SUPPLEMENTAL REPORT TO THE MAY 11, 2023 STAFF REPORT

BACKGROUND – The Applicant is requesting a final plat approval for an 8-unit subdivision for a 102.05-acre property located on the east side of Mechanicsville Road that is in both the Residential 1 Zoning District (R1) and Rural Residential 1 Zoning District (RR1). The application was heard on May 16, 2023. On May 31, 2023 additional submittals to respond to the comments of the earlier staff report were received. Below is a listing of the new submittals and a review of how the comments of the May 11th staff report have been addressed.

NEW SUBMITTALS: –which have been added to the document file (17-22-62.100) in the Hinesburg Planning & Zoning office:

- A submittal letter from the Engineer dated April 19, 2023
- A project narrative from the Engineer dated March 6, 2023
- A plan by Engineering Ventures PC, titled 'Cover Sheet', with project #20542, drawing# C0-0, dated 04/01/2023 and with a revision date of 05/25/2023.
- A plan by Engineering Ventures PC, titled 'Site Layout Plan', with project #20542, drawing# C2-1, dated 03/01/2023 and with a revision date of 05/25/2023.
- A plan by Engineering Ventures PC, titled 'Site Grading & Utility Plan', with project #20542, drawing# C2-2, dated 03/01/2023 and with a revision date of 05/25/2023.
- A plan by Engineering Ventures PC, titled 'Erosion Prevention & Sediment Control Plan', with project #20542, drawing# C2-3, dated 03/01/2023 and with a revision date of 05/25/2023.
- A plan by Engineering Ventures PC, titled 'Soils Management Plan', with project #20542, drawing# C2-4, dated 03/01/2023 and with a revision date of 05/25/2023.
- A plan by Engineering Ventures PC, titled 'Roadway Plan & Profile', with project #20542, drawing# C3-1, dated 03/01/2023 and with a revision date of 05/25/2023.
- A plan by Engineering Ventures PC, titled 'Site Details and Notes', with project #20542, drawing# C4-2, dated 03/01/2023 and with a revision date of 05/25/2023.
- A plan by Engineering Ventures PC, titled 'Stormwater Details (1 of 2)', with project #20542, drawing# C4-3, dated 03/01/2023 and with a revision date of 05/25/2023.
- A plan by Engineering Ventures PC, titled 'Stormwater Details (2 of 2)', with project #20542, drawing# C4-4, dated 03/01/2023 and with a revision date of 05/08/2023.
- A survey by Vermont Mapping & Survey Co., LLC with project #22826, drawing#S-826, drawing dated March 2023, and signature dated May 31, 2023.
- A stormwater & erosion control narrative from Engineering Ventures PC. (7-pages). The Applicant added LID conformance information.
- Stormwater Operation & Maintenance Manual for the Laster Subdivision Project by Engineering Ventures, PC., with inspection forms and a 'plan key' showing the areas that need to be maintained, dated May 2023. (8-pages). This was updated to require annual inspections with recommended semi-annual inspections, and maintenance instructions for the conveyance swales. The map on page 8 has been updated to show the conveyance swale.
- An updated shared roadway and Stormwater operations & maintenance agreement and covenants. (3-pages)

STAFF COMMENTS

1. The survey plat labels lots 1-9, but the development road and stormwater areas appear to be on their own lot that is separate from the remaining land (lot 9). Either the lot lines separating these areas from lot 9 should be removed, or the road and stormwater area lot should be numbered. – The Applicants have designated the shared maintenance area as lot #10.

2. The placement of a swale on the north side of the building envelopes of proposed lots 1 through 5 appears to be a good idea. However, we need a detail for the swale, grading on the plans for the swale, an easement to provide maintenance of the swale, and this easement area should not be in the building envelope. Also, is there an agreement on how the swale would be maintained? – The swale is shown on detail sheet C4.3, on the survey and on plans C2.1, C2.2, C2.3, C2.4, and C3.1. There are separate details on sheet C4.3 for grass lined and stone lined swales to be placed based on grade. The detail shows a two-foot bottom and either 1 on 2 or 1 on 3 side slopes. Plan sheet C2.2 labels the swale as having a 1 on 3 side slope. The building envelopes on the survey have been updated to exclude the 10-foot-wide swale easement, which was added. The maintenance agreement has been updated to include the swale outside the right-of-way shall be jointly maintained in part 'b' of the agreement.

3. The pipes in the roadway (per A-76) should be at least 18-inches in diameter. The proposed culvert that discharges stormwater from the northside swale is only 12-inches in diameter. – The plans have been updated to show most of the stormwater pipes between catch basins, from the swales to either the catch basins and sediment treatment structures as 18-inches. A condition can state that the stormwater pipes as described would have a diameter of 18-inchesand that pipes located between the sediment treatment structures and the gravel wetlands shall be sized per the stormwater treatment modeling.

4. The location of the driveway culverts for proposed lots 6 to 8 should line up with the swale or vice versa. Also, as in comment #2, there needs to be an easement, maintenance, exclusion from the building envelope etc. Similar to comment #2 details, plans, building envelopes, swale easement, survey, and the maintenance agreement have been updated. In addition, the swales and the driveway culverts have been lined up.

5. Please confirm that the 8-inch outlet pipe from the deep sump catch basin will not conflict with the two pipes (the 12-inch and the 18-inch pipes connected to the pretreatment structure) that cross its paths. Please provide the elevations of each as they cross. The Applicant's Engineer stated in the reply narrative, dated 5/31/2023, that they checked the elevations and no conflict exists. She provided an elevation for the larger pipes crossing the 8"ø pipe, however it is not clear which elevation is provided. Perhaps the invert? It is It would be clearer to be provided with the both invert elevations and a calculation of the clearance.

6. This comment from the preliminary plat was mentioned in the stormwater narrative as being included, but apparently was not included. Section 6.6.2(5) of the HSR requires

that the applicant provide some low impact design (LID) standards. The Applicant's Engineer updated the stormwater narrative adding an LID section. She states that the LID requirements are met with the cluster development, minimize (reduced) impervious areas, open space preservation, site fingerprinting, filtration practices, landscaping practices and soil conservation practices. The amount of proposed open space in the master plan is considerable. The way that Section 6.6.2(5) of the HSR is written is to try to do as much as is feasible. What is proposed does provide conformance. The property is limited due to a high-water table, wetlands, steep slopes, etc. The Applicant could add runoff conveyance practices by increasing the length of the northern swale and/or adding check dams.

7. The Applicant should explain the longer retention time for GW2 of 1440 minutes instead of 720-minutes. The reason for the longer retention time is that GW2 discharges directly to a class two wetland, which is considered a warm water habitat and requires the longer retention time.

8. The shared roadway and stormwater operation and maintenance agreement and covenants should be updated to include other key infrastructure in the road right of way, specifically maintenance of the street trees as well as the maintenance and snowplowing of the pedestrian path/sidewalk. The agreement should also be updated to specifically mention shared maintenance responsibilities for the drainage swales outside of the shared roadway – i.e., swales on the north side of lots 1-5 and the north side of 6-8. The shared maintenance agreement was updated to include these other features. Part 'b' should reference part 'f' or be reworded to include the information in part 'f'. This addition would add clarity.

9. Sheet C2.2 (utility plan) shows proposed water, sewer, electric, and stormwater drainage lines, but does not show proposed natural gas lines. Proper placement of underground gas lines should be addressed and added to the plan to avoid conflicts with other infrastructure. The Applicant's response narrative states that they are not proposing to provide access to natural gas. Section 6.9.2 of the HSR requires a note on the survey that states 'that the proposed utility locations may be modified slightly when installed, due to unforeseen site constraints such as ledge.' The constraint note was added to the survey.

10. For conformance to Sections 5.22.3(5&6) of the HZR there will be conditions requiring that garages be set back at least 10-feet from the front of the principal structure and that these single-family residences will have roof pitches of at least 6 on 12. The Applicant's response narrative acknowledges this condition.

11. Clarify "inspections twice annually, with inspection recommended quarterly" that is stated on the proposed stormwater maintenance plan. The stormwater maintenance plan has been updated to require one annual inspection, but to recommend two inspections annually.

12. The crosswalk striping detail shown on Sheet C4.2 should be horizontal instead of diagonal for consistency with VTrans standards. Stripes should be 8 feet long and 2 feet

wide with gaps between stripes also 2 feet wide. The crosswalk striping has been appropriately updated.

13. The crosswalk sign posts shown on Sheet C4.2 should be revised to show 2-inch square posts (rather than u-shaped posts), in order to accept future flashing beacon equipment. Also, the post anchor detail should be revised to show a 48-inch-deep concrete anchor (e.g., 12" diameter sonotube) with a post sleeve at least 18 inches deep, instead of a wood block anchor. Greater anchor stability needed in order to accept future flashing beacon equipment. An additional detail was added to Sheet C4.2 for the square posts. A note stating that the post sleeve be at least 18-inched in depth should be added. Plan C2.1 now states that the crosswalk signs, that can be upgraded to flashing beacon signs in the future, will have the square post design. The warning signs are proposed to use the 'u' shaped anchors.

14. Pursuant to section 2.5.2 of the HZR, the 75-foot stream buffer area on the north side of lots 1-5 (sheet L000) shall not be converted to lawn, and shall be left in an undisturbed, vegetated condition. Control of non-native species of nuisance plants is allowed, and supplemental planting with native vegetation is encouraged. The Applicant's response narrative acknowledges this condition.

15. The landscaping plan (sheet L000) shows tree and shrub plantings on lots 1-8; however, a note indicates that the landscaping on the lots is, "representative and subject to change". The specific placement of the on-lot landscaping may change, but the number and type of plantings shall be per the plans. Minor revisions of plant species may be reviewed and approved by the Zoning Administrator. The Applicant's response narrative acknowledges this condition.

16. New – Conferring with the Fire Chief on general standards, the proposed turnaround should be lengthened from 32-feet to 40-feet.

Respectfully submitted,

Mitchel Cypes, P.E.,
Hinesburg Development Review Coordinator