STAFF REPORT - SITE PLAN REVIEW

Prepared by Darren Schibler, Town Planner

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Andrew Hood 1 Allen Martin Drive, LLC (c/o Dave Boucher)
119 Brigham Hill Road 98 Sleepy Hollow Road
Essex, VT 05452 Essex, VT 05452

Proposal..................................................................................................................................................... 27

The applicant has proposed four warehouse buildings with a total floor area of 33,860 square feet
(SF) on a vacant lot with a shared driveway in the Resource-Preservation District – Industrial
(RPD-I) zoning district, Tax Map 71, Parcel 3. The buildings would accommodate up to 60
employees in total, and a new water line that connects to the existing system west of Sand Hill
Road would be installed and conveyed to the Town.

Abutting properties to the north and south are in the RPD-I district and have been developed for
light manufacturing, office, and storage uses. To the west, a Medium Density Residential (R2)
District contains single-family homes separated by the RPD-I’s 200-foot buffer and Sand Hill
Road. The Town-owned Saxon Hill Forest lies to the east of the property.
Background

For history of the property prior to 1978, see the document titled “Historical Analysis of Two Town Forests in Essex, Vermont” dated January 9, 2018.

The Planning Commission granted conceptual approval for the entire Saxon Hill Industrial Park on May 11, 1978; Phase I of the Master Plan, approved on September 20, 1978, laid out lots along a new access road now known as Allen Martin Dr. Lot A-2, the lot currently under review, is located just south of Allen Martin Dr. and Sand Hill Rd.; lot A-1 is located just south of that and is currently known as 89 Sand Hill Road. Lots A and B include what are now known as 30 and 42 Allen Martin Dr. Other lots were located closer to VT-15, including Lot C (now Corporate Dr.), Lot C-2 and C-4 (located along the first 1,500 feet of what is now Thompson Dr.), and Lot C-3 (now Oliver Wight Dr.).

On June 12, 1980, the Planning Commission granted site plan approval to Mansfield Industrial Associates (MIA) for two groups of three connected buildings totaling 72,000 SF on Lot A-2. No construction occurred until a zoning permit for the northernmost building (12,800 SF) was issued in October 1987.

On January 12, 1989, the Planning Commission approved a site plan amendment to increase parking on the overall site from 121 to 229. A condition was added that construction must be completed within two years; this did not occur and the approval expired on January 12, 1991.

On October 7, 1993, a minor site plan amendment was granted by the Community Development Director to construct a 3,200-SF addition to Building 1 as the first phase of Building 2. However, the applicant was required to obtain re-approval of the original site plan by the Planning Commission for any further construction because the original approval had expired.

On October 14, 1993, MIA appeared before the Commission to explore a new curb cut for Lot A-2 from Sand Hill Road through the 200-foot buffer, since the access off Allen Martin Drive posed challenges with traffic volume and sight distance.

On October 28, 1993, the Commission re-instated the expired January 12, 1989 approval with substantially the same findings and conditions, with the additional approval of a temporary driveway access off Sand Hill Rd. On June 8, 2000, the Commission again re-approved the original site plan, but no construction took place and that approval expired on June 8, 2002.

On September 26, 2013, the Planning Commission approved a simple parcel subdivision of Lot A-2 into a 2.31-acre lot including the existing building (which became 7 Allen Martin Dr.), and the remaining vacant 6.77-acre lot (which retained the address 1 Allen Martin Dr.). Both lots would share the existing access off Allen Martin Dr. The approval included a condition that prior to sale of either lot, easement deeds for water, sewer, access, and gas must be reviewed by the Town Attorney (this was done and the deeds were recorded on October 31, 2013). Right-of-way easements for trails and buffers would be considered under site plan review for the vacant lot.
On October 11, 2018, MIA appeared before the Planning Commission to explore again the idea of a primary access off Sand Hill Rd. instead of the shared access off Allen Martin Dr. The Commission did not support access through the 200-foot buffer, which is expressly prohibited in the RPD-I district standards and cannot be waived by the Commission.

I. Article V, Section 5.6 of the Zoning Regulations: Site Plan Review

The applicant has applied for Site Plan Review pursuant to Section 5.6 of the Town of Essex Outside the Village of Essex Junction Official Zoning Regulations. The purpose of site plan review is to ensure the project’s compliance with the Town Plan, the Zoning Regulations, and conditions of previous approvals. Site Plan review standards specifically include preservation of natural and scenic features, layout of development, access, internal circulation, parking, landscaping, lighting, and utilities and fire protection.

The applicant has submitted the following plans:

- Plan Sheet #1, “Site Plan, Allen Martin Drive – Lot #1, Essex, VT,” prepared by O’Leary-Burke Civil Associates, PLC, dated 05/09/2019, revised 08/08/2019;
- Plan Sheet #4, “Road & Storm Details, Allen Martin Drive – Lot #1, Essex, VT,” prepared by O’Leary-Burke Civil Associates, PLC, dated 05/09/2019, revised 07/09/2019;
- Plan Sheet #5, “Water Details, Allen Martin Drive – Lot #1, Essex, VT,” prepared by O’Leary-Burke Civil Associates, PLC, dated 05/09/2019, revised 07/09/2019;
- Plan Sheet #6, “Sewer Details, Allen Martin Drive – Lot #1, Essex, VT,” prepared by O’Leary-Burke Civil Associates, PLC, dated 05/09/2019, revised 07/09/2019;
- Plan Sheet #7, “EPSC Plan & Details, Allen Martin Drive – Lot #1, Essex, VT,” prepared by O’Leary-Burke Civil Associates, PLC, dated 05/09/2019, revised 07/09/2019;
- Plan Sheet EX-1, “Circulation Plan, Allen Martin Drive – Lot #1, Essex, VT,” prepared by O’Leary-Burke Civil Associates, PLC, dated 8-8-19;

(A) ZR Section 5.6(A), General Requirements

1. Conformance with the Essex Town Plan
The project complies with the following goals and objectives of the 2016 Essex Town Plan:

**Goal 1f:** Economic development is carried out in the Saxon Hill Industrial Park with consideration and respect for the natural surroundings.

**General Policy 2:** Economic growth shall be diversified, with development occurring in and around ... the Saxon Hill/Resource Preservation District – Industrial (RPD-I) zoning district.

**Specific Policy 2(S).1:** Infill development within existing industrial and commercial zoning districts shall be promoted.

2. Dimensional limitations and provisions of the Zoning Regulations

This project is located in the RPD-I district, and must conform to the standards listed in Table 2.14 of the Zoning Regulations.

i. **Table 2.14, Dimensional Requirements, Resource Preservation-Industrial District (RPD-I)**

   The project reflects the purpose of the RPD-I in that the development activity is located within the 40% industrial area designation, and will be carried out in harmony with the natural surroundings. Furthermore, natural attributes (i.e., forest cover and trails) will be protected for public enjoyment to the extent feasible.

ii. **Permitted Uses**

   Storage, warehouse, and distribution are permitted uses in the RPD-I district. The proposed buildings may also be occupied by other permitted uses, but each new user must obtain a use permit from the Community Development Office to ensure conformance with the **Zoning Regulations** and State Fire & Life Safety code.

iii. **District Dimensional Requirements**

   The proposal generally conforms to Table 2.14(D), Dimensional Requirements of the RPD-I district, as noted below:

<table>
<thead>
<tr>
<th>Dimensional Requirements</th>
<th>Required</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Lot Area – Nonresidential</td>
<td>40,000 sf</td>
<td>294,901 sf</td>
</tr>
<tr>
<td>Minimum Lot Frontage</td>
<td>200 ft.</td>
<td>788.27 ft.</td>
</tr>
<tr>
<td>Minimum Front Setback (from ROW)</td>
<td>50 ft.</td>
<td>195 ft.</td>
</tr>
<tr>
<td>Minimum Side Setback</td>
<td>25 ft.</td>
<td>25 ft.</td>
</tr>
<tr>
<td>Minimum Rear Setback</td>
<td>25 ft.</td>
<td>48 ft.</td>
</tr>
<tr>
<td>Minimum Buffer/Residential Districts</td>
<td>200 ft.</td>
<td>265 ft.</td>
</tr>
<tr>
<td>Maximum Lot Coverage – All</td>
<td>60%</td>
<td>36.6%</td>
</tr>
<tr>
<td>Maximum Height</td>
<td>45 ft.</td>
<td>&lt; 45 ft.</td>
</tr>
</tbody>
</table>

The lot has sufficient frontage and area for further subdivision, possibly allowing for each of the proposed buildings to have its own lot. Should this
occur after construction is complete, the buildings are positioned such that parking areas likely would be located within the side setbacks.

iv. District Development Standards

Most of the property’s frontage is within the 200-foot buffer along Sand Hill Road, but approximately 40 feet of the northwestern part of the property that fronts along Allen Martin Drive is within the 100-foot buffer.

The applicant has proposed clearing a 20-foot-wide corridor through the 200-foot buffer to install a new water line off Sand Hill Road. The new water line and easement to the Town would run parallel to the existing sewer line and easement, thus reducing the number and total width of clearings required. Alternative designs were explored that would have extended the existing 8-inch line on the northeastern side of Lot 2, but the Town Engineer recommended against this due to the length of the line and the number of service lines that would need to be tapped from the main.

The proposed access drive would be located within the 100-foot buffer, which is prohibited under ZR Table 2.14(7)(b); however, the existing shared access drive for Lot 2 (7 Allen Martin Drive) is located within this buffer and was approved prior to the prohibition on access drives within the 100-foot buffer. Furthermore, the Planning Commission approved the subdivision of Lot 1 with the access located through this buffer. The only alternative access would be through the eastern portion of the site, which would require significant design changes and is also not supported by the landowner of Lot 2.

The applicant also proposed clearing a 20-foot-wide corridor through the 100-foot buffer in order to install underground gas and electricity lines, which is permitted under ZR Table 2.14(7)(b). However, it would be preferable for the applicant to secure gas and electricity easements through Lot 2.

3. Protection of public health, safety, and welfare

The proposed project will not impact public health, safety, or welfare. In an email dated June 6, 2019, the Police Chief stated that there were no concerns with the proposal.

4. Outstanding violations

The property does not have any outstanding zoning violations.

(B) ZR Section 5.6(B), Natural features

The Zoning Regulations state that “site layout and design, to the extent feasible, shall incorporate and protect significant natural features as identified on the Significant Features and Water Resources Maps contained in the Town Plan of record or through site investigation.”
5. Topography

The Zoning Regulations call for minimal changes to a site’s topography and vegetation, specifying that a site “shall be planned to retain, insofar as possible, the natural contours and to conserve the natural cover and soil.” The lot is generally flat and completely forested except for the existing sewer line; the required buffers within the RPD-I would be retained except as noted in Finding I(A)(2)(iv). Grading would occur to create the stormwater infrastructure and level the site, which would result in creation of several steep slopes. Discussion of steep slopes appears in Finding I(B)(2).

6. Steep Slopes

There are two areas of steep slope (greater than 20% grade) on the eastern portion of the site as it drops into a ravine. No development would occur in areas which currently have greater than 15% grade, but the proposed grading plan shows creation of some slopes greater than 15% and up to 25% around the stormwater ponds and to the east of Buildings 2 and 3. Because these slopes are within a stream buffer, they are subject to ZR Section 3.11, which is reviewed under Finding IV(B)(3).

Sheet 7 of the plans (Erosion Prevention and Sediment Control) shows that silt fencing will be used along the eastern edge of the site, which will reduce sediment losses into the ravine. Given the highly erodible soils, it is imperative to minimize disturbance to the areas at the top of the ravine, and any areas that are disturbed must be re-vegetated as soon as possible. The applicant has proposed replanting 9 white pine saplings on any slopes greater than 33% grade.

7. Surface Waters and Wetlands

Though there are no wetlands or streams located on the site, there is a stream at the bottom of a ravine to the east of the site. However, the stream has a well-established floodplain, and the required 50-foot riparian buffer lies outside the project boundary.

8. Renewable Energy

The applicant has not proposed utilization of renewable energy at this time. The proposal would not impact the ability of neighboring properties to use renewable energy, as it would not create light or wind shade over property lines.

9. Open Space

The site does not contain any open meadows. The RPD-I’s 200-foot buffer, which runs along the southwestern boundary of the property, will remain forested except as noted in Finding I(A)(2)(iv) and open to the public via an existing trail.
(C) ZR Section 5.6(C), Access

Pedestrian and vehicular access to the site must meet applicable design standards in the Zoning Regulations and Public Works specifications. The Planning Commission can impose conditions related to on- or off-site improvements meant to mitigate the impact of traffic, or to maximize pedestrian and vehicular safety.

In the project narrative dated June 27, 2019, the applicant’s engineer stated that the project would generate 11 PM peak hour vehicle trip ends (VTE) according to the ITE Trip Generation Manual, 8th Edition. The applicant provided a traffic study that has been reviewed by Public Works.

Primary access to the lot will be via an existing curb cut off Allen Martin Drive located on the adjoining property at 7 Allen Martin Drive. This access was approved by the Planning Commission in the 2013 subdivision, and the applicant holds an access easement over the driveway. The driveway would be upgraded to a private road with a 24-foot paved width and 5-foot-wide shoulders with drainage swales.

In e-mails dated June 26 and September 3, 2019, the Fire Chief stated that the driveway must be a named private road with its own addressing for E911 purposes.

Pedestrian access to the site is provided via an existing asphalt path along the east side of Sand Hill Road, which continues along Allen Martin Drive. Pedestrians may enter the site from this path through the main curb cut at 7 Allen Martin Drive, or through the 15-foot-wide trail easement that runs along the southern property boundary.

In a memorandum dated August 9, 2019, Public Works staff stated that a traffic fee of $104.44 per PM VTE for a total of $1,148.84. Public Works also stated:

There appears to be sufficient access in and out of the site via the existing drive to Lot #2. There does not appear to be any significant hazard or potential conflict with either vehicular or pedestrian traffic.

Public Works would like to have two Trucks Entering signs installed either side of the existing drive access to Allen Martin Drive. The two signs shall be installed in accordance with the latest version of the Manual on Uniform Traffic Control Devices, (MUTCD).

There is an existing asphalt-paved path along the frontage of the lot that is substandard and needs to be upgraded from approximately a point just south of the [pedestrian] crossing (including the crossing apron from the path to Sand Hill Road) to the northern limit of the lot, a distance of approximately 400 feet. The path needs to be widened to the full 6 feet that exists south of the crossing. This should be done by exposing the current width of the asphalt path. If it is not 6 feet in width, gravel base needs to be added to create the full six feet of width and the entire length overlaid with 1.5 inches of new pavement. The crossing apron is currently unpaved and needs to be paved with a handicapped surface plate
A concrete walk / handicap accessible sidewalk detail has not been provided. Public Works staff recommends handicap accessible sidewalk ramps on the proposed warehouse site be constructed to VAOT standards, C-3A and C-3B. Additionally, all paved walkways should be constructed in compliance with current ADA standards.

The Typical Private Roadway detail only provides a 15-inch depth of subbase material for the access drive to all four warehouse buildings. Due to the heavy truck traffic intended for the site, Public Works recommends at least 24 inches of subbase.

The Parks and Recreation Director did not provide comment on this application.

(D) ZR Section 5.6(D), Site Circulation

The Zoning Regulations require the Planning Commission to consider on-site vehicular and pedestrian circulation, and allow the Commission to impose conditions to ensure adequate circulation. The Planning Commission must pay particular attention to safety and give consideration to accessibility, as required by the Americans with Disabilities Act.

As noted in Finding I(C), vehicles would enter the site through the existing curb cut at Allen Martin Drive, whose apron is 50 feet wide and whose traveled width will be widened slightly to 24 feet. From there, vehicles would travel along the private road to the proposed buildings, each of which would have its own driveway off the private road leading to the paved loading docks and graveled parking areas. Parking lot entrances for Buildings 1 and 2 would meet or exceed Town standards for apron design. The entrances to Buildings 3 and 4 have modified aprons to accommodate several large truck loading docks.

Snow would be plowed to the southern end of the private road and stored to the west side of Building 4, as well as to the eastern side of the parking area for Building 4. Should the proposed snow storage areas prove insufficient, snow must be hauled off-site. Snow shall not be stored within the stormwater ponds or within the 200-foot buffer.

In an e-mail dated June 26, 2019, the Fire Chief stated:

The Fire Department has concerns with the basic design of the access road. This would circumvent the normal process for creating a public street but would create five separate addresses on one dead-end driveway. Also, the layout for commercial vehicles to navigate into the loading docks is insufficient for safety and will create many opportunities for incidents as they try to turn around. There should be a second avenue of egress into that space from the main road.

Also, the Fire Department requests more information regarding the occupancy of each building to determine what additional comments are warranted.
In response, the applicant submitted Sheet EX-1, Circulation Plan, which shows that aisle widths and turning radii are adequate to accommodate a WB-40 type truck. This approximates the size of Essex Fire Department vehicles and exceeds the size of Essex Rescue vehicles.

However, larger trucks such as WB-50 would not be able to turn into the parking areas and back into the loading docks. Instead, they must enter the parking lot for the building before their destination, and then back along the access drive into the destination loading dock. In an email dated June 27, 2019, the applicant stated that they explored a secondary access road but did not pursue it because it would create an additional 400 feet of road and would require the cooperation of the adjoining landowner.

Should the lot ever be further subdivided as described in Finding I(A)(2)(ii), the orientation of the buildings would make providing a second means of access more difficult should it be required for a future subdivision. A layout resembling the original site plan for this parcel, in which buildings were aligned parallel with the existing building on Lot 2, might make a looped access more feasible.

Also, there are several parking spaces located within a fenced-in outdoor storage area the east of Building 1. Materials storage in this area could potentially impede traffic circulation, and could create safety hazards depending on the nature of the materials being stored. Because the parking and storage areas will be graveled rather than paved, it is impractical to mark a fire lane to ensure access. Therefore, the fenced-in storage area for Building 1 should be reduced in size to allow free access to the side parking area, or else the parking spaces should be eliminated. At minimum, both fenced-in areas must be accessible to emergency responders via a key box.

(E) ZR Section 5.6(E), Parking

Parking must be provided in accordance with Section 3.9 of the Zoning Regulations, and no more than 50 percent of a front-yard setback can be devoted to parking. Under ZR Section 3.9(B), the proposed uses would require 1 parking space for every 400 square feet of floor area, or 2 spaces for every 3 employees. With 33,860 square feet of floor area, the site must have 85 parking spaces; alternatively, with 60 employees, the site must have 40 parking spaces.

The applicant has interpreted these requirements as a minimum and maximum range, and has proposed 76 spaces total for the site. The amount of parking proposed would be sufficient for most permitted uses within the RPD-I. However, it would be significantly lower than the minimum required for the following uses: offices; personal services; recreation; and equipment sales, rental, and repair. Parking would be distributed over individual parking areas as follows:
The proposed parking layout generally distributes the parking evenly between all buildings based on floor area, an important consideration should the parcel ever be subdivided into individual building lots.

However, as noted in Finding I(D), four of the spaces dedicated to Building 1 are located within the fenced-in storage area and may not have sufficient access, especially if the building’s use requires materials storage that would restrict access or parking. Given this, the fenced-in storage area should be reduced in size, or else the parking spaces should be eliminated. If the spaces were eliminated, only 9 would remain; under the minimum required parking (2 spaces for every 3 employees), the building would be limited to 6 employees for most permitted uses within the RPD-I.

Also, in an e-mail dated September 3, 2019, the Fire Chief noted that the parking areas are proposed to have a graveled surface, which will make delineation of spaces difficult, particularly in winter months. This may lead to under-parking and situations where emergency access is blocked by poorly-parked vehicles. The parking areas should be paved, with parking spaces and fire lines clearly marked and visible at all times.

No bicycle parking is shown. Though it is not strictly required due to the nature of the proposed uses, it is highly recommended given the site’s proximity to the Saxon Hill Forest, which contains a significant network of mountain bike trails that are used by employees of businesses in the area.

(F) **ZR Section 5.6(F), Landscaping and Screening**

The Planning Commission can require landscaping to achieve the objectives of the Zoning Regulations and the Town Plan. The landscaping objectives in the RPD-I district involve the preservation of forest cover, including routing utilities along driveways where possible and replacing any disturbed buffer areas with trees of the same species and at the same density. In addition to the landscaping requirements, Table 2.14(D)(7)(a) and (c) of the Zoning Regulations specify that an undisturbed, vegetated 200-foot buffer must be maintained along Sand Hill Road and adjacent residential districts, and a 100-foot buffer must be maintained along Allen Martin Drive except for underground utility crossings that are revegetated under a landscaping plan approved by the Planning Commission. The Planning Commission cannot waive these buffer requirements.
As noted in Finding I(A)(2)(iv), the applicant has proposed clearing within both the 200-foot and 100-foot buffers for underground utility crossings. These crossings are located so as to create the minimal number and area of clearing necessary to serve the proposed buildings. The applicant has proposed planting northern white cedar trees within the clearings along Sand Hill Road and Allen Martin Drive to reduce the visibility of these corridors. The angle of the corridor through the 200-foot buffer will also reduce its visibility from the road. Planting is not proposed within the majority of the corridors to prevent damage to utility lines by the roots of large trees. To further reduce possible damage to utility lines and better blend with native vegetation, low-growing shrubs such as dogwood, witch hazel, blueberry, chokeberry, or shadbush can be substituted for the proposed cedar trees. The applicant’s efforts to reduce impacts to the buffer are commendable and are sufficient to meet the intent of Table 2.14(7).

As noted in Finding I(B)(2), the applicant has proposed planting white pine saplings on the areas of steep slope that will be created by grading on the southern portion of the site. The Town Forester has recommended red pine instead due to white pine’s susceptibility to white pine weevil when grown in open areas.

Finally, the applicant has proposed seven red maple trees as street trees along the private road. The landscaping objectives for street trees typically require one tree for every 50 feet of frontage along a public or private road. The proposed private road is approximately 578 feet long, so 11 street trees would be required, but fewer are acceptable to maintain adequate separation between trees and proposed water connections. The proposed trees in the front of Buildings 2 and 3 should be relocated at least 15 feet away from underground utilities.

(ZR Section 5.6(G), Lighting)

The Zoning Regulations call for an exterior lighting plan that provides “site lighting and lighting levels that are appropriate for the anticipated activities on the site and the property’s surrounding context, and that maximize the efficiency of site lighting and energy demand, while minimizing up-light glare, and unnecessary spillover light or light diffusion onto adjacent properties.”

To provide illumination for the parking and loading areas, the applicant plans to install a total of thirteen (13) building-mounted lights with three or four fixtures on each building, at heights of either 12 feet or 20 feet. The lighting plan demonstrates compliance with all the requirements of ZR Section 5.6(G). All fixtures will be LED-powered, fully cut-off, and would be equipped with a motion-sensor device that dims output to 10% at night unless movement is detected. Lighting levels would have a maximum of 5.36 foot-candles, maintain an average-to-minimum uniformity ratio of 3.81, and produce no light trespass above 0.2 foot-candles five feet beyond the property lines.
(H) ZR Section 5.6(H), Utilities and Services

1. Water Supply and Sewage Disposal

The applicant originally proposed a water line design using an existing stub on the adjacent property at 7 Allen Martin Drive. However, the length of the line and its location on private property would have required conveying it as a publicly-owned and –maintained line. The applicant subsequently proposed an alternative location through the 200-foot buffer that is acceptable to Public Works.

In a memorandum dated August 9, 2019, Public Works staff stated:

(a) The current facility at 1 Allen Martin Drive was previously approved and currently has only 200 GPD of both water and sewer capacity. The property was approved for subdivision on September 12, 2013, with all of the water and sewer allocation going to Lot #2...

(b) The applicant’s current site plan would increase the current number of employees by 60. Table 10.12.380 of the Towns Water Use Ordinance, lists offices and occupied warehouses having domestic water demand of 15 GPD per employee. The Public Works Department calculates the water and sewage usage for the proposed warehouse addition as follows: (60 Employees X 15GPD = 900 GPD). The applicant will be required to purchase the additional water and sewer for this project as proposed.

(c) The applicant submitted a Sewer Allocation Application to Public Works for 900 GPD of additional sewer allocation [on Lot 1]. This request was brought in front of the Selectboard, and received approval on July 15, 2019. The site currently has 900 GPD of sewer allocation.

(d) The sewer and water connection fees are estimated at the following, under the assumption that the maximum number employees for the four proposed buildings would be 60. In addition, if the fee schedule changes, then the fee charged shall be the fee in effect at the time of submittal for a building permit.

   i. Water: 900 GPD x $5.73/gal + (4 X $1,000) = $ 9,157.00
   ii. Sewer: 900 GPD x $10.30/gal + (4 X $1,000) = $13,270.00
   iii. Total = $22,427.00

Public Works recommends that the applicant pay connection fees for both water and sewer for each of the four buildings as the applicant comes in for a building permit.

(e) Recent hydrant flow testing confirms that there is adequate domestic water pressure for the existing building on Lot #2. The applicants engineer must provide hydraulic calculations confirming that there will be sufficient domestic and fire flows to each of the four proposed buildings and the hydrant at the end of the new 8-Inch main. If adequate fire flow and pressure cannot
be obtained for the industrial buildings and fire suppression systems, there
may be a need to loop the water system either directly back to Sand Hill Road
through the Town easement along the southern property line or to the Lot #1
PVC waterline at the eastern side of Lot #1...

(f) The proposed 8-inch line to Lot #1 will become part of the Town of Essex
Distribution system. The applicants engineer has proposed to tap the existing
12-Inch CWD transmission main along the east side of Sand Hill Road. The
applicant will require approval to tap CWD’s infrastructure and shall provide
a copy of the application to tap to the Town. The new 8-Inch waterline to Lot
#1 shall be constructed in accordance with the Town of Essex Standard
Specifications for Construction.

(g) Public Works has a concern with the number of bends in the proposed
waterline 8” main parallel to the existing sewer line. It appears this was done
to minimize the impact the 200-foot buffer. There are a significant number of
additional fittings that would be required to locate the new water main into
this easement. Public Works would prefer a straight wet tap off of the
Champlain Water District transmission main along Sand Hill Road to the
location of the proposed hydrant at the northeast corner of Building #2. Using
the least number of fittings within this water main is preferred. Understanding
the need for the buffer, Public Works proposes another alternative in the
attached sketch. This would be the minimum we would accept. This eliminates
two of the five 45-degree elbows.

Public Works also required several other design changes which are listed in the
conditions of approval.

In a memorandum dated August 29, 2019, the applicant’s engineer responded to
Public Works in general agreement with the above statements. The applicant’s
engineer submitted revised plans following Public Works’ suggestion to reduce
the number of bends in the water line, and also provided an analysis that
demonstrates water flow and pressure for domestic and firefighting purposes will
be sufficient for the proposed buildings.

2. Stormwater Management

The applicant’s engineer described the stormwater system in the project narrative
dated July 10, 2019:

The stormwater created by the proposed project will be collected by various
pretreatment swales, catch basins, and yard drains and routed to three separate
infiltration basins within the project area. The stormwater system has been
designed to infiltrate up to the 10-year storm event…The project will require a
permit from the State Stormwater Program.

In a memorandum dated August 9, 2019, Public Works staff required that the
applicant submit copies of the State Stormwater Permit and General Construction
Permit prior to start of construction, and that the applicant submit calculations of the pounds of phosphorus to be removed by the stormwater system. Public Works also required several design changes that are listed in the conditions of approval.

In a memorandum dated August 29, 2019, the applicant’s engineer noted that the stormwater infiltration system will remove 8.62 pounds of phosphorus annually.

3. **Utilities**

As noted in Finding I(A)(2)(iv), the applicant has proposed underground electric and natural gas lines that would run through the 100-foot buffer, then follow the private road to provide service connections to each building.

(I) **ZR Section 5.6(I), Fire Protection**

In an e-mail dated July 10, 2019, the Fire Chief expressed serious concerns about access to the site by emergency vehicles and the potential for commercial truck traffic to block fire lanes. As noted in Findings I(C) and (D), the proposed layout will allow emergency vehicles to access each building provided that fire lanes are kept clear, though they may be required to back out on the private road. The applicant must also provide a key box for access to locked areas by emergency personnel, including the fenced-in storage areas.

As noted in Finding I(H)(1)(e), Public Works confirmed that the building has adequate water flow and pressure for fire protection for the existing building on Lot 2, but the applicant’s engineer must verify that the proposed buildings and hydrant will have adequate flow and pressure.

**II. Additional Findings by the Planning Commission**

**III. Proposed Conditions**

1. All conditions from previous approvals shall remain in effect except as modified herein.

2. All construction shall be in conformance with the plans listed above as may be amended herein.

3. Prior to the issuance of a zoning permit, the plans shall be revised as follows:

   a) On Sheets 1, 2, 3, 7, and EX-1, the fenced-in storage area for Building 1 shall be reduced in size to allow free access to the side parking area, or else the parking spaces shall be eliminated;

   b) On Sheets 1, 2, 3, 7, and EX-1, the parking areas shall be shown as paved instead of graveled.

   c) On Sheet 3, the proposed red pines shall be relocated at least 15 feet away from underground utilities;

   d) On Sheet 3, the proposed white pines shall be replaced with red pine or another species
on Sheet 5, a note shall be added that the contractor must ensure that a representative of the Champlain Water District is present before, during, and after wet tapping the 12-inch transmission main;

4. An electronic copy of the plans as may have been revised shall be submitted to the E911 coordinator in .PDF file format. Another copy shall be submitted in geodatabase or shapefile in Vermont State Plane Meters, NAD83 (NSRS or most current); alternatively, coordinated CAD data – Vermont State Plane Coordinates, US Survey Feet, Grid Zone 4400, NAD 83 (2011) epoch 2010.0, NAVD 88 (geoid12b); alternatively, paper showing three (3) values of State Plane Coordinates.

5. Prior to the issuance of a zoning permit, the applicant shall obtain any and all applicable state approvals and permits and shall submit copies to the Community Development Department for review.

6. Prior to the issuance of a zoning permit, the applicant shall obtain Town approval for the name of the new private road.

7. Prior to the issuance of a zoning permit, the applicant shall pay the traffic fee of $1,148.84, or the fees in place at the time of submittal.

8. Prior to the issuance of a zoning permit, the applicant shall obtain approval from the Champlain Water District (CWD) to tap its 12-inch transmission line on Sand Hill Road, and shall provide a copy of the approval to the Town. The applicant’s engineer shall verify with CWD that the Tapping Sleeve Detail provided on Sheet 5 meets or exceeds their requirements.

9. Prior to the issuance of a zoning permit, the applicant shall pay water fees ($9,157.00) and sewer fees ($13,270.00) totaling $22,427.00, or the fees in place at the time of submittal, or if a different use occupies the building.

10. Prior to the issuance of a zoning permit, the applicant shall verify with Public Works that there is adequate water flow and pressure for domestic service and fire protection in all buildings and the fire hydrant. The applicant’s engineer also shall verify with Public Works the pipe sizes required to provide adequate water pressure to all four buildings.

11. All utility lines shall be installed underground.

12. Any and all Fire Department Connections, control panels, and key boxes shall be located on the northern side of buildings. Key boxes shall provide access to any fenced-in storage areas.

13. Each proposed building shall be metered and billed off an individual meter. The applicant’s engineer shall provide peak domestic water demand calculations, based on the number of fixture units, for properly sizing the water meter for the proposed building. The Town of Essex will not size the meter based on line pressure in the building.

14. No occupancy of any structures shall occur until a certificate of occupancy inspection and sign off is issued by the Zoning Administrator. A copy of the State’s occupancy approval
shall be filed and attached to the Town’s inspection approval.


15. Prior to the issuance of the first certificate of occupancy, the asphalt path along Sand Hill Road shall be upgraded pursuant to Finding I(C) and any further instructions issued by the Public Works Department.

16. Prior to the issuance of a certificate of occupancy for each building, the applicant’s engineer shall supply an accurate fixture unit count of each facility to properly size the water meter. Furthermore, the applicant’s engineer shall work with the Town of Essex Water and Sewer Department and the Champlain Water District on properly sizing all fire suppression systems to be designed into the approved building.

17. Any change in tenant for any of the buildings shall require a Zoning Permit. Prior to the issuance of said permit, the applicant shall notify the Fire Department of the intended use and disclose any hazardous materials that may be stored on-site.

18. All landscaping shall be guaranteed for the life of the project. Any dead or diseased plantings shall be replaced as soon as seasonally possible.

19. Parking areas and fire lanes shall be clearly marked at all times.

20. Should the proposed snow storage areas prove insufficient, snow must be hauled off-site. Snow shall not be stored within the stormwater ponds or within the 200-foot buffer.

21. By accepting the conditions of this approval without appeal, the applicant confirms and agrees for itself and all assigns and successors in interest that the conditions of this approval shall run with the land and the land uses herein permitted, and will be binding upon and enforceable against the applicant and all assigns and successors in interest.

IV. Attachments

- “Historical Analysis of Two Town Forests in Essex, Vermont,” by Drayton et al., January 9, 2018.
- Memorandum, “1 Allen Martin Drive, (Lot #1 Final Site Plan),” from Aaron K. Martin, P.E., Utilities Director / Town Engineer; Annie Costandi, E.I., Stormwater Coordinator / Staff Engineer; and Dennis Lutz, P.E., Public Works Director, dated 08/09/2019.

cc: Bryan Currier, P.E., O’Leary-Burke Civil Associates, PLC
    Andrew Hood
    David Boucher, Mansfield Industrial Associates, LLC

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