CONDITIONAL USE – DEVELOPMENT IN A FLOODPLAIN, FLUVIAL EROSION HAZARD & STREAM SETBACK AREA

Applicant: Hinesburg Center Investments, LLC	Owner: Estate of David Lyman c/o
Brett Grabowski, 32 Seymour Street,	Barbara Lyman, 368 Read Ave. West, St.
Williston, VT 05495	Albans, VT 05478
Landscape Architect: Mike Buscher	Engineering & Survey: Roger Dickinson,
T.J. Boyle Associates LLC.,	Trudell Consulting Engineers
301 College Street, Burlington Vermont 05401	14 Morse Drive, Essex, VT 05452
Property Location, Tax Numbers, Zoning Districts and Areas: Located to the west of	
Hinesburg Center 1 / Kinney Drugs, between the Creekside development and Patrick Brook.	
Tax Map #08-01-06.320. 9.7 acres is located in the Village zoning district (VG). 36.5 acres is	
located in the Agricultural zoning district (AG). Total Area is 46.2 acres.	

<u>BACKGROUND</u> - Hinesburg Center Investments, LLC, hereafter referred to as the Applicant, is requesting Development Review Board (DRB) conditional use approval for development in a floodplain, fluvial hazard and stream setback area as part of a final plat application for a subdivision called Hinesburg Center 2 (HC2) that would include 73 new residential units and 16,800sf of non-residential space. Proposed development within the stream setback and fluvial erosion hazard area would be a connector road over Patrick Brook and a pedestrian bridge. Proposed development in the flood hazard area would include the connector road and bridge, plus some of the roads, residences and stormwater infrastructure.

The final plat application for this subdivision will be reviewed separately. The Applicant will be also applying for three site plan approvals within the proposed development concurrently with this application.

Development of a bridge/culvert for a new road through a fluvial erosion hazard area and a floodway is permittable as a conditional use per Sections 6.7.2(8) and 6.8.2(5) of the Hinesburg Zoning Regulations (HZR). The associated fill is approvable with conditional use approval per Section 6.7.2(10c) and 6.8.2(7c) of the HZR. Similarly in the flood hazard area outside of the floodway area is approvable with conditional use approval per Section 6.9.2(9) of the HZR. Required design standards are provided in Section 6.12 of the HZR. Development in the village stream setback area for the bridge and road/culvert is approvable with conditional use approval per Section 2.5.2(5f) of the HZR.

The proposed connector road and pedestrian bridge are planned future public infrastructure shown on the Hinesburg Official Map. The connector road, which would be a north/south through road and pedestrian path, is labeled on the Map as future community facility #14 & #15. The pedestrian bridge near VT Route 116 is shown on the Map as a future sidewalk.

This proposed development would be located on 'lot 32', the remaining land from several earlier subdivisions of the original Lyman property done by the Applicant. The proposed development is concentrated in the eastern 9.7 acres of the subject parcel that is located in the VG. The western 36.5 acres is located in the AG. The subject parcel is currently undeveloped and in agricultural use. There are some trails used by the Public. The property borders Hinesburg

Center 1 (HC1) to the east, the Creekside development to the south, Patrick Brook and the proposed Haystack Crossing development to the north and the LaPlatte River to the west.

On August 24, 2022, notice of this hearing was provided to Kyle Medash, Western Floodplain Manager with the VT DEC Rivers Program. Section 6.13.2(1) of the HZR, which is conforms to State statute 24V.S.A-§4424, requires that a minimum of 30-day notice be provided to the State National Flood Insurance Program (NFIP) Coordinator. Kyle Medash is the NFIP Coordinator for Chittenden County. He provided a response on September 22, 2022.

The standards per Section 6.12 of the HZR, which are appear to be of most importance are as follows:

- Section 6.12.1(2) of the HZR requires that development in a special flood hazard area (floodplain) will result in a net increase that is no greater than 1.00-feet in the base flood elevation (BFE) at any point with in the project area.
- Section 6.12.2(1a) of the HZR requires that development in a floodway well result in a net increase that is no greater than 0.00 feet during the 'base flood', otherwise known as the 100-year storm event.
- Section 6.12.1(5) of the HZR requires that new development and fill in the special flood hazard area will demonstrate that there will be no undue adverse impacts.

Further review of the other standards, which include the other portion of Section 6.12 and the conditional use review of Section 4.2 of the HZR, will occur once the standards that appear to be of most importance are shown to be in compliance.

The application was received and was deemed complete on August 22, 2022. The submitted plans are part of the official record and are contained in the document file 08-01-05.000 in the Hinesburg Planning & Zoning office. The plans and documents provided are for all of the Applicant's submitted applications. Relative to this application are the following:

- Civil plan set sheet #1, which shows the limits of the floodplain from several sources, floodway and river corridor, and the stream setback.
- Civil plan set sheet #13, which shows the plans and details for the pedestrian bridge over Patrick Brook near VT Route 116.
- Civil plan set sheet #14, which shows the plans and details for the vehicular bridge and pedestrian path over Patrick Brook that would connect Road 'C' of HC2 with Patrick Road of the Haystack development.
- Exhibit #5, which is an analysis of the proposed Patrick Brook culvert to show compliance with the hydraulic requirements of the NFIP and Hinesburg regulations.
- Kyle Medash's letter dated September 22, 2022.

Exhibit #5's narrative adequately describes what is proposed, the methodology, the data points used, formula values, the area reviewed, and the discharges that were evaluated. The narrative provides an opinion that based on the information provided as complying so long as recommendations based on the design criteria are followed. To support these results are a profile, a data table listing results based upon river stations, and 27 cross sections are provided.

STAFF REVIEW Per Article 6, HZR

- 1. Need for a Plan Exhibit #5 provides a profile and cross sections that reference a stationing along Patrick Brook. These are difficult to understand without a plan to provide context. A plan would provide context as to where the points listed in the profile and table are located. It would show where the submitted cross sections are located.
- 2. Cross section scale and vertical exaggeration The scale of the cross sections are so large that the area around Patrick Brook is difficult to review. The review would be clearer if distant areas, which would have proposed elevations that are significantly above the BFE were excluded from the cross sections, and if the vertical exaggeration was reduced. Combined with not having a plan, the cross sections are difficult to understand.
- 3. Existing conditions modeling This is a concern raised by Kyle Medash in his September 22nd letter. The Applicant's floodplain Engineer, Matt Murawski, P.E., describes in his narrative that the proposed flood elevation will not increase. The Applicant should be prepared at the hearing to provide the additional information or clarity to substantiate this determination.
- 4. XS 2457 A concern raised by Kyle Medash in his September 22nd letter is that the elevation of this location, XS 2457, is incorrectly stated in the analysis. The Applicant should be prepared at the hearing to address this concern.
- 5. **Full flow of Patrick Brook** A question raised by Kyle Medash in his September 22nd letter is whether the discharge that bypasses Patrick Brook by discharging in to the canal along Mechanicsville Road was considered in the analysis. The Applicant should be prepared at the hearing to address this concern.
- 6. Overall floodplain impact The engineering analysis and modeling in exhibit #5 focuses solely on the proposed Patrick Brook crossing. Section 6.12 of the HZR requires analysis and findings for all of the flood hazard areas proposed to filled and developed. Such analysis should specifically address whether the proposed filling of the floodplain will create undue adverse impacts as noted in section 6.12.1(5). This should include adjacent developed areas (e.g., Hinesburg Center 1 development, Creekside neighborhood) as well as upstream and downstream areas and infrastructure. Note that the Applicant did supply this sort of analysis when a similar application was reviewed and approved on 12/17/2013 i.e., two Milone & MacBroom studies from 2010 and 2013. That approval expired, but the Applicant may want to have the project engineer submit these studies, reference them, and/or update them to demonstrate compliance with the provisions in section 6.12.

Respectfully submitted,

Mitchel Cypes P.E., Hinesburg Development Review Coordinator