

**TOWN OF WOODSTOCK SUPPORTING PLAN STANDARDS FOR THE
PROTECTION OF SCENIC BYWAYS AND VISTAS & THE SITING OF
SOLAR ENERGY FACILITIES**

WOODSTOCK RESOURCES, VALUES & PUBLIC INTERESTS

OPEN SPACE & TRADITIONAL DEVELOPMENT PATTERN

The Town and Village of Woodstock Comprehensive Plan, 2014 (hereinafter "Town Plan") states in its Scenic Statement that "the scenic rural character, so vital to our lifestyles, consists of a great variety of features. Densely settled areas provide focal points of human activity, clearly defined within the space beyond. This space provides fields, mixed forests and wetlands which are linked together by brooks, rivers, and both paved and unpaved roads. Distant views of Ascutney, Killington, and the Green Mountains contrast with a foreground of open and wooded ridgelines and valley floors. The scenic corridor of the Ottauquechee River provides a second visual focal point. Scattered cemeteries, historic bridges, farmscapes, and stone walls give us a perspective on our rich heritage . . . For residents of the small farms and private homes, the beauty and function of this landscape is an integral part of their lives."

"The Town Plan also recognizes the "prime importance of the role that open space plays in the quality of life and character of Woodstock. The value and contribution of open space in Woodstock flow not only from its open fields and meadows, but also from its wooded hillsides, forests, stream corridors and other natural vistas." Town Plan, p. 77.

As a result, the Town Plan concludes that "[p]rotecting and maintaining Woodstock's open spaces is vital to the community's economic, social and environmental future. Maintaining the economic base provided by both tourism and agriculture in the Town requires a generous resource of scenic beauty in the countryside, in the Village, and in the areas adjacent to the Village and hamlets of Woodstock. The primary threats to the rural character of the town and its open spaces are natural reforestation of previously farmed fields, and development, both residential and commercial, that is insensitive to the agrarian heritage and pastoral aesthetics that have historically defined the unique attributes of Woodstock." Id.

SCENIC BYWAYS LINKING TOWN CENTERS

"U.S. Route 4 (a major East-West artery) and State Routes 12 and 106, are well-traveled corridors leading to and from Woodstock. Currently the character of these roads varies from residential and commercial development to relatively sparsely populated open spaces. Recent years have seen increased development along these

routes that pass directly through the center of Woodstock Village and the Town's hamlets. Resulting loss of scenic differentiation between the Village and hamlets and the rural countryside that surrounds them could unduly impact the aesthetic and environmental quality of the entire town." Id.

The Town Plan therefore directs that Woodstock should establish clear definition of commercial and open space zones along Routes 4, 12, and 106 which should include provisions for scenic vistas, preservation of agricultural lands, river corridor conservation zones, and creative use of setback requirements to create a clear "greenway" through which travelers to Woodstock would move. Id.

WETLANDS AND SENSITIVE ECOLOGICAL AREAS

The Town Plan recognizes that wetlands are one of the earth's most productive ecosystems. They provide travel corridors and critical habitat for wildlife, including food, cover, breeding and nesting grounds. Wetlands often lie at the headwaters of rivers and streams and help maintain flow during periods of drought. Wetlands provide open space and aesthetic qualities in addition to recreational and educational opportunities. Town Plan, p. 71.

Only 0.8 % of Windsor County is covered by wetlands, the lowest of any county in Vermont. Woodstock has relatively few wetland areas. The numerous small wetlands scattered throughout Woodstock provide functions and values that maintain the ecological integrity of our natural environment and provide many other benefits to our community. The Town Plan regards the protection of these limited, life-sustaining resources and wildlife access to them as critical to preserving the biodiversity of Woodstock's fauna and flora. Moreover, many of Woodstock's wetlands provide temporary storage of flood waters, thereby decreasing adverse effects on downstream communities and habitats while reducing the severity of flooding within our own town. They also recharge groundwater and improve water quality by retaining sediments, nutrients, and pollutants that otherwise contaminate surface waters. Accordingly, ground-mounted solar arrays are not compatible with wetlands and ought not to be located within or close to them or other sensitive natural areas, such as vernal pools. Id.

ADVENT AND GROWTH OF SOLAR DEVELOPMENT PROJECTS

The contribution of solar energy to Woodstock's total energy supply is growing. More structures are being sited, oriented and designed to incorporate passive solar construction techniques for space heating and natural lighting. Passive solar building design and solar thermal heating systems can significantly increase energy efficiencies and reduce costs. Until recently, the upfront costs of solar photovoltaic (PV) systems

were generally too costly for the average homeowner, but emerging technologies and state, federal and utility incentives have made grid connected net-metered PV systems more affordable.

Technological advances, including the incorporation of photovoltaic components in roofing and siding materials, may make solar power an even more viable source of electricity in the near future.

The scale and siting of some proposed and/or existing solar installations in Woodstock and other Vermont communities, have raised concerns about the impacts that such facilities can have on the town's residential neighborhoods, its historic village and hamlet area, its scenic byways, and its scenic, natural, agricultural, and historic resources, such as the Marsh Billings Rockefeller National Park, the Billings Farm, U. S. Route 4 and the Scenic Ridgeline Overlay District. Woodstock's scenic character is defined by traditional, compact townscapes and open rural landscapes. Woodstock residents are proud of this character and the Town benefits from the tourism it attracts. The Town's scenic landscapes can be affected by energy-related facilities and activities. Energy-related facilities can significantly change the aesthetic character of the Town's landscapes. In particular, large, ground-mounted solar array projects raise concerns, which the Town Plan identifies as in need of Town attention when reviewing applications for development along these corridors:

1. Loss of scenic vistas and open wooded hillsides;
2. Loss of the scenic differentiation between town and countryside;
3. Loss of natural habitats along stream/river corridors;
4. Loss of prime agricultural lands and flood plains;

Woodstock has previously acted to protect its historical, agricultural, open space, and scenic resources. Woodstock established a Scenic Ridgeline District in 1992 in response to the adverse visual impacts of development on the scenic qualities of the Town's prominent ridges and hillsides, which contribute significantly to the Town's aesthetic identity. Large, ground-mounted solar arrays are incompatible with the scenic and open space values that the Scenic Ridgeline District was designed to protect. The Town Plan recommends that the Woodstock take steps to restrict inappropriate development within the Scenic Ridgeline District. Town Plan, p. 79.

Woodstock has also created two Design Review Districts (Village and South Woodstock) the primary purpose of which is to preserve and protect the historic character of the village. The Town Plan recognizes that alternative energy projects, such as solar arrays, present a particular conflict with historic structures and land use patterns. As a result, the Town Plan places the primary interest of its energy policy within the Design Review District upon energy conservation and proper

insulation/weatherization techniques before considering energy production devices. The Town Plan directs that alternative energy development within the Design Review District should focus on geothermal and recognizes that alternative energy devices, such as ground-mounted and roof top solar arrays do not fit the historic character of structure or neighborhood. Accordingly, the Town Plan instructs that solar arrays in the Design Review District should be located in private areas and out of the public view. Town Plan, p, 36-37.

DEVELOPMENT OF MUNICIPAL SUPPORTING PLAN

As a result, the Select Board has developed these Supporting Plan Standards for the Protection of Scenic Byways and Vistas & the Siting of Solar Facilities ("the Standards") as a supporting plan pursuant to 24 V.S.A. §4432. Woodstock will support the siting of appropriately scaled renewable energy resources in the Town, villages, and hamlets that avoid or minimize impacts to areas of high public value. Toward these ends, the Town will seek opportunities for early involvement in the planning / permitting process including Act 250 proceedings and proceedings before the Public Service Board, in order to avoid and mitigate potential impacts of development along Woodstock's Scenic Byways and solar facility development, while promoting new installations in appropriate locations.

The Town Selectboard will participate in Act 250 hearings and PSB hearings for renewable energy projects which require a Certificate of Public Good) proposed to be located in Woodstock. The Town will also assess potential impacts to areas of high public value from net metering 6 projects and will participate in PSB proceedings if warranted.

Woodstock intends the policies and maps referenced herein to articulate clear written community standards for use in Act 250 and PSB §248 proceedings. In Act 250 proceedings and those before the PSB, the Town will utilize these Standards in support of the Town's position with respect to development along designated scenic byways and with respect to renewable energy projects.

Electricity generation and transmission systems powered by solar energy are regulated by the Public Service Board (PSB) under 30 V.S.A. Section 248 (Section 248 PSB proceedings). These include net metered distributed energy installations, as well more commercial, utility-scale generation, transmission and distribution facilities. The Woodstock Planning Commission, the Two Rivers Ottauquechee Regional Commission, and the Woodstock Selectboard will receive notice of a Certificate of Public Good (CPG) application for a proposed solar facility in Woodstock Town. In determining whether to provide a proposed solar project with a CPG, the PSB must give due consideration to the recommendations of the municipal and regional planning commissions, the Woodstock Selectboard, and the land conservation measures contained in the

Woodstock Town Plan.

See 30 V.S.A. §248(b)(1).

The PSB must also determine whether a proposed solar facility will have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment, the use of natural resources, and the public health and safety, with due consideration having been given to the criteria specified in 10 V.S.A. §1424a(d) (outstanding resource waters) and the Act 250 criteria set forth in 10 V.S.A. §6086(a)(1) through (8) and 9(K).

See 30 V.S.A. §248(b)(5).

To determine whether the proposed solar energy facility would have an adverse impact on the considerations set forth identified in §248(b) (5) above, PSB Rule 5.108(A) requires the PSB to conduct the so-called "Quechee analysis" to assess whether a proposed solar project would have an adverse impact by virtue of being "out of character with its surroundings," and if so, whether the adverse impact qualifies as "undue." Rule 5.108(A). The PSB therefore must consider "the nature of the project's surroundings, the compatibility of the project's design with those surroundings, the suitability of the project's colors and materials with the immediate environment, the visibility of the project, and the impact of the project on open space." Rule 5.108(A)(1).

A solar project's location, size, and visibility, together with the context of the surrounding land uses, will be relevant in the PSB's consideration of whether the proposed project would have an undue adverse impact. Among other things, the Quechee analysis requires the PSB to consider whether the proposed project would violate a "clear written community standard".

Therefore, the effective participation of Woodstock in the PSB's review process requires the development of specific community standards in order to ensure that local conservation and development objectives are considered and weighed by the PSB in its review of a CPG application for a solar energy facility. Toward that end, the Woodstock Select Board has developed the following specific community standards for the siting and development of a solar energy facility in Woodstock Town.

WOODSTOCK COMMUNITY STANDARDS REGARDING SCENIC BYWAYS AND VISTAS AND THE SITING OF SOLAR ENERGY FACILITIES

I. A. PURPOSE

The purpose of these community standards is to promote the development of renewable energy resources and energy facilities in Woodstock Town, while limiting the adverse impacts of such development on public health, safety and welfare, the town's historic

and planned pattern of development, environmentally sensitive areas, and our most highly-valued natural, cultural and scenic resources – consistent with related development, resource protection and land conservation policies included elsewhere in this plan. These policies should also be considered in undertaking municipal solar energy projects and programs, in enacting or updating the town's bylaws to address renewable energy development, and in the review of new or upgraded energy facilities and systems by the town and in § 248 PSB proceedings.

B. General Standards for Energy Projects

Woodstock will consider supporting the following types of energy development, in order of priority:

1. Increased system capacity through state, utility and municipally-supported energy efficiency and conservation programs.
2. Individual and group net-metered renewable energy projects, community-based projects, and other small-scale distributed renewable energy systems serving individual users, in appropriate, context-sensitive locations.
3. In-place upgrades of existing facilities, including existing transmission lines, distribution lines and substations as needed to serve the town and region.
4. New community-scale energy facilities, including new transmission and distribution lines, substations, hydro dams, wind and solar farms, co-generation facilities and biomass plants that are designed to meet the expected needs of Woodstock Town.

To the extent physically and functionally feasible, existing utility systems, including transmission lines, distribution lines and substations, shall be upgraded or expanded on site or within existing utility corridors before new facilities or corridors are considered.

C. Public Health and Safety Standards and Use Classification

A small net-metered or off-grid solar energy project, including a solar array, system intended solely to serve only an individual residence or business, should be considered an accessory structure allowed in all land use in which structures are allowed by zoning bylaws.

D. Setbacks

Except for transmission and distribution lines and utility connections, all energy facilities including substations, commercial, utility and net-metered generation facilities and accessory structures – must meet minimum setback requirements for the land use district(s) in which they are located. In addition:

1. Building-mounted solar panels must meet the minimum setback requirements of the Town bylaws for the building on which the panels are to be mounted. The installation of a net-metered or similar off-grid energy system on a nonconforming structure will not constitute an increase in the degree or amount of nonconformance under town bylaws.
2. Renewable energy facility setback distances from property lines, or from occupied structures in existence at the time of application, should be increased as necessary to mitigate identified aesthetics, historic sites, air and water purity, the natural environment, the use of natural resources, and the public health and safety, with due consideration having been given to the criteria specified in 10 V.S.A. § 1424a(d) (outstanding resource waters) and the Act 250 criteria set forth in 10 V.S.A. §6086(a)(1) through (8) and 9(K), and nuisances or adverse impacts upon adjoining property owners.

E. Access

New energy generation facilities shall be sited in a manner that avoids or, to the greatest extent physically feasible, minimizes the need for new and extended access roads and utility corridors.

1. Facility access should be provided from existing access roads where physically feasible, and access roads and utility corridors should be shared to minimize site disturbance, resource fragmentation, the creation of additional edge habitat, and the introduction and spread of invasive exotic species.
2. Identified impacts to public highways from facility construction, operation and maintenance, including highway improvements required to accommodate the facility, shall be mitigated by the developer.
3. Public access to generation and transmission facilities, including substations, must be restricted as necessary to protect public health and safety.
4. Noise generated by any energy facility, including wind energy systems, shall not exceed the lesser of (a) 45dB(A) as measured at any property line, or (b) 5 dB(A)

above the ambient sound level, except during a short-term event such as a utility outage or a severe wind storm.

F. Signs

Energy generation facilities and structures shall not be used for display or advertising purposes. Signs, except for owner and manufacturer identifications and safety warnings that do not exceed one square foot, are prohibited on all structures.

1. Substation lighting should be the minimum necessary for site monitoring and security, should be cast downward, and must not result in light trespass or glare on adjoining properties.

G. Decommissioning and Abandonment

Generation facility permits or certificates must include provisions for system abandonment, decommissioning and site restoration including, for larger systems > 100 kW, required sureties for facility removal and site restoration.

II. SOLAR ENERGY FACILITY SITING STANDARDS

A. Site Designation and Siting Standards

1. Sites planned for or intended to accommodate solar energy facility development, including the location of existing and planned commercial and net-metered generation facilities and utility corridors, are to be shown on site development and subdivision plans reviewed by the town.
2. Solar energy facilities and accessory structures are to be designed and constructed of materials, colors, and textures that blend into the surrounding natural or built environment to the extent feasible.
3. The solar energy facility shall not extend above the background horizon line.
4. The solar energy facility shall be screened from view through the use of existing topography, structures, vegetation or strategically placed tree, shrub and ground cover plantings that do not block distant views.

5. Onsite mitigation – e.g., through facility clustering, relocation, buffering and permanent conservation easements – is preferred. Off-site mitigation measures should be required where on-site mitigation is not physically feasible.

B. Setbacks

1. Ground-mounted solar energy facilities with a generation capacity from 0 MW to .5MW shall be located at least 50 feet from any property line and at least 50 feet from any public highway.
2. Ground-mounted solar energy facilities with a generation capacity from .5 MW to 1 MW shall be located at least 100 feet from any property line and at least 100 feet from any public highway.
3. Ground-mounted solar energy facilities with a generation capacity from 1 MW to 1.5 MW or more shall be located at least 150 feet from any property line and at least 150 feet from any public highway.
4. Ground-mounted solar energy facilities with a generation capacity from 1.5 MW to 2 or greater MW shall be located at least 200 feet from any property line and at least 200 feet from any public highway.
5. Ground-mounted solar arrays shall not be located within 1,000 feet of the boundary of the Village Design Review District, the South Woodstock Design Review District, and Taftsville, unless topographic features of the landscape or existing vegetative screening preclude observation of the solar arrays from the relevant protected district or hamlet.
6. Ground-mounted solar arrays shall not be located within 250 feet of the boundary of a public cemetery in Woodstock, unless topographic features of the landscape or existing vegetative screening preclude observation of the solar arrays from the cemetery.

C. Hazard Areas

With the exception of transmission and distribution lines, ground-mounted solar energy facilities that are not attached to existing or permitted structures shall not be located in:

1. Special Flood Hazard Areas (SFHAs), including floodways and floodway fringes identified on Flood Insurance Rate Maps (FIRMs) for the town. Any allowed facility shall not be located within these areas must meet minimum National

Flood Insurance Program (NFIP) requirements, as reviewed and permitted by the municipality or the state.

2. Shall not be located in fluvial erosion hazard areas as identified on Woodstock FEMA maps.
3. Shall not be located on steep slopes, with natural (pre-development) grades in excess of 15%.

D. Conservation/Open Space Areas

Ground-mounted solar energy facilities with a generation capacity of greater than 100 kW are to be sited to avoid, where physically feasible, or to otherwise minimize encroachment and mitigate, the adverse impacts of facility development on:

1. Significant wildlife habitat, including without limitation, deer wintering areas, core habitat areas, and travel and migratory corridors, as identified from state inventories and data sets, local inventories, and site investigations associated with facility development.
2. Ground-mounted solar arrays shall not be located on the following land identified on the Town Plan's 2014 Critical Areas Map: swamps, flood plains, forest fens (yellow shaded areas), wetlands (Class II and Class III), and vernal pools. The setback for a ground-mounted solar energy facility from surface waters and wetlands shall be 75 feet. The setback for a ground-mounted solar energy facility from vernal pools shall be 50 feet.

E. Agricultural Land/Open Space

Ground-mounted solar energy facilities with a generation capacity of greater than 100 kW, transmission and distribution lines, accessory structures and access roads are to be located on nonagricultural land or along field edges to avoid fragmentation of, and to minimize and mitigate adverse impacts to agricultural land and open fields.

1. Ground-mounted solar energy facilities shall not be located on primary agricultural soils as mapped by the USDA Natural Resource Conservation Service in order to preserve such lands for agricultural use.

F. Designated Scenic Areas

Ground-mounted solar energy facilities sited within or as viewed from scenic areas shall not create a significant physical, visual, audible, or historically incongruous or

incompatible intrusion into these areas. New facilities, including generation facilities greater than 100 kW substations and transmission lines, are specifically prohibited within or as viewed from these areas unless significant associated impacts can be avoided, for example through facility siting, screening or line burial.

G. **Designated Woodstock Town Historic Districts and Other Historically-Significant Properties**

Ground-mounted solar energy facilities shall not be located within any area designated on the National Register of Historic Places.

1. Ground-mounted solar energy facilities shall not be located within 500 feet of a building designated as a historic building. Ground-mounted solar arrays shall not be located within 500 feet of the boundaries of the Marsh Billings Rockefeller National Park and/or, the Billings Farm. These standards may be relaxed if topographic features of the landscape and/or existing vegetative screening preclude observation of the solar arrays from these protected properties and/or the buildings located thereon.
2. The installation of solar energy facilities on historic buildings or on buildings within the any area hamlet or Village designated on the National Register of Historic Places shall be done in accordance with current Secretary of the Interior's Standards for Rehabilitation.
3. The historic character of listed properties and structures shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
4. Ground installations, to the extent functionally feasible, shall be installed in locations that minimize their visibility, such as a side or rear yard, and be screened from view of public rights-of-way and adjoining properties.
5. Roof or building-mounted systems may be placed on new construction, non-historic buildings and additions.
6. Solar panels and other roof- or wall-mounted structures shall not be placed on primary building facades, including street-facing walls or roofs, unless there is no other suitable location on the site or structure.
7. Roof or building-mounted systems on a historic building shall not physically damage the structure, alter its character-defining features, including existing roof lines or dormers, nor obstruct significant architectural features such as overlaying

windows or architectural detailing. Attachment points must be minimized and allow for future system removal.

8. Roof-mounted installations shall be placed below and behind parapet walls and dormers, on rear-facing roofs, where feasible. Panels are to be mounted flush with and at the same angle as the existing roof surface and, on flat roofs, set back from the roof edge to minimize visibility.

III. GOALS

A. Promote sustainable development in Woodstock by reinforcing traditional land use patterns and municipal development policies, maximizing energy conservation through weatherization of existing structures and appropriate siting of new development, encouraging appropriate development and use of renewable energy resources, protecting natural and cultural resources.

B. Ensure the long-term availability of safe, reliable and affordable energy supplies to meet the needs of the town and neighboring communities.

C. Reduce municipal energy consumption and costs, community reliance on fossil fuels and foreign oil supplies, and greenhouse gas emissions that contribute to climate change through increased energy and fuel efficiency, energy conservation, and active transition to alternative fuels and renewable energy sources.

D. Sustainably develop Woodstock Town's renewable energy resources and local distributed energy generation capacity – including municipal and community generation and supporting smart grid technology – consistent with adopted plan policies and community energy facility and siting standards.

E. Avoid or minimize the adverse impacts of energy development on public health, safety and welfare, the town's historic and planned pattern of development, environmentally sensitive areas, and Woodstock Town's most highly valued natural, cultural and scenic resources, consistent with adopted plan policies and community standards for energy development, resource protection and land conservation.

IV. WOODSTOCK COMMUNITY STANDARDS REGARDING SCENIC BYWAYS

The purpose of these standards is to protect the scenic resources and traditional development pattern along the corridors between the village centers and hamlets. U.S. Route 4 is hereby designated as a scenic byway. The boundaries of this scenic byway shall extend 1,000 feet from the highway right of way, or to the Woodstock town line,

whichever is less ('the scenic byway buffer"). This scenic highway buffer shall be measured from the edge of the public highway's right of way.

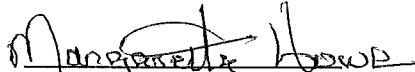
A. Within this scenic byway, construction or expansion of any structure must be compliant with the permitted or conditional uses set forth in the applicable zoning bylaws for the district, which shall be augmented by the following standards.

1. For properties with an existing conservation easement (as of the effective date of these regulations) or a building envelope(s) established by the Planning Commission, construction or expansion of any structures allowed as a permitted use in the underlying zoning district shall be a permitted use, unless a driveway or road is proposed that is to be located outside of the approved building envelope or an approved driveway or road location, in which case the use will be reviewed as a Conditional Use. The applicant shall, to the greatest extent possible, consider and implement the standards set forth below in connection with such permitted use.
2. Construction of new principal and accessory structures or the expansion of existing structures may be approved by the Development Review Board subject to conditional use review and findings that the proposed construction or expansion will have no undue adverse effect on the scenic resources of the area and to the greatest extent possible, the standards below are met.
 - (a) Structures are sited so that they do not protrude above a ridgeline.
 - (b) Structures are sited in wooded areas or on field edges.
 - (c) Structures are sited in such a way that agricultural resources are not fragmented or otherwise impacted.
 - (d) New structures are sited in proximity to existing structures.
 - (e) Existing vegetation is retained and supplemented with new plantings compatible with existing vegetation to screen structures and minimize impacts on views from U.S. Route 4.
 - (f) New driveways, roads and parking areas are sited away from open fields, follow existing contours to minimize the visual impact of cut and fill, are screened from U.S. Route 4 and sited in such a way that agricultural resources are not fragmented or otherwise impacted.

(g) Ground-mounted solar arrays shall not be located within the scenic byway buffer unless topographic features of the landscape and/ or existing vegetative screening preclude observation of the solar arrays from motorists, bicyclists, and/or pedestrians on the public highway.


651332.1


Town of Woodstock Supporting Plan Standards for the Protection of Scenic Byways and Vistas & the Siting of Solar Facilities adopted by the Select Board of the Town of Woodstock at a special meeting duly warned and held on the 9th day of June, 2015


Margaretta Howe, Chair

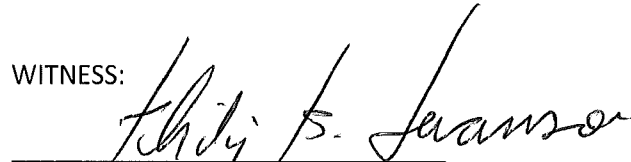

Preston Bristow

John Doten


Bruce Gould


Bob Holt

WITNESS:


Philip B. Swanson,
Municipal Manager