaic installation, including, but not limited to, equipment shelters, storage facilities, transformers, and substations.
- AS-OF-RIGHT SITING — Development may proceed without the need for a special permit, variance, amendment, waiver, or other discretionary approval. Such development is subject to site plan review. Projects conforming to this bylaw, including this section, cannot be prohibited, but can be reasonably regulated by the Building Inspector. **[Amended 1-24-2022 STM by Art. 16]**
- BUILDING INSPECTOR — The person designated by § 200-3.1A of this bylaw and charged with the enforcement of the bylaw.
- BUILDING PERMIT — A construction permit issued by the Building Inspector; the building permit evidences that the project is compliant with the state and federal building codes as well as this bylaw.

DESIGNATED LOCATION — The locations designated by the Solar Overlay District described in Subsection B of this section, where large-scale ground-mounted solar photovoltaic installations may be sited as of right. Said locations are shown on the Town's Official Zoning Map, which is on file in the office of the Town Clerk.

LARGE-SCALE GROUND-MOUNTED SOLAR PHOTOVOLTAIC INSTALLATION — A solar photovoltaic system that is structurally mounted on the ground and is not building-mounted, and has a total solar photovoltaic array area of more than 1,500 square feet.

SITE PLAN REVIEW — Review by the Northfield Planning Board in accordance with this section and § 200-3.5.

SOLAR PHOTOVOLTAIC ARRAY — An arrangement of solar photovoltaic panels.

- E. General requirements for all large-scale ground-mounted solar power generation installations. The following requirements are common to all large-scale ground-mounted solar photovoltaic installations to be sited in designated locations:
- (1) Compliance with laws and regulations. The construction and operation of all large-scale ground-mounted solar photovoltaic installations shall be consistent with all applicable local, state and federal requirements, including but not limited to all applicable safety, construction, electrical, and communications requirements. All buildings and fixtures forming part of a solar photovoltaic installation shall be constructed in accordance with the Massachusetts State Building Code.
 - (2) Building permit. No large-scale ground-mounted solar photovoltaic installation shall be constructed, installed, or modified without first obtaining a building permit.
 - (3) Fees. The application for a building permit for a large-scale ground-mounted solar photovoltaic installation must be accompanied by the application fees required for a building permit and site plan review.
 - (4) Site plan review. Large-scale ground-mounted solar photovoltaic installations shall be subject to site plan review by the Planning Board in accordance with this section and § 200-3.5 prior to construction, installation, or modification. Site plan submission requirements and procedures shall be in accordance with the Planning Board's rules and regulations.
 - (5) Setback and height requirements. For large-scale ground-mounted solar photovoltaic installations, including appurtenant structures and parking areas, setbacks shall be at least 100 feet from any property boundary; the minimum setback areas are not included in the calculation of the five-acre maximum specified in this bylaw. The height of a large-scale ground-mounted solar photovoltaic installation or any appurtenant structure shall not exceed 20 feet.
 - (6) Appurtenant structures. All appurtenant structures, including but not limited to equipment shelters, storage facilities, transformers, and substations, shall be architecturally compatible with each other. Whenever reasonable, structures should be shaded from view by vegetation and/or joined or clustered to avoid adverse visual impacts.

(7) Design and performance standards.

- (a) Lighting. Lighting of solar photovoltaic installations shall be consistent with local, state and federal law. Lighting of other parts of the installation, such as appurtenant structures, shall be limited to that required for safety and operational purposes, and shall be reasonably shielded from abutting properties. Where feasible, lighting of the solar photovoltaic installation shall be directed downward and shall incorporate full cutoff fixtures to reduce light pollution.
- (b) Signage. Signs on large-scale ground-mounted solar photovoltaic installations shall comply with § 200-8.4 of this bylaw. A sign consistent with the bylaw shall be required to identify the owner and provide a twenty-four-hour emergency contact phone number. Solar electric installations shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the solar electric installation.
- (c) Utility connections. Reasonable efforts, as determined by the Planning Board, shall be made to place all utility connections underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above the ground if required by the utility provider.
- (d) Roads. Access roads shall be constructed to minimize grading, removal of stone walls or street trees, and minimize impacts to environmental or historical resources.
- (e) Control of vegetation. Herbicides may not be used to control vegetation. Mowing or the use of pervious pavers or geotextile materials underneath the solar array are possible alternatives.
- (f) Hazardous materials. Hazardous materials stored, used, or generated on site shall not exceed the amount for a very small quantity generator of hazardous waste as defined by the DEP pursuant to MassDEP regulations 310 CMR 30.000 and shall meet all requirements of the DEP, including storage of hazardous materials in a building with an impervious floor that is not adjacent to any floor drains to prevent discharge to the outside environment. If hazardous materials are utilized within the solar electric equipment, then impervious containment areas capable of controlling any release to the environment and to prevent potential contamination of groundwater are required.
- (g) Noise. Sound or noise levels may not exceed 50 dBA at the boundary of the property.
- (h) Safety and environmental standards.

[1] Emergency services. The large-scale ground-mounted solar photovoltaic installation owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the Northfield Fire Chief. Upon request, the owner or operator shall cooperate with local emergency services in developing an emergency response plan. All means of shutting down the solar

photovoltaic installation shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.

- [2] Land clearing, soil erosion and habitat impacts. Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of the large-scale ground-mounted solar photovoltaic installation or otherwise prescribed by applicable laws, regulations, and this bylaw.

F. Monitoring, maintenance, and reporting.

- (1) Solar photovoltaic installation conditions. The large-scale ground-mounted solar photovoltaic installation owner or operator shall maintain the facility in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. Site access shall be maintained to a level acceptable to the local Fire Chief and Emergency Medical Services. The owner or operator shall be responsible for the cost of maintaining the solar electric installation and any access road(s), unless accepted as a public way.
- (2) Modifications. All material modifications to a large-scale ground-mounted solar photovoltaic installation made after issuance of the required building permit shall require approval by the Planning Board.
- (3) Annual reporting. The owner or operator of the installation shall submit an annual report which certifies compliance with the requirements of this bylaw and the approved site plan, including control of vegetation, noise standards, and adequacy of road access. The annual report shall also provide information on the maintenance completed during the course of the year and the amount of electricity generated by the facility. The report shall be submitted to the Selectboard, Planning Board, Fire Chief, Emergency Management Director, Building Inspector, Board of Health, and Conservation Commission (if a wetlands permit was issued) no later than 45 days after the end of the calendar year.

G. Abandonment or decommissioning.

- (1) Removal requirements. Any large-scale ground-mounted solar photovoltaic installation which has reached the end of its useful life or has been abandoned as set forth below 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.
- (2) Decommissioning shall consist of:
 - (a) Physical removal of all large-scale ground-mounted solar photovoltaic installation structures, equipment, security barriers and transmission lines from the site.
 - (b) Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.

- (c) Stabilization or revegetation 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) Abandonment.
 - (a) Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, an installation shall be considered abandoned when it fails to operate for more than one year without the written consent of the Planning Board.
 - (b) If the owner or operator of the large-scale ground-mounted solar photovoltaic installation fails to remove the installation in accordance with the requirements of this section within 150 days of abandonment or the proposed date of decommissioning, the Town retains the right, after the receipt of an appropriate court order or written consent of the owner, to enter and remove an abandoned, hazardous, or decommissioned large-scale ground-mounted solar photovoltaic installation. As a condition of site plan approval, an applicant shall agree to allow entry to remove an abandoned or decommissioned installation. The costs for the removal will be charged to the property owner in accordance with the provisions of MGL c. 139, § 3A, as a tax lien on the property.
- H. Financial surety. Applicants for large-scale ground-mounted solar photovoltaic installations shall provide a form of surety, either through escrow account, bond, or other form of surety approved by the Planning Board, to cover the cost of removal in the event the Town must remove the installation and remediate the landscape, in an amount and form determined to be reasonable by the Planning Board, but in no event to exceed more than 125% of the cost of removal and compliance with the additional requirements set forth herein, as determined by the project applicant. Such surety will not be required for municipally or state-owned facilities. The applicant shall submit a fully inclusive estimate of the costs associated with removal, prepared by a qualified engineer. The amount shall include a mechanism for calculating increased removal costs due to inflation.

Exhibit B

**Larner Consulting
Peer Review Revision for Northfield Conservation Commission**

October 16, 2024

Larner Consulting Wetlands Delineation & Permitting

October 16, 2024

Northfield Conservation Commission
Town of Northfield
69 Main Street
Northfield, MA 01360

RE: Peer Review Revision for Supplemental Information
0 Pine Meadow Road; BWC Asheula LLC Dual Use Solar Project; DEP #249-0159

Dear Commissioners:

Larner Consulting is pleased to assist the Town of Northfield Conservation Commission (the Commission) with its review of a Notice of Intent (NOI) for the dual use solar array (the Project) located on a parcel on Pine Meadow Road in Northfield, Massachusetts (the Site), filed by BWC Asheula LLC (the Applicant). The Project includes the installation of an agrivoltaic array under which the current agricultural operation will continue, a gravel access road, equipment pad, and fencing within Bordering Land Subject to Flooding, Riverfront, and Buffer. **Comments relevant to the recent supplemental information submitted will be in bold and underlined.**

Larner Consulting reviewed the wetland delineation and NOI documentation with respect to the requirements of the Massachusetts Wetlands Protection Act and implementing Regulations (the WPA); the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Regulations and Handbook (the Handbook) as it relates to the WPA; and, generally accepted wetland science practice.

Larner Consulting initially received the following documentation which served as the basis for our review:

PROPOSED AGRIVOLTAIC ARRAY BWC ASHUELA BROOK LLC SITE PLANS; 0 PINE MEADOW ROAD NORTHFIELD, MASSACHUSETTS; prepared by Field Engineering Co., Inc.; stamped by Richard R. Riccio, P.E.;, dated 2/29/2024, revised 4/3/2024

Stormwater Management System Report; BWC ASHUELA BROOK, LLC PROPOSED AGRIVOLTAIC ARRAY OFF PINE MEADOW ROAD NORTHFIELD, MASSACHUSETTS; prepared by Field Engineering Co., Inc.; stamped by Richard R. Riccio, P.E; dated 3/1/2024

NOTICE OF INTENT (NOI) DOCUMENTS; PROPOSED AGRIVOLTAIC ARRAY; Pine Meadow Road; Assessor's Map 55, Lots A4, A5 & A7, Assessor's Map 72, Lot A1, Northfield, Massachusetts, dated 4/16/2024

MassDEP File Number Issuance and Comments (DEP #249-0159)

Project Memo; Re: MA DEP FILE NO WE 249-0159, Notice of Intent Filing, Pine Meadow Road Proposed Agrivoltaic Array, dated 5/15/2024

A revised plan was received on September 9, 2024:

PROPOSED AGRIVOLTAIC ARRAY BWC ASHUELA BROOK LLC SITE PLANS; 0 PINE MEADOW ROAD NORTHFIELD, MASSACHUSETTS; prepared by Field Engineering Co., Inc.; stamped by Richard R. Riccio, P.E.;, dated 2/29/2024, revised 9/6/2024

Supplemental information was received on October 15, 2024:

Letter Regarding Surficial Soils Evaluation at 0 Pine Meadow Road, Northfield, MA Related to Notice of Intent with MassDEP File # 249-0129; prepared by David Cameron, PWS, Principal, Fleetwood Environmental Solutions, LLC, dated 10/10/2024

Letter Regarding Northfield - Proposed Agrovoltiac Array; 0 Pine Meadow Road, Northfield Assessor's Parcels 55-A4, 55-A5, 55-A7 and 72-A1; prepared by Richard R. Riccio III, P.E, Project Manager, Field Engineering Co., Inc., dated 10/15/2024

BWC Ashuela Brook-Updated Compensatory Flood Calcs; INCREMENTAL FLOOD PLAIN CALCULATIONS; Cut & Fill Sheet

2321-BWC ASHUELA-ALT IX PLAN sheet (Interconnection)

Larner Consulting notes that the supplemental material Letter Regarding Northfield - Proposed Agrovoltiac Array; 0 Pine Meadow Road, Northfield Assessor's Parcels 55-A4, 55-A5, 55-A7 and 72-A1; prepared by Richard R. Riccio III, P.E, Project Manager, Field Engineering Co., Inc., dated 10/15/2024 describes the delineation of the FEMA flood zone in detail. The Commission had expressed concerns that the boundary of the floodplain may not have been adequately delineated on-site. The supplemental letter and Larner Consulting note that the entirety of the parcel is within BLSF and no attempts have been made to overcome the presumption that the floodplain is jurisdictional. There is no greater extent of BLSF that could be determined to exist. The Applicant has assumed the greatest amount of jurisdiction that the WPA provides.

Site Visit

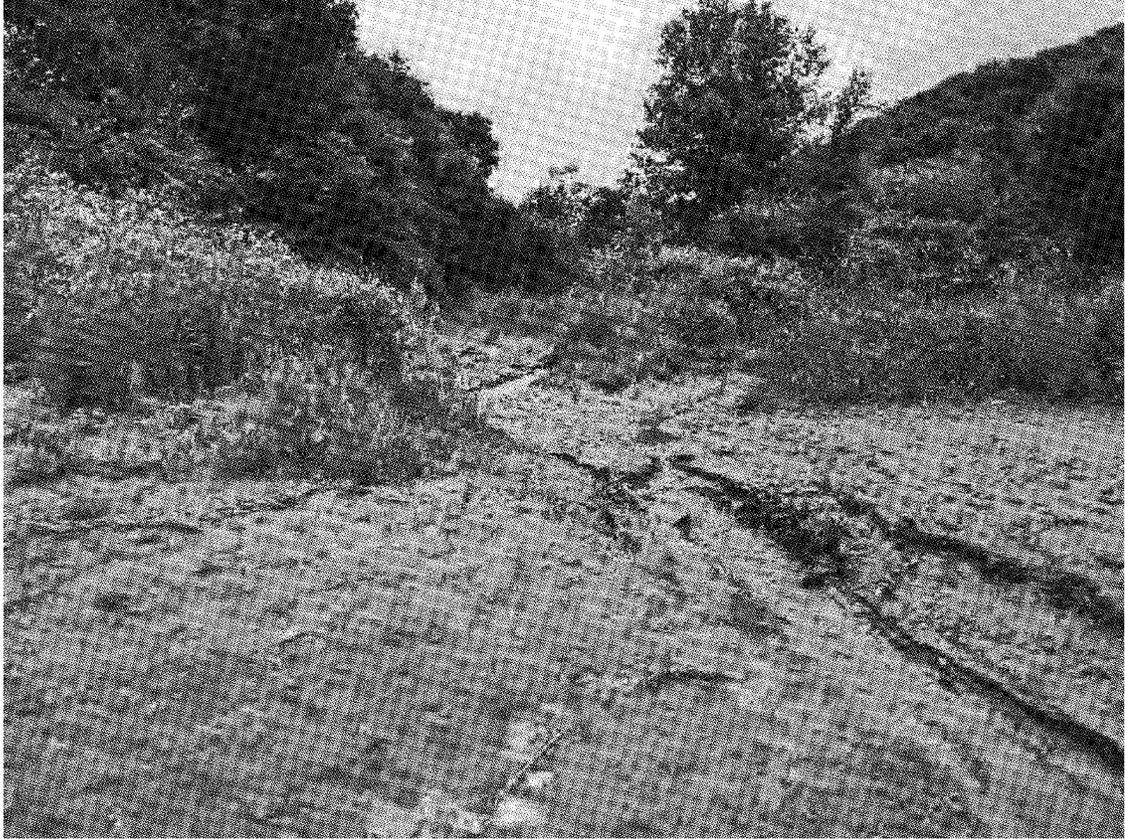
Larner Consulting conducted a site visit on June 17, 2024 accompanied by David Cameron of Fleetwood Environmental, to familiarize ourselves with the Site and adjacent area, to evaluate the existing conditions relative to the proposed Project, and to review the wetlands delineation.

Resource Area Delineation Review

On June 17, 2024, Larner Consulting and Fleetwood Environmental met on the subject property to review the delineation in the field of the MAHWL (Riverfront), BVW, and Bank Resource Areas. A delineation report with DEP data sheets was not provided, though wetland flags were evident and all flags were located and reviewed. Soil samples were taken and reviewed in both wetland and upland soils. Careful attention was given to the soils in the agricultural field as these altered sites can lead to confusing drainage patterns and soils.

Larner Consulting concurs with the delineation of the resource areas on-site and finds that Fleetwood Environmental, when faced with ambiguous field indicators, erred on the side of protecting additional BVW & Riverfront. **There is no reasonable delineation within the bounds of professional jurisdiction that would be more protective of wetland resources.** Additionally, Larner Consulting inspected within 100 and 200 feet of each of the subject sites for any additional jurisdictional areas not identified in the NOI and found no such areas.

Larner Consulting would like to note that it is unusual to review a delineation and find no flags that should be adjusted. Generally, at least one flag would be of note, and possibly require revision. Photographs are included herein to illustrate conditions at the Site and to provide documentation of the review despite our lack of comments.



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MassDEP Technical Review Comments

MassDEP has provided the following technical review comments which we have italicized below, along with Larner Consulting's commentary in plain text.

1. *The square footage of work in BLSF needs to be added to the Form 3 NOI. The red outline on the FIRM does not show the correct area of the parcels, it shows them all north of Cross Road*

A Revised Sheet 3 of the NOI Form was provided with the square footage of work proposed within BLSF and an updated FIRM was provided showing the correct area of the parcels in the 5/15/2024 Project Memo reviewed.

2. *In the future, please use the most current abutter notification form.*

Not Applicable

3. *The commission should determine if any work will be allowed to occur in the Riverfront Area to Pine Meadow Brook. The area inside the fence line is greater than 10 sq. ft., which is what the Form 3 states.*

The alternatives analysis for Riverfront for this type project is anywhere else in the town. Only a general paragraph discussed this, nothing in detail, which is not sufficient. The regulations state that as much of a project as feasible shall be sited outside the riverfront area. If siting of a project entirely outside the riverfront area is not practicable, the alternatives shall be evaluated to locate the project as far as possible from the river. If there is a practicable and substantially equivalent economic alternative with less adverse effects, the proposed work shall be denied and the applicant may either withdraw the Notice

of Intent or receive an Order of Conditions for the alternative, provided the applicant submitted sufficient information on the alternative in the Notice of Intent.” Please note the use of the word “shall”. The regulations also state the applicant shall submit information to describe sites and the work both for the proposed location and alternative site locations and configurations sufficient for a determination by the issuing authority under 310 CMR 10.58(4)(d). Please submit alternative configurations which include removing all work from the Riverfront Area, including the fencing.

Not Applicable - The revised plans dated 9/6/2024 submitted by the Applicant show the proposed fence to be moved outside of the Riverfront Area. No work is proposed in RFA.

4. *Since it does not appear that any actual soil testing was done to confirm HSG soils groups, the stormwater report is at best, a guess, by using NRCS soils data. The commission should note that the runoff numbers are lower post construction due to the change in the runoff coefficient.*

Not Applicable - While the applicant has responded, and Larner Consulting can confirm, that “The use of NRCS Soils data is standard practice in determining the hydrologic soil groups (HSG) to develop the CN coefficients for the hydrologic analysis.”, engineered stormwater calculations are beyond the expertise of this consultant. Larner Consulting can evaluate the compliance of stormwater management with the performance standards in the Handbook only.

REVISED COMMENT: The letter Regarding Surficial Soils Evaluation at 0 Pine Meadow Road, Northfield, MA Related to Notice of Intent with MassDEP File # 249-0129; prepared by David Cameron, PWS, Principal, Fleetwood Environmental Solutions, LLC, dated 10/10/2024 confirmed in the field through direct observation that the soils found on site are consistent with the NRCS mapping, and, therefore, the calculations provided for stormwater management are appropriate.

5. *For Stormwater Standard #8 compliance, Section 3.1 mentions site grading. What will be the estimated square footage of this grading and will that be a factor in Standard #8 compliance, which is during the construction period? Will sediment basins be required? It does not appear that this grading has been taken into account for compliance with the BLSF performance standards.*

The Applicant responded in the 5/15/2024 Project Memo that “There will be approximately 74,000 square feet of grading associated with the proposed fill for the equipment pad and the related cuts for the compensatory storage area. The applicant will be required to complete a Stormwater Pollution Prevention Plan (SWPPP) in compliance with the NPDES Construction General Permit for erosion and sedimentation control during construction.” Additionally, the revised plans dated 9/6/2024 submitted by the Applicant have added a “Double Row of Siltation Barrier”. ~~While the Applicant did respond to the aerial extent of grading in BLSF for the equipment pad, The Applicant has not made a direct response to the query as to whether the site grading was included in the fill impacts to BLSF, but the cut & fill calculations do only refer to the fence and array posts. As the grading around the equipment pad raises the elevation from approximately el. 202 to el. 204-206, there is additional fill in BLSF which has not been documented. It is unclear until the Applicant provides the cubic feet of fill for the equipment pad, but it is possible that the approximately 7,497 c.f. of additional compensatory storage already proposed will be sufficient to comply with the BLSF performance standards.~~

The Applicant did adequately calculate and compensate for fill in BLSF, including around the equipment pad.

6. *To help ensure that conservation commissions have sufficient expertise available to address specific issues regarding an applicant’s filing, M.G.L. c. 44, section 53g gives Commissions authority to charge a fee for the employment of outside consultants that allow for the use of the fee to ensure that they have the necessary information for them to make a decision pursuant to the Wetlands Protection Act, M.G.L. c. 131, sec. 40 and 310 CMR 10.00.*

Not Applicable

Notice of Intent Application WA Performance Standard Review

1. We note that the Applicant has submitted a Notice of Intent proposing 59,503 cubic feet of fill in Bordering Land Subject to Flooding and approximately 10 square feet of alterations to Riverfront Area
2. We note that the Applicant has submitted a revised plan that removes all proposed work from the Riverfront Area. As such, no review of compliance with the Riverfront performance standards is required. Despite this, we note that the proposed siltation fence will protect the Riverfront Area and Connecticut River from sedimentation.
3. ~~310 CMR 10.57(1)(a) states: “Bordering Land Subject to Flooding: Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed project within Bordering Land Subject to Flooding.” This is generally interpreted to mean that the Applicant must demonstrate that each cubic foot of fill will be mitigated by a cubic foot of compensatory storage **at the same elevation.**~~

~~The Notice of Intent submission contained calculations entitled “PROPOSED BWC ASHUELA BROOK AGRIVOLTAIC ARRAY FLOOD PLAIN VOLUME ALTERATION CALCULATIONS”. These calculations appear to accurately reflect the cubic feet of fill from fence and solar array posts, but does not include the cubic feet of fill from the equipment pad. The Commission should note, however, that the calculations are based on 2-foot elevation intervals and general practice is 1-foot intervals. The Project proposes 59,503 c.f. of fill from posts and proposes 67,000 c.f. of cut (compensatory storage) through gentle grading at the southern end of the site. As the grading around the equipment pad raises the elevation from approximately el. 202 to el. 204-206, there is additional fill in BLSF which has not been documented. It is unclear until the Applicant provides the cubic feet of fill for the equipment pad, but it is possible that the approximately 7,497 c.f. of additional compensatory storage already proposed will be sufficient to comply with the BLSF performance standards.~~

~~The Project as proposed provides a more than adequate volume of compensatory storage. The submitted plans do not contain enough detail to determine whether the volume cut for compensatory storage is equal to the volume of fill at the same elevation. Projects that propose to fill in BLSF are generally required to submit a “cut & fill” table showing the volume of fill and compensatory storage proposed by cubic foot at each 1-foot elevation. This is not an explicit requirement of the performance standards and the Commission should weigh the value of this information themselves. The grading which is proposed as compensatory storage is located closer to the Connecticut River than the fill and at the same general elevations as the fill. Said grading serves a dual purpose as both compensatory storage and a low impact development stormwater control measure (SCM). Therefore, Larner Consulting finds that the compensatory storage as proposed will provide for all flood storage volume that will be lost as the result of a proposed project within Bordering Land Subject to Flooding.~~

~~**Larner Consulting recommends that the Commission request the Applicant review the grading for the equipment pad and provide the volume of fill proposed in addition to the fill from the posts in order to determine the Project’s compliance with 310 CMR 10.57(1)(a). The Commission may wish to consider requesting a “cut & fill” sheet with 1-foot elevation intervals, if it believes that information will better document that all flood storage volume that will be lost as the result of a proposed project within Bordering Land Subject to Flooding.**~~

REVISION: Larner Consulting erred in reading the fill calculations. Larner Consulting amends their comment to state:

310 CMR 10.57(1)(a) states: “Bordering Land Subject to Flooding: Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed project within

Bordering Land Subject to Flooding.” This is generally interpreted to mean that the Applicant must demonstrate that each cubic foot of fill will be mitigated by a cubic foot of compensatory storage **at the same elevation.**

The Notice of Intent submission contained calculations entitled “PROPOSED BWC ASHUELA BROOK AGRIVOLTAIC ARRAY FLOOD PLAIN VOLUME ALTERATION CALCULATIONS”. These calculations appear to accurately reflect the cubic feet of fill from fence and solar array posts, but does not include the cubic feet of fill from the equipment pad. The Commission should note, however, that the calculations are based on 2-foot elevation intervals and general practice is 1-foot intervals. The Project proposes 59,503 c.f. of fill from posts and proposes 67,000 c.f. of cut (compensatory storage) through gentle grading at the southern end of the site.

The Project as proposed provides a more than adequate volume of compensatory storage. The submitted plans and supplemental documentation do not contain enough detail to determine whether the volume cut for compensatory storage is equal to the volume of fill at the same elevation. Projects that propose to fill in BLSF are generally required to submit a “cut & fill” table showing the volume of fill and compensatory storage proposed by cubic foot at each 1-foot elevation. This is not an explicit requirement of the performance standards and the Commission should weigh the value of this information themselves. The grading which is proposed as compensatory storage is located closer to the Connecticut River than the fill and should accept stillwater rise before it reaches the filled area. The storage is also at the same elevations as the fill; the only information lacking is how much cut is proposed at each elevation in response to the amount of fill proposed at each elevation. Said grading serves a dual purpose as both compensatory storage and a low-impact development stormwater control measure (SCM).

While the Commission may wish to consider requesting a cut and fill table to document that the compensatory flood storage is provided for at the same elevation as an equal amount of fill, Larner Consulting finds the Applicant has demonstrated the Project’s compliance with the performance standards for work in Bordering Land Subject to Flooding found at 310 CMR 10.57(1)..

REVISED COMMENT: The BWC Ashuela Brook-Updated Compensatory Flood Calcs; INCREMENTAL FLOOD PLAIN CALCULATIONS; Cut & Fill Sheet submitted complies with the general requirements for this performance standard. Larner Consulting notes that the Applicant’s have provided all necessary information to demonstrate compliance with BLSF performance standards.

Stormwater Management Handbook Compliance Comments

The Applicant has provided the following statements regarding compliance with the MassDEP Stormwater Handbook Standards, which we have italicized below, along with Larner Consulting's commentary in plain text.

Standard 1. No new stormwater conveyances may discharge untreated stormwater directly to, or cause erosion in wetlands or waters of the Commonwealth.

- *No proposed site stormwater conveyance system will discharge untreated stormwater runoff directly to wetlands. There are no proposed stormwater discharges from the project. The surface characteristics on the facility will remain largely unchanged following construction.*

Standard Met

Standard 2. Stormwater management systems shall be designed so that the post-development peak discharge rates do not exceed pre-development peak discharge rates.

- *As there are minimal impervious surfaces being proposed, and the surface characteristics of the project area will remain relatively unchanged following construction, a reduction in the peak discharge rates in post-development conditions is anticipated.*

Standard Met

Standard 3. Loss of annual recharge to groundwater shall be eliminated or minimized through the use of environmentally sensitive site design, low impact development techniques, stormwater best management practices, and good operation and maintenance. At a minimum, the annual recharge from the post- development site shall approximate the annual recharge from predevelopment conditions based on soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook.

- *As there is minimal new impervious area being provided in addition to crushed stone edge drains as part of this project, recharge characteristics of the site will remain unchanged.*

Standard 4. Stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS). This standard is met when:

- a) Suitable practices for source control and pollution prevention are identified in a longterm pollution prevention plan, and thereafter are implemented and maintained;*
- b) Structural stormwater best management practices are sized to capture the required water quality volume as determined in accordance with the Massachusetts Stormwater Handbook; and*
- c) Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook.*

- *The 80 percent TSS removal rate is not applicable as there are no new impervious areas being proposed on the project. The areas beneath the solar panels will be grassed or vegetated with crops and we are proposing a gravel access road which will not provide increased TSS loads to the adjacent properties and wetlands.*

Standard Not Applicable

Standard 5. For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If, through source control and/or pollution prevention, all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt and stormwater runoff, the proponent shall use the specific structural stormwater BMPs determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L.c. 21, §§ 26-53 and the regulations promulgated thereunder at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.

- *The proposed project is not considered a high intensity use with higher potential pollutant loads.*

Standard Not Applicable

Standard 6. Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply and stormwater discharges near or to any other critical area require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook.

- *The project does not discharge stormwater to any designated critical areas as defined in the Massachusetts Stormwater Handbook.*

Standard Met

- Standard 7. A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural stormwater best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.*
- *This standard is not applicable as this is not a redevelopment of a previously developed site.*

Standard Not Applicable

- Standard 8. A plan to control construction-related impacts, including erosion, sedimentation, and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) shall be developed and implemented.*
- *The proposed development will incorporate erosion and sedimentation controls to minimize the potential for sedimentation in down gradient resources. These controls will include straw wattles/silt fence barriers, and slope stabilization measures such as hay/straw wattles and silt fences. The applicant will complete a Stormwater Pollution Prevention Plan in accordance with the NPDES General Permit for Stormwater Discharges associated with Construction Projects and this SWPPP will also be used as the plan to meet this standard.*

Standard Met

- Standard 9. A Long -Term Operation and Maintenance (O&M) Plan shall be developed and implemented to ensure that stormwater management systems function as designed.*
- *The Stormwater Management Plan for this project has been developed in full compliance with the DEP Stormwater Management Policy. The Plan is based on a multi-dimensional approach to stormwater management that recognizes the need for proper site planning, source control of potential contaminants, and implementation of structural and non-structural treatment methods to ensure the protection of water resources in the vicinity of the site and adjacent properties. The Stormwater Operation and Maintenance Plan is provided on the construction drawings. A more detailed Long-Term Operation and Maintenance Plan is also included in the following sections.*

Standard Met

- Standard 10. Illicit Discharges to the Stormwater Management System are prohibited.*
- *An Illicit Discharge Compliance Statement has been completed and is included as an Appendix to this Report.*

Standard Met

Stormwater LID discussion

MassDEP Stormwater policies require the Applicant to consider implementing Low Impact Development stormwater management techniques. The Applicant has designed all Stormwater Control Measures (SCM) as LID measures. The Checklist for Stormwater Report marks the following LID techniques as utilized:

No disturbance to any Wetland Resource Areas
Use of “country drainage” versus curb and gutter conveyance and pipe
Other (describe): Minimal Impervious Area. Development will consist of grassed and gravel surfaces.

The Applicant has utilized the compensatory flood storage grading to improve peak rate flows, TSS, and erosion & sedimentation post-construction. **Larner Consulting finds this stormwater treatment plan to be effective, in compliance with the Wetlands Protection Act's requirement to adhere to the Handbook, and minimizing potential impacts on wetland resource areas.**

Larner Consulting is available to attend the public hearing, upon request, to present the results of our review and be available for discussion regarding the comments listed herein.

Thank you for the opportunity to assist the Town of Northfield with the review of this project. Should you have any questions, please do not hesitate to contact our office.

REVISED COMMENT: Larner Consulting notes that the project as presented meets all performance standards under the Wetlands Protection Act, and that the Applicant has provided all necessary information to determine the boundaries of resource areas on the property.

Sincerely,



Erica Larner, Wetlands Scientist
Larner Consulting

Exhibit C

**Beacon Integrated Solutions
Revised Special Permit and Site Plan Approval Report**

December 19, 2024



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Boston, MA 02132
Voice: 617•469•2172
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Beth S. Greenblatt
Managing Director

October 21, 2024, Revised November 13, 2024, Revised December 19, 2024

Town of Northfield
Ms. Meg Riordan, Chair
Northfield Planning Board
69 Main Street
Northfield, MA 01360

RE: Special Permit Petition and Site Plan Review for BWC Ashuela Brook Solar Array, Assessor Map 55 Lots A4.1, A5.1, A7.1, Map 72 Lot A7.1.1

Dear Chair Riordan :

Beacon Integrated Solutions (“Beacon”) was engaged by the Town of Northfield, Planning Board to review the Application filed by BWC Ashuela Brook LLC for a Large-Scale Ground-Mounted Solar Photovoltaic Systems and to report on our findings with respect to the Applicant’s compliance with the Northfield Solar Zoning By-Law. On June 10, 2024, Beacon provided its initial findings relying on the information provided by BWC Ashuela Brook LLC in its Application. Since the issuance of the June 10, 2024, report, additional information has been provided to the Planning Board by BWC Ashuela Brook LLC in connection with the Planning Board’s due diligence through the Public Hearing process.

Beacon’s updated findings are presented herein. This document replaces the October 21, 2024, document.

Procedural Background:

On March 4, 2024, BWC Ashuela Brook LLC, a Delaware special purpose entity managed by BlueWave Origination, LLC, with a legal business address located at 116 Huntington Avenue, Suite 601, Boston, MA 02116 (“Applicant”), through its Consulting Engineer, Field Engineering Co., Inc., filed an application to construct a large-scale solar facility on Pine Meadow Road in Northfield under the Town of Northfield Zoning By-laws for a Special Permit pursuant to Section 3.4, a Site Plan Review pursuant to Section 3.5 and in accordance with the Solar Generation Zoning By-law, Section 10.3.

On April 30, 2024, BWC Ashuela Brook LLC provided the Planning Board with additional information including a written response addressing questions from Beacon issued on April 8, 2024 and April 9, 2024.

On May 16, 2024, BWC Ashuela Brook LLC provided the Planning Board with additional information pertaining to the status of their Notice of Intent filed with the Northfield Conservation Commission and the Pre-Determination Application submitted to Massachusetts Department of Energy Resources, Massachusetts Department of Agricultural Resources and the University of Massachusetts Clean Energy Extension for certification of the project as an Agricultural Solar Tariff Generation Unit.

On May 23, 2024, the Planning Board held a Public Hearing.

On June 4, 2024, BWC Ashuela Brook LLC provided the Planning Board with additional information with respect to their due diligence for archaeological field investigations and interconnection with Eversource Energy.

In a letter dated June 18, 2024, the Town of Northfield received a letter from FirstLight regarding permitting guidance and authorization in connection with its Federal Energy Regulatory Commission ("FERC") licensed hydroelectric facilities. FirstLight advised that the lands adjacent to the Connecticut River within the FERC Project Boundary are owned in fee and/or subject to FirstLight's flowage and seepage rights. They further advised that no activities or uses can occur within the FERC Project Boundary or on FirstLight's lands where either fee or flowage rights exist without prior written authorization from FirstLight through the issuance of a permit.

On June 25, 2024, Field Engineering on behalf of BWC Ashuela Brook LLC submitted a written request to the Planning Board to continue the Public Hearing from June 26, 2024 to a future date in August 2024. The Public Hearing was continued to September 17, 2024.

On September 6, 2024, Field Engineering on behalf of BWC Ashuela Brook LLC submitted to the Planning Board revised Site Drawings documenting a modification to the original submission impacting the footprint of the solar project, fencing, access road, equipment pad, and utility interconnection design, along with supporting documentation addressing the revised Site Drawings, including revised applications and documents to the various authorities and parties with jurisdiction for permitting, utility interconnection, FirstLight flowage areas and SMART Program certification. The revised Site Drawings presents a more significant buffer between Pine Meadow Road and the woven agricultural fence.

On October 2, 2024, in connection with the continued Public Hearing scheduled for October 8, 2024, Field Engineering on behalf of BWC Ashuela Brook LLC submitted to the Planning Board additional information pertaining to the revised utility interconnection design, and updated information on farming plan, outreach to the Northfield Fire Department and a proposed approach to mitigating visual impacts to abutters.

During the October 8, 2024, Public Hearing, BWC Ashuela Brook LLC presented a Letter of Filing Consent from FirstLight addressing the current status of their required permitting process. The Public Hearing was continued to October 24, 2024.

In response to the Planning Board's request during the October 8, 2024 Public Hearing, on October 17, 2024, BWC Ashuela Brook LLC provided the Planning Board with a revised peer review report originally submitted to the Conservation Commission by its consultant, Larner Consulting.

Project Overview:

The Applicant is proposing to construct, own, operate and maintain a ground-mounted dual-use, single axis tracker solar photovoltaic array (hereinafter referred to as "Ashuela Brook Solar"), sized at 2.29-megawatt (MW) DC/2-megawatts (MW) AC plus appurtenant equipment on approximately 16.1 acres of cleared agricultural land located across the parcels on Pine Meadow Road, Northfield MA. While the area enclosed by an agricultural fence will span approximately 16.1 acres, according to the Applicant, the area under the solar modules is approximately 3 acres. The Applicant has indicated that the Agrivoltaic array will consist of approximately 4,300 solar modules mounted on ten-foot-high pole or screw steel posts with solar tracking systems mounted on top of the steel posts. The height of the module when in its vertical position is a maximum of 14 feet from the ground.

Ashuela Brook Solar will not include the provision of battery energy storage, as the Applicant sought and received an exemption from the Department of Energy Resources (“DOER”) in connection with qualifying Ashuela Brook Solar for the Solar Massachusetts Renewable Target (“SMART”) Program.

The Applicant further indicated that it will only pursue the implementation of Ashuela Brook Solar if it receives certification from the SMART Program as an Agriculture Solar Tariff Generation Unit (“ASTGU”). In support of that goal, the Applicant provided a copy of the Pre-Determination Form filed (signed on May 14, 2024) with the DOER and the Massachusetts Department of Agricultural Resources (“MDAR”) detailing the required information for determination of the design eligibility and farming plan for an ASTGU under the SMART Program. The Applicant indicated that the review by the regulatory agencies, along with the University of Massachusetts Clean Energy Extension (“UMass CEE”), and final determination by DOER anticipated approval in the Fall of 2024.

In its submittal of its revised Site Drawings on September 6, 2024, the Applicant provided an updated farming plan along with documentation of its revised submission to the DOER, MDAR and the UMass CEE for consideration of its application for certification under the SMART Program. The original farming plan included supporting a combination of livestock production, hay, baleage and crops, including corn. The revised proposed farming plan will use approximately 51% of the fenced area for organic vegetable production for retail sales, initially including beets, cabbage, garlic and tomatoes. The remaining area will serve as a buffer between the organic crop area and adjoining land and is expected to be managed by the farmer according to the Applicant with hay and baleage production. The Applicant has indicated to the aforementioned agencies that their approach to organic vegetable production is anticipated to be phased in to full production over a five-year period.

On November 13, 2024, the Applicant provided documentation dated November 8, 2024, from DOER indicating that Ashuela Brook Solar had sufficiently demonstrated that it likely satisfied all criteria set forth in 225 CMR 20.00 to be considered an ASTGU received certification from the SMART program as an approved ASTGU. Beacon notes that this approval is a pre-determination of Ashuela Brook Solar’s eligibility as an ASTGU and does not specifically qualify Ashuela Brook Solar under the SMART program qualifications guidelines specified under 225 CMR 20.06. Beacon recommends that the Planning Board Condition the Special Permit to require the Applicant to provide copies of the Annual Report filed annually with the MDAR and DOER in compliance with SMART Program qualifications. Such annual reporting shall include, but not be limited to the productivity of the crop(s) and herd, including pounds harvested and/or grazed, herd size growth, success of the crop if applicable, and potential changes.

Ashuela Brook Solar will be accessed via a newly constructed 20-foot-wide gravel access driveway off of Pine Meadow Road. The gravel access road, originally designed to be completely enclosed by an 8-foot woven-wire agricultural fence, has been redesigned to permit access from Pine Meadow Road to the Connecticut River. The 8-foot woven-wire agricultural fence has been moved closer to the Agrivoltaic array.

The Northfield Zoning By-Laws has an established Solar Overlay District, the purpose of which *“is to promote the creation of new large-scale ground-mounted solar photovoltaic installations by providing standards for the placement, design, construction, operation, monitoring, modification and removal of such installations that address public safety, minimize impacts on scenic, natural and historic resources and provide adequate financial assurance for the eventual decommissioning of such installations”* (As defined in Section 200-10.3). The Solar Overlay District has two defined Zones and delineated as the Solar Overlay Zone on the Northfield Solar Overlay Zone Map.

Beacon notes that Ashuela Brook Solar is not located in either of the Zones delineated on the Northfield Solar Overlay Zone Map. The Applicant stated that in considering site selection for large-scale solar, their primary criteria consisted of an engaged landowner (and interested farmer for agrivoltaics), distance to the nearest substation and utility 3-Phase power, and a site that provides the benefit of dual use for solar and continued agriculture. The Applicant asserts that it has had no engagement with the owners of the properties within the Solar Overlay Zones, nor in their professional judgement, do those locations provide an economically viable option for large-scale ground-mounted solar. In its written response provided on April 30, 2024, to questions posed by Beacon, the Applicant provided a detailed discussion regarding the anticipated challenges they would face, coupled with the unsuitability of the properties, had they pursued large-scale solar at two properties located within the Solar Overlay Zone, including 122 Old Bernardston Road and Old Vernon Road.

It is Beacon's assumption that given the proximity of the subject property to the L'Etoile properties also located on Pine Meadow Road, BWC Ashuela Brook, LLC is expecting to leverage its sunk costs from the significant investment in utility upgrades, making this site location a better economic location for them than the properties within the Solar Overlay Zone.

Beacon's findings are presented herein.

GENERAL INFORMATION AND OVERVIEW		
Parcel Identification	Assessor Maps	Map 55, Lots A4.1, A5.1 and A7.1 – Book 7421, Page 215 Map 72, Lot A1.1 – Book 7421, Page 224
Ashuela Brook Solar Details		2.29 MW DC/2 MW AC Approximately 4,300 solar modules, mounted on pile or screw driven
Applicant Parties	Property Owner	Thomas R. Shearer, Trustee of the Thomas R. Shearer Investment Trust Trustee of the Patricia E. Shearer Investment Trust 101 Cross Road, Northfield, MA 01360
	Ashuela Brook Solar Owner	BWC Ashuela Brook, LLC 116 Huntington Avenue, Suite 601, Boston, MA 02116 DE Limited Liability Company, Organized on February 13, 2020 MA Foreign Limited Liability Company, Registered on March 2, 2020
	Ashuela Brook Solar Owner, LLC Manager	Bluewave Origination LLC 116 Huntington Avenue, Suite 601, Boston, MA 02116 DE Limited Liability Company, Organized on August 29, 2019 MA Foreign Limited Liability Company, Registered on June 25, 2021
	Ashuela Brook Solar Long-term Property Owner	BWC Ashuela Brook, LLC has entered into a purchase and sale agreement with the current owner. BWC Ashuela Brook, LLC has indicated that it does not intend to sell all or part of the real property. Instead, BWC Ashuela Brook, LLC has indicated that it will sell the property for sale to a local Land Trust, a local non-profit entity or to a local
	Consulting Engineer	Field Engineering Co., Inc Richard R. Riccio III, P.E., License #45898 11D Industrial Drive, P.O. Box 1178, Mattapoisett, MA 02739
	Project Surveyor	DGT Associates Surveying & Engineering 255 Park Avenue, Suite 500, Worcester, MA 01609
	Proposed Farmer	Finicky Farm, LLC Owner: Desiree and Jesse Robertson-DuBois Manager: Elspeth Robertson-DuBois
	Ashuela Brook Solar Asset Manager	BlueWave Asset Management Team at "assetmgmtteam@bluewave.com" operations, annual O&M, reporting and farming
Property Restrictions	M.G.L. c. 61A	Parcels are currently and will remain enrolled in Chapter 61A and are designated as Important Agricultural Farmland. The Applicant is responsible for local, state and federal

ZONING BY-LAW REFERENCE	ZONING BY-LAW SECTION	BEACON FINDINGS
<p>200-3.4 C Special Permit Decision Criteria</p>	<p>(1) Use in Harmony with general purpose and intent</p>	<p>The Applicant asserts that Ashuela Brook Solar is compliant with the a large-scale ground-mounted solar photovoltaic installation and productive use of the parcel for agriculture is in harmony with the under its Master Plan. The Applicant further states that Ashuela Bro to the neighboring properties.</p> <p>During the Public Hearing and in its petition, the Applicant stated site a dual-use Agrivoltaic project in which the real property will photovoltaic development and continued agricultural uses (see page in the Project Narrative and revised Site Drawings dated 9/6/2 indicated that it will only pursue the implementation of Ashuela certification from the SMART Program as a certified ASTGU and documentation of it submitted to the DOER, MDAR and UMass CEE. with its revised Site Drawings dated 9/6/2024 expanding the buffer and extending the vegetative screening along Pine Meadow Road position that the use is in harmony with the general purpose and is consistent with the Town’s Master Plan.</p> <p>Beacon recommends that the Planning Board Condition the Special Applicant to report to the Planning Board in advance of applying for changes to the 9/6/2024 Site Drawings that the Building Inspector changes, whether voluntarily modified or modified for compliance requirements or Orders of Conditions imposed by other Authorities the Conservation Commission, Floodplain Administrator or in preservation requirements.</p>
<p>200-3.4 C Special Permit Decision Criteria</p>	<p>(2) Use is appropriate and will not alter the character of the zoning district</p>	<p>The Applicant asserts that Ashuela Brook Solar will not be detrimental of the zoning district, will generate minimal traffic or noise, will be roadway and will require minimal site grading.</p> <p>The Applicant stated that the acquisition of the parcels and construction Solar will ensure that the parcels remain in agricultural use, although Applicant providing no supporting information regarding any cons</p>

		<p>landowner to change the use of the parcels. On November 13, 2024, that the landowner had not advised BlueWave of any intent to sell for any use other than agricultural or agrivoltaics.</p> <p>Beacon also notes that during the Public Hearing, abutters address the visual impacts on neighboring properties given the expanse and the inability to visually screen Ashuela Brook Solar from Pine Meadow impacts to neighboring parcels, the Applicant has proposed in installing screening along Pine Meadow Road of approximately 600 feet original gravel access driveway and extending south on Pine Meadow Road from the intersection of Cross Road. The Applicant is proposing to plant Cedar (<i>Juniperus Virginiana</i>) and is willing to consider alternative to the Planning Board's request.</p> <p>In its 10/2/2024 correspondence to the Planning Board, the Applicant approach to satisfying its stated commitment to enhance the landscape. Specifically, the Applicant offered to establish an escrow account of \$100,000 to be used as directed by the Planning Board for vegetative screening. Beacon recommends that the Planning Board adopt this alternative approach to escrow term care or warranty of vegetation. For this approach to be considered, we recommend that the Applicant also establish an annual annuity for the escrow.</p> <p>The Northfield Zoning By-Laws has an established Solar Overlay District which <i>"is to promote the creation of new large-scale ground-mounted solar installations by providing standards for the placement, design, construction, maintenance, modification and removal of such installations that address public safety, scenic, natural and historic resources and provide adequate financial assurance for the eventual decommissioning of such installations"</i> (As defined in Section 10.01 of the Northfield Zoning By-Laws). The Northfield Solar Overlay District has two defined Zones and delineated as the Solar Overlay District on the Northfield Solar Overlay Zone Map.</p> <p>Beacon notes that Ashuela Brook Solar is not located in either of the defined zones on the Northfield Solar Overlay Zone Map. The Applicant stated that in considering large-scale solar, their primary criteria consist of an engaged landowner</p>
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		<p>for agrivoltaics), distance to the nearest substation and utility 3-Phase, provides the benefit of dual use for solar and continued agricultural that it has had no engagement with the owners of the properties in the Solar Zone, nor in their professional judgement, do those locations provide an option for large-scale solar. The Applicant provided a detailed discussion of the challenges they would face had they pursued large-scale solar at two locations in the Solar Overlay Zone, including 122 Old Bernardston Road and Old Pine Meadow Road.</p> <p>It is Beacon's assumption that given the proximity of the subject properties also located on Pine Meadow Road, BWC Ashuela Brook, the "sunk costs" associated with the significant investment in utility upgrades make a better economic location than properties within the Solar Overlay Zone.</p> <p>Prior to applying for the Building Permit, the Applicant shall conduct a visual survey at various locations across the parcel to demonstrate the visual impact on the subject properties.</p> <p>The Applicant shall install and warranty vegetative screening on Pine Meadow Road of approximately 600 feet originating at the 200-foot driveway and extending south on Pine Meadow Road approximately to the intersection of Cross Road. The screening shall be Eastern Red Cedar or an alternative equivalent native species at the Planning Board's request. The Applicant shall provide an annually renewing irrevocable tree performance bond of Northfield as the named bond holder in an amount sufficient to ensure the Applicant to maintain a healthy vegetative screening buffer from Pine Meadow Road to neighboring abutters.</p> <p>In advance of applying for the Building Permit, the Applicant shall submit a site management plan associated with the vegetative screening.</p>
<p>200-3.4 C Special Permit Decision Criteria</p>	<p>(3) Adequate and appropriate facilities to be provided</p>	<p>The Applicant has provided full-scale REVISED Site Drawings, dated 10/21/2024, signed by a Professional Civil Engineer licensed in Massachusetts, for Permitting and are <u>not</u> Construction Drawings and include:</p> <ul style="list-style-type: none"> • Notes and Legends, Sheet N-1 • Existing Conditions, Sheet EC-1

		<ul style="list-style-type: none"> • Overall Site Plan Layout, Sheet SL-1 • Detailed Site Plan, Sheet SP-1 • Sedimentation & Erosion Control, Sheet SEC-1 • Site Details, Sheet DET-1 and DET-2 <p>The Applicant has indicated that the proposed new 20-foot-wide gravel access on Sheets SL-1, SP-1, SEC-1 and DET-1 provide adequate access to the site for emergency response, and for agricultural operations and maintenance. The Applicant stated that Ashuela Brook Solar requires no water or sewer facilities.</p>
<p>200-3.4 C Special Permit Decision Criteria</p>	<p>(4) Not be detrimental or otherwise offensive to adjoining zoning districts and neighboring properties</p>	<p>The Applicant asserts that because Ashuela Brook Solar will not involve the use of sewage or refuse materials, it will have no detrimental impact to the site and neighboring properties. The Applicant acknowledged that the inverters will generate noise, but the equipment will be situated in a location that would not impact any of the abutting properties. In its response to Beacon's written questions, the Applicant indicated that the specifications for the equipment contemplated for Ashuela Brook Solar indicate noise emissions of 68 dBA for the inverters and transformers.</p> <p>As stated previously, Beacon notes that during the Public Hearing, concerns pertaining to the visual impacts on neighboring properties to the extent of the project, and the inability to visually screen Ashuela Brook Solar from Pine Meadow Road. To address visual impacts to neighboring parcels, the Applicant will install and warranty vegetative screening along Pine Meadow Road, 20 feet originating at the 20-foot-wide gravel access driveway and extending to Pine Meadow Road approximately 150 feet from the intersection of Cross Street. As presented in its revised Site Drawings dated 9/6/2024, the Applicant will screen the area from Pine Meadow Road to the first solar module to approximately the property line.</p> <p>Beacon also notes that the revised Site Drawings dated 9/6/2024 show interconnection assets located alongside the access road and on Pine Meadow Road. Assets include three telephone poles owned by Eversource and one power pole. During the Public Hearing, an adjacent abutter expressed concern that the telephone poles were a visual deterrent that could not be screened.</p>

		<p>vegetation. In response, the Applicant proposed a modified approach plan reducing the number of Eversource-owned poles on Pine Meadow a provision of pad mounted Eversource-owned equipment situated existing proposed pad mounted equipment.</p> <p>The Applicant provided an Alternative Interconnection plan on 10/10/2024 indicated that they had submitted it to Eversource for consideration of a Single Line Drawing. During the continued Public Hearing on 10/21/2024 the Applicant provided written correspondence from Eversource indicating that the Interconnection plan was unacceptable and would not be considered for approval. The Planning Board approved the original Interconnection plan as part of the REVISED Site Drawings dated 9/6/2024 and require the Applicant to implement best practices to screen aboveground interconnection assets. The Applicant's interconnection plan is subject to Eversource approval.</p>
<p>200-3.4 C Special Permit Decision Criteria</p>	<p>(5) Not cause undue traffic congestion</p>	<p>The Applicant asserts that Ashuela Brook Solar will not require regular maintenance and thus there will be no undue traffic congestion. If the agricultural use of the parcel is unchanged, the traffic impact will remain minimal. Beacon notes that while the Applicant's proposed agricultural use of vegetables will be more limited than the current use, they have no documentation or information as to how the intended agricultural use impacts differ from current use.</p>
<p>200-3.4 C Special Permit Decision Criteria</p>	<p>(6) Proposed use conforms to principles of rural design under Section 200-8.1 of the By-Law</p>	<p>While the Zoning By-Law encourages the reuse and retention of existing structures, woods, roads and lanes rather than construction of new roads or structures, the Applicant claims that new 20-foot-wide gravel access road offers a minimal footprint and will be used to operate and maintain the Ashuela Brook Solar equipment, to facilitate access to the equipment pad and to provide access to emergency vehicles to the equipment pad.</p> <p>The Applicant further notes that there are no existing stone walls or building structures, and no significant changes in the grade (except for the equipment pad due to proximity in the Floodplain) or clearing of trees. The Site Drawings, submitted on 9/6/2024, removed gated barriers to the equipment pad and access for wildlife frequenting the Connecticut River should not be impacted.</p>

<p>200-3.4 C Special Permit Decision Criteria</p>	<p>(7) Use is consistent with the Northfield Master Plan</p>	<p>The Applicant asserts that Ashuela Brook Solar will promote the preservation of existing structures and natural features and enable the parcel to remain in agricultural use. The Applicant also notes the possibility of more intensive development activities. Beacon again notes that no additional documentation or information has been provided supporting any alternative use of the parcel for sale by the current owner.</p>
<p>200-3.5 F Site Plan Review Standards</p>	<p>(1) Principles of rural design in Section 200-8.1</p>	<p>While the Zoning By-Law encourages the reuse and retention of existing structures, roads and lanes rather than construction of new roads or structures, the Applicant claims that new 20-foot-wide gravel access road offers a minimal footprint and will allow the Applicant to operate and maintain the Ashuela Brook Solar equipment, to facilitate maintenance and to provide access to emergency vehicles to the equipment pad.</p> <p>The Applicant further notes that there are no existing stone walls or building structures, and no significant changes in the grade (except for the equipment pad due to proximity to the Floodplain) or clearing of trees. The Applicant's Site Drawings, dated 9/6/2024, removed gated barriers to the back land and the Applicant notes that wildlife frequenting the Connecticut River should not be impeded.</p>
<p>200-3.5 F Site Plan Review Standards</p>	<p>(2) Siting of facilities</p>	<p>The Applicant asserts that the facility will comply with all setback requirements of the Zoning By-Law. Beacon notes the following:</p> <ul style="list-style-type: none"> • 100-foot Solar By-Law Setback Requirement: The proposed driveway and agricultural fencing is within the 100-foot Solar By-Law setback in some areas. The Applicant asserts that the design of the Solar facility was to maximize the contiguous area available for solar panels. Underground conduits and aboveground utility poles will also be within the setback limits in some areas. • 200-foot Riverfront Area (RFA): In its revised Site Drawings, the Applicant has relocated its agricultural fencing to be outside the RFA. • Property Line Setback: The Applicant stated that there are no setbacks from the Property Line Setback, but as stated above, the 20-foot-wide gravel access road and the agricultural fencing is within the Property Line Setback.
<p>200-3.5 F Site Plan Review Standards</p>	<p>(3) Design guidelines for buildings and sites</p>	<p>As shown on the full-scale Revised Site Drawings, dated 9/6/2024, the Applicant's Professional Civil Engineer licensed in Massachusetts, there are no structures associated with Ashuela Brook Solar.</p>

<p>200-3.5 F Site Plan Review Standards</p>	<p>(4) Open space and natural features</p>	<p>The Applicant asserted that Ashuela Brook Solar will not include any resource areas or the Riverfront Area of the parcels. Beacon notes that a Notice of Intent with the Northfield Conservation Commission. See [redacted], held, and additional documentation was requested.</p> <p>On October 17, 2024, the Applicant provided the Planning Board with a report originally submitted to the Northfield Conservation Commission by Larner Consulting.</p> <p>Since the property is located in the Floodplain Overlay District, the Applicant submitted a Floodplain Development Permit Application with the Northfield Floodplain Administrator in accordance with the requirements of the Floodplain By-Law. Beacon recommends that the Planning Board Condition the Special Use Permit on the Applicant to report to the Planning Board in advance of applying for any changes to the 9/6/2024 Site Drawings that the Building Inspector requires, whether voluntarily modified or modified for compliance with the requirements or Orders of Conditions imposed by other Authorities including the Conservation Commission, Floodplain Administrator or in accordance with preservation requirements. As noted previously, the Applicant has indicated that no activities or uses can occur within the FERC Project Boundaries where either fee or flowage rights exist without prior written authorization through the issuance of a permit, or other documentation as determined by the Floodplain Administrator.</p>
<p>200-3.5 F Site Plan Review Standards</p>	<p>(5) Pedestrian, bicycle and vehicular safety</p>	<p>The Applicant has indicated that the 20-foot-wide gravel access drive is solely for use by Ashuela Brook Solar for construction, operation and maintenance, farming operations and for emergency vehicle access. Since the application submitted on 9/6/2024, removed gated barriers to the back lands where wildlife frequenting the Connecticut River should not be impeded.</p>
<p>200-3.5 F Site Plan Review Standards</p>	<p>(6) Water quality</p>	<p>The Applicant has indicated that the provision of water is not required and that Ashuela Brook Solar will not impact water quality in the area.</p>
<p>200-3.5 F</p>	<p>(7) Stormwater</p>	<p>The Applicant has provided a Stormwater Management System and a qualified professional to provide technical guidance on the substance of the report in connection with its jurisdictional review of the Notice of Intent.</p>

<p>Site Plan Review Standards</p>		<p>Conservation Commission, a review of the report and the proposed Management Systems plan will be evaluated for best management</p>
<p>200-3.5 F Site Plan Review Standards</p>	<p>(8) Utilities, exterior lighting, parking and snow removal</p>	<p>The Applicant asserts that the only utilities needed by Ashuela Brook the Eversource (f.k.a. Western Massachusetts Electric Company) dis the Applicant has indicated that there will be no lighting or parking Brook Solar. The Applicant proposed to address seasonal snow removal gravel access driveway when the snow accumulation was greater than</p> <p>Beacon recommends that the Planning Board Condition the Special Applicant to report to the Planning Board in advance of applying for changes to the 9/6/2024 Site Drawings that the Building Inspector changes, whether voluntarily modified or modified for compliance requirements or Orders of Conditions imposed by other Authorities the Conservation Commission, Floodplain Administrator or in preservation requirements.</p> <p>Beacon recommends that the Planning Board Condition the Special material modifications to Ashuela Brook Solar, specifically as it relates capacity, changes to the size or location of the concrete equipment Drawings, dated 9/6/2024, be immediately provided to the Planning</p> <p>Further, Beacon recommends that the Planning Board approve the plan as provided on Sheet SP-1 of the REVISED Site Drawings dated Applicant to use best commercial practices to screen aboveground The Applicant noted that the final interconnection plan is subject to</p> <p>Beacon further recommends that prior to applying for the Building provide the Building Inspector with documentation of (a) all required snow removal plan made to the Northfield Highway Department, (b) from the Highway Department, (c) a summary of actions taken by the concerns or requirements identified by the Highway Department and Northfield public safety officials regarding their acceptance of the plan in the event of an emergency.</p>

<p>200-3.5 F Site Plan Review Standards</p>	<p>(9) Trees and landscaping</p>	<p>The Applicant asserts that there will be no tree removal or grade connection with Ashuela Brook Solar, except to the area around the is proposed to be elevated to mitigate issues involving its siting near</p> <p>To address visual impacts to neighboring parcels, the Applicant has warranty vegetative screening along Pine Meadow Road of approximately at the 20-foot-wide gravel access driveway and extending south approximately 150 feet from the intersection of Cross Road. The install native Eastern Red Cedar (<i>Juniperus Virginiana</i>) and is willing equivalent native species at the Planning Board's request.</p> <p>In its 10/2/2024 correspondence to the Planning Board, the Applicant approach to satisfying its stated commitment to enhance the Specifically, the Applicant offered to establish an escrow account of be used as directed by the Planning Board for vegetative screening recommend that the Planning Board adopt this alternative approach term care or warranty of vegetation.</p> <p>Beacon notes that the Applicant stated in its response of April 30, 20 of April 8, 2024 of its willingness to provide a tree performance vegetative screening along Pine Meadow Road is properly managed.</p> <p>The Applicant shall install and warranty vegetative screening on Meadow Road of approximately 600 feet originating at the 20 driveway and extending south on Pine Meadow Road approximately intersection of Cross Road. The screening shall be Eastern Red Cedar an alternative equivalent native species at the Planning Board's request that Applicant provide an annually renewing irrevocable tree performance of Northfield as the named bond holder in an amount sufficient to to maintain a healthy vegetative screening buffer from Pine neighboring abutters.</p>
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		Beacon further recommends that the Applicant provide a land associated with the vegetative screening in advance of applying for
200-3.5 F Site Plan Review Standards	(10) Historic significance	<p>The Applicant acknowledges that the parcels are located within the district and has committed to working with the Northfield Massachusetts Historic Commission, the Elnu Abenaki Tribe and throughout the development, construction and operations periods.</p> <p>The Applicant has engaged Heritage Consultants as its technical advisor aspects of the Ashuela Brook Solar project. The Applicant provided a for and received a permit from the Massachusetts Historic Commission archaeological field investigation.</p> <p>Beacon recommends that prior to applying for the Building Permit required to provide to the Building Inspector written documentation conducted pursuant to the permit issued by the Massachusetts Historic Commission written documentation from the Northfield Historical Commission addressed all concerns and requirements pertaining to present significance.</p>
200-3.5 F Site Plan Review Standards	(11) Signage	As required by the National Electrical Code, Ashuela Brook Solar will and identification. Such signage shall provide safety warnings. Additionally, the Applicant provided a representation of signage on 9/6/2024, page DET-1, which includes emergency contact information provided proposed safety signage details.
200-3.5 F Site Plan Review Standards	(12) Energy-efficiency site design	The Applicant states that Ashuela Brook Solar has been designed to by using single axis trackers allowing the bifacial modules to track hours. The bifacial modules efficiently enable power generation modules.
200-3.5 F Site Plan Review Standards	(13) Potential adverse effects and mitigation	The Applicant asserts that Ashuela Brook Solar has been designed allowing for continuous agricultural use. Ashuela Brook Solar is enclosed, providing security and safety. The Applicant further asserts that materials contained in the project and that only the transformers are and such fluids are stored in self-contained vessels and located on Beacon expects the Northfield Conservation Commission, and t

		Administrator will consider these concerns in connection with the permitting process.
200-10.3 E Solar Overlay District General Requirements	(1) Compliance with laws and regulations	The Applicant asserts that Ashuela Brook Solar will be constructed with all applicable local, state and federal requirements.
200-10.3 E Solar Overlay District General Requirements	(2) Building Permits	The Applicant stated that Ashuela Brook Solar will apply for and obtain building and electrical permits.
200-10.3 E Solar Overlay District General Requirements	(3) Fees	The Applicant stated that all fees required for applicable permits filed and associated with future permit requirements will be paid at the time of application.
200-10.3 E Solar Overlay District General Requirements	(4) Site Plan Review	The Applicant applied for Site Plan Review with the Planning Board as part of its Special Permit application.
200-10.3 E Solar Overlay District General Requirements	(5) Setback and height requirements	<p>Though the Applicant asserts that Ashuela Brook Solar complies with all applicable requirements, Beacon notes the following:</p> <ul style="list-style-type: none"> • 100-foot Solar By-Law Setback Requirement: The proposed driveway and agricultural fencing is within the 100-foot Solar By-Law setback. The Applicant asserts that the design of the Ashuela Brook Solar will be to maximize the contiguous area available for agriculture. Utility poles and aboveground utility poles will also be within the setback limit. • 200-foot Riverfront Area (RFA): In its revised Site Drawing, the Applicant has relocated its agricultural fencing to be outside the RFA. • Height limitation: The Applicant stated that no structure will be taller than the height restriction.

<p>200-10.3 E Solar Overlay District General Requirements</p>	<p>(6) Appurtenant structures</p>	<p>The Applicant indicated that the appurtenance structures, including associated equipment are set back from Pine Meadow Road and s agricultural fence and the planting of 600 feet of evergreen vegetati structures are proposed in connection with Ashuela Brook Solar.</p>
<p>200-10.3 E Solar Overlay District General Requirements</p>	<p>(7) Design and Performance Standards a. Lighting</p>	<p>The Applicant indicated that the design and operation of Ashuela Br any lighting requirements.</p>
<p>200-10.3 E Solar Overlay District General Requirements</p>	<p>(7) Design and Performance Standards b. Signage</p>	<p>As required by the National Electrical Code, Ashuela Brook Solar will and identification. Such signage shall provide safety warnings. Additionally, the Applicant provided a representation of signage on 9/6/2024, page DET-1, which includes emergency contact informa provided proposed safety signage details.</p>
<p>200-10.3 E Solar Overlay District General Requirements</p>	<p>(7) Design and Performance Standards c. Utility Connections</p>	<p>The Applicant indicated that Ashuela Brook Solar is committed to above-ground utility infrastructure but advises the Planning Board t utility interconnection must comply with Eversource intercon ultimately is subject to the approval of Eversource.</p> <p>The original Interconnection plan was anticipated to include:</p> <ul style="list-style-type: none"> • 4 new utility poles sited on the south side of the 20-foot-w connecting to an existing utility pole on the north side of th • Underground conduit and conductors running along the 2 driveway from the equipment pad to the utility poles. • Aboveground wires between the utility poles. • Approximately 3 miles of reconfiguration of the existing u Pine Meadow road. • Underground connections between each array section with <p>The Applicant provided a copy of the application for interconnection filed with Eversource along with a copy of the executed Interconne All major equipment, including but not limited to inverters, swit relays will be located on the concrete equipment pad.</p>

		<p>As shown in revised Site Drawings dated 9/6/2024, page SP-1, the P Eversource is located on the north side of the 20-foot-wide gravel a Meadow Road. As discussed above, the Applicant plans to install fo poles (three telephone poles owned by Eversource and one owned b 20-foot-wide gravel access driveway from the equipment pad to t the 20-foot-wide gravel access driveway with overhead wire. A fi sited on the northern side of the 20-foot-wide gravel access drivew point of interconnection to Eversource on Pine Meadow Road. Eac spaced approximately 40-50 feet apart. Wiring from pole to pole w</p> <p>During the Public Hearing, an adjacent abutter expressed conc telephone poles were a visual deterrent that could not be scre vegetation. In response, the Applicant proposed a modified approa plan reducing the number of Eversource-owned poles on Pine Mea a provision of pad mounted Eversource-owned equipment situated existing proposed pad mounted equipment.</p> <p>The Applicant provided an Alternative Interconnection plan on 10 indicated that they had submitted it to Eversource for considerat Single Line Drawing. Beacon notes that while the revised Single Line a licensed Professional Engineer, but the provided Sheet IX-1 was ne</p> <p>During the continued Public Hearing on December 19, 2024, the A correspondence from Eversource indicating that the Alternative unacceptable and would not be considered. The Applicant noted tha plan is subject to Eversource approval.</p> <p>Beacon understands that the interconnection process is an iterative that the Planning Board require updated information on the "customer-side" and "utility-side" final interconnection designs for c such final designs meet the stated intent pertaining to minimizing and visual impacts on neighborhood properties.</p>
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		<p>the Applicant, this is the auditory equivalent of a normal conversation standing within a few feet of one another.</p> <p>Beacon recommends that the Planning Board require the Applicant to provide other documentation from the equipment manufacturers of the equipment demonstrating dBA levels at a distance no less than the boundary of the site.</p>
<p>200-10.3 E Solar Overlay District General Requirements</p>	<p>(7) Design and Performance Standards h. Safety and Environmental Standards – (1) Emergency services</p>	<p>The Applicant confirmed that it will seek review and approval from the Fire Department personnel of all final construction drawings prior to receiving a Building Permit. Additionally, the Applicant confirmed prior to construction at Brook Solar, it shall provide training on the operation and emergency procedures to Northfield public safety personnel. Access gates secured by the Applicant will be equipped with a Knox Box or equivalent to enable access by fire department personnel in the event of emergencies.</p> <p>Beacon further recommends that prior to applying for the Building Permit, the Applicant provide the Building Inspector with documentation of (a) all requests for review from the Fire and Police Departments, (b) any responses received from the Fire and Police Departments, and (c) a summary of actions taken by the Applicant to address the requirements identified by the Fire and Police Departments.</p>
<p>200-10.3 E Solar Overlay District General Requirements</p>	<p>(7) Design and Performance Standards h. Safety and Environmental Standards – (2) Land clearing</p>	<p>The Applicant asserts that there will be minimal clearing of native vegetation and minimal soil grading. The Applicant will require its selected site contractor to fully comply with a Stormwater Pollution Prevention Plan as required by the Construction General Permit for discharges from construction activities. Beacon expects the Northfield Conservation Commission and the Northfield Conservation Administrator will consider these concerns in connection with the permitting process.</p>
<p>200-10.3 F Solar Overlay District Monitoring, maintenance and reporting</p>	<p>(1) Installation conditions</p>	<p>The Applicant has provided a post construction operation and maintenance plan for post-construction operation and maintenance activities associated with the solar array.</p> <p>Beacon notes that there is insufficient detail addressing vegetation management and warranty provisions for the vegetative screen along Meadow Road. Beacon recommends the Planning Board requires the Applicant to include operations and maintenance plan to address these concerns, including an annually renewing irrevocable tree performance bond.</p>

<p>200-10.3 F Solar Overlay District Monitoring, maintenance and reporting</p>	<p>(2) Modifications</p>	<p>The Applicant confirmed its understanding that any material modification to Ashuela Brook Solar after the issuance of the required Building Permit shall require approval by the Planning Board.</p> <p>Beacon recommends that the Planning Board Condition the Special Use Permit for the Applicant to report to the Planning Board in advance of applying for any material modifications or changes to the 9/6/2024 Site Drawings that the Building Inspector requires, whether voluntarily modified or modified for compliance with applicable requirements or Orders of Conditions imposed by other Authorities including the Conservation Commission, Floodplain Administrator, in order to meet preservation requirements or as required by FirstLight.</p> <p>Beacon recommends that the Planning Board Condition the Special Use Permit for material modifications to Ashuela Brook Solar, specifically as it relates to increasing capacity, changes to the size or location of the concrete equipment enclosures. The 9/6/2024 Site Drawings, dated 9/6/2024, be immediately provided to the Planning Board for review.</p> <p>Further, Beacon recommends that the Planning Board approve the Special Use Permit plan as provided on Sheet SP-1 of the REVISED Site Drawings dated 9/6/2024. The Applicant to use best commercial practices to screen aboveground equipment enclosures. The Applicant noted that the final interconnection plan is subject to approval by the utility.</p>
<p>200-10.3 F Solar Overlay District Monitoring, maintenance and reporting</p>	<p>(3) Annual reporting</p>	<p>The Applicant confirmed that it will comply with the detailed annual reporting requirements set forth in the Zoning By-Law.</p> <p>Beacon recommends that the Planning Board Condition the Special Use Permit for the Applicant to provide copies of annual reports filed with the MDAR with SMART Program qualifications.</p>
<p>200-10.3 G Solar Overlay District Abandonment or decommissioning</p>	<p>(1) Removal requirements (2) Decommissioning (3) Abandonment</p>	<p>The Applicant provided a Decommissioning Plan and Cost Estimate prepared by an engineer, Field Engineering, Co., Inc. The Decommissioning Plan included labor and equipment cost for the removal of Ashuela Brook Solar and return of parcels to the original condition, excluding normal wear and tear. The Decommissioning Plan did not specifically address the maximum amount of time for decommissioning post discontinued operations or abandonment.</p>

		<p>In addition to the requirements and obligations set forth in the Zoning Ordinance, the Applicant shall, in the event of any sale or lease of the parcel, provide the subdivider with a copy of the tree warranty performance bond requirements and surety provisions and provide evidence to the subdivider that the Applicant provided such materials.</p>
<p>200-10.3 H Solar Overlay District</p>	<p>Financial Surety</p>	<p>The Applicant provided a Decommissioning Plan and Cost Estimate prepared by an independent engineer, Field Engineering, Co., Inc. The Decommissioning Plan includes labor and equipment costs for the removal of Ashuela Brook Solar parcels to the original condition, excluding normal wear and tear. The estimate includes a 3 percent annual increase to account for inflation.</p> <p>Beacon notes that given the size of Ashuela Brook Solar, the estimate in dollars likely understates the magnitude of the effort given the unique nature of the land and land of historic significance.</p> <p>Prior to applying for the Building Permit, the Applicant shall provide the following supporting documentation of actual decommissioning cost estimates from the Applicant of similar size and on parcels with similar characteristics. Financial Surety shall be an annual renewing irrevocable bond with the named bond holder.</p>

Beacon very much appreciates the opportunity to support the Northfield Planning Board in its review of the Ashuela Brook Solar Photovoltaic system. If you have any questions or need additional information, please do not hesitate to contact me directly at 617-469-2172.

Best regards,

Beth S. Greenblatt

Beth S. Greenblatt

Exhibit D

**Northfield Planning Board
Site Plan Review Approval**

January 27, 2025



TOWN OF NORTHFIELD

www.northfieldma.gov

69 MAIN STREET

NORTHFIELD, MASSACHUSETTS 01360-1017

Megan Riordan
Chair

Planningboard@northfieldma.gov
413.498.2901

APPLICATION FOR SITE PLAN REVIEW FOR BWC ASHUELA BROOK SOLAR ARRAY, ASSESSOR MAP 55 LOTS A4.1, A5.1, A7.1, MAP 72 LOT A7.1.1 A/K/A 0 PINE MEADOW ROAD

PB FILE #

APPROVAL

Applicant: BWC Ashuela Brook LLC,
BlueWave Origination, LLC
116 Huntington Avenue
Suite 601
Boston, MA 02116

Property Owner: Patricia and Thomas Shearer of 101 Cross Rd, Northfield MA 01360
Property Address: 0 Pine Meadow Road, Northfield, MA 01360

After multiple hearings on the above referenced application for site plan review to install a large scale agrivoltaics array at the above referenced property, Board member Victoria Luksha moved and seconded by Tammy Pelletier that the Board approve the September 6, 2024 Site Plan (insert plan identification information here) submitted by the Applicant. A true copy of the September 6, 2024 Site Plan is on file with the Planning Board and incorporated as if fully set forth herein.

After deliberations, the Board voted 3-1-1 to approve the September 6, 2024 Site Plan.

Project Overview

The Applicant is proposing to construct, own, operate and maintain a ground-mounted dual-use, single axis tracker solar photovoltaic array (hereinafter referred to as "Ashuela Brook Solar"), sized at 2.29-megawatt (MW) DC/2-megawatts (MW) AC plus appurtenant equipment on approximately 16.1 acres of cleared, currently in use, agricultural land located across the parcels on Pine Meadow Road, Northfield MA. While the area enclosed by an agricultural fence will span approximately 16.1 acres, according to the Applicant, the area under the solar

modules is approximately 3 acres. The Applicant has indicated that the Agrivoltaic array will consist of approximately 4,300 solar modules mounted on ten-foot-high pole or screw steel posts with solar tracking systems mounted on top of the steel posts. The height of the module when in its vertical position is a maximum of 14 feet from the ground. The proposed project is located entirely within the Floodplain Overlay District.

In its submittal of its revised Site Drawings on September 6, 2024, the Applicant provided an updated farming plan along with documentation of its revised submission to the DOER, MDAR and the UMass CEE for consideration of its application for certification under the SMART Program. The original farming plan included supporting a combination of livestock production, hay, baling and crops, including corn. The revised proposed farming plan will use approximately 51% of the fenced area for organic vegetable production for retail sales, initially including beets, cabbage, garlic and tomatoes. The remaining area will serve as a buffer between the organic crop area and adjoining land and is expected to be managed by the farmer according to the Applicant with hay and baling production. The Applicant has indicated to the aforementioned agencies that their approach to organic vegetable production is anticipated to be phased in to full production over a five-year period.

Ashuela Brook Solar will be accessed via a newly constructed 20-foot-wide gravel access driveway off Pine Meadow Road. The gravel access road, originally designed to be completely enclosed by an 8-foot woven-wire agricultural fence, has been redesigned to permit access from Pine Meadow Road to close to the Connecticut River in an attempt to provide wildlife access to biologically sensitive corridors. The 8-foot woven-wire agricultural fence has been moved closer to the Agrivoltaic array.

Procedural History

On March 4, 2024, BWC Ashuela Brook LLC, a Delaware special purpose entity managed by BlueWave Origination, LLC, with a legal business address located at 116 Huntington Avenue, Suite 601, Boston, MA 02116 ("Applicant"), through its Consulting Engineer, Field Engineering Co., Inc., filed an application to construct a large-scale solar facility on Pine Meadow Road in Northfield under the Town of Northfield Zoning By-laws for a Special Permit pursuant to Section 3.4, a Site Plan Review pursuant to Section 3.5 and in accordance with the Solar Generation Zoning By-law, Section 10.3.

On April 30, 2024, BWC Ashuela Brook LLC provided the Planning Board with additional information including a written response addressing questions from Beacon issued on April 8, 2024 and April 9, 2024.

On May 16, 2024, BWC Ashuela Brook LLC provided the Planning Board with additional information pertaining to the status of their Notice of Intent filed with the Northfield Conservation Commission and the Pre-Determination Application submitted to Massachusetts Department of Energy Resources, Massachusetts Department of

Agricultural Resources and the University of Massachusetts Clean Energy Extension for certification of the project as an Agricultural Solar Tariff Generation Unit.

On May 23, 2024, the Planning Board opened a Public Hearing on BWC Ashuela Brook, LLC's application for a Special permit.

On June 4, 2024, BWC Ashuela Brook LLC provided the Planning Board with information regarding a different location than the proposed location on 0 Pine Meadow Rd to suffice as due diligence for archaeological field investigations and interconnection with Eversource Energy.

In a letter dated June 18, 2024, the Town of Northfield received a letter from FirstLight regarding permitting guidance and authorization in connection with its Federal Energy Regulatory Commission ("FERC") licensed hydroelectric facilities. FirstLight advised that the lands adjacent to the Connecticut River within the FERC Project Boundary are owned in fee and/or subject to FirstLight's flowage and seepage rights. They further advised that no activities or uses can occur within the FERC Project Boundary or on FirstLight's lands where either fee or flowage rights exist without prior written authorization from FirstLight through the issuance of a permit.

On June 25, 2024, Field Engineering on behalf of BWC Ashuela Brook LLC submitted a written request to the Planning Board to continue the Public Hearing from June 26, 2024 to a future date in August 2024 to provide them with time to open discussions with FirstLight. The Public Hearing was continued to September 17, 2024.

On September 6, 2024, Field Engineering on behalf of BWC Ashuela Brook LLC submitted to the Planning Board revised Site Drawings documenting a modification to the original submission impacting the footprint of the solar project, fencing, access road, equipment pad, and utility interconnection design, along with supporting documentation addressing the revised Site Drawings, including statements that pertaining documents would be revised, including applications and documents to the various authorities and parties with jurisdiction for permitting, utility interconnection, FirstLight flowage areas and SMART Program certification. The revised Site Drawings presents a more significant buffer between Pine Meadow Road and the woven agricultural fence.

On October 2, 2024, in connection with the continued Public Hearing scheduled for October 8, 2024, Field Engineering on behalf of BWC Ashuela Brook LLC submitted to the Planning Board additional information pertaining to another revised utility interconnection design, and updated information, claims of attempted outreach to the Northfield Fire Department and a proposed approach to mitigating visual impacts to abutters via arboreal blockage.

During the October 8, 2024 Public Hearing, BWC Ashuela Brook LLC presented a Letter of Filing Consent from FirstLight addressing the current pending status of their required permitting process. The Public Hearing was continued to October 24, 2024.

In response to the Planning Board's request during the October 8, 2024 Public Hearing, on October 17, 2024, BWC Ashuela Brook LLC provided the Planning Board with a revised peer review report originally submitted to the Conservation Commission by its consultant, Larner Consulting.

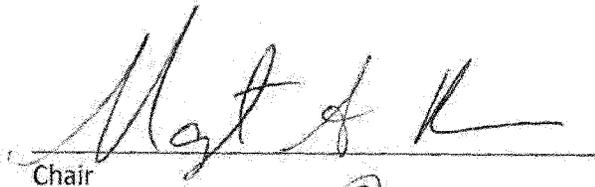
At the October 24, 2024 hearing, the Public Hearing was continued to December 19, 2024.

On December 19, 2024, the Planning Board closed the public hearing and Board Member Luksha moved and seconded by Board member Pelletier that the Board approve the application with findings and conditions outlined in its consultant's, Beacon Integrated Solution (Beacon), October 21, 2024, revised November 13, 2024 findings and conditions report.

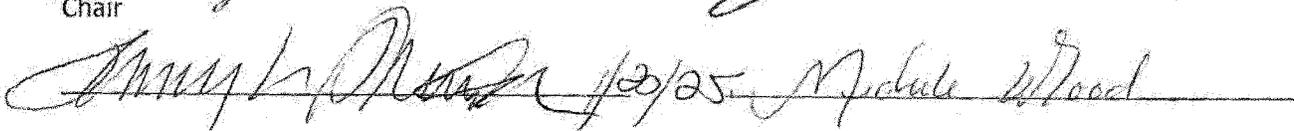
After deliberations, the Board voted 3-1-1 to approve the September 6, 2024 Site Plan.

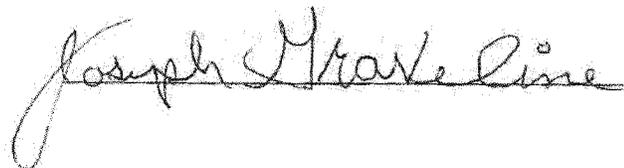
Any person aggrieved by the Decision of the Planning Board or any Site Plan granting authority, whether or not previously a party to the proceedings, or any municipal officer or board, may, as provided for in the Massachusetts General Laws, Chapter 40A, Section 17, appeal to a court of competent jurisdiction by bringing action within twenty (20) days after the Decision has been filed with the Office of the Town Clerk.

Northfield Planning Board


Chair



 1/20/25



Date:

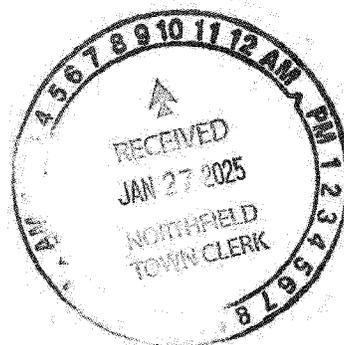


Exhibit E

**Northfield Planning Board
Special Permit Denial**

January 27, 2025



TOWN OF NORTHFIELD

www.northfieldma.gov

69 MAIN STREET

NORTHFIELD, MASSACHUSETTS 01360-1017

Megan Riordan
Chair

Plaanningboard@northfieldma.gov
413.498.2901

DENIAL

Applicant: BWC Ashuela Brook LLC,
BlueWave Origination, LLC
116 Huntington Avenue
Suite 601
Boston, MA 02116

Property Owner: Patricia and Thomas Shearer of 101 Cross Rd, Northfield MA 01360
Property Address: 0 Pine Meadow Road, Northfield, MA 01360

After multiple hearings on the above referenced application for a special permit to install a large scale agrivoltaics array at the above referenced property, Board member Victoria Luksha moved and seconded by Tammy Pelletier that the Board approve the special permit application with added findings and conditions outlined in its consultant's, Beacon Integrated Solution (Beacon), October 21, 2024, revised November 13, 2024 and December 19, 2024 findings and conditions report. A true copy of the Report is attached hereto and incorporated as if fully set forth herein.

After deliberations, the Board voted 0-5 to approve the application resulting in a DENIAL.

Project Overview

The Applicant is proposing to construct, own, operate and maintain a ground-mounted dual-use, single axis tracker solar photovoltaic array (hereinafter referred to as "Ashuela Brook Solar"), sized at 2.29-megawatt (MW) DC/2-megawatts (MW) AC plus appurtenant equipment on approximately 16.1 acres of cleared, currently in use, agricultural land located across the parcels on Pine Meadow Road, Northfield MA. While the area enclosed by an agricultural fence will span approximately 16.1 acres, according to the Applicant, the area under the solar modules is approximately 3 acres. The Applicant has indicated that the Agrivoltaic array will consist of approximately 4,300 solar modules mounted on ten-foot-high pole or screw steel posts with solar tracking systems mounted on top of the steel posts. The height of the module when in its vertical position is a maximum of 14 feet from the ground. The proposed project is located entirely within the Floodplain Overlay District.

Ashuela Brook Solar will not include the provision of battery energy storage, as the Applicant sought and is waiting to receive an exemption from the Department of Energy Resources (“DOER”) in connection with qualifying Ashuela Brook Solar for the Solar Massachusetts Renewable Target (“SMART”) Program. The Applicant further indicated that it will only pursue the implementation of Ashuela Brook Solar if it receives certification from the SMART Program as an Agriculture Solar Tariff Generation Unit (“ASTGU”). In support of that goal, the Applicant provided a copy of the Pre-Determination Form filed (signed on May 14, 2024) with the DOER and the Massachusetts Department of Agricultural Resources (“MDAR”) detailing the required information for determination of the design eligibility and farming plan for an ASTGU under the SMART Program. The Applicant indicated that the review by the regulatory agencies, along with the University of Massachusetts Clean Energy Extension (“UMass CEE”), and final determination by DOER anticipated approval in the Fall of 2024. As of the date of this Decision, the Applicant has not provided proof of approval.

In its submittal of its revised Site Drawings on September 6, 2024, the Applicant provided an updated farming plan along with documentation of its revised submission to the DOER, MDAR and the UMass CEE for consideration of its application for certification under the SMART Program. The original farming plan included supporting a combination of livestock production, hay, bailage and crops, including corn. The revised proposed farming plan will use approximately 51% of the fenced area for organic vegetable production for retail sales, initially including beets, cabbage, garlic and tomatoes. The remaining area will serve as a buffer between the organic crop area and adjoining land and is expected to be managed by the farmer according to the Applicant with hay and bailage production. The Applicant has indicated to the aforementioned agencies that their approach to organic vegetable production is anticipated to be phased in to full production over a five-year period.

On November 13, 2024, the Applicant provided documentation dated November 8, 2024 from DOER indicating that Ashuela Brook Solar had sufficiently demonstrated that it likely satisfied all criteria set forth in 225 CMR 20.00 to be considered an ASTGU received certification from the SMART program as an approved ASTGU. Beacon notes that this approval is a pre-determination of Ashuela Brook Solar’s eligibility as an ASTGU, and does not specifically qualify Ashuela Brook Solar under the SMART program qualifications guidelines specified under 225 CMR 20.06.

Ashuela Brook Solar will be accessed via a newly constructed 20-foot-wide gravel access driveway off Pine Meadow Road. The gravel access road, originally designed to be completely enclosed by an 8-foot woven-wire agricultural fence, has been redesigned to permit access from Pine Meadow Road to close to the Connecticut River in an attempt to provide wildlife access to biologically sensitive corridors. The 8-foot woven-wire agricultural fence has been moved closer to the Agrivoltaic array.

The Northfield Zoning By-Laws has an established Solar Overlay District, the purpose of which *“is to promote the creation of new large-scale ground-mounted solar photovoltaic installations by providing standards for the placement, design, construction, operation, monitoring, modification and removal of such installations that address public safety, minimize impacts on*

scenic, natural and historic resources and provide adequate financial assurance for the eventual decommissioning of such installations” (As defined in Section 200-10.3).

The Solar Overlay District has two defined Zones and delineated as the Solar Overlay Zone on the Northfield Solar Overlay Zone Map. Ashuela Brook Solar is not located in either of the Zones delineated on the Northfield Solar Overlay Zone Map. The Applicant stated that in considering site selection for large-scale solar, their primary criteria consisted of an engaged landowner (and interested farmer for agrivoltaics), distance to the nearest substation and utility 3-Phase power, and a site that provides the benefit of dual use for solar and continued agriculture. The Applicant asserts that it has attempted no engagement with the owners of the properties within the Solar Overlay Zones as they have with the Pine Meadow properties, nor in their professional judgement, do those locations provide an economical option for large-scale ground-mounted solar. In its written response provided on April 30, 2024, to questions posed by the Board’s consultant, Beacon, the Applicant provided a discussion regarding the anticipated challenges they would face, coupled with their belief of the unsuitability of the properties, if they were to attempt large-scale solar at two properties located within the Solar Overlay Zone, including 122 Old Bernardston Road and Old Vernon Road.

It is Beacon’s assumption that given the proximity of the subject property to the L’Etoile properties also located on Pine Meadow Road, BWC Ashuela Brook, LLC is expecting to leverage its sunk costs from the investment in utility upgrades, making this site location a better economic location for them than the properties within the Solar Overlay Zone.

Procedural History

On March 4, 2024, BWC Ashuela Brook LLC, a Delaware special purpose entity managed by BlueWave Origination, LLC, with a legal business address located at 116 Huntington Avenue, Suite 601, Boston, MA 02116 (“Applicant”), through its Consulting Engineer, Field Engineering Co., Inc., filed an application to construct a large-scale solar facility on Pine Meadow Road in Northfield under the Town of Northfield Zoning By-laws for a Special Permit pursuant to Section 3.4, a Site Plan Review pursuant to Section 3.5 and in accordance with the Solar Generation Zoning By-law, Section 10.3.

On April 30, 2024, BWC Ashuela Brook LLC provided the Planning Board with additional information including a written response addressing questions from Beacon issued on April 8, 2024 and April 9, 2024.

On May 16, 2024, BWC Ashuela Brook LLC provided the Planning Board with additional information pertaining to the status of their Notice of Intent filed with the Northfield Conservation Commission and the Pre-Determination Application submitted to Massachusetts Department of Energy Resources, Massachusetts Department of Agricultural Resources and the University of Massachusetts Clean Energy Extension for certification of the project as an Agricultural Solar Tariff Generation Unit.

On May 23, 2024, the Planning Board opened a Public Hearing on BWC Ashuela Brook, LLC's application for a Special permit.

On June 4, 2024, BWC Ashuela Brook LLC provided the Planning Board with information regarding a different location than the proposed location on O Pine Meadow Rd to suffice as due diligence for archaeological field investigations and interconnection with Eversource Energy.

In a letter dated June 18, 2024, the Town of Northfield received a letter from FirstLight regarding permitting guidance and authorization in connection with its Federal Energy Regulatory Commission ("FERC") licensed hydroelectric facilities. FirstLight advised that the lands adjacent to the Connecticut River within the FERC Project Boundary are owned in fee and/or subject to FirstLight's flowage and seepage rights. They further advised that no activities or uses can occur within the FERC Project Boundary or on FirstLight's lands where either fee or flowage rights exist without prior written authorization from FirstLight through the issuance of a permit.

On June 25, 2024, Field Engineering on behalf of BWC Ashuela Brook LLC submitted a written request to the Planning Board to continue the Public Hearing from June 26, 2024 to a future date in August 2024 to provide them with time to open discussions with FirstLight. The Public Hearing was continued to September 17, 2024.

On September 6, 2024, Field Engineering on behalf of BWC Ashuela Brook LLC submitted to the Planning Board revised Site Drawings documenting a modification to the original submission impacting the footprint of the solar project, fencing, access road, equipment pad, and utility interconnection design, along with supporting documentation addressing the revised Site Drawings, including statements that pertaining documents would be revised, including applications and documents to the various authorities and parties with jurisdiction for permitting, utility interconnection, FirstLight flowage areas and SMART Program certification. The revised Site Drawings presents a more significant buffer between Pine Meadow Road and the woven agricultural fence.

On October 2, 2024, in connection with the continued Public Hearing scheduled for October 8, 2024, Field Engineering on behalf of BWC Ashuela Brook LLC submitted to the Planning Board additional information pertaining to another revised utility interconnection design, and updated information, claims of attempted outreach to the Northfield Fire Department and a proposed approach to mitigating visual impacts to abutters via arboreal blockage.

During the October 8, 2024 Public Hearing, BWC Ashuela Brook LLC presented a Letter of Filing Consent from FirstLight addressing the current pending status of their required permitting process. The Public Hearing was continued to October 24, 2024.

In response to the Planning Board's request during the October 8, 2024 Public Hearing, on October 17, 2024, BWC Ashuela Brook LLC provided the Planning Board with a revised peer

review report originally submitted to the Conservation Commission by its consultant, Lerner Consulting.

At the October 24, 2024 hearing, the Public Hearing was continued to December 19, 2024.

On December 19, 2024, the Planning Board closed the public hearing and Board member Luksha moved and seconded by Board member Graveline that the Board approve the application with findings and conditions outlined in its consultant's, Beacon Integrated Solution (Beacon), October 21, 2024, revised November 13, 2024 findings and conditions report.

After deliberations, the Board voted 0-5 to approve the application resulting in a DENIAL.

The Board provided the following statement of reasons for its decision/denial.

Section 200-1.2 provides that the purpose of the Zoning Bylaw of the Town of Northfield Massachusetts is

enacted in order to promote the general welfare of the Town of Northfield, to protect the health and safety of its inhabitants, to support the most appropriate use of land throughout the Town, and to further the goals and policies of the Northfield Master Plan, and to preserve and increase the amenities of the Town, consistent with but not limited by the provisions of the Zoning Act, MGL c. 40A, as amended, and Section 2A of Chapter 808 of the Acts of 1975.

Section 200-10.3 (C) Solar Overlay District provides in relevant part:

Applicability. Large-scale ground-mounted solar photovoltaic installations that occupy no more than five acres of land on one or more adjacent parcels in common ownership (including those separated by a roadway) proposed to be constructed in the Solar Overlay District are permitted as of right, subject to site plan review under § 200-3.5 and this section. All other proposed large-scale ground-mounted solar photovoltaic installations require a special permit and site plan review in accordance with this bylaw.

As the Project is not within the Solar Overlay District, it requires a special permit and site plan review by the Planning Board. Section 200-3.4 (C) of the bylaw provides the Special Permit criteria as follows:

Decision criteria. Unless otherwise specified herein, special permits shall be granted by the special permit granting authority only upon its written determination that the adverse effects of the proposed use will not outweigh its beneficial impacts to the Town or the neighborhood, in view of the particular characteristics of the site, and of the proposal in relation to that site.

The determination shall include findings that all of the following criteria for granting a special permit are met:

- (1) The use is in harmony with the general purpose and intent of this Zoning Bylaw;
- (2) The use is in an appropriate location and is not detrimental to the neighborhood and does not significantly alter the character of the zoning district;
- (3) Adequate and appropriate facilities will be provided for the operation of the proposed use;
- (4) The proposed use will not be detrimental or otherwise offensive to the adjoining zoning districts and neighboring properties due to the effects of lighting, odors, smoke, noise, sewage, refuse materials, or visual or other nuisances;
- (5) The proposed use will not cause undue traffic congestion in the immediate area;
- (6) To the maximum extent possible, the proposed use conforms to the principles of rural design in § 200-8.1 of this bylaw; and
- (7) The proposed use is consistent with the Northfield Master Plan.

Additionally, as the Project is in the Floodplain Overlay District section 200-10.1 (A) provides that:

Purpose. The purposes of the Floodplain Overlay District are to:

- (1) Ensure public safety through reducing flood threats to life and personal injury;
- (2) Eliminate new hazards to emergency response officials;
- (3) Prevent the contamination and pollution of water resources resulting from flooding, so as to protect public safety and avoid damage to wildlife habitat;
- (4) Avoid the loss of utility services which if damaged by flooding would disrupt or shut down the utility network and impact regions of the community beyond the site of flooding;

(5) Eliminate costs associated with the response and cleanup of flooding conditions; and

(6) Reduce damage to public and private property resulting from floodwaters.

Section 200-10.1 (f) further provides that:

Subdivision and development proposals.

(1) All subdivision proposals and development proposals subject to site plan review or requiring a special permit for property in the Floodplain Overlay District shall be reviewed by the Planning Board or Zoning Board of Appeals to assure that:

(a) Such proposals minimize flood damage potential and, to the maximum extent feasible, locate all structures, roads, utilities and other infrastructure out of the Floodplain Overlay District;

(b) Public utilities and facilities are located and constructed so as to minimize flood damage potential; and

(c) Adequate drainage is provided.

(2) Where such development is subject to a special permit or site plan review under Sections 3.4 and 3.5 and any other sections of the Northfield Zoning Bylaws, the Planning Board or Zoning Board of Appeals shall incorporate these standards into their review. . . .

After careful review of the Project, the Board found that the installation violates several review criteria set forth within Section C of the Special Permit Decision Criteria and Section 200-10.1 (A) (1)-(5). The installation does not produce benefits that outweigh the hazards of an industrial installation within the Floodplain. The installation does not conform in any way to the historic character, natural setting, or general purpose of the area. It would be detrimental to residence, beyond the direct abutters, affect public use of the Massachusetts Scenic Byway and the Franklin County Scenic Byway, and goes against the Master Plan of Northfield.

The supporting factors within the review criteria for a Denial of the permit are as follows:

200-3.4 C: The benefits do not outweigh the hazards. Installing hazardous materials within a Floodplain, and an overflow area utilized by First Light Northfield Mountain Pumped Hydro Storage Station for flooding with water and debris, presents too great a danger to the community members that live within the area. It could potentially destroy, through debris or contamination, sensitive habitat and prime farmland that the installation would be occupying.

Once that area is contaminated, it cannot be reclaimed. The potential exposure of residents to hazardous material, loss of prime farmland, and the following loss of life are far too great to balance against a potential gain of energy, that does not directly benefit the community, for a limited span of time.

200-3.4 C (1): Installation is not in harmony with the general purpose. The neighborhood is residential, historic farming, and a Scenic Byway. The Solar installation intends to block views of the Connecticut River entirely, it changes the use of the land from farming to industrial, and includes additional industrial installations, i.e. the electrical pad and/or added electrical poles.

200-3.4 C (2): Not an appropriate location. The proposed project is in an area subject to flooding. The neighborhood is predominately a historic farming and residential neighborhood. An installation of this nature would be significantly detrimental to the character, look, and feel of this neighborhood and area.

200-3.4 C (4): Detrimental and offensive to adjoining zoning districts and neighboring properties. This installation would be significantly detrimental and offensive to abutting and neighboring properties. The impacts would negatively affect their property values, and massively impact the viewshed, restricting sightlines of not just abutters and the neighboring residents, but have massive impacts on recreational use of local and statewide visitors that regularly utilize the Massachusetts and Franklin County Scenic Byway. Fourteen (14) abutters, neighbors, and community members that utilize the area recreationally have written in their request for a denial of permit. There were no letters of support.

Due to the visual effects of the Project, private homeowners property values will be diminished. Properties purchased prior to this Project will have a much smaller pool of interested buyers because of proximity of their properties to an industrial solar site; therefore causing the value of their properties to diminish from where they might have been in such a scenic section of Northfield prior to an industrial solar project being built.

200-3.4 C (6) and 200-8.1 A, F Principles of Rural Design: This installation does not, in any way, conform to the Principles of Rural Design. It does not "retain and reuse existing farmland" and the installation will obstruct site lines as "seen from public places and roads." This installation would stand out starkly within the rural setting, completely disrupting the historic and current setting, look, feel and character of the area.

Additionally, this Project is in conflict with this criterion as outlined in Article 8.1.

Site development standards. B. preserve stonewalls and hedgerows. These traditional landscape features define outdoor areas in a natural way, and create corridors useful for wildlife, using these features as property lines is often appropriate, as long as setback requirements, do not result in constructing buildings in the middle of fields.

This project will be built entirely in the middle of a field with 24 acres of hundred-year flood plain next to the Connecticut river with 16.1 acres fenced in eliminating significant existing wildlife corridors and stifling the elasticity of the flood plains ability to move water during the flood event.

200-3.4 C (7): The installation is in direct conflict with the Northfield Master Plan.

Page 52: Scenic resources and Unique Environments. There is emphasis on preservation of scenic and historic areas, of which this area is noted as such.

Page 54: Landscapes that reflect major patterns of a region's history (e.g. agricultural landscapes) directly noting landscapes that are important due to their design or physical character (e.g. 18th century Colonial Period Connecticut Valley rural farms) and Landscapes that yield or have the potential of yielding significant information on indigenous / pre-contact or historic peoples.

Page 55: Cited as the first on the list for Significant Scenic, Ecological, Recreational, and Historic Landscape / Features in Northfield:

- Connecticut River (Stream Corridor)
- Pine Meadow Road (Historic Agricultural Landscape)
- Route 63 / Connecticut River Scenic Byway (Scenic Road)
- Pine Meadow Road (Scenic Road)

Page 60: Threats to Northfield Natural Resources: Negative Impacts of Development.

Bullet point #3: The property is characterized as Prime Farmland by GIS and vulnerable to development.

Additionally, as the Project is in the Floodplain Overlay District Section 200-10.1 provides that:

(A) Purpose. The purposes of the Floodplain Overlay District are to:

- (1) Ensure public safety through reducing flood threats to life and personal injury;
- (2) Eliminate new hazards to emergency response officials;
- (3) Prevent the contamination and pollution of water resources resulting from flooding, so as to protect public safety and avoid damage to wildlife habitat;
- (4) Avoid the loss of utility services which if damaged by flooding would disrupt or shut down the utility network and impact regions of the community beyond the site of flooding;
- (5) Eliminate costs associated with the response and cleanup of flooding conditions; and

(6) Reduce damage to public and private property resulting from floodwaters.

C. (1) The floodplain management regulations found in this Floodplain Overlay District section shall take precedence over any less restrictive conflicting local laws, bylaws or codes. The degree of flood protection required by this bylaw is considered reasonable by the Town but does not imply total flood protection.

(I) Subdivision and development proposals.

(1) All subdivision proposals and development proposals subject to site plan review or requiring a special permit for property in the Floodplain Overlay District shall be reviewed by the Planning Board or Zoning Board of Appeals to assure that:

(a) Such proposals minimize flood damage potential and, to the maximum extent feasible, locate all structures, roads, utilities and other infrastructure out of the Floodplain Overlay District;

(b) Public utilities and facilities are located and constructed so as to minimize flood damage potential; and

(c) Adequate drainage is provided.

(2) Where such development is subject to a special permit or site plan review under Sections 3.4 and 3.5 and any other sections of the Northfield Zoning Bylaws, the Planning Board or Zoning Board of Appeals shall incorporate these standards into their review. Where such development is subject to the Subdivision Regulations of the Town of Northfield, the Planning Board shall incorporate these standards into their subdivision plan review.

Adequate drainage paths shall be provided around structures on slopes, in order to guide floodwaters around and away from proposed structures. That requirement has not been designed into this Project as there will be a fence completely surrounding this Project resulting in congestion of flood waters and debris and stifling the elasticity of the flood plains ability to allow a path down to the channel of the River to eliminate as much as possible flooding to the local neighborhood.

In Zones A1–30 and AE, along water courses that have a regulatory floodway designated on the Northfield, FIRM, or Flood Boundary and Floodway Map, encroachments, are prohibited in the regulatory floodway, which would result in any increase in flood levels within the community

during the occurrence of the base flood discharge. This is a likely outcome of this Project in a major flood event.

In the flood way, designated on Flood, Boundary and Floodway Map, the following provisions shall apply: (1) All encroachments, including fill, new construction, substantial improvements, to existing structures, and other development, are prohibited unless certification via registered professional engineer, or architect is provided by the applicant demonstrating that's such a encroachment shall not result in any increase in flood levels during the occurrence of the hundred year flood. No demonstrable proof that this Project shall not result in any increase in flood levels during the occurrence of 100 year flood.

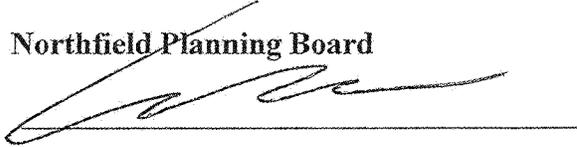
Finally, the Town's Open Space and Recreation Plan at page 14, provides that the 100 and 500 year flood plains are mapped by the National Flood Insurance Program (NFIP) after a study of waterways. The 100-year flood plain is used for regulatory purposes. According to the NIFP maps effective in 1980, 100-year flood plains in Northfield occur along: The entire length of the Connecticut River in Northfield including Pauchaug Meadow, Great Meadow, Little Meadow, Pine Meadow. The Project is subject to three (3) flowage easements to various power companies which provide the companies with the right to flood the area of the Project with water, ice, and debris.

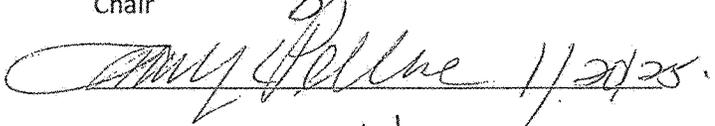
Because this Project is solely located in the NIFP waterways and subject to flowage easements, there is a high likelihood that this Project is prone to being inundated during a major flood event.

For all of the above reasons, the location and siting of a large-scale solar array in the flood plain is a serious threat to the health, safety and welfare of the neighborhood, abutters, the Town and the Commonwealth.

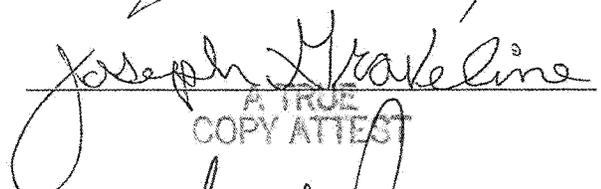
Any person aggrieved by the Decision of the Planning Board or any special permit granting authority, whether or not previously a party to the proceedings, or any municipal officer or board, may, as provided for in the Massachusetts General Laws, Chapter 40A, Section 17, appeal to a court of competent jurisdiction by bringing action within twenty (20) days after the Decision has been filed with the Office of the Town Clerk.


Chair

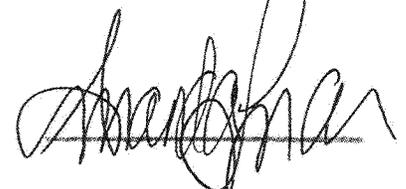
Northfield Planning Board


 1/20/25




A TRUE COPY ATTEST

Date: _____



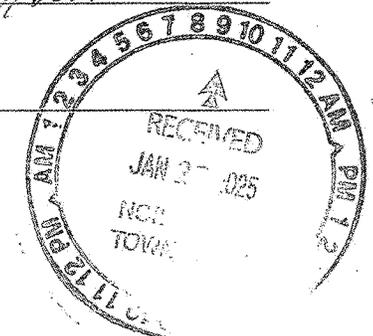


Exhibit F

**Field Engineering Co., Inc.
Agrivoltaic Array Floodplain Memorandum**

October 15, 2024

October 15, 2024
Project No. 2312K

Mr. Michael Zhe
Senior Director, Project Development
BWC Ashuela Brook, LLC
116 Huntington Avenue, Suite 601
Boston, MA 02116

RE: Northfield-Proposed Agrivoltaic Array
0 Pine Meadow Road
Northfield Assessors Parcels 55-A4, 55-A5, 55-A7 and 72-A1
Floodplain Discussion

Dear Mr. Zhe:

The purpose of this letter is to provide a written discussion regarding the development of the proposed agrivoltaic array within the 100-year floodplain. During deliberations with the Conservation Commission, it has been asked as to whether or not the current flood maps are still valid and if we've "verified" that the 100-year floodplain on the maps is accurate. It has also been asked as to whether or not the site is within the floodplain or a Regulatory Floodway. Answers to these questions are addressed below.

As you are aware, the Conservation Commission is charged with regulating work within "bordering land subject to flooding" under the Wetlands Protection Act and the according to the Act, the definition of "bordering land subject to flooding" is as follows:

"The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm. Said boundary shall be that determined by reference to the most recently available flood profile data prepared for the community within which the work is proposed under the National Flood Insurance Program (NFIP, currently administered by the Federal Emergency Management Agency, successor to the U.S. Department of Housing and Urban Development). Said boundary, so determined, shall be presumed accurate. This presumption is rebuttable and may be overcome only by credible evidence from a registered professional engineer or other professional competent in such matters."

It should be noted that there is no reference to "Regulatory Floodways" in the Wetlands Protection Act.

Additionally, the Town of Northfield Floodplain Overlay District Bylaw also has a definition of the Floodplain District which is as follows:

Floodplain District. The Floodplain Overlay District is herein established as an overlay district. The District includes all special flood hazard areas designated on the Town of Northfield's Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency for the administration of the National Flood Insurance Program, dated September 30, 1980 and on the Flood Boundary & Floodway Map (FBFM) dated September 30, 1980. These maps indicate the 1%-chance regulatory floodplain. The exact boundaries of the District shall be defined by the

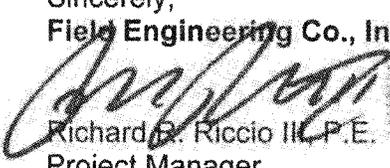
1%-chance base flood elevations shown on the FIRM and further defined by the Flood Insurance Study (FIS) report dated March 1980 prepared by the U.S. Department of Housing & Urban Development Federal Insurance Administration and any amendments thereto. The effective FIRM, FBFM, and FIS report are incorporated herein by reference and are on file with the Town Clerk and Building Inspector.

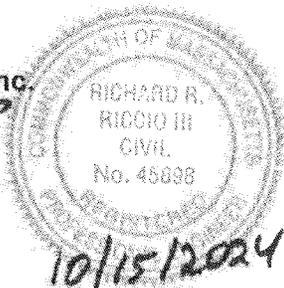
As we have stated, we do not rebut the presumptions of the current flood maps and have prepared a design in accordance with said maps. By raising the proposed solar infrastructure above the "base flood elevation" as depicted on the 1980 Maps and providing compensatory flood storage for the small amount of fill being placed below the "base flood elevation" as shown on our latest site plans, it is our professional opinion that we comply with the Performance Standards under the Wetlands Protection Act for work within "bordering land subject to flooding" and the Conservation Commission can issue an Order of Conditions for this work, which is the only work within the Commission's jurisdiction. It should be noted that we will also be required to file a Permit application with the Floodplain Administrator to allow work within the Floodplain Overlay District as required under the Bylaw. This application has been submitted to the Administrator and is a prerequisite for an application to Building Department, and will not be issued until any other necessary local, state or federal permits have been obtained.

In addition to the information presented above, Field Engineering has reviewed the FEMA Flood Map Service Center to determine if there is any more recent information related to the floodplain in the area and we have found that FEMA has developed updated Preliminary FIRM Maps for the Town of Northfield, issued May 22, 2024 (copies attached herein). As the updated maps show, FEMA has revised 100-year floodplain and better defined the Regulatory Floodway for the project area. According to the preliminary 2024 maps, the "base flood elevation" in the area of the proposed agrivoltaic array will be at elevation 200.5 (NAVD 88 Datum). On the 1980 maps, this elevation was 205 (NGVD 29 Datum) or 204.7 (NAVD 88 Datum). Should these revised FIRM Maps become official, while a portion of the array would still be within the floodplain, the area of the site where the equipment pads are proposed would no longer be within the floodplain. Finally, on the Preliminary FIRM Maps of 2024, it is clearly shown that the Regulatory Floodway associated with the Connecticut River does not extend onto the project area.

If you need any additional information or have any questions, please do not hesitate to contact me directly.

Sincerely,
Field Engineering Co., Inc.


Richard R. Riccio III, P.E.
Project Manager



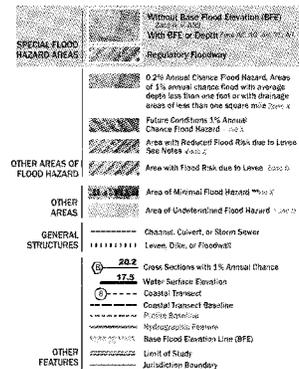
Attachments

1. FEMA NFIP Flood Map Panel 25011C0138D, Preliminary Issue Date: 5/22/2024
2. FEMA NFIP Flood Map Panel 25011C0301D, Preliminary Issue Date: 5/22/2024
3. FEMA FIRM Flood Insurance Map Panel 250124 0010B, Effective Date: 9/30/1980



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT. THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://msc.fema.gov)



NOTES TO USERS

The information and questions about this Flood Insurance Rate Map (FIRM), and other flood hazard information are part of the National Flood Insurance Program (NFIP) and are available to the public. For more information, please contact the FEMA Mapping and Information Center at 1-877-352-8347 or 1-877-352-8348 for the Flood Hazard Map Review Center website at www.fema.gov. Available products may include preliminary flood hazard mapping, Flood Insurance Study (FIS) reports, and digital systems information. Areas of flood hazard shown on this map are for informational purposes only and do not constitute a flood insurance policy. Flood insurance coverage is available through the National Flood Insurance Program. For more information, please contact the National Flood Insurance Program at 1-800-453-5867.

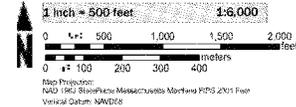
For comments and questions, please refer to the Flood Insurance Study Report for this jurisdiction. In addition, flood insurance is available in this context, contact your insurance agent or call the National Flood Insurance Program at 1-800-453-5867.

Boundary information shown on this FIRM was provided as digital data by the United States Geological Survey (USGS). The boundary information was derived from the National Hydrography Dataset (NHD) and the National Wetlands Inventory (NWI).

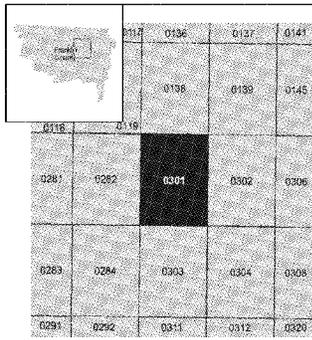
Basic information shown on this FIRM was provided as digital data by the United States Geological Survey (USGS). The boundary information was derived from the National Hydrography Dataset (NHD) and the National Wetlands Inventory (NWI).

Basic information shown on this FIRM was provided as digital data by the United States Geological Survey (USGS). The boundary information was derived from the National Hydrography Dataset (NHD) and the National Wetlands Inventory (NWI).

SCALE



PANEL LOCATOR



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

FRANKLIN COUNTY MASSACHUSETTS ALL JURISDICTIONS



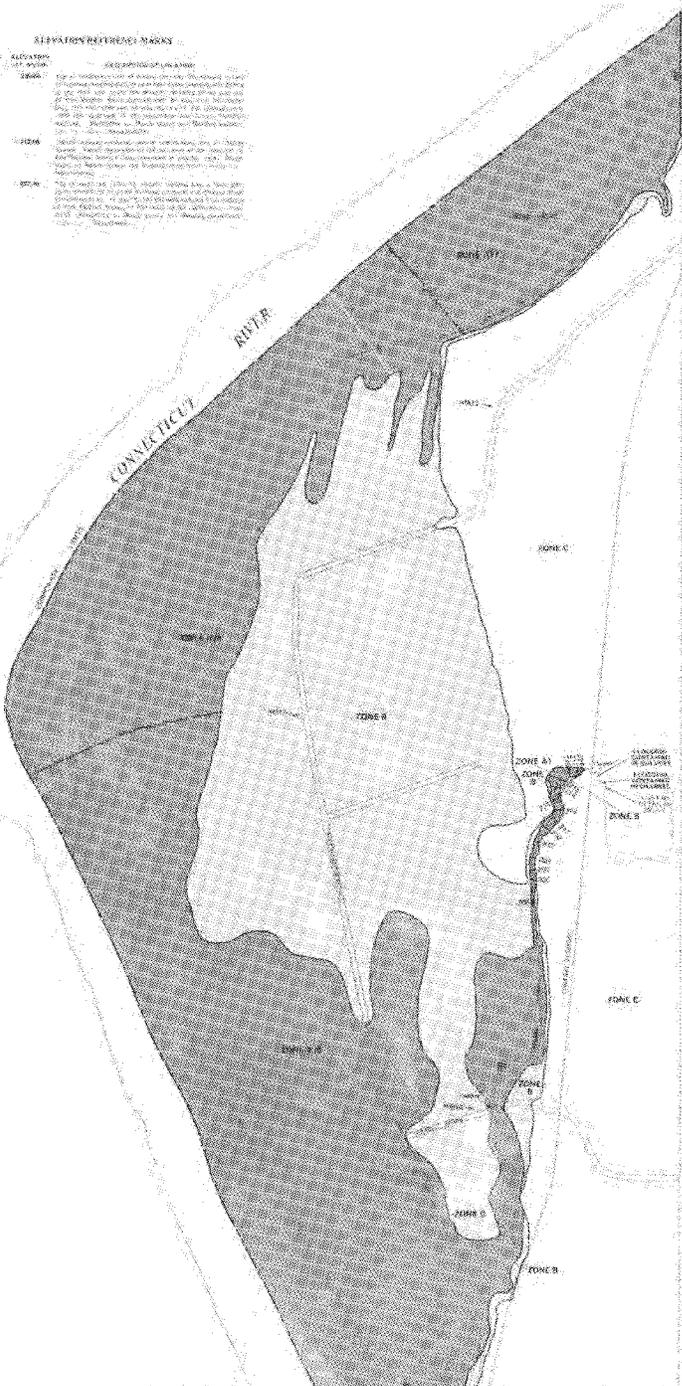
Panel Grid Index:

COMMUNITY	NUMBER	PANEL	SUFFIX
DOWN OF MONTAGE	290122	0301	D
DOWN OF ERVING	290116	0301	D
TOWN OF NORTHFIELD	290124	0301	D
TOWN OF GILL	290117	0301	D

MAP NUMBER
25011C0301D
EFFECTIVE DATE
Firm Issue Date: 05/22/2024

ELEVATION REFERENCE MARKS

MARK	ELEVATION	DESCRIPTION
18407	128.66	Top of wooden cross at corner of lot. This mark is used to determine the elevation of the ground surface at the corner of the lot. The height of the cross above the ground surface is 10.00 feet. The elevation of the ground surface at this mark is 118.66 feet.
18408	128.66	Top of wooden cross at corner of lot. This mark is used to determine the elevation of the ground surface at the corner of the lot. The height of the cross above the ground surface is 10.00 feet. The elevation of the ground surface at this mark is 118.66 feet.
18409	128.66	Top of wooden cross at corner of lot. This mark is used to determine the elevation of the ground surface at the corner of the lot. The height of the cross above the ground surface is 10.00 feet. The elevation of the ground surface at this mark is 118.66 feet.



KEY TO MAP

1. Flood Hazard Zone
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EXPLANATION OF ZONE DESIGNATIONS

1. Zone A: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
2. Zone B: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
3. Zone C: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
4. Zone D: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
5. Zone E: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
6. Zone F: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
7. Zone G: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
8. Zone H: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
9. Zone I: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
10. Zone J: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
11. Zone K: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
12. Zone L: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
13. Zone M: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
14. Zone N: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
15. Zone O: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
16. Zone P: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
17. Zone Q: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
18. Zone R: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
19. Zone S: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
20. Zone T: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
21. Zone U: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
22. Zone V: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
23. Zone W: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
24. Zone X: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
25. Zone Y: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard
26. Zone Z: Special Flood Hazard Area (SFHA) - 1% Annual Flood Hazard

SYMBOLS

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NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
NORTHFIELD,
MASSACHUSETTS
FRANKLIN COUNTY

PANEL 10 OF 13

COMMUNITY PANEL NUMBER
230150 0101 0

EFFECTIVE DATE:
SEPTEMBER 20, 1980

U.S. DEPARTMENT OF RESOURCES
AND GENERAL SURVEY