

April 12, 2022

Town of Hinesburg Development Review Board
c/o: Mitchel Cypes, Development Review Coordinator
mcypes@hinesburg.org

RE: Proposed Subdivision - Laster Property
Preliminary Plat Submittal

Dear Board Members,

The attached plans and narrative below are in support of the preliminary plat subdivision application to the Town of Hinesburg Development Review Board for the above referenced project. The attachments include the items required in Section 4.1 of the Hinesburg Subdivision Regulations and below are relevant excerpts (shown in italics) followed by responses for submission requirements outlined in the Hinesburg Subdivision and Zoning Regulations:

HSR Article 5, Planning Standards
Section 5.1 Application of Planning Standards

5.1.1 Suitability for Development - Whether the land for the proposed subdivision is suitable for subdivision or development or demonstrates no significant impediments to development due to flooding, improper drainage, steep slopes, rock formations, or other adverse earth formations or topography, utility easements or other features which will be harmful to the safety, health, and general welfare of the present or future inhabitants of the subdivision and/or its surrounding areas.

The land proposed to be developed is a low slope meadow that goes uphill from Mechanicsville Road. The development area does not impede on any steep slopes, rock formations or any utility easements. Flooding and drainage is not an issue on this portion of the property.

5.1.2 Natural Features Protection - Whether the proposal gives due regard to the preservation and protection of existing natural features including: significant trees, hedgerows and productive forests; agricultural lands; streams, rivers, lakeshores and other surface waters; floodplains and wetlands; groundwater resources; rock outcroppings, steep slopes and ridge lines; earth resources; wildlife habitat; significant natural areas, and other natural resources.

The development area avoids any forests, stream, rock outcroppings and ridge lines and sits in an old horse pasture. There is a minimal impact to existing Class III and Class II wetlands at the Mechanicsville Road connection and this impact has been minimized by placing the new road at the narrowest part of the wetland area. All significant natural areas and natural resources will remain intact and untouched.

5.1.3 Cultural Features Protection - Whether the proposal gives due regard to the preservation of historic structures and areas, and of scenic resources. In the village areas, the proposal shall enhance compact,

historic, pedestrian-oriented settlement patterns. Outside the village areas, the proposal shall enhance the rural landscape.

There are no structures on the property. The property is at the edge of the village area and represents a transition from village area to rural. The proposal is a hybrid of modest density homes with pedestrian oriented patterns in combination with a large part of the property being left in its natural state to enhance the rural landscape.

5.1.4 Open Space and Recreation - Whether the proposal includes sufficient open space for active and passive recreation

The current proposal leaves approximately 85% of the property as open space for recreation. The property is not posted and many people currently use the property for hiking, cross country skiing, biking and hunting.

5.1.5 Compatibility with Surroundings - Whether the proposed density, building sizes, pattern of development, and configuration of lots is compatible, within the context of the Town Plan goals and the Zoning Bylaw, with the surrounding properties, the natural environment and the built environment.

The energy efficient modest sized homes and density is compatible with zoning, the Town Plan goals, the surrounding properties and the natural environment. The homes are walkable to The Hinesburg School, CVU and town, reducing reliance on vehicles. The net zero ready homes reduce carbon emissions. The smaller lot sizes with a larger amount of open space help increase the housing stock while still leaving all forested areas forested.

5.1.6 Transportation - Whether the proposal contains adequate provision for transportation including vehicular and pedestrian traffic in terms of safety, convenience, access to points of destination and attractiveness.

(1) Whether the proposed development will cause unreasonable highway congestion or unsafe conditions with respect to the use of roads and highways in the Town.

Refer to attached Transportation Assessment Memo, prepared by Wall Consultant Group.

(2) Whether the layout and/or extension of any roads provides for appropriate access to the project and possible future projects as determined necessary by the Development Review Board. The Development Review Board shall consider the long-term road network as it relates to existing, proposed, and potential roads and development in the Town, safety, emergency vehicle access, aesthetics, and any other impacts identified in the course of the review of the project.

Refer to attached Transportation Assessment Memo, prepared by Wall Consultant Group.

5.1.7 Soil Erosion and Storm Water Run-off - Whether the proposal includes adequate provision for the control of storm water runoff and erosion during and after construction.

Stormwater management practices and erosion prevention and sediment control measures have been designed in accordance with the most recent versions of the Vermont Stormwater Management Manual and Vermont DEC Low Risk Site Handbook for Erosion Prevention and

Sediment Control. A more detailed discussion is provided in the attached Stormwater & Erosion Control Narrative and depicted within the attached plans.

5.1.8 Water Supply - Whether there is sufficient water available for the foreseeable needs of the proposed development without impacting existing water supplies.

The project will be served by municipal water. The Town of Hinesburg approved drinking water and wastewater capacity for proposed Lots 1 & 2 in an allocation approval letter dated March 31, 2021 and capacity for proposed Lots 3-8 in a letter dated March 11, 2022. Both approval letters are included as attachments.

5.1.9 Wastewater Disposal - Whether the project has access to municipal wastewater disposal facilities, in conformance with any sewage disposal policies or regulations in effect, or the site has the capacity to safely and effectively treat sewage flows from the proposed development through a sewage disposal system designed by a qualified professional engineer or consultant acting within the authority of his or her certification.

The project will be served by municipal sewer. The Town of Hinesburg approved drinking water and wastewater capacity for proposed Lots 1 & 2 in an allocation approval letter dated March 31, 2021 and capacity for proposed Lots 3-8 in a letter dated March 11, 2022. Both approval letters are included as attachments.

5.1.10 Agriculture/Forestry - Whether the proposed development will preserve agricultural and forestry land and uses by placing development in areas that are marginal for agricultural and forestry uses and where development will be least disruptive to agricultural and forestry operations.

The proposed development is located in the Residential 1 zoning district, the zoning that seeks fairly high density residential. The proposal is for a more modest density that sits only in the previous horse meadow. No forested areas are in the development area. None of the land sits in the Agricultural zoning.

5.1.11 Municipal Services - Whether the proposed development will place an unreasonable burden on the ability of local governmental units to provide municipal or governmental services and facilities.

The project has been reviewed with the Town Manager, Fire Chief, Road Foreman and DPW. The proposed 8 homes are located in the Village Growth Area as shown on "Map 3: Future Land Use Town of Hinesburg" and within Water/Wastewater Service Area as shown on "Map 10: Sewer & Water Town of Hinesburg" and should not place an unreasonable burden on the municipality to provide services.

5.1.12 Energy Conservation - Whether the proposed development promotes energy conservation by encouraging compact patterns of development and through orientation of structures on a site to gain maximum benefit from solar access and wind protection. Projects should be sited and designed to take maximum advantage of solar gain – to ensure passive solar gain and to allow for the use of photovoltaics now or in future. If this cannot be accomplished to the DRB's satisfaction, the use of renewable energy technology (solar, wind, geothermal, etc.) or green building certification (LEED program for non-residential projects; "Green Home Certification" for residential projects – see definition) shall be employed as a substitute.

Primary sustainable design goals regarding the approach of the neighborhood planning and lot layout considers maximizing density, minimizing site disturbance of natural features and plantings, and favoring orientation and sizing of each residential lot to allow for maximum solar exposure. A supplemental neighborhood supported net-metered solar installation to be a future consideration, pending individual lot owner support and approval. Certification and administration of the applicable programs to be the responsibility of individual lot owners and building contractors.

5.1.13 Conformance with Town Bylaws and Plan - Whether the proposed development is in compliance with the Hinesburg Town Plan, Zoning Bylaw and other by-laws and regulations or policies then in effect.

The proposed 8 homes are located in the Village Growth Area as shown on “Map 3: Future Land Use Town of Hinesburg” and are concentrated near Mechanicsville Street to provide pedestrian access to the Village and CVU. The net zero ready homes align with the Energy Use reduction portions of the town plan. Natural areas are preserved to the extent feasible and available for recreation. The plan meets the Zoning Bylaw and other by-laws and regulations in effect.

Section 5.2 Park Land and School Sites - The Development Review Board may require as a condition to subdivision approval, the dedication of park or school land or the payment of a fee in lieu thereof.

The proposed development has 8 homes. This is below any threshold that would require land for additional school resources. If there is a future subdivision proposal on this property with additional homesites, discussions with the town will occur to locate land for a park space.

HZR Article 2, Uses, Area, Density and Dimensional Requirements

2.4.2 Village Growth Area Density & Build Out

The proposed development is within the Village Growth Area. Base density is not achieved due to presence of natural features. Streams with 75-ft setbacks, Class II wetlands with 50-ft buffers, Class III wetlands and presence of steep slopes limits the areas feasible for development. The base density is calculated (below, exclusive of stream buffers) as 9.5-units and the development proposes creation of 8-units.

| Density Calculation | |
|----------------------------|------------|
| Project Area | 5.7 acres |
| Stream Setbacks | 1.0 acres |
| Development Area | 4.7 acres |
| R1 Base Density | 2 units/ac |
| Project Base Density | 9.5 units |
| Units Provided | 8 units |

2.5.1 Stream Setbacks

A 75-ft setback has been applied to streams mapped on the existing undeveloped parcel. The project largely avoids impact within these areas. The project proposes disturbance to 720-sf of the stream setback along the Mechanicsville Road right of way. This temporary disturbance includes 200-sf for installation of the gravel wetland treatment area discharge pipe and 524-sf to restore the existing gravel drive to meadow. Lots proposed to extend to within a stream setback identify a building envelop restricting development within the setback with the intent of maintaining the existing natural vegetation.

HZR Article 3, Zoning Districts

Dimensional standards are met for the proposed lots. Refer to plan sheet C0.0 for details.

HZR Article 5, General Provisions – Responses to relevant sections

Section 5.5 Off-Street Parking

A minimum of (2) off street parking spots will be provided in driveways for each of the individual lots.

Section 5.7 Access Requirements

5.7.1 Required frontage on, or access to, public roads or public waters

- (1) The project parcels exists as privately owned land. Access is not proposed via an existing right of way or easement.
- (2) The new roadway will be situated on a newly created 50-ft wide right of way and will remain privately owned. A draft maintenance agreement is included as an attachment.
- (3) All proposed lots will be accessed from the new private roadway.
- (4) N/A
- (5) All proposed driveways will enter onto the new private roadway.

Section 5.21 Inclusionary Zoning

N/A. The project proposes creation of 8 new dwelling units, which is below the 10 unit threshold subject to this standard.

Section 5.22 Village Design Standards

5.22.2 Site Level Standards

- (1) *Wastewater & Water:* Yes, water supply and wastewater disposal will be connected to the municipal system.
- (2) *Parking Lots:* N/A
- (3) *New Streets & Road Cuts:* The new roadway meets the Town Road Standards and includes sidewalks and shade trees.

- (4) *Road Connectivity:* The new roadway serving the development is a dead-end street with a hammer head turn around located at the terminus. Presence of stream setbacks, Class II and Class III wetland areas located along the western property line fronting Mechanicsville Road present limitations for incorporating two points of access for the proposed development. The proposed configuration minimizes overall project disturbance and disturbance to the natural features identified above. The single curb cut off Mechanicsville Road limits the number of vehicle interactions for the proposed development.
- (5) *Integration with Surrounding Area:* The proposed neighborhood structure is similar in typology to the nearby Thistle Hill neighborhood. Modestly-sized (0.30-acre to 0.84-acre) single-family lots are positioned to directly address the proposed streetscape, encouraging linear driveways and modestly-scaled front yards. The development has been concentrated along Mechanicsville Road and the proposed road to create a neighborhood feel and preserve natural features. A sidewalk and curbed green-belt planted with street trees is proposed on the south side of the new road, with a new pedestrian crossing connecting to the existing sidewalk on the west side of Mechanicsville Road.
- (6) *Pedestrian Connectivity:* The proposed development will include a 6-ft wide multi use path for the length of the new roadway fronting the proposed housing lots. A crosswalk is proposed at the intersection of Mechanicsville Road to provide a pedestrian route to the existing sidewalk on the east side of Mechanicsville Road.
- (7) *Building Location & Street Scape:* Lot depths favor house locations no further than 40' from the street edge, with garages set back from the street creating driveway lengths that allow for stacked parking if necessary. The proposed sidewalk is located on the south side of a curbed green-belt for its entire length, increasing pedestrian safety and providing suitable growing conditions for street trees that will shade the proposed road.

5.22.3 Building Standards Site Level Standards

Residential structures proposed on individual lots will be subject to this standard.

5.22.5 Public Open Space Standard

N/A. The project proposes creation of 8 new dwelling units, which is below the 10-unit threshold subject to this standard.

Section 5.23 Energy & Green Building Standards

Conformance and application of the Residential Energy Building Standards to be the responsibility of individual lot owners and building contractors. 'Net Zero' and 'Net Zero Ready' will be highly encouraged, although not a requirement of the residential home building construction.

Sustainable building design strategies to mitigate the reliance on fossil fuel use, include high-performance building envelopes, southern-facing glazing for passive solar gain in winter, active or passive shading of southern and western glazing in summer, minimal openings on northern wall exposures, and south-facing roof surfaces to locate active solar photovoltaic and solar hot water systems.

Implementation of high efficiency led lighting, heat pump technology and controls are anticipated to exceed the minimum energy performance standards for each home's lighting, heating and cooling systems. Cross and stack ventilation to be considered as a supplement or alternative to mechanical cooling systems. Appropriate material and product selections are to support the high-performance, energy efficient design approach.

In addition to promoting electric vehicles, pedestrian access within the neighborhood and connection to the established system of community pathways will encourage wellness by means of an increase in pedestrian and bicycle use. Increased pedestrian and bicycle use will contribute to and support a reduction in gas-powered vehicle impacts by the neighborhood community.

Section 5.27 Stormwater & Erosion Control

Stormwater management practices and erosion prevention and sediment control measures have been designed in accordance with the most recent versions of the Vermont Stormwater Management Manual and Vermont DEC Low Risk Site Handbook for Erosion Prevention and Sediment Control. A more detailed discussion is provided in the attached Stormwater & Erosion Control Narrative and depicted within the attached plans.

Section 5.29 Outdoor Lighting

No street lighting is proposed. Lighting for individual residences will be downcast and shielded.

List of attached plans and documents including items required in Article 4 of the Hinesburg Subdivision Regulations:

Plan Attachments

1. Civil Preliminary Plat Plan Set
2. L100 Landscape Plan
3. Survey Plat
4. Preliminary Subdivision Plat

Document Attachments

5. Transportation Assessment Memo
6. Curb Cut Application
7. Water & Wastewater Allocation Approval Letter for Lots 1 & 2
8. Water & Wastewater Allocation Approval Letter for Lots 3-8
9. Stormwater Management & Erosion Prevention & Sediment Control Narrative
10. Draft Roadway Maintenance Agreement

As noted above the proposed subdivision has been designed in general conformance with the Hinesburg Subdivision Regulations as well as relevant Vermont Agency of Natural Resources requirements and standard practice. Please let me know if you have any questions or comments.

Respectfully,

Engineering Ventures, PC



Kevin Worden, PE – Vice President

Cc: Joe Laster