Exhibit TL-WC-2

Aesthetic Assessment Report for the Proposed Northland Solar Project in Lowell, Vermont

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Introduction

This Aesthetic Assessment has been prepared on behalf of the Town of Lowell to provide an objective, professional opinion on the proposed Northland Solar Project (Project) located in the town of Lowell, Orleans County, Vermont. This report and its accompanying exhibits have followed the framework set forth in Title 30 Section 248 of the Vermont Statutes Annotated, and PUC Rule 5.112, for review of commercial energy generation and transmission projects.

The analysis employs the requirements of the two-part Quechee Analysis, established in 1985 in the Environmental Board's Quechee Lakes decision.

Featured methodology for the aesthetic assessment of this Project includes on site visual field study, citizen interviews, cartographic analyses, and Planning document review and summary. Documents reviewed also includes the submitted petition and plans by Northland Solar LLC seeking a Certificate of Public Good for approval to install and operate the 4.999 MW solar generation facility in Lowell, Vermont. Primary analyses focus upon and assess the inevitable changes caused by the installation and their potential for negative visual and aesthetic impacts.

As is customary, this assessment includes a focus upon vantage points from adjoining State roads, but also studies the relationships the project site has to nearby public Town lands, including recreational lands, scenic, natural and cultural resources, and public buildings.

Locations that involve residential areas in close proximity to the proposed solar project are also considered, understanding that Section 248 using the Quechee Analysis specifically does not guarantee that views from individual private homes and properties will always remain the same. The PUC has established that the focus of an aesthetics analysis is not "in contemplation of protecting private property, but rather a mechanism for protecting members of the public from exposure to aesthetic

degradation." [1]

1.0 General Approach

When assess whether a project's impact will be adverse or unduly adverse, whether the installation is visible is not the only factor to consider. The basic operative question of "Can we see it?" runs the risk of over-simplifying the assessment process by not delving deep enough into the site-specific context and the surrounding landscape functions and character.

This is where a solid understanding of the context and sensitivity of the area is essential for judging whether a project will diminish the scenic beauty of a place and whether and what steps may be taken to mitigate or ameliorate those affects. While the Quechee Analysis provides a clear strategy for evaluating whether the aesthetic impacts of a project are adverse and undue, the former Environmental Board has outlined the importance of context by defining aesthetics as involving "…overall perception" and "the sense of place and the quality of life that a place affords" (Vt. Envtl. Bd. May 25, 1999).

This assessment therefore engages in analysis that studies how this site relates to the area's "sense of place" and "quality of life," and how it may affect the "overall perception" of the area. The office of Walter Cudnohufsky Associates (WCA) believes this larger understanding of a project's relationship to its context is an essential ingredient of a meaningful assessment of its aesthetics.

Cherished and familiar, town character and in this case rural character is both simple and common parlance, and yet complex and changing in its components and relationships between its prime or key elements and inhabitants. In an effort to protect the incremental or wholesale erosion of that character, one must with some certainty and objectivity express that character. Context is everything.

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[1] Re: Rinkers, Inc., No. 302-12-08 Vtec at 17-18 (Vt. Envtl. Ct. May 17, 2010) (Wright, J.) (quoting Re: Lawrence E. Thomas, Permit No. #2W0644-EB, Findings of Fact, Concl. Of Law, & Order, at 11 (Vt. Envtl. Bd. Feb. 18, 1986)).

In Vermont, rural character is almost universally an ingredient in its unique sense of "place". To maintain that contextual character it is important to identify its fragilities as well as its strengths and create a common, defendable basis – a sensitivity quotient if you will – to provide a reasonable platform from which one can determine if a proposed project will materially diminish the scenic beauty and aesthetics.

The following discussions, narratives, and appendices, assembled by the professional staff at WCA run through a full Quechee Analysis of the proposed Northland Solar Project. We submit that through this two-step proven analytical process we have come to the reasonable, careful, and commonly understandable assessment that the proposed Project will result in an undue adverse impact on aesthetics and sense of place for Lowell citizens and its many visitors.

2.0 Project Description

The Project proposed is a 4.999 MW ground-mounted PV solar electric generation facility located 1,928 linear feet north of the VT Rte 100 /VT Rte 58 intersection also commonly known as the "Four Corners," in the town of Lowell, Vermont (See Community Context Map in the Appendix). The Project will occupy approximately 26.97 acres within a larger 43.90-acre parcel that is currently open farm field just east and visible from the Lowell Village. The parcel is bounded to the west by Route 100, residential properties and the existing Vermont Electric Coop sub-station; to the south, southwest and southeast by primarily residential properties with one small portion of a commercial property(garage) sharing a boundary; and to the east and north primarily by large blocks of forested land with a single residential property near the proposed entry drive. The Project will be accessed from VT Route 100 via an existing gravel driveway and associated curb cut. At the end of the current driveway a new 12 feet wide, 1,320 feet long gravel private access road will extend to the secure gate and then to the equipment and transformer pad locations within the generation facility. A second 12 feet wide pervious access road will extend 925 feet North from the main array to two smaller arrays in the northern portion of the Project area. The Project will consist of solar photovoltaic (PV) modules mounted to a single axis racking system composed of steel and aluminum support pieces installed so that the

Figure 1: Aerial Context Map of the Project vicinity: Lowell Village Center & Environs

highest point of the array structure is no more than 10 feet from grade and will allow modules to rotate east-west to track the sun. The stationary support posts of the mounting structure are assumed to be pile or screw driven and laid out such that the arrays will be arranged in north to south rows. The currently designed generation facility will contain a total of 114 rows of modules with maximum continuous row length of 880 feet and minimum continuous row length of 190 feet. Typical spacing between rows is 16 feet on center with an approximate 8 feet of clear space between the edges of the modules. There are 3 separate groups of arrays all of which will be independently fenced at perimeters with minimum 7 feet tall High Tensile Fixed Knot Game fence with a 6″ square mesh opening fastened to either pressure treated or cedar posts; 6″ posts shown for corners and 4″ posts for fence line runs. Each fenced

zone will have a single secure access gate with minimum width of 16 feet to maximum width of 20 feet per the site plans submitted by the applicant.

New electrical infrastructure is proposed for interconnection to the grid and for conversion of energy produced through solar capture into grid-ready energy which is located both within the fenced array areas and along the new access drive and the service access drive that connects the main array to the smaller northern arrays. Centrally located concrete equipment pads will support (4) rows of inverter racks, and (2) 2,800kVA transformers with oil containment which will sit inside the main fenced area. A combination of above ground and underground power cables will be utilized to provide connection between solar module arrays and equipment. This includes a (+/-) 1,000 linear foot section of underground power cable located along the proposed access drive leading to the arrays in the northern section of the project. A cluster of (5) Interconnection Poles near the gated entry and a new approximately 1,300 feet long section of both underground and overhead power lines are proposed to complete the connection back to the sub-station at Route 100.

2.1 Project Site Disturbance Summary

Submitted Project plans and details by the applicant's consultants show a proposed 32.97-acre Limit of Disturbance (LOD) on the existing parcel, which equates to 75% of the approximately 44-acre existing farm field. The LOD includes all areas that lie within the fencing and associated areas of disturbance with construction of access drives and interconnection infrastructure.

Other notable site disturbance shows the proposed removal and stockpiling of **.52 acres of prime agricultural soils** (PAS) for future reclamation in accordance with AAFM Guidelines, "ACT 250 Procedure: Reclamation of Vermont Agricultural Soils." It is also notable that of the total 40.31 acres of mapped PAS on the parcel, 30.27 acres fall within the project LOD. The disturbance to PAS is associated with grading and construction of roadbeds for access drives, trenching, solar racking post installation, and construction of equipment pads.

Environmental impacts and disturbance will result from the increased impervious

area and disturbed soils which will require a Construction Stormwater Permit for the 32.97 acres that fall within the previously mentioned LOD. Additionally, there will be impacts to on-site resource areas including Riparian Buffers, Stream, Class III Wetland and Class II Wetland from construction activities related to both grading and the installation of culverted crossings for the access drive(s), solar racking post installation and fence post installation. See the submitted site plans and details from the applicant for additional detail and information.

2.2 Project Mitigation Plan Summary

Proposed mitigating as shown on the engineering plans produced by the applicant's consultants address two primary impacts of the Project: 1) erosion and sedimentation control, including post-construction reestablishment of vegetative cover within the Limits of Disturbance, and 2) select buffer plantings along sections of the parcel boundary to address project visibility from neighboring properties.

The recommended erosion control measures are standard details and requirements typical to these types of installations with general statements made regarding types of mulches that may be used for certain applications. The plans also are very general in nature in terms of describing what treatments may happen where. The entire land area that falls under the proposed solar arrays is simply labeled "SEED AND MULCH TYPICAL." Within the plan notes there are two seed mixes specified for permanent and temporary stabilization respectively.

Select buffer planting are shown along portions of the property boundary and in areas where it is presumed the applicant's consultants have determined that the highest visibility of the Project will occur and require buffering. Of the 4,400 liner feet of property line which adjoins other properties with greatest exposure, only a total of 1,100 linear feet of planted buffer is shown interspersed along this edge; a mere 25% of the property perimeter. 142 Evergreen Trees mixed with 33 deciduous, medium to large shrubs (10'-20' max height range) and a deciduous mid-story tree (25' max height) constitute the proposed planting palette. Species selection is almost exclusively plants that would be found growing in Northern New England with the exception of Thuja plicata (Western redcedar), which makes up 65% of the planting

plan. Proposed planting character based on species selection and layout seems to suggest a mixed hedgerow approach meant to augment the primarily deciduous tree and shrub line that exists at the farm field edge. Proposed plantings are generally only one or two plants deep and while plan notes suggest some opportunity for field adjustment at time of planting the overall plan reads as being inadequate to address the scale and size of the proposed Project and lacking an effort to honor the predominant agricultural field edge planting character and develop planting patterns and a layout more in harmony with overriding landscape character.

3. Quechee Analysis Part I

3.1.a. What is the nature of the Project's surroundings?

General landscape

"Vermont's rural traditions have been better preserved in the Northeast Kingdom than in other areas of the state. Respect for individual rights and a genuine neighborliness toward others are values that continue as part of the social fabric here. The physical landscape has essentially remained unchanged with compact village centers surrounded by working farms and productive forests." (NVDA Regional Plan)

Lowell is a small village set centrally on a plateau midway between two visible mountain ranges – the Lowell Mountains to the South/Southeast, and a range from Belvedere Mountain up to Jay Peak on the West.

Historically sited where Route 58 crosses the Missisquoi River, the heart of the village has expanded around the juncture of Routes 58 and 100 (called "Four Corners") for good reason: ample dry and almost level land, visibility, accessibility, central to the Town. Two of the most frequented public buildings were sited in the expanded Village to take advantage of a nearly 1/2-mile view southeast to sloping farm fields bordered by forested hills and the Lowell Mountains beyond.

Mountain views are an essential and cherished ingredient in Lowell, cited prominently in the Town Plan. For courtesy and etiquette reasons, the farm fields are

not designated in the Plan for other town uses. The village by description includes the adjacent farm fields but in planning documents they are not marked as part of the village due to the plan's expressed desire to keep farm land viable.

An important but easily overlooked fact is that these important mountain views are made possible primarily via the remaining open fields. The fields and the long-range views are integral.

Perceived Village Center

"It is the primary and fundamental intention of Lowell to remain a rural, agricultural town that encourages farming and a town that encourages individual businesses and entrepreneurship of a scale that can integrate harmoniously into its residential areas." (Vision Statement Town Plan 2022-23, pg. 8)

In Lowell's village, the number of non-marked property boundaries creates an even greater than normal sense of unity and wholeness across the village and across Rt 100. This contributes to the strong sense that the surrounding fields are an integral part of the Village.

Thus, roughly 1/3 of the perceived Village center is not currently designated as village on the Regional Plan (please see Perceived Village Diagram in Appendix). Of the approximately 180 acres of the perceived contiguous village (less than a square mile) some 63 of those acres are these open fields bounded by versions of forest edge.

Immediately Around Project Site

The project site is an open farm field running east, adjacent to Rt 100 and approximately 1928 linear feet north of the juncture with Rt 58 known as Four Corners. As noted above, it is situated within the context of the village center. It is immediately surrounded by protected and private forest to the North and East, Residential housing and a Cemetery from the East to the South and Southwest, a Substation to the Southwest, another 16.5 acre agricultural field to the Southwest across Rt 100, and the Town Graded School, Town Hall, Sports fields, hiking trails and picnic areas to the West across Rt 100.

What is Lowell's Rural Character?

Vermont landscape character, and in particular the character of the Northeast Kingdom, is perhaps its strongest draw for those choosing to reside there or visit. How Vermont's landscape relates to the wider New England region (and beyond) has long been studied. These studies assist both with expressing the nature of that character and understanding its quality and significance. It defines and names the landscape character, resulting in a convenient guide to what one desires to preserve, for use in decision making. A proper look at the Lowell landscape character and relating it to the larger regional landscape context is useful.

NAR Visual and Cultural Study

A research study, entitled *North Atlantic Regional Water Resources Study, Vol 2*. was undertaken by a partnership of resource planners and published in 1972. Walter Cudnohufsky was a co-author to Appendix N of that publication, titled *Study of Visual and Cultural Environment*, which characterized and assessed landscapes from Maine and Vermont, down to Virginia.

How can one define and compare the quality of Lowell's landscape character? The NAR Visual and Cultural study is helpful.

In short, all landscapes have an underlying land form (see illustration below) that ranges from flat land to mountainous. That underlying land form is only slowly changing. On top of that land form is a more quickly changing pattern of settlement and land use that may be composed of forest, open land (primarily farm fields), and built environment - town/urban (see illustration below)

When a particular landscape element predominates and others subordinate, it becomes the landscape type lead. In Lowell's case the lead is a **Farm Forest** landscape, with forested land the more dominant. Other examples of landscape leads are Forest Town, Town Farm, and Urban Forest.

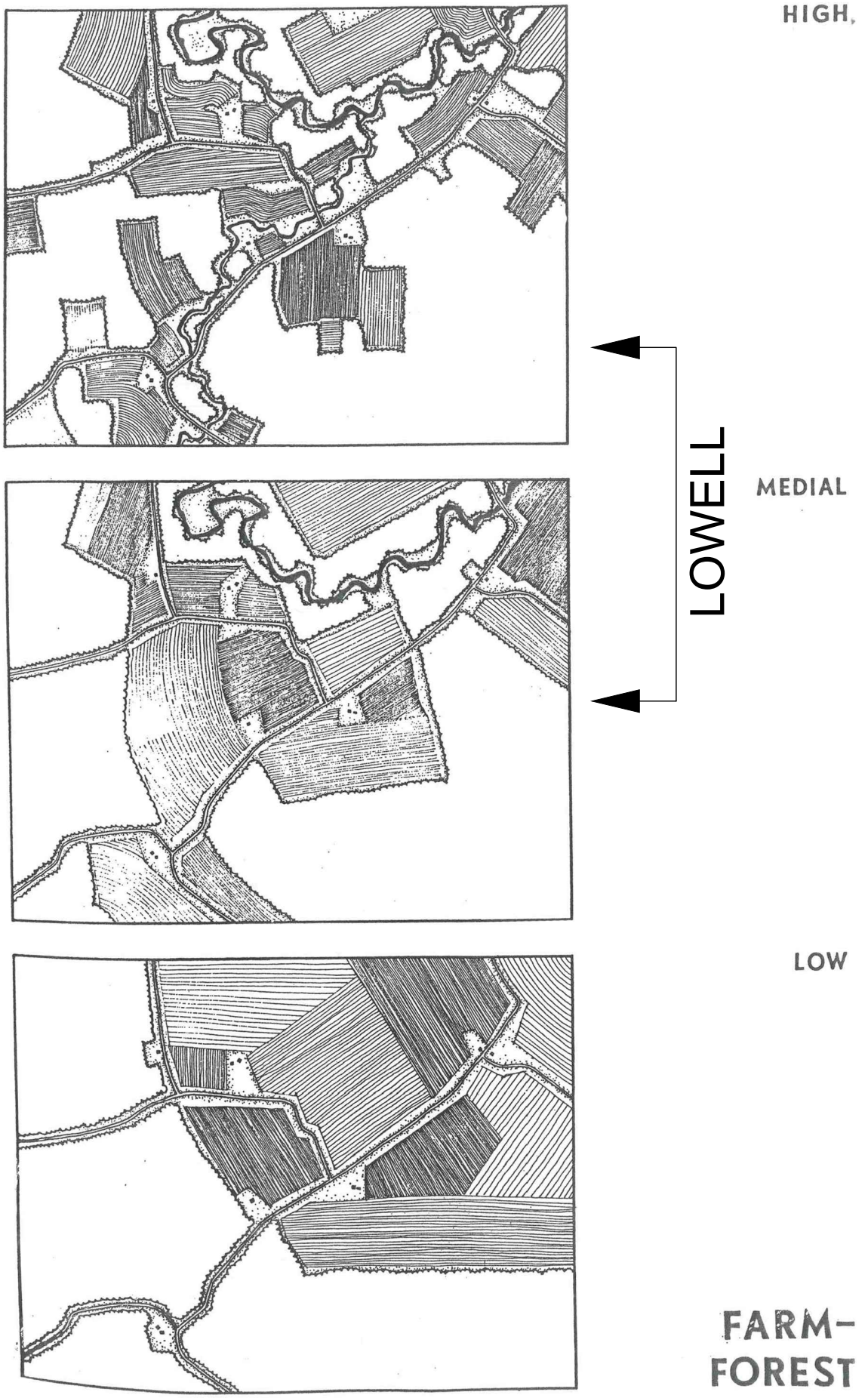
Within the designated landscape lead, there are additional elements that measure the quality of that landscape. Often the measurement is indicated by the complexity of the

interchange between the two main factors. In the case of the Farm Forest, the interplay of meandering wooded edge with open space and waterways sneaking in and around it creates more complexity, more opportunity for mystery, and as a result, a higher quality of scenic beauty. One example is to think of a scenic road meandering through a landscape that pinches to hug the road, then opens out to reveal distant views with cows grazing in the foreground, terrain rising and falling, a house, a field, a woodland edge.

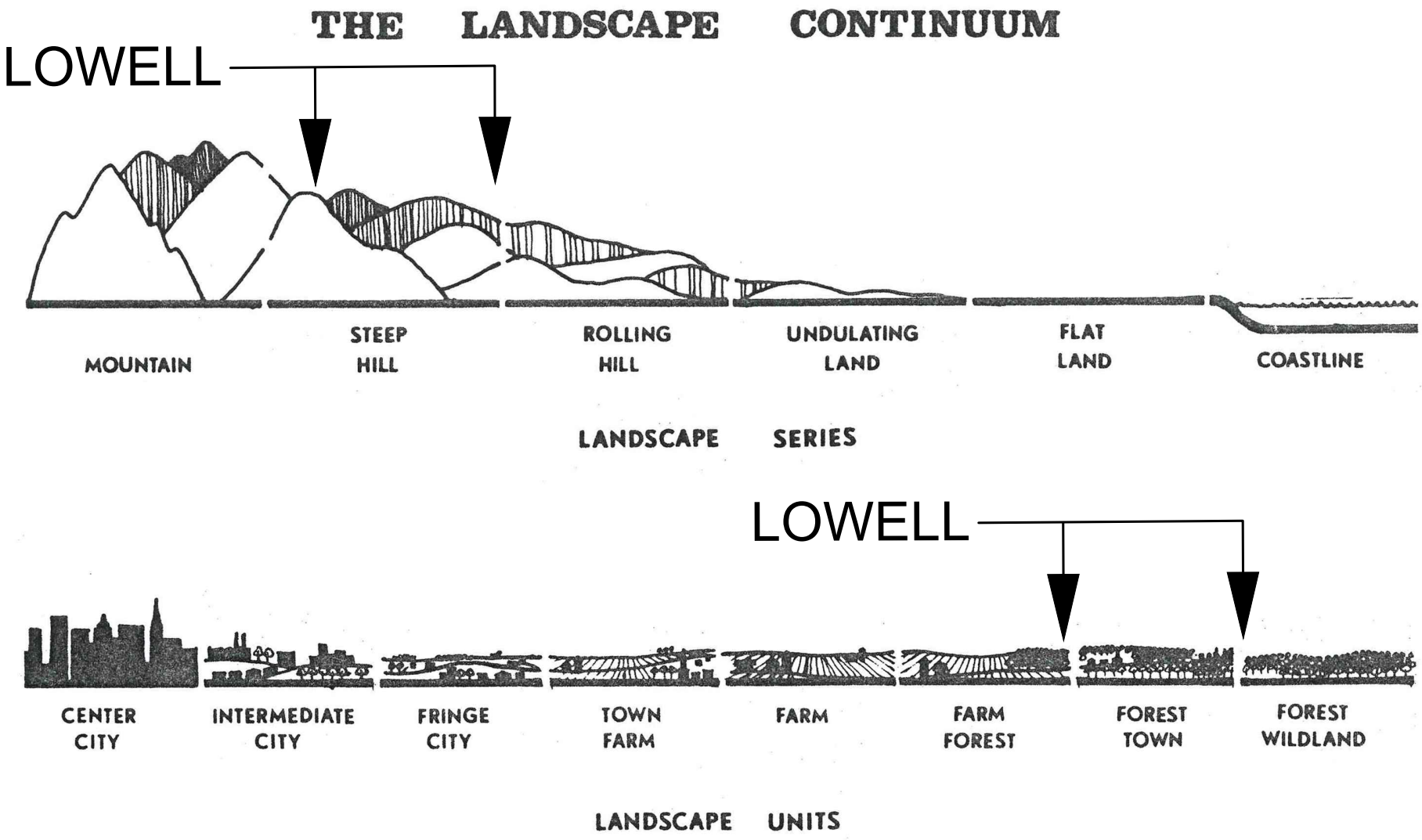
Using the matrix attached, one can conclude that the town of Lowell ranks as Medial to High in its quality as a Farm Forest landscape.

According to the NAR Study, in Vermont and the entire Northeast, Farm Forest is the rarest landscape type in both occurrence and area. It occurs in only two locations in all of New England: in the Lowell vicinity of North Central Vermont, and extreme SE New Hampshire and southern Maine. In the purview of this study, Lowell has the right to conclude they live in an uncommon if not unique landscape. The study was published in 1972, and with the continued decline in agricultural acreage, one can believe that in 2026 the Farm Forest landscape has become rarer still. It is perhaps the most fragile landscape type.

Our concluding understanding from the application of the NAR study is that Lowell resides in a fragile, vulnerable, rapidly changing, uncommon landscape of greatly appreciated and appreciating quality. The landscape represents a quality of life that guides all living in Lowell. The loss of prime farm lands and the openness of fields is the single most impactful loss for this much cherished Farm Forest Landscape. This contextual fact should inspire special scrutiny during project reviews.



Excerpt from *North Atlantic Regional Water Resources Study, Appendix N: Visual and Cultural Environment, Vol. 2. Prepared by Research Planning and Design Associates, Inc. Amherst, MA for the North Atlantic Regional Water Resources Study Coordinating Committee, 1972, pg. N-87.*



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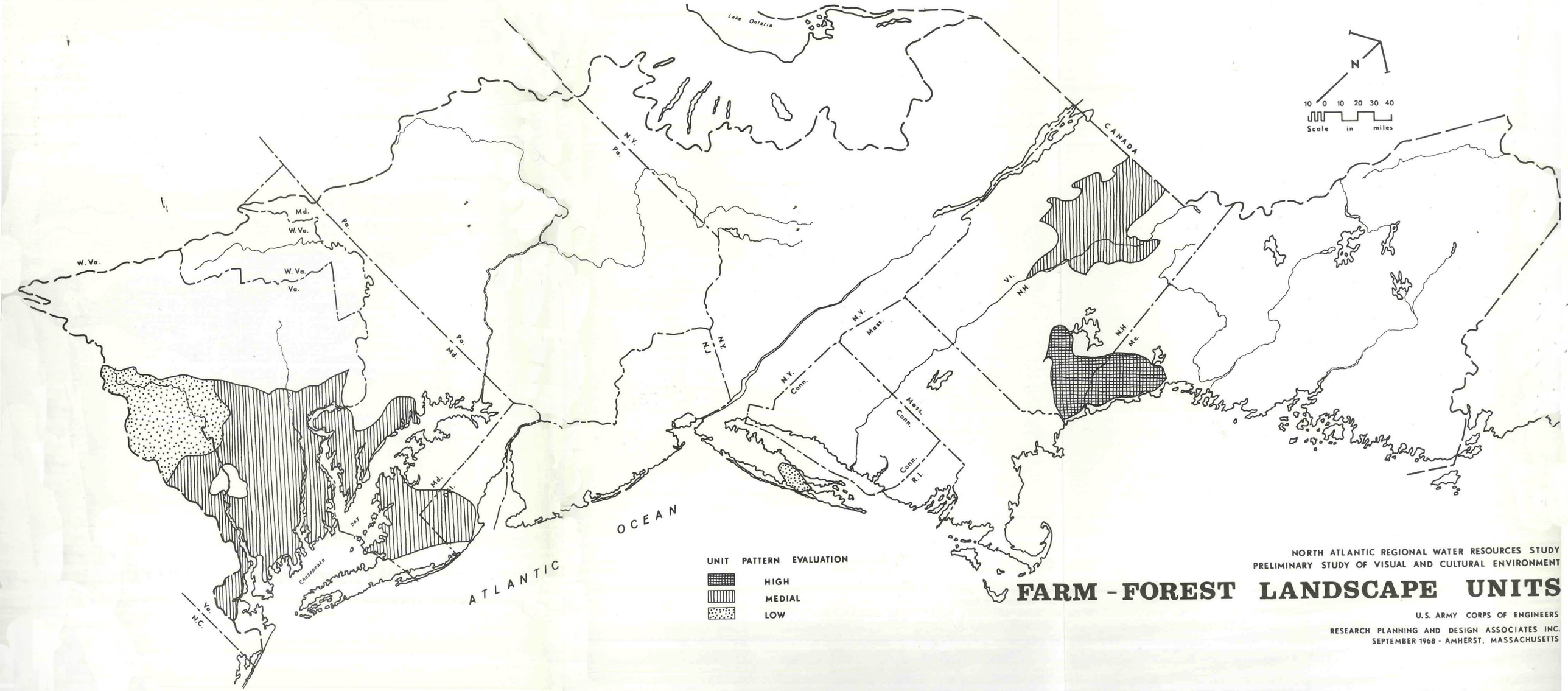

NORTH ATLANTIC REGIONAL WATER RESOURCES STUDY
PRELIMINARY STUDY OF VISUAL AND CULTURAL ENVIRONMENT

FARM - FOREST LANDSCAPE UNITS

U.S. ARMY CORPS OF ENGINEERS
RESEARCH PLANNING AND DESIGN ASSOCIATES INC.
SEPTEMBER 1968 - AMHERST, MASSACHUSETTS

3.1.b. Is the Project's Design compatible with its surroundings?

What are the visual traits of a large-scale solar installation as they relate to fitting into Lowell's Farm Forest landscape?

The aggregated attributes of a grid-scale solar installation make it difficult to easily fit most landscape types without disrupting those landscapes. The more organically natural the landscape the greater the contrast and the greater the difficulty of fitting. The more complex the edge between Farm and Forest, as we see in Lowell, the more likely it is that a large solar installation will intrude on the landscape, taking up the few larger expanses of existing open land, rather than blend in.

Scale is perhaps the most factor here. For reference, an average big box store parking lot is 8-10 acres. With 33 acres of land within the Limit of Disturbance, that is equivalent to three big box parking lots, or twenty football fields.

The panels are distinctly rectilinear with clean, sharp corners, often several in succession as the lines of panels step in or out and often comport awkwardly when

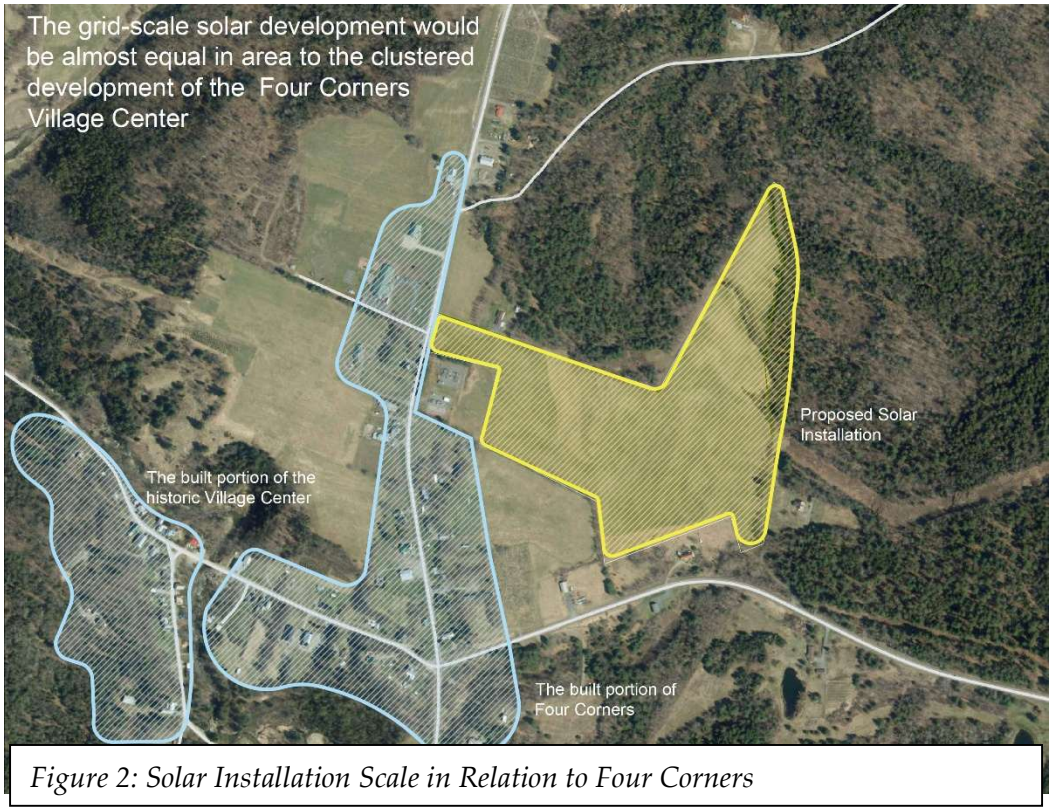

Figure 2: Solar Installation Scale in Relation to Four Corners

adjusting to undulating terrain. In contrast is the existing soft-edged natural rolling land forms of the field and forest edge. Alternatively, the neighboring rectilinear buildings are simpler in form and are generally softened by property plantings or nestled into woodlands.

The efficiency of densely-clustered panels leaves smaller intervening openings, such that they read as a single contiguous block, resulting in an installation the size of a big box parking lot. The absolute scale of this block of panels is visually out of scale with any other development in the vicinity. It rivals the entire built village center of Lowell's Four Corners (see Figure 2).

Most properties in the area may have vegetated boundaries but few fences. As stated previously, there is a general lack of highly defined borders that in turn create more a sense of unity and less of a "keep out" message. The fencing and screening of the solar installation, though acting as mitigation, effectively takes it out of the public domain and borrowed viewshed that other properties share.

For all these reasons, we conclude that the project is not compatible with its surroundings.

3.1.c. Are the colors and materials selected for the project suitable to the context in which it is located?

The proposed installation is set in the context of a field with forested edge and surrounding residences, with a powerline running through the field and substation adjacent which is largely screened by mature evergreens.

The installation's framework will be galvanized metal supporting and surrounding each dark blue-black photovoltaic panel. The surrounding fence will be galvanized metal wire mesh with 6" wide openings and wooden posts. There will be a new gravel access road and wooden utility posts connecting to the substation.

Galvanized metal is a common material and found generally in small quantities in the existing landscape. It also connects in character to the adjacent substation.

The photovoltaic panels are in strong contrast to their metal supports – a visual complexity specific to photovoltaic panels and in this vicinity seen on occasional rooftops, including a residence to the East of the site. We witnessed no other ground-mounted solar electric installations at any scale in the immediate vicinity, though residential scale ground-mounted installations do exist in the town. At a height of 10 feet off the ground and thus readily visible from adjacent windows, the vantage point from which the panels will be seen means that for those with the strongest views, the installation will not recede into the backdrop, but be viewed as dark lines in contrast to a brighter ground plane of light green or tan vegetation (live or dormant), or bright white snow.

Quality solar panels are limited in the amount of glare they produce due to surface stippling and a design that absorbs and utilizes the maximum light possible. Where they would most likely produce glare would be toward the eastern residence. The choice of panels can make a substantial difference in anticipated glint and glare, and since the choice of panel is not currently designated, an installation more likely to produce glare is possible.

It is our belief that the usefulness in evaluating the materials and colors on their own merits is to narrow a project down to focus on the familiarity of material/color or whether it alone would clearly offend. In this case, taken alone, it would not. However, when the scale of the project is introduced, the size and continuity of color/material is quite out of character with anything of similar material in the area. To use a comparison to large parking lots – one would surely say asphalt is a material and color common – ubiquitous – to the vicinity. However that does not mean that a nearly 27-acre parking lot would feel appropriate. A 27-acre parking lot will hold 3,000 cars.

For this reason, we must conclude that the colors and materials at this scale are not suitable to the field-forest-residential yard context in which this site sits.

3.1.d. What is the project's impact on open space?

A generally accepted definition of Open Space is land that has not been developed. It

may be privately or publicly owned, but contributes in some way to the public's physical and emotional health – through views, recreation, farmland, or ecological preservation.

This project would remove a 44-acre parcel of open space from agriculture, from public view and potentially from public use. Currently the field is hayed in the summer. It is used by students from the Graded School for nature study, and in winter to sled. A snowmobile path traverses the property. It is adjacent to deer overwintering habitat and home to nesting bird habitat. It has been used as agricultural land since the 1800s.

The Project proposal includes a new gravel access road on one side of the sledding hill and a 7' fence on the other. It does leave room between the two but it is unclear whether the possibility or desire to utilize it for sledding will continue. The Project perimeter fence follows the property boundary's angles at an offset of 38', conceivably leaving space for a snowmobile trail to continue if allowed. Fencing will preclude the sighting of animals grazing and all but the smaller critters passing through.

The Project's impact on open space by developing an existing farm field would be to develop the majority of an agricultural site. With its rigid, mechanical pattern, a living agriculture site is transformed into a fixed, machine-like industrial grid. It eliminates breathing room, interrupts spatial continuity, adds a dark foreign line easily competing with the natural horizon, and would unavoidably be a jarring identity shift.

3.1.e. Where is the Project Visible?

Rt 58

Views of an installed solar array from route 58 will be limited and largely fleeting glimpse views. They will simultaneously be difficult to fully ascertain and eliminate or screen. The predominant naturalness of travel on Rte. 58 and the limited number of open fields, when approaching from the East, make the openness of the Mountain View Cemetery and the planned solar fields beyond it especially eye-catching.

Rt 100

Glimpse views are more likely from Rte. 100. The property has 220 feet of frontage on Rt 100 with a currently unimpeded visual connection to much of the field but some 1000 feet of additional frontage are subject to glimpse views. The viewers traveling both north and south on Rt. 100 will get these glimpse views, but particularly traveling south. With the exception of the fact that drivers will be closer to the property and proposed installation, and moving, they will essentially have exposure to the same views the Lowell Town Hall and School will have from their locations on the western frontage and setback from RT 100. Even though the northern section isn't officially designated as the Scenic Route 100 Byway, Route 100 is still widely considered one of Vermont's most scenic corridors and is often called "Vermont's Main Street" or "the Skier's Highway."

Lowell Graded School and Town Hall

The Town Hall and the Graded School are two of the most frequented public buildings in Lowell. These buildings were located and designed with their front doors, windows, and driveways facing and featuring the longest view across Rt 100, including the fields proposed for the solar installation and beyond to mid-range hilltops and the Lowell Mountains. Most school rooms from classrooms to the counseling rooms and library are facing and featuring this view.

The view is captivating in early sun rise and late afternoon, and exudes mystery by turning corners. Its mixed evergreen and deciduous border have all-season interest from the School in particular. The field rising from Rt 100 is open and inviting, with the built homes as partly screened accents only to this predominantly natural vegetated scene. It is interrupted at the street by a tall utility pole which divides the view but does not significantly diminish its feeling of openness or interfere with the hills. A substation is screened with mature evergreens which, while out of scale and obtrusive in their close proximity to Rt 100, are less obtrusive from the public buildings which are set back on the other side of the road. This screen, while effectively blocking most of the substation from view, also blocks the distant Lowell Mountains to the south. Additional utility poles run through the field, connecting to

the substation. At the distance from which they are viewed, however, their impact is below the horizon and insignificant.

In the context of the public buildings oriented to this agricultural field, the field is perceived as an outdoor room or 'common' of comforting and stimulating qualities. It is in contrast and compliment to the forested edge, and providing the longer views to the South/Southeast ridge of the Lowell Mountains. The view of open field in the heart of Lowell is impressively long!

The level and unbounded rt 100 is not divisive as would be suggested by map study alone. The farm fields are visibly prominent to all citizens, children and visitors using the village center 365 days a year coming and going from school, sporting events, Town Meetings and doing business in the community.

Mountain View Cemetery

The Mountain View Cemetery on Rt 58 was site and aptly named for its views to the Western ridgeline. It borders the large lawn connected to Residence and former B&B #3, located on Rt 100. A thin, deciduous boundary separates the lawn from the agricultural field in question. In summer months, this buffer of trees and brush will do a good job of screening most of the proposed solar installation from both Residence #3 and the Cemetery, but slot views through gaps in the trees will make the size of the project clear. Furthermore, the field slopes up from the Cemetery, revealing multiple rows of the array at different elevations. In leaf-off condition, 6 months of the year, there will be a direct view from the Cemetery through to the Project site.

Residences

There are several residences that feature the open field as a major part of their viewshed.

The home uphill and East (Residence #1) looks over the farm field in question and on toward extensive views of mid-range and long-range mountains, from Burnt Mountain to Jay Peak and beyond.

Another residence (#2) also borders very close to the field. On-level with the field, the openness gives the home a stunning mountain view.

A third residence, formerly a B&B, has a large lawn bordered by a thin deciduous tree-lined boundary, beyond which the field is located and clearly visible in winter conditions. A fourth residence shares that view.

A fifth property, located where the field meets Rt 100, sits directly adjacent to the field. A line of deciduous trees separates it from Rt 100 and the forest edge comes to the eastern edge of the yard. This property may have winter views over Rt 100 to the western peaks. It is also open on the south to the farm field in question.

Other properties physically near the field will have slot views to the field, particularly during leaf-off conditions, or about ½ of the year.

See Appendix for photographs with views from these locations.

Summary

Given substantial views of the site from highly-frequented public buildings and also from several adjacent residences; given the incompatibility of the Project with the rural Village character; given the negative impact on Open Space were the Project to be constructed, and given that the scale of the materials in relation to the surroundings is foreign, we submit that a project of this scale, on this site, would have an adverse effect on the Town of Lowell.

Quechee Analysis-Part II

3.2.A. Does the Project violate a clear written community standard intended to preserve the aesthetics or scenic, natural beauty of the area?

*"In order for a provision to be considered a clear, written community standard, it must be 'intended to preserve the aesthetics or scenic beauty of the area' where the proposed project is located and must apply to specific resources in the proposed project area***."** (In Re Halnon, NM-25, Order of 3/15/01 at 22 n.5.)

In evaluating whether a project violates a clear written community standard, which directly addresses aesthetics or a scenic resource under the Quechee test, the PUC has identified the adopted Town Plans as the primary document for providing these standards. Regional Plans do influence Goals and Objectives found in local Planning Documents and highlight the shared regional character, land use patterns, development challenges and opportunities, and natural/scenic resources that are to be more specifically addressed and planned for in Town Plans and Town land use regulations; which work hand in hand. If it can be shown that such standards do exist for the specific project site, and that the project as designed would violate those standards, the adverse impact would be undue and the PUC must take under advisement in deliberations and determinations for a Project Petition under review.

Regional and Local Planning Regulations

The proposed Project is in the Town of Lowell, Vermont which lies within Orleans County, and is part of the Northeast Kingdom Region. This region of Vermont falls under the planning purview and guidance of the Northeastern Vermont Development Authority (NVDA) which characterizes this special "corner" of the state in the most recent Regional Plan document as follows: "The Northeast Kingdom is composed of rolling hills, farmlands, lakes and rivers, forests, country roads, and compact village centers. These areas

combined create an open, picturesque landscape unlike any other. Open space provides not only scenic beauty and wildlife habitat, but is necessary for the numerous outdoor activities enjoyed by the region's residents and visitors, and is key to the agricultural and forestry traditions of the region."

In further assessing the Project, the following documents have been reviewed: the 2022 Lowell Town Plan (adopted 08/2023), the 2015 NVDA Regional Plan for the Northeast Kingdom (updated and readopted 07/19/2023 in accordance with 24 VSA 434b), the NVDA Regional Energy Plan Assessment and Report-June 2023 (Regional Energy Plan) and the more recently developed Future Land Use (FLU) mapping in accordance with the passing of Act 181 in 2024. The FLU includes identification of Town and Village Centers where it would be most advantageous for local municipalities to focus investment and planning oversight for future growth and development. Our review of the above regional and local planning documents has shown that while there is a common thread of developing policies and strategies to protect a quality of life within the Northeast Kingdom that respects the richness of scenic and aesthetic elements and qualities revered within the region, there is absent a level of specific written community standards, as defined by the Quechee test.

Following are excerpts and summary conclusions drawn from the relevant sections of the Regional and Town Planning documents which were consulted to help reach a determination on whether a community standard was at risk of violation by the proposed Project in Lowell, Vermont.

The NVDA Regional Plan for the Northeast Kingdom

In general, and in keeping with a recognizable format for a regional scale planning document, the NVDA Regional Plan for the Northeast Kingdom focuses on the broader issues and planning topics and identifies the greatest opportunities and risks to regional character and resources to assist towns in balancing development with the protection of historic settlement and land use patterns, natural resources, historic and cultural sites, wildlife habitat, outdoor recreation, scenic landscapes and quality of life. Planning recommendations are enumerated in the Volume 1 Regional Goals and

Strategies: V. Goals and Strategies section of the plan (pgs. 6-30) for the identified topics and use common phrases like "support", "encourage", and "promote" that demonstrates the advisory intent of the NVDA.

In regards to the question of impacts to scenic and aesthetic qualities of the region, the following planning areas contain language that is providing guidance for consideration: agricultural land use; recreation land use; future land use and development; energy goals; historic, cultural and scenic goals; and natural resource goals. The relevant goals, and strategies listed below are of particular note to our review and assessment of the Project and the proposed site. The highlights from this section of the Regional Plan speak to the fact that the proposed Project site is located on mapped Prime Agricultural Soils and the parcel has been in continuous agricultural use for over a century, that the open farm field has been used for a variety of passive recreational uses by local residents and groups, that it is proximate to and visible from several public buildings within the Village, that it is visible from the historic burial ground at Mountain View Cemetery, that it contains or is crossed by wetland and water resources, and adjoins forest blocks that are identified as deer yards and are of sufficient acreage to be shown on regional mapping as having a medium-high value for Habitat Block Importance.

The Energy Goals section is also of particular note as the goals and strategies clearly show that the Region is not adverse to implementing a variety of energy production technologies, including renewables sources, to meet goals set forth in the Comprehensive Energy Plan but is interested in ensuring that siting of production facilities and infrastructure is done in a way that is not detrimental to the region. Strategies also include embracing small scale renewables and approaches that allow for integration with active farms and associated economic and land use preservation benefits. On the subject of more specific guidance for siting in **Chapter 2: Energy** of the Regional Plan it is stated:

"NVDA's statutory role in energy planning is outlined in V.S.A. Title 24, Chp.117 §4348a (3), which stipulates that a regional plan include:

"… an analysis of energy resources, needs, scarcities, costs and problems within the

region across all energy sectors, including electric, thermal, and transportation; a statement of policy on the conservation and efficient use of energy, and the development of renewable energy resources; a statement of policy on patterns and densities of land use likely to result in conservation of energy; and an identification of potential areas for the development and siting of renewable energy resources and areas that are unsuitable for siting those resources or particular categories or sizes of those resources."

Further on in the same chapter in a section more specific to photovoltaic solar arrays the plan also states more specific siting policies found on page 60.

"Siting policies for solar:

- NVDA has determined that the following types of locations in the region should be prioritized for future solar generation. Even though these locations are not shown on the regional solar maps due to a lack of GIS data, these sites should be considered "preferred sites" for siting solar:
    - Rooftops of structures, residential and commercial. (Our conservative estimates show the region's total potential output from rooftop solar alone could amount to 23.9 MW, or 6.3% of the high end of the LEAP model projections for solar for 2050 of 377.2 MW).
    - Brownfield sites not located in a designated downtown or village center
    - Earth extraction sites (e.g. gravel pits, quarries), active or abandoned
    - Parking lot canopies and surface parking lots
    - Farms, where more than 50% of the power generated is used by the farm
    - Industrial parks, where more than 50% of the power generated is used by the tenants of the industrial park
    - Undersized lots and otherwise undevelopable land in existing industrial parks
- The Northeast Kingdom has a robust agricultural economy, and NVDA discourages siting ground-mounted solar in a manner that fragments productive agricultural soils, effectively removing farmland from production for decades. To this end, NVDA encourages municipalities to explore and identify local constraints that minimize farmland fragmentation.

- Notwithstanding the above concern, NVDA recognizes that successful integration of solar into active agricultural uses can help farms reduce expense, generate extra income, and remain viable. NVDA encourages on-farm solar that, to every extent feasible, uses existing farm structures, or is sited in a manner that supports grazing, the establishment of pollinator crops, or simply to create buffers between organic and non-organic production areas. NVDA will showcase best on-farm generation practices in the region and will cite "Guide to Farming Friendly Solar," produced by the Two Rivers Ottauquechee Regional Planning Commission, as a vital resource."

Volume 1: V. Goals and Strategies

- Agricultural Land Use Goals:
- Farming and agriculture will remain and important and viable sector of the regional economy
- Contiguous tracts of agricultural soils will be preserved
- Development of residential and commercial uses will not significantly reduce the amount of open and productive farm land.

Recreation Land Use Goals:

- Sufficient open space will available for current and future outdoor recreational pursuits
- A variety of year-round and seasonal, indoor and outdoor recreation opportunities will be available for residents and visitors

Future Land Use and Development Goals:

- Traditional development patterns will be maintained and linear "strip" development will be avoided.
- New development will be compatible with existing land uses, and consistent with local plans

Strategies:

- *Support beautification efforts in town(village) centers and downtowns*
- *Encourage towns to plan for community recreational and social needs*
- *Encourage community open space plans and recreation infrastructure, recognizing that privately-held land will not be available unless protected through the purchase of conservation and access easements.*

Energy Goals:

- An adequate, reliable, diverse, and secure energy supply will benefit the region
- Environmental and aesthetic impact of energy generation and usage will be considered.
- There will be broad public participation in the decision-making process.

Strategies:

- *Encourage the Vermont Legislature to develop policies that support the development of solar, small wind, hydro-electric, farm methane and biomass generation facilities, <u>while respecting current local land use and the culture of the region.</u>*
- *Encourage the PUC to examine long-term sustainability of proposed facilities.*
- *Support the development of <u>small-scale renewable resources</u>, such as wind and solar and the use of supplemental sources(wood) to stabilize energy costs.*

Historic, Cultural & Scenic Goals:

- Future development should follow traditional development patterns, while providing for economic development opportunities and livable communities.
- Significant historic, cultural, and scenic resources within the region should be identified and preserved.

Natural Resources Goals:

- The overarching goal for the region is to balance local economic needs with the protection of the natural resources that so many of the regions residents enjoy and depend upon.
- Critical wildlife habitat should be protected.
- The native biodiversity of the region should be maintained and restored when appropriate.
- Private, public and community interest should be considered in matters affecting local recreation and open space.
    - *Support local and state efforts to protect critical wildlife habitat and*

maintain connectivity.

- *Support local and state efforts to inventory, delineate and map important habitats and wetlands*
- *Assist interested towns with planning and mapping for the protection of habitats and natural resources*

The 2022 Lowell Town Plan

"Lowell has unrivaled scenic views in the heart of the Green Mountains," From Lowell's Town Plan Community Profile section (pg. 6).

Town Plan Vision Statement

"It is the primary and fundamental intention of Lowell to remain a rural, agricultural town that encourages farming and a town that encourages individual businesses and entrepreneurship of a scale that can integrate harmoniously into its residential areas." (pg. 8)

Town Plan Goals and Objectives (pgs. 8-9)

"The primary goal of this Town Plan is to provide for Lowell's residents: to further their opportunities to maintain an adequate and satisfying livelihood, to foster harmony among neighbors and to protect and maintain the rural lifestyle we all enjoy."

In addition to the overall stated vision and primary goal we find that within the seventeen cited planning objectives, six most specifically contend the issues prominent in the solar proposal now under review. These highlight the relevant issues and strategies when planning for development within the Lowell rural community and are in keeping with the regional planning goals identified within the NVDA Reginal Plan document which include: open farm land preservation, advancing additional recreation lands, avoiding unsightly areas/development thus maintaining beauty and promoting/guiding residential, commercial and industrial development that fits.

- *Ensure all residents have their property rights respected and protected.*
- *The growth of Lowell should occur in such a way as to enable residents to continue to live in town without undue tax burdens.*
- *Allow for commercial and industrial development that fit within the Town's primary objective.*
- *Maintain the Town's beautiful rural character as much as possible – eliminating junk yards and unsightly areas.*
- *Encourage open farmland for agricultural purposes and find new ways to support career farmers and hobby farmers to ensure they can continue their appreciated endeavor.*
- *Encourage the development of more town owned and operated parks and other recreational uses and maintain the ones the Town already has.*

The questions of and about this proposed large scale solar installation is featured by definition in the Towns considered future planning intentions and that visual character and quality of life, with the expressed desire to place the decisions on how the Town develops with its residents, are perhaps the most relevant issues for this bucolic and uncommonly beautiful Town. This intention is most clearly stated within the **Purpose** statement in the **Planning** section of the Town Plan

"Changes are coming at an increasing rate. The problems posed by these pressures must be addressed by comprehensive forethought to ensure that future decisions will provide long-term solutions rather than stopgap measures. Since communities exist primarily for the health and enjoyment of those who live in them, it follows that the nature, location and timing of community growth should be determined by the people of Lowell rather than left solely to chance or to the decisions of non-resident developers. The intent of this plan is not to eliminate any existing land uses or to stop all future development, but rather to channel the desired growth to appropriate locations within the town." (pg. 7)

More specific language that begins to approach policy and standards for protecting open lands or other scenic qualities and aesthetic character is found in the **Land Use** section of the Town Plan. In section titled **Opens Spaces Reserved for Conservation Purposes** (pg. 19) the plan notes that an earlier adopted plan from 1989 contains

language to authorize the creation of a Conservation Mountain District to limit development on sensitive lands. This was later established as part of the Zoning Bylaw for areas in Town above an elevation of 2,000 feet. The Town plan also goes on to state: "These areas are generally forested, are inaccessible and have moderately steep to very steep slopes. It should be noted that those areas in Lowell that are above 1,500 feet also possess many of the same characteristics as those areas above 2,000 feet in elevation. These areas can be found along the Town's eastern, southern, and western boundaries." *(This section of the Town Plan is one of the few places where more specific standards are mentioned, however the Project site sits below this elevation and is on open farm field)*

The **Land Use** section of the Town Plan dedicates a section to **Village Character** (pg 20) in which it is stated: "The Planning Commission is proud of the Town's historic village and wants to encourage the revival of some original aesthetics it once possessed. The Planning Commission aims to maintain the integrity of all public areas of the town to these standards to encourage residents to follow, bringing the town's core to its original charm."

More specific measures mentioned to work towards the "revival" of the Village include: adding parks, benches and secure places for children and families to gather and play, sidewalk improvements, and off-street parking that would encourage business.

Other sections of the Town Plan where it can be inferred that the planning approaches and policies while not explicitly focused on scenic or aesthetic qualities collectively when put into practice or under due consideration have an underlying effect on the scenic beauty and rural character of the Twon of Lowell. It is not difficult to connect the threads between the contributions of scenic roads, large blocks of unfragmented forest, the protection of wildlife and protecting environment to foster recreational use as means towards providing a sustained and improved quality of life in Lowell that holds appeal for those that call this place home or visit.

Benefits of Lowell's Forest Blocks and Connected Forests (pg 23-24)

"The Town of Lowell recognizes the importance of unfragmented forest blocks and

the connecting landscapes in maintaining the ecological processes that support the biological and economic health of the people of Lowell and its wildlife. Lowell's unfragmented forests provide many benefits to the people of Lowell. Our forests provide timber and jobs, help moderate tick-borne illness, prevent soil erosion and contribute to the quality of our waters and air. These forests provide places for recreation including hunting, fishing, and trapping, walking and hiking, skiing, snowshoeing, snowmobiling, ATV riding and enjoying our mountains, rivers, and our spectacular display of fall colors. Lowell's unfragmented forests also contribute to our Biological Diversity and provide secluded habitats for many of our more wary species of wildlife such as bear, bobcat, moose, and fisher."

"The Town of Lowell encourages all landowners to assist in maintaining our unfragmented forests and the connections between them."

Recreational Planning (pg. 48)

"The Planning Commission does not see the need currently to recommend any kind of an organized recreation program. However, because Lowell's recreational opportunities are dependent on the quality of Lowell's environment, it is necessary to protect and maintain Lowell's wonderful natural resources including the trails and streams, from development damage. "

Scenic Roads (pg. 59)

Some of the scenic features of Lowell to celebrate are:

- Route 58 corridor
- Hazen's Notch Road
- Bayley Hazen Road
- Route 100
- Long trail- Belvidere Mountain

"Route 58 is perhaps the most scenic road in Lowell. This highway passes over some of the higher elevations in Lowell and offers some spectacular views. That section of Route 58 between Irasburg and Route 100 crosses an elevation of almost 1,700 feet

above sea level."

A common theme from the Town Plan is scenic rural character and controlled development is a primary focus of the Planning Commission. The Plan does celebrate the scenic qualities and overlying rural farm land and forest landscape character along with intimate Village at the Town center as being primary contributing elements of what gives Lowell appeal and a "sense of place." What the plan does lack is any clear written standards that can be directly applied to the Project site under review or specific mention of this parcel of land as being of special interest for protection as part of the Village Center, a scenic resource or a current land use identified as limited for development.

In conclusion, while many aspects of the Regional and Town Plans indicate an intent to preserve rural character, scenic views, and important landscapes through broad goals and policies, there are no specific standards that explicitly protect identified resources, or that specify the Project site as a scenic resource or falls within a protected land class/use. We can confirm that the Project will not violate a clear written community standard intended to preserve the aesthetics or scenic beauty of the area in accordance with the Quechee test.

3.2.b Is the Project offensive or shocking to the average person?

We will discuss this project in relation to the properties noted above as having views to the proposed installation.

Mountain View Cemetery

As discussed above and shown in the accompanying simulation illustration, the existing deciduous border would do little to block strong views of the solar array from the Cemetery. No additional mitigation is proposed for this border, presenting a shocking view of the array for Cemetery visitors.

Residence #1

This home is situated immediately uphill from the field to the East. The home affords

a grand view, clearly sited and built to celebrate the view that encompasses the entirety of the field and beyond to a long ridgeline of peaks. The field makes up about 1/3 of the overall view, shared with mountain ridges and sky. The impact of the installation would be extreme from this location.

The mix of evergreen and deciduous plantings at the property line is currently inadequate to mitigate the view of the solar installation. The proposal includes evergreen and deciduous plantings to compliment this buffer. The proposed species include Thuja plicata 'Green Giant,' an evergreen planted at 5' tall and reaching 60' tall at maturity; Hamamelis virginiana and Amelanchier laevis, both deciduous trees reaching about 15-20' at maturity; and Physocarpus opulifolius, Viburnum lentago, and Cornus racemosa, all deciduous shrubs reaching 12-20' at maturity.

Using the existing trees as indicators of how the additional screen will affect the view, the existing evergreen pine is considered approximately 50' tall while the deciduous trees are closer to 35' tall. Planted at 5' tall, the Green Giants and other plantings will do little to block the solar array from this residence. After around 8-10 years, with approximately 18-24"/year of growth, the Green Giants will reach approximately 20' in height and block the field from view. After about 17-23 years, the Green Giants at 40' tall will start blocking the entire mountain view.

Appropriate mitigation of an adverse aesthetic in this case would only be a radical reduction in the size and location of the system.

In this case as in others, mitigation is a difficult, if not impossible, goal to achieve. The field is an active part of the views and experience from these homes. Blocking it from view doesn't ameliorate the impact. A wall of vegetation won't remedy an experience lost.

Residence #2

This residence is located South of the field, with a small yard between the home and the property boundary. The home currently has excellent views to the Westerly mountain range, both from the ground and from second-floor windows, as seen in images provided by the owner. There is no current planted border between this

property and the field, and this is the most significant area of mitigation planting proposed. The mitigation consists primarily of Thuja plicata 'Green Giant' planted as an evergreen hedge, with additional deciduous shrub accents.

Planted at 5' tall, the Green Giants will remove the field from view on the ground likely within a few years' time. Within a few more years, they will cut off the view of the mountains from the ground and first-floor deck. In the meantime, second floor windows will look over the hedge to the array. Within about 17-23 years, the Green Giants will block the mountain view from the second floor.

Residences #3 and #4

Both of these homes are located southwest of the field, with driveways coming off of Rt 100. Residence #3, mentioned above, has a large lawn that also extends behind Residence #4, with the thin deciduous border as described. With no additional plantings proposed, both of these properties will have strong views to the arrays in winter conditions.

Residence #5

This home is located Northwest of the field. The driveway from this property is planned to be used for the beginning of the gravel access road to the field. This home, like others, is oriented to the westerly ridgeline, with a garage on the south closest to the field. Forest lies behind the home and a line of deciduous trees on the west.

This is another home that would be impacted by the Project. Mitigation plantings are proposed to remove much of the field from view over time, but an opening will always remain for the access road. This opens slot views from the rear yard and windows to the full extent of the field that rises up above the home.

Since these residences have been located adjacent to the farm fields in question, and have been designed to feature views of those fields, full solar installation screening will dramatically eliminate and or alter those views and the experience of living in

those homes. Meaningful mitigation does not appear possible for these properties.

Viewing from RT 58

As mentioned in section 3.1.e., views of the site are largely screened by thick stands of existing vegetation, with only limited and largely glimpsing views in leaf-off conditions. Given that even a glimpsed view of a significant array can be surprising in this context, careful study of the project frontage that parallels Rt 58 is warranted to ascertain if and where additional or seasonal screening may be warranted.

Viewing from RT 100

As discussed previously, Rt 100 will give glimpse views into the property for a stretch of approximately 1000 ft, and a larger view into the site where it meets the road, across from the Graded School and Town Hall. From the numerous points of viewing this proposed solar array, glimpses add up to recognizing the full breadth of the installation. It would entail such a dramatic character change, Lowell citizens and those most familiar and apt to see the array would likely experience the shock and/or offense most acutely.

Lowell Graded School, Town Hall and Fields behind

As mentioned previously, these properties are the most frequented public gathering areas in Lowell. The buildings were located and designed with their front doors, windows, and driveways facing and featuring the longest view across Rt 100 to the field and hills beyond. This view is particularly strong in the leaf-off months – the majority of the school year – but also apparent in the summer.

The proposed plan would add a row of evergreen trees that reach 60' and above at maturity, to block the solar array from views from these properties and Rt 100. Over time, they will. As indicated by the mature evergreens screening the substation, a new screen will also block the entire mountain view from these properties, the view they are all oriented to face.

The graphic below illustrates the development in proportion to the adjacent Village

Center. The developed land of the Four Corners area of the Village Center (roughly ½ of the complete Village Center), to which the field in question sits adjacent, measures approximately 50 acres. It is only a portion of the Four Corners Village Center mapped as part of the FLU plan, the remainder being ball fields, woodlands and other open space. The proposed solar facility itself exhibiting structural or architectural characteristics, is directly adjacent to and essentially equal in size to the entire developed Four Corners area. This would essentially create a rival development, void of human habitation or public use, directly adjacent to the Four Corners center.

Summary: What would the visual change be that is deemed so out of character with its surroundings that it becomes shocking or offensive to the average person?

To recap: The installation is considered adverse due to its large scale within the visual context of a diminutive Village Center: nearly 27 acres of panels, which is larger than all the surrounding properties. It has high visibility from several residences and community gathering spaces. Its character: large, with many sharp corners, is in strong contrast to the existing context of field with meandering forest edge and single-family homes. The installation, and mitigating plantings, remove a piece of open space enjoyed by many.

For a visual change to be deemed offensive or shocking to the average person, an analysis cannot only look at whether an adverse development is visible or not. It is here that we truly consider how this Project would affect the "Sense of place and quality of life that place affords."

It is easy to conclude that to build a solar installation of this size and not add plantings to try and block the visual it creates would be shocking – the development is so dramatically out of proportion with everything else in the area.

To try and block the solar installation, however, is equally offensive. Cherished views, and views of open space in particular, are themselves an experience. When the development of a large block of Village Center, including the gathering spaces that are at the heart of the community: the school, the recreation fields and picnic spaces, the Town hall, the historic Cemetery, is oriented toward a feature that is removed, it has a shocking effect. It takes away a community-wide experience.

We note that a communications tower and a ridge line with thirteen wind turbines are all currently visible from the Village Center. In aggregate, the introduction of a grid-scale solar project the scale toward an industrial character that will eclipse that of the rural village.

For these reasons, affecting not only adjacent residences but the community as a whole, we conclude that the Project as proposed would be considered shocking or offensive to the average person.

3.2.c Has the applicant failed to take generally available mitigating steps to improve the harmony of the proposed project with its surroundings?

The largest generally available step is to study alternative brown field, roof, gravel pit, land fill and other locations, designated as preferable in the NVDA regional plan. To our knowledge, there have been no references noting that a study of alternatives has transpired. The property availability, convenient openness, and proximity to a substation seems insufficient to justify such a large facility in this location.

The next available step is to study the facility at different reduced sizes to ascertain the reduction in the total and permanent impact. Yet the system expands to use all possible land.

Of the 4400 of open field perimeter (west, south, and east - the contiguous woodland edge is not being counted), now shared with the inhabited properties, only 1100 feet (25%) has designated planting mitigation proposed. In addition to the obvious deficiency, the nature of the plant choices may take half of the life of the facility to be even sufficiently screened and in some cases may never fully succeed at screening. The mitigation can thus be described as deficient for all abutters: the School and Town buildings, residences, and other properties.

The premise that you achieve harmony if you hide and cannot see or mostly cannot see the solar facility is itself a challengeable premise. The glimpsed solar facility will always and unavoidably have a visual and psychological presence to Lowell citizens whether they live with it twenty-four seven or only on select days and times.

Tree groves with irregular edges and specimen trees form the densest part of the surrounding character. The choice to have a hedge-like, thin line of plantings only, more uncommon in this

rural context risks calling attention to both the mitigation and the facility. It appears that the proposal for vegetation screening is greatly underestimating the level of exposure.

Are hedge row plantings even appropriate mitigation? When the choice of permitting this facility is pending, building in harmony is best aided by not building at all and eliminating the need for mitigation. If the location for the facility needs significant mitigation it is the wrong use for this location.

With the exuberance to maximize the installation size and fill property line to property line with panels, we observe that visual impacts are not sufficiently or honestly considered.

The solar plans reviewed do not suggest nor show a robust effort to build in harmony with what is extant and with those who reside here. We conclude that the applicant has not taken reasonable mitigating steps to improve the harmony of the project with its surroundings.

Conclusion of Aesthetic Assessment

The review of probable aesthetic impacts finds that the proposed array is located in an ever more uncommon Farm Forest landscape. It has additionally been identified as of medial to high quality based on its intrinsic diversity and complexity. The key ingredient of this character are the very fields under discussion, providing not only the open space that allows views to distant hills, but also the pastoral setting so cherished by the inhabitants of Lowell.

While the fortuitous topographic location limits the amount and duration of viewing for a distance, the project will never the less will be a featured view from residential and public properties on all four of its borders. Views from the Village Center are particularly long, broad and valued. Visibility from Route 100 adds to visual impact on the region. Town buildings have been located and designed to feature this long and largely pastoral view to the Southeast, one that is terminated by the Lowell Mountain ridgeline.

We find that the project's colors and materials, while not totally foreign to the Town, are not compatible based on the extreme quantity scale.

This strong difference in character leads to the conclusion that the Project represents a change to the existing setting and would therefore be considered adverse to the aesthetics and scenic and natural beauty of the area as defined under the first part of the Quechee test.

Undertaking the second part of the Quechee Test, there is a strong indication in the Town and NVDA Regional plans that agricultural fields are under threat and are a priority to preserve, and that there is clear guidance as to the preferred sites on which to install industrial scale renewable energy projects. These strong implications, however, do not clearly designate this parcel, nor preclude its being developed for solar. The Project does not thus violate a clearly written community standard intended to preserve the aesthetics or scenic beauty of the Project site or surrounding area based on the review of the Regional Plan, Regional Energy Plan and Town Plan.

Has the proposed project taken available measures to mitigate its impacts? We conclude that the expected vegetative screening will be employed, but that the effort to hide the development will be substantially deficient on several counts. Full enough consideration was not given to leaf-off conditions – thus a good 6 months of the year – by relying on a thin boundary of largely deciduous trees to screen the panels from several locations. The size of the development and the nature of it rising terrain means that it will take several years, perhaps half the expected life of the facility, for the screens to effectively hide it from view. From that point, if the plantings reach full maturity they will start taking away the longer range views as well. One of the mitigation options not discussed would be to substantially reduce the size and scale of the facility and locate it in less visible portions of the property.

Is it offensive to the common person?

We find that the project's proportionally large physical size and scale, its proximate location to the village and Rte. 100, its visual nature and its mitigation details, lead to the conclusion that it presents unduly adverse impact. The fact that it blocks and otherwise converts a prime view from highly used public areas and several residential properties to a decidedly more industrial character. This historic piece of farmland is an important visual in the Village and the proposed change would be shocking to the average person, and offensive to the citizens of Lowell.

We find with clear conviction that the project as proposed and reviewed results is an unduly adverse impact.

Select concerns regarding the accuracy of the Northland Solar Project Aesthetic Analysis and Orderly Development Review
T.J. Boyle Associates September 26, 2025
By WCA Associates Inc. Walter Cudnohufsky

There are a few omissions in the Aesthetic Analysis that do not fully or accurately enough represent the visual conditions or resulting impacts of the proposed 4.99MW solar generation facility in and on the village center of Lowell VT.

1)The greatest visual impact season is winter, with foliage loss and high contrast snow cover that in this region of Vermont can approach 5-6 months in length. It is an extremely important period of the year for assessing impact, and especially given that the proponents of the project are relying on existing predominantly deciduous trees and vegetation as a large part of the mitigation strategy or to claim that visual impact will be minimal. The TJ Boyle assessment uses images with full foliage thus is incomplete and possibly misleading.

2)The visual impact on abutting residences and Mountain View Cemetery is illustrated and assessed based on photographic evidence not taken from those properties looking in the direction of the proposed solar array. The proponent's imagery is primarily from the proposed solar field toward those properties and thus underestimating or disregarding the real visual impact on those properties.

3)The use of street view panoramic imagery, approaching and exceeding a 180 degree field of view, supplemented by linked single image still photography, ends up being confusing and diluting the actual on the ground visual experience. They end up disorienting and thus not accurately representing the reality of how the typical person either standing in a fixed position of travelling by foot or vehicle will see and perceive the Project on relation the surrounding landscape context. Humans typically have a cone of vision of 60 degrees within which shape and color recognition is the most acute and within that field of view a smaller 30 degree cone of vision is where we discern finer detail. Objects or views that fall outside of the 60 degree cone of vision are subject to distortion and while it has been shown that full range of human vision can be just over 180 degrees there is a portion of that fuller field of view that is not clearly perceived in daily human experience as we move through the environment.

4) A key power of the current views into and across the Project site is the visibility to and of distant ridgelines SE and S serving now as regional landscape connection and adding diversity and all day and all-season interest. It will be lost as a prime view from village center and rte. 100 viewing. In other words, the most dynamic and longest most cherished view will be taken away by proposed evergreen planting and the installation it intends to hide. An omission not recognized nor discussed in the proponent's analysis.

5) The topsoil stockpiles may be a visual feature. While proposed locations are shown, the height of piles is not indicated. Any height, and especially any over the height of the proposed

seven-foot fences would be an additional engineering like visual feature with visual consequence. We have not found it described in the analysis.

We must conclude by acknowledging that there is an evident effort to be fair and accurate in this aesthetic analysis of existing conditions and in portraying resulting impacts. However, the above listed omissions can and do have a consequential impact on a full and fair visual aesthetics assessment.