



CIVIL ENGINEERING ASSOCIATES, INC.

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March 14, 2022

Mr. Mitchel Cypes, P.E., Development Review Coordinator
Town of Hinesburg
Town Hall, 3rd Floor
10632 Route 116
Hinesburg, VT 05461

**Re: Haystack Crossing, LLC.
Final Plat application for a Planned Unit Development
Hinesburg Road and Shelburne Falls Road**

Dear Mr. Cypes:

On behalf of Haystack Crossing, LLC, we would like to present to the Town of Hinesburg this Final Plat application for the proposed Phase I component of the Haystack Crossing Project.

This application covers the proposed subdivision of parcels for Phase I and the supporting Road and utility infrastructure. This plan package also includes references to boundary line adjustments that are necessary to reconcile the Bissonette Field access points and the Riggs Road Extension to Route 116. These BLA applications are being submitted under separate cover.

We have included a sheet that shows the conceptual build-out of the project that depicts both residential and commercial buildings. It should be noted that Site Plan applications for the future multifamily buildings and commercial buildings will be submitted at a later time once the proposed programs for those buildings have been solidified.

With the Haystack Crossing Project envisioned to be developed in two phases, Phase I represents that portion of the project which:

1. Complies with the Master Plan approval for the Haystack Crossing Project.
2. Complies with the water and sewer allocations issued by the Selectboard.
3. Provides a layout that supports a mixture of commercial and residential land uses.
4. Utilizes the Shelburne Falls Road intersection so as to:
 - a. Provide the most efficient movement of vehicles to and from the project through the soon to be constructed improvements at the Route 116/ CVU Road/Shelburne Falls Road intersection; and

- b. Provides time and flexibility for the maturing of the future needs and supporting improvements along the Route 116 corridor, specifically at the Riggs Road intersection.

Phase 1 Sub-Phases/Well Capacity - The Phase I project sub-phases have been eliminated in favor of constructing all of the phase I infrastructure at one time. With the new municipal well on the property being drilled, permitted and easements in place, the only remaining work is connecting the new well which will occur during or prior to the infrastructure improvements associated with this project. The Town has issued a water allocation covering the entire phase I requirements.

Compliance Demonstration - This application package has been assembled in a manner where the Conditions of Approval from the Preliminary Plat application has been assembled with specific responses on how compliance is being achieved on each item.

Proposed Offer of Public Lands - The project proposes a combination of public and private streets along with a number of public open space features. Those public offerings include:

- a) Haystack Crossing (this is a continuation of the original offer of dedication);
- b) Shubael Street (Connecting Route 116 with the recreation fields);
- c) Jenna Drive (it provides a direct route for southbound recreation field patrons);
- d) Hailey Lane (it provides a future east gridded street connection)
- e) Center Road (Connector to points south)
- f) Public Lands between the Recreation Field and Jenna Drive
- g) Public Lands (Lot 70) between Haystack Crossing and the KB Real Estate parcel).
- h) Open Space/Path along Route 116 in the southeast quadrant of the site (Lot 1A).
- i) Conservation easement along Patrick Brook
- j) Access easement along the southern portion of the property from Route 116 to the recreation fields.
- k) Recreation Path easement along the northern portion of the property from Route 116 to the recreation fields.
- l) Water Main easements within the private roads/property.

Open Lands to Remain Private - Roads and open space parcels that will remain privately owned include:

- m) Lots 1 and 7 on the south, west and north sides of the proposed development area.
- n) Lot 8 – Solar Field and well site.
- o) Lots 14 and 20 between the recreation field and single family homes along Jenna Drive.
- p) Lot 58 pocket park at the intersection of Haystack Crossing and Jenna Drive

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q) Lot 4A located between Shubael Street and Violet Circle.

Future Development - Lands Reserved for Future Development

r) Phase II South (lot 69)

s) Phase II North (Lot 68)

t) West Solar Field

The **Plan sheets** have generally been organized in the following manner:

- Overall Layout and Master Plans
- Landscaping Plans
- Site Lighting Plans
- C2.x - Site Improvements Plans
- C3.x - Site Grading and Drainage Plans
- C4.x - Site Water & Sewer Utility Plans
- C5.x - Site Gas & Electric Utility Plans
- C6.x – Plans & Profile Sheets
- T1.x – Transportation Related Improvements Plans
- C7.x - EPSC Plans
- C8.x – Road Sections
- C9.x - Details
- C10.x - Specifications

Stormwater – We have provided responses to your guidance on the requested stormwater/grading improvements as outlined below.

1. Per the last plans, there is a low area located about where the southern portion of the recreation field parking area meets the proposed access road, which has no outlet. There is a circle 330 elevation with the land inside the circle apparently is at a lower elevation. A way for this area to drain will need to be shown on the plans. *[Dave Marshall] A new catch basin #1A has been added in that low spot to direct flows to the forebay of the gravel wetland.*
2. The pipe inlet between lots 32 and 33, which connects to CB#6, has an invert elevation of 330.0. The obvert of the 42-inch pipe by CB#5 is 330.97. The inlet area will flood. *[Dave Marshall] That presumes that the 42" pipe is flowing full at that location.* Sufficient contours are needed to show the extent of the flooding, and that none of the proposed residences will flood. *[Dave Marshall] The plans show that the finish floor of the house is to be set at approximately 335.0. There is no basement. This allows 5 feet of ponding to occur above the 15" culvert invert between Lots 32 and 33 and 4-feet above the obvert of the 42" pipe. We have added the 331, 332 and 333 contours at the*

culvert inlet. The surrounding contours extending from the street and lane improvements are all 333. The site will be filled to approximately the 333.2 elevation to provide maple drainage protection to the estimated FFF 335 elevation.

3. Similar to comment #2, on the lot adjacent to the Town recreation fields, which is proposed to be transferred to the Town, there is an invert of 328.1 near CB#2, which is a lower elevation than the obvert of the 42-inch pipe by CB#1 of 329.50 **[Dave Marshall]** The 42" pipe invert is 326.00 at CB#1 (confirming the obvert of 329.50). and the peak water elevation of the main gravel wetland, which was close to elevation 330. **[Dave Marshall]** The emergency overflow invert for the gravel wetland is 328.3. The design 10-year water surface elevation is 328.9 and and the 100-year elevation is 329.9. Similarly sufficient contours are needed to show the extent of the flooding. **[Dave Marshall]** The existing plans show the 330 contour tying into the existing 330 contour at this location. The stormwater modeling refers to this area as flooding, but does not provide the limits of flooding **[Dave Marshall]** (see above). Contours are needed to delineate the area. The area that is utilized for stormwater storage should be a separate lot than the remaining land to be transferred to the Town.**[Dave Marshall]** The backwater limits for the Q10 event are minimal beyond the culvert flared end section. The flooding limits for the Q100 event are more substantial but can be estimated based on the 330 contours depicted on the plan. The need for an easement for the infrequent nature of these storms is an issue for further vetting with the Town as opposed to the DRB.
4. Sufficient contours or other information should be provided to show that a portion of building 'H' is not being used as part of a berm for gravel wetland #2.**[Dave Marshall]** Building H is not being proposed with this application. If it were and portion of the frost wall was being used as the limits of flooding, there is nothing that would indicate that this is a bad practice for a very short term event. The plans show the proposed contours in this area. When the design for Building H is developed and submitted as part of a Site Plan application, a better determination of how the building finished floor elevations are protected from flooding can be determined.
5. For buildings that are returning for site plan approval, sufficient contours should be provided to show how the land will be graded before structures are placed on the property.**[Dave Marshall]** Yes, depending on the character of the grading, 1-foot or at least 2-foot contour intervals will be provided to demonstrate proper protections are being employed.
6. For lots with single family residences, grading should be shown that is approximately what would be proposed. The final decision will most likely not require exact grading, but we can add a finding to indicate flexibility.**[Dave Marshall]**

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Sheet C3.2 Does not have any proposed single family homes as depicted in the master plan approval.

Sheet C3.3 shows the conceptual grading for Lots 39-42. Lots 32-37 are fairly flat but some contouring has been added for the drainage relief while supplemental contours have been depicted for lots 10-14. Lots 15-17 on the west side of Jenna Drive have been supplemented with future building development grading contours.

Sheet C3.4 shows the grading for Lot 10 which is also shown in better context on Sheet C3.3.

Sheets C3.5 – 3.6 Do not have any proposed single family homes as depicted in the master plan approval.

Sheet C3.7 Shows the additional grading information for Lots 17-23 on the west side of Jenna Drive and Lots 46-53 in the top right of the drawing.

Sheet C3.8 shows the grading from Lots 63-64 beyond what is depicted on Sheet C3.9.

Sheet C3.9 shows the grading for lots 22-29 on the west side of Jenna Drive and Lots 51-56 on the south side of Jenna Drive.

Sheet C3.10 shows the grading for lots 27-30 on the North side of Jenna Drive and Lots 59-60 on the north side of Haley Lane.

Traffic – The project proposes to utilize the Haystack Crossing corridor as one route for the collection and distribution of traffic to and from the project site. The traffic improvements work will also include the connection of the project to Vermont Route 116 (Hinesburg Road) through the construction of a right turn in only (southbound on VT Route 116) and right turn out only (southbound on Route 116).

An update to the traffic impact Study (TIS) was completed by Wall Consulting Group (WCG) successors of the local transportation staff of Resource System's Group to address the 95th percentile analysis requirements set forth in the conditions of approval.

Conditional Use - Since there are proposed features (stormwater outfall, recreation path, southern traffic connector roadway) that fall within the stream setback, a Conditional Use application is required to be submitted and authorized by the Development Review Board.

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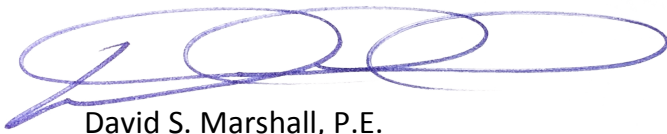
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We have included an application form and supporting narrative as it relates to compliance with the Conditional Use standards.

Application Fee – With the understanding that any lot where a structure other than a single family home is proposed requires a Site Plan approval and the Site Plan approval fee includes a per unit fee, the application fee for this Final Plat application is based on the number of non-open space lots proposed for approval. In this case that number is 60.

This completes our summary of the materials being submitted for the Town's review on this project. If you should have any questions, please feel free to contact me at 864-2323 x310 or at dmarshall@cea-vt.com.

Respectfully,



David S. Marshall, P.E.

Attachments:

- 1 - Final Plat Application
\$12,015 Application Fee \$200 per lot x 60 lots + \$15 filing fee)
- 2 - Conditions of Approval Response
- 3 – Section 6 Compliance Summary
- 4A -Blackrock Haystack -Recreation Development Agreement - Draft
- 4B - Water Easement Deed – Draft
- 5 - Building H Senior Overview
- 6 – Patrick Brook Bridge Memorandum (USC)
- 7 – Winn Wilson DEC Letter on Stormwater Compliance
- 8 – Town Response on Project Layout (USC)
- 9 – UVMCAT Map of Archaeological Sensitivity
- 10A – Haystack Draft Declaration
- 10B – Haystack Draft Bylaws
- 11 - Traffic Memorandum on 95%ile Queuing
- 12 – Fire Department Ability to Serve
- 13 – Haystack Solar Package Narrative and Residential Offering
- 14 – Density Analysis
- 15 - BLA Application with KB Realty (USC)
- 16 - BLA Application with Town of Hinesburg (USC)
- 3 Full Size Set of plans, One 11x17 Set

Cc: (all with enclosures, 11x17 plans) B. Avery, CEA File 13127.00