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To: Planning Commission

From: Robin Pierce, Community Development Director *RP*

Date: December 16th, 2021

Re: **Final Site plan review for a Planned Unit Development to construct six single family residential units with twelve parking spaces at 41 Maple Street in the R-2 District, by Ronald Bushey, owner.**

Project Location: 41 Maple Street

Project Area Size: 0.93 Acres (41,000 sq. ft.)

Lot Frontage: 30 feet

Existing Land Use: Vacant

Surrounding Land Use: Residential.

Total Lot Size: Minimum Lot Size R-2 District: 7,500 square feet.

Existing Lot Coverage: 0

Permitted Lot Coverage: 40%

Proposed Lot Coverage: 32.4%

Project Description: This lot formally had one residential home on it, which was in poor condition that has been demolished. The six houses do not have garages. With parking in front of the residential sector for 12 vehicles the resulting area for housing reduces the potential for conflict between vehicles and residents. The six residential homes and the parking area are connected by a five foot wide path. The houses have all of the accommodation on the entry level with the potential to add more useable space on one side of the upper level. The landscape proposal, featuring two vegetative types, located on the Site Plan, is unimaginative and should be improved. At some points the distance between the houses could make it difficult, if not impossible, for the Village Fire Department to respond effectively to a fire at the houses especially numbers 5 and 6. Absent a more accessible design it is recommended that each house is fitted with sprinklers in the kitchen and the furnace room. Aesthetically the houses have steep roofs, porches facing the path, are of a pleasing scale, and are in keeping with the Vermont motif. Single family houses of this size, less than 1,200 sq. ft. are extremely rare in the community and represent a need that is not addressed other than through apartment living. The main design component of the site is to separate the vehicles from the houses and residents. This should not be discounted as it is a major safety feature that can add to quality of life. The ability for children to play outside their home without having to worry about vehicles in close proximity is a boon to any family. The outdoor spaces lend themselves to a variety of passive and active recreation without defining what such activity will be. Landscaping needs to be improved: Creating an arbor for vehicles to travel under to define an entrance to the site and landscaping to screen and shade the parking should be added. How a landscaping budget of \$41,000 was

derived should be explained by the applicant. The close proximity, with sidewalk connections, to Maple Street Park is a major benefit for this site. I did not notice any bike racks on the Site Plan. These should be added. Although not mentioned in the text for this application the site needs one visitor parking space. The applicant did not ask for a waiver. They have supplied 12 spaces the Code requires 13. No Homeowners documentation was supplied with this application. This tells me that the houses will be constructed for rental. At least initially.

Plans reviewed for this submittal:

<i>41 Maple Street – Submittal #2</i>			
<i>Sheet #</i>	<i>Sheet Name</i>	<i>Dated</i>	<i>Last Revised</i>
<i>Prepared By: O’Leary-Burke Civil Associates, PLC</i>			
<i>1</i>	<i>Site Plan</i>	<i>5/20/21</i>	<i>10/8/21</i>
<i>2</i>	<i>Water Supply and Project Details</i>	<i>5/20/21</i>	<i>10/8/21</i>
<i>3</i>	<i>Sewage Disposal Details and Specifications</i>	<i>5/20/21</i>	<i>10/8/21</i>
<i>4</i>	<i>Erosion Control & Landscaping Details & Specifications</i>	<i>5/20/21</i>	<i>10/8/21</i>
<i>PL1</i>	<i>Boundary Plat</i>	<i>08/01/2021</i>	<i>---</i>

SECTION 502: APPROVAL PROCEDURES FOR ACTIVITIES REQUIRING REVIEW UNDER CHAPTERS 6 AND 7

O. Master Plans

1. Purpose. To guide long-term development on larger properties and allow for public input early in the process as a means to limit negative impacts resulting from incremental planning and development. The master plan process is an opportunity to address the long-term vision and conceptual design for development of buildings, land uses, infrastructure and conservation/preservation through integrative design. Master plans are an opportunity to discuss early design concepts with the Planning Commission prior to the formal permitting process. A formal approval of the Master Plan by the Planning Commission is not a guarantee that the development moving forward will gain Planning Commission approval, rather it is an indication that the general concept of the Master Plan is in keeping with the Village’s vision for the District moving forward. The Master Plan shall address the following:

- (a) Land uses;
- (b) Land subdivision;
- (c) Streets, parking, and open space;
- (d) Preservation of significant natural, historical or cultural features;
- (e) Stormwater management;
- (f) Urban form and urban design including the relationships between buildings, streets, open spaces, and parking areas;
- (g) Connections to adjacent areas and networks;
- (h) Significant natural and/or historic features; and
- (i) Development phasing.

2. Review Procedures. All Master Plans shall be reviewed by the Commission at a public meeting. Approval of a master plan is not a guarantee of future development approvals on the site.
3. Submittal Requirements:
 - (a) A map in plan view that addresses the items listed in Section 502.R.1.
 - (b) Supporting documentation to include:
 - (i) Land uses by gross building square footage
 - (ii) Total number of units by type and overall density
 - (iii) Amount of open space and uses
 - (iv) Building typologies
 - (v) Amount and location of parking
 - (vi) Vignettes, sketches, 3D models or other visual media to assist in representing the master plan proposal (optional or as required by the Planning Commission).
 - (vii) A statement describing the design intent for the master plan including the important physical relationships that influenced the proposed design including, but not limited to, natural features, connections, urban form, views, nodes, public transit, access and pedestrian mobility and connection to adjacent areas.

SECTION 619: RESIDENTIAL 2 (R-2)

- A. Purpose. To provide areas for high-density single family residential development and accessory uses.
- B. Lot Size/Lot Coverage
 1. The minimum lot size shall be seven thousand five hundred (7,500) square feet. No more than one (1) principal structure shall be allowed per lot unless approved as part of a Planned Development. 2. The maximum total lot coverage shall be forty (40) percent. However, the maximum permitted lot coverage for buildings shall not exceed twenty-five (25) percent. Chapter 6
- C. Setback Requirements
 1. The minimum front yard setback shall be fifteen (15) feet. The front yard setback shall be established by the average setback of the principal structures on the two adjacent lots (or the closest two lots on the same side of the same street) and the minimum setback requirement for the underlying zoning district. The principal structure shall have a setback between the established maximum and minimum setback as described above. Semi-attached accessory structures (such as a deck) shall be allowed if there is sufficient space between the principal structure and the minimum setback. Porches that are integrated into the principal structure shall be considered part of the principal structure. If a principal structure is not parallel to the front lot line the setback will be determined by the average setback at the two corners of the structure closest to the front lot line. The Planning Commission may waive this requirement if the following conditions are met:
 - (a) The proposed setback does not negatively impact the character of the neighborhood; and
 - (b) The proposed setback would be in keeping with the setbacks and character of anticipated future development of the area.

Applicants may apply for a variance if they do not meet the criteria above but believe they cannot meet the requirements of this section.

2. The minimum side yard setback shall be eight (8) feet.
3. The minimum rear yard setback shall be twenty-five (25) feet for principal structures and fifteen (15) feet for accessory structures.

D. Permitted and Conditional Uses. Permitted and Conditional uses are as indicated on the Use Chart in Section 620 of this Code

E. Parking Requirements. Off-street parking requirements are as specified in Section 703 of this Code.

F. Building Height. Building heights shall not exceed three (3) stories or thirty five (35) feet, whichever is less.

SECTION 703: PARKING AND LOADING

A. Purpose of Parking and Loading Provisions. To ensure the adequate provision of parking and loading facilities for all development within the Village.

B. Loading Requirements. All uses shall provide off-street loading spaces except residential uses or other uses specifically waived by the Commission in accordance with Subsection 7 below.

1. Location. All loading spaces shall be located on the same lot as the principal use. Loading spaces shall minimize circulation conflicts on the lot. Loading areas shall not be calculated to include required off-street parking spaces.

2. Size. All loading spaces shall be of sufficient size to allow necessary maneuvering for deliveries without encroaching upon the public right-of-way, parking spaces, or internal parking lot circulation unless a specific waiver is approved by the Commission. Loading spaces shall be fifteen (15) feet wide by twenty-five (25) feet in length.

C. Off-Street Parking Requirements.

1. All required parking spaces, with the exception of parallel parking spaces, shall have a minimum width of nine (9) feet and a minimum length of eighteen (18) feet. Parallel parking spaces shall have a minimum width of eight (8) feet and minimum length of twenty-two (22) feet.

SECTION 708: SCREENING/BUFFERING

A. Purpose. To provide sufficient screening and buffering to mitigate the potential negative impact of adjoining incompatible land uses.

B. Standards.

2. Any Commercial use located adjacent to a residential use shall provide a buffer zone of not less than twenty (20) feet. **Not applicable.**

Stormwater retention and pedestrian amenities. With a new use on existing development or renovation on existing property, the applicant must provide landscaping adequate to

provide screening and environmental enhancement to the satisfaction of the Planning Commission.

SECTION 719: LANDSCAPE AND TREE PLANTING REQUIREMENTS

A. Purpose and Intent. To protect and enhance the community's environmental, economic and aesthetic quality, thereby contributing to the overall objective of promoting public health, safety, and welfare. More specifically, it is the purpose of this Section to:

1. Reduce sound, glare, and heat.
2. Protect, preserve and improve property values.
3. Reduce conflicts between adjoining land uses and incompatible activities.
4. Promote energy conservation through the use of vegetation.
5. Protect the environment by contributing to air purification, oxygen regeneration, ground water recharge and minimizing erosion through storm water run-off.
6. Enhance community appearance, identity and unique natural beauty.
7. Preserve and protect existing mature tree growth.
8. Channelize vehicular and pedestrian movement within off-street parking areas.
9. Delineate parking areas and adjacent right-of-way.
10. Delineate ingress and egress points.

D. Landscaping. There shall be a sufficient amount of landscaping and screening, as may be reasonably determined by the Planning Commission, to insure protection of and enhance the quality of the project in question and adjacent properties. The landscape plan must be drawn by a landscape architect, landscape designer, or competent landscape professional, and the landscaping requirement will be a minimum of three (3) percent of the total construction cost for new construction up to \$250,000. For new construction projects above \$250,000, the landscape requirement shall be a minimum of two (2) percent of the total construction cost. In the case of construction projects above \$1,000,000, a landscape architect, licensed by the State of Vermont's Office of Professional Regulation, will be required to prepare a landscape plan. This may be waived in unusual circumstances. The Commission may permit or require improvements to the public right-of-way in part or in lieu of on-site landscaping to be used to improve the pedestrian environment including street trees, plantings, stormwater retention and pedestrian amenities. With a new use on existing development or renovation on existing property, the applicant must provide landscaping adequate to provide screening and environmental enhancement to the satisfaction of the Planning Commission.

SECTION 723: PLANNED UNIT DEVELOPMENT (PUD)

The objective of the Planned Unit Development (PUD) is not simply to allow exceptions to otherwise applicable regulations. It is instead to encourage a higher level of design and amenity than it is possible to achieve under the usual land development requirements.

The Village may require modifications to the application of detailed zoning and subdivision standards as provided herein only where such special amenity is achieved to otherwise applicable regulations. In this way the Village may grant the developer a desirable flexibility and at the same time not only protect, but enhance the welfare of the residents and other users of a development as well as the rest of the community.

A. Planned Unit Development. The Commission may review any subdivision under Section 503 as a Planned Unit Development under this Section. The Commission may approve a Planned Unit Development in the R-1 and R-2 Residential Zoning Districts.

1. Application Requirements. Submittal of a Planned Unit Development application shall be in conformance with the submittal standards of Section 511, Planned Developments.

2. Density. A Planned Unit Development shall meet the density requirements of the Residential District in which it is located. The Commission may grant density bonuses not to exceed one-hundred (100) percent in the R-1 District and up to twenty-five (25) percent in the R-2 District of the gross density as permitted in the District. Bonuses may be earned by the following schedule and shall be requested by the applicant. The applicant shall provide sufficient information to justify all bonus requests. The Commission may, at its sole discretion, request additional information prior to approval of any bonus. Density bonuses are as follows:

(a) Preservation of natural resources including scenic views, mature tree stands, unique vegetation or unique rock formations not to exceed five (5) percent.

(b) Preservation of solar access not to exceed five (5) percent. Credit shall be given for the preservation of solar access to ten (10) homes, or ten (10) percent of the total development, whichever is greater.

(c) Renewable Energy Generation one hundred (100) percent density bonus for projects that generate at least twenty-five (25) percent of the total project energy use through on-site renewable sources (e.g., solar photovoltaic, solar hot water, wind, geothermal, biomass, etc.). Energy use shall be based on professional estimates. The total bonus shall be equal to the percentage of the total project energy generated from on-site solar power generation. Credit may only be granted for preservation of solar access or solar power generation, not both.

(d) Preservation and donation to the Village or non-profit organization of open space through the use of clustering, Zero-Lot Lines or other innovative techniques not to exceed five (5) percent.

(e) Provision of recreation facilities which are available to all Village residents not to exceed five (5) percent.

(f) Construction of bicycle paths which connect neighborhoods or in conformity to a Bicycle Plan as approved by the Commission not to exceed five (5) percent.

(g) Innovative design which reduces long-term maintenance costs not to exceed five (5) percent.

(h) Provision of affordable housing which is deeded to a land trust or non-profit organization or includes other mechanisms to guarantee the perpetual affordability of the units not to exceed twenty (20) percent. A minimum of ten (10) percent of the total number of units constructed shall be affordable to a family of four with eighty (80) percent of the current median family income (per Federal HUD Standards of Chittenden County).

(i) Other considerations which in the opinion of the Commission provide important community services including the dedication of land for public purposes not to exceed five (5) percent.

B. Design Considerations. The Commission shall review an application for innovative land and building design techniques. The Commission may determine that the design is not innovative

and that standard District requirements shall apply. The Commission may authorize the following modifications to requirements of the underlying Zoning District.

1. Reduced side yard setbacks when specific building footprints are approved.
2. Front yard setback reduction on any internal streets which do not provide a direct connection to adjoining public streets.
3. The use of Zero Lot Lines, clustering and other innovative techniques.
4. The incorporation of on-site solar panels to generate power for the project.
5. Amenities and Quality of Design. To be granted the flexibility permitted under these regulations, the PUD must demonstrate a level of design and amenity exceeding that typical of conventional development. Features that exhibit a strong level of design include, but are not limited to:
 - (a) Amount and quality of landscaping;
 - (b) Amount, quality, and interconnectedness of common space; and
 - (c) Varied building massing or other measure to reduce monotony in design.

At a minimum, up to fifteen (15) percent of the gross PRD or PUD area shall be developed with passive and active amenities. Examples of amenities include but are not limited to:

- (a) Jogging/exercise track;
- (b) Off-street bicycle paths;
- (c) Playgrounds;
- (d) Tennis court;
- (e) Athletic fields;
- (f) Wooded areas; and
- (g) Open fields that may be in active agricultural production.

The type of amenities required will vary with each individual project. For example, projects designed for seniors, ages fifty five (55) and above, will have different types of amenities than a project designed for young families.

- C. Multifamily Dwellings. The Commission may approve the construction of multi-family dwellings not exceeding thirty (30) percent of the units permitted by the underlying Zoning Districts if the following criteria are met: **Not applicable**.
- D. Findings Review Requirements. The Planning Commission shall make the following findings before approving a PUD zoning request:
1. Superior Design. The final plan represents a more creative approach to the unified planning of development and incorporates a higher standard of integrated design and amenity than could be achieved under otherwise applicable zoning district and subdivision regulations, and that solely on this basis modifications to the use and design standards established by these regulations are warranted.
 2. Meets PUD Requirements. The final plan meets the requirements for Planned Unit Developments set forth in this Code and that no modifications to the use and design standards otherwise applicable are allowed other than those permitted herein.
 3. Consistent with General Plan. The final plan is consistent with the Village of Essex Junction Comprehensive Plan.
 4. Circulation. The streets, sidewalks, pedestrian ways, bicycle paths, off-street parking and loading as appropriate to the planned uses are provided. That they are adequate in location, size, capacity and design to ensure safe and efficient circulation of automobiles, trucks, bicycles, pedestrians, fire trucks, and garbage trucks without

blocking traffic, creating unnecessary through traffic within the preliminary plan, or unduly interfering with the safety or capacity of adjacent thoroughfares.

5. Open Spaces and Landscaping. The quality and quantity of common open spaces and landscaping provided are consistent with the higher standards of design and amenity required in a Planned Unit Development. The size, shape, and location of a substantial portion of total common open space provided in residential areas render it useable for recreation purposes.

6. Phasing. Each proposed development phase of the PUD may, together with any phases that preceded it, exist as an independent unit that meets all the foregoing criteria and all other applicable regulations herein even if no subsequent phase should ever be completed.

Staff Comments.

The vast majority of Staff Comments have been addressed by the applicant. They are listed here to provide background and context for the Planning Commission.

General

- 1) The applicant will need to request and obtain additional sewer and water allocations for this project from the Village.
✓ **This comment has been addressed. The applicant has indicated that they will seek additional sewer and water allocations after the Final review hearing.**
- 2) We recommend a condition of approval of this project requiring the submission of record drawings for site utilities to the Village of Essex Junction upon completion of construction, in both AutoCAD and PDF format. The Village would also like to request this information be provided in shapefile format in Vermont State Plane Meters, NAD83.
➤ **The applicant has indicated that they agree with the above condition. Accordingly, we recommend the above condition be incorporated into any approval of this project.**
- 3) The plans should be revised to include a note requiring the connections to the existing municipal water main and existing municipal sewer manhole to be performed in the presence of an authorized representative of the Village of Essex Junction, after a minimum of 48 hours advance notification.
✓ **This comment has been addressed. A note has been added to Sheet 1 in response to this comment.**
- 4) Will the project include a dumpster to serve the proposed houses? If so, this should be shown on the plan, with an appropriate screening detail.
✓ **This comment has been addressed. A dumpster enclosure has been shown on the plans, along with appropriate screening details.**
- 5) General Water Specifications note #1 on Sheet #2 should be revised to present the DIGSAFE number as 1-888-DIG-SAFE. This note should also be revised to include the telephone number for the Village of Essex Junction Public Works Department (802-878-6942).
✓ **This comment has been addressed.**
- 6) On Sheet #4, General Construction Notes note #1 should be revised to remove the reference to the Town of Colchester and instead refer to the Village of Essex Junction.
✓ **This comment has been addressed.**
- 7) On Sheet #4, General Construction Notes note #2 should be revised to present the DIGSAFE number as 1-888-DIG-SAFE. This note should also be revised to include the telephone number for the Village of Essex Junction Public Works Department (802-878-6942).
✓ **This comment has been addressed.**

- 8) On Sheet #4, General Construction Notes note #9 should be revised to remove the reference to the Town Engineer and instead refer to the Village Engineer.
✓ **This comment has been addressed.**
- 9) On Sheet #4, General Construction Notes note #10 should be revised to refer to the Village of Essex Junction Land Development Code instead of “Ten States Standards – Recommended Standards For Water”.
✓ **This comment has been addressed.**
- 10) On Sheet #4, the Tree Planting detail should be revised to require the use of non-Phosphorus based fertilizers unless otherwise warranted by soil testing.
✓ **This comment has been addressed.**
- 11) The Boundary Plat should be revised to include bearings and distances for the individual house “lots”, as well as tie lines from the perimeter boundary to these lots.
✓ **This comment has been addressed.**
- 12) Homeowners Association documentation outlining the ownership and maintenance requirements for the private/shared infrastructure should be submitted to the Village for review.
➤ **The applicant has indicated that “The legal documents are being prepared and will be forwarded upon completion.”**

Site Layout – Roadways, Drives, and Walkways

- 1) The plans depict one accessible parking space in the new parking area. The plans should be revised to include a marked access aisle for this accessible parking space. In addition, this space should be ‘van accessible’.
✓ **This comment has been addressed.**
- 2) The plans should be revised to show the limits of curb and sidewalk disruption and replacement within the Village right-of-way as needed. Please note that the curb (depressed) and sidewalk will be required to be installed across the new access drive.
➤ **The plans have been revised in response to this comment. Additional revisions should be made to depict the limits of disturbance for the curb and sidewalk disturbance/replacement anticipated as part of this project.**
- 3) The plans indicate that the footprint of the proposed homes will be “lots”. Per the LDC, a private drive shall serve no more than two lots and therefore the proposed access will be considered a private street. Accordingly, the easement/right-of-way width shall be 40’ and the pavement width should be 20’ wide. The plans should be revised accordingly.
➤ **The applicant has indicated that they “Disagree” with this comment. The applicant has stated that a “Footprint Lot” is not a lot for zoning purposes.” Regardless of the classification of this access as a private street, private drive, or a driveway, it is our opinion that this access drive should have a minimum pavement width of 20’. We feel our concern has been noted and defer to the Village staff and Planning Commission for further discussion on this item.**
- 4) Per item #3 above, the Shared Driveway/Parking Cross-Section detail shown on Sheet #2 should be revised to require a 20’ wide pavement lane.
➤ **See item #3 above.**
- 5) Per Section 709.A.3 of the LDC, a private street shall be built to the same cross section as a public street as shown on “Detail 2 of Appendix A”, which calls for 3-1/2” of pavement and 30” of gravel. In this instance, we would support a waiver to allow a minimum of 2-1/2” of pavement and 18” of gravel for the access drive.

- ✓ **Regardless of the classification of the access as discussed above it item #3, the applicant has revised the plans to show a cross section with 2-1/2" of pavement and 18" of gravel. We find this acceptable.**
- 6) Regarding the Replacement of Existing Sidewalk and Curb detail shown on Sheet #2:
 - a) Concrete for the curb and sidewalk shall be 4,000 psi.
✓ **This comment has been addressed.**
 - b) The limits/depths/specifications for gravel subbase for new curb should be shown.
✓ **This comment has been addressed.**
 - c) False joints in the sidewalk shall be saw cut, not grooved.
✓ **This comment has been addressed.**
 - d) The sidewalk shall be 5' in width (or match existing).
✓ **This comment has been addressed.**
 - e) Curb and sidewalk shall be treated with Certi-Vex AC 1315 per the manufacturer's instructions.
 - **The plans have been revised in response to this comment. A note has been added to the detail stating that "The curb and sidewalk shall be tested with Certi-Vex AC 1315 per the manufacturer's instructions." This note should be revised to state "shall be treated with" instead of "shall be tested with".**

Grading & Drainage

- 1) The Site Plan, Sheet #1, includes a note state "Snow Removal / Stormwater Infiltration Area". The plans should be revised to depict an alternate location for snow storage, as snow should not be stored in stormwater treatment areas. This is also consistent with the Snow Management Plan note on Sheet #4.
✓ **This comment has been addressed.**
- 2) On Sheet #4, the Storm System Maintenance note #1 should be revised to remove the reference to "Drywells" and replace this with "Infiltration Basin".
✓ **This comment has been addressed.**
- 3) The applicant should submit drainage computations for the proposed infiltration basin. The Water Quality Superintendent requests that a copy of the HydroCAD file for the project be provided to the Village upon project approval.
 - **The applicant has stated "N/A. The project creates less than ½ acre of impervious area. The Infiltration area is proposed for proper stormwater control only." This information is being requested to aid the Village in demonstrating compliance with the MS4 permit requirements, specifically for phosphorus impacts. Accordingly, the Water Quality Superintendent requests that this comment remains but we defer to the Village staff and Planning Commission for further discussion on this item.**

Water

- 1) The plans should be revised to depict the location of the previous water service for the previous house on the project parcel that was removed. The plans should require the abandonment of this previous water service by disconnecting the existing service from the corporation stop and closing the existing corporation stop at the water main; in the presence of an authorized representative of the Village of Essex Junction.
✓ **This comment has been addressed.**
- 2) The plans should be revised to require a test excavation to confirm the depth of the existing water main along Maple Street to ensure that 18" of separation can be provided to the new sewer service for this project. At an assumed 6 feet of cover, it appears as though the 18" of separation will not be available.

- ✓ **This comment has been addressed.**
- 3) The plans should be revised to clearly designate the public portion of the water infrastructure serving the project as extending to the proposed hydrant and encompassing the curb stops. The plans should be revised to provide an easement to the Village of Essex Junction for access to the curb stops and new hydrant, with a copy of the easement documentation submitted to the Village for review. The water services for the lots should be designated as private.
- **The plans have been revised in response to this comment to show a 20' wide easement centered along the waterline. We note that a portion of this easement area stops at the boundary of the adjacent property to the north (#37 Maple Street), resulting in less than 10' of easement area on the north side for a portion of the waterline. In addition, with the current waterline alignment, there is less than 10' of easement area along the north side of the waterline across the #43 Maple Street property. The plans should be revised to provide a full 20' wide easement (centered on the waterline) to the Village along the entire length of the public portion of the waterline.**
- 4) The plans should be revised to provide a new isolation valve for the hydrant, between the hydrant and curb stops.
- ✓ **This comment has been addressed. A note has been added to the plans requiring a 6" valve between the proposed hydrant and the curb stops. We find this acceptable.**
- 5) Sheet #1 should be revised to specify that the new 1" water services for each building will be Type K Copper.
- ✓ **This comment has been addressed.**
- 6) The Tapping Valve and Sleeve Detail shown on Sheet #2 should be revised to require a ductile iron tapping sleeve. Stainless steel tapping sleeves are not allowed.
- ✓ **This comment has been addressed.**
- 7) The Water Service Detail shown on Sheet #2 should be revised to show the connection of the corporation stop to the water main at 2 o'clock (or 10 o'clock).
- ✓ **This comment has been addressed.**
- 8) On Sheet #2, General Water Specifications note #2 should be revised to reference the latest edition of the Village of Essex Junction Land Development Code instead of the Vermont Water Supply Rule.
- ✓ **This comment has been addressed.**
- 9) On Sheet #2, General Water Specifications note #3 should be revised to reflect the requirements of Section 112.D.14 of the LDC.
- **The plans have been revised in response to this comment. Additional revisions should be made to the note to clarify the requirement for dechlorination while flushing and the requirement for two samples of water from the flushed, disinfected main, collected 24 hours apart, showing no evidence of bacteriological contamination, as determined by the Health Department or other approved lab.**
- 10) On Sheet #2, General Water Specifications note #4 should be revised to require "double" cement lining for ductile iron pipe.
- ✓ **This comment has been addressed.**
- 11) On Sheet #2, the Hydrant detail should be revised to require a 5" Storz connection instead of 4". In addition, this detail should be revised to require "double start" threads.
- **The plans have been revised to include a note that that the "Pumper nozzle shall be a five (5) inch Storz connection with "double start" threads". Additional revisions should be made to require all hydrant connections to be "double start" threads.**

- 12) On Sheet #2, General Water Specifications note #5 should be revised to require a 5" Storz connection instead of 4". In addition, this detail should be revised to require "double start" threads.

➤ **See item #11 above.**

Sanitary Sewer

- 13) The plans should be revised to depict the location of the previous sewer service for the previous house on the project parcel that was removed. The plans should require the abandonment of this previous sewer service using a rigid, gasketed cap fitting; in the presence of an authorized representative of the Village of Essex Junction.

✓ **This comment has been addressed.**

- 14) The plans should be revised to designate the public/private portions of the sanitary sewer infrastructure serving the project, with appropriate easements provided as necessary.

➤ **The applicant has stated "N/A. The proposed sewer infrastructure is to be private, including the new manhole." We find this acceptable and note that all sewer infrastructure beyond the connection to the existing manhole in the center of Maple Street is to be privately owned and maintained.**

- 15) The plans should be revised to show the location of the existing sewer service for the existing building at #43 Maple Street.

✓ **This comment has been addressed.**

- 16) On Sheet #1, the invert elevation for Cleanout #1 (343.1) is above the 4" invert elevation for Unit 1 (343.0). The plans should be revised accordingly.

✓ **This comment has been addressed.**

- 17) The slope of the building sewer services from Unit 5 and Unit 6 are less than 0.0208 ft/ft, which is the minimum slope for a 4" building service. The plans should be revised accordingly.

✓ **This comment has been addressed.**

- 18) On Sheet #3, General Sewer Specifications General note E should be revised to remove the reference to brick for frame adjustment; cast-in-place or precast concrete grade rings shall be used.

✓ **This comment has been addressed.**

- 19) On Sheet #3, General Sewer Specifications Construction Methods note B should be revised to require the pipe bedding material to be compacted for the full width of the trench up to a point 6" above the top of the pipe.

➤ **The plans have been revised in response to this comment. Additional revisions should be made to the second paragraph in this note to reflect the requirements for the pipe bedding material to be compacted for the full width of the trench up to a point 6" above the top of the pipe.**

- 20) On Sheet #3, General Sewer Specifications Construction Methods note F.2 should be revised to reflect the required test times per Section 115.D.6(b) of the LDC.

✓ **This comment has been addressed.**

- 21) On Sheet #3, General Sewer Specifications Construction Methods note G should be revised to reflect the requirements of Section 1-1009(b)(2) of the Environmental Protection Rules, Chapter 1, Wastewater System and Potable Water Supply Rules, effective April 12, 2019.

✓ **This comment has been addressed.**

- 22) On Sheet #3, the Shared 8' Diameter Pump Station Detail should be revised to require a non-mercury float switch.

✓ **This comment has been addressed.**

- 23) On Sheet #3, the Shared 8' Diameter Pump Station Detail depicts a cast iron manhole frame and cover with a $\pm 24"$ diameter opening. We recommend an aluminum hatch with a larger opening for ease of access for maintenance and/or repairs.
- **The applicant has stated that "As the pump station is private, the developer is comfortable with standard manhole frame and cover." We find this acceptable.**
- 24) On Sheet #3, the Shared 8' Diameter Pump Station Detail should be revised to specify the pipe material inside the structure.
- ✓ **This comment has been addressed.**
- 25) On Sheet #3, the Shared 8' Diameter Pump Station Detail depicts a 2" Ball Valve on the vertical discharge line from the pump. We believe that this should be a check valve. The applicant should provide clarification and revise the detail as appropriate.
- ✓ **This comment has been addressed. The detail has been revised to depict this as a check valve.**
- 26) On Sheet #3, the Sewage Design Information should be revised to require a visual alarm in addition to an audible alarm, as shown on the Power Panel – Side View detail.
- ✓ **This comment has been addressed.**
- 27) On Sheet #3, the Testing Requirements note #1 should be revised to reflect the requirements of Section 1-1010(b) of the Environmental Protection Rules, Chapter 1, Wastewater System and Potable Water Supply Rules, effective April 12, 2019.
- ✓ **This comment has been addressed.**
- 28) On Sheet #3, the Sewer Service + Forcemain Trench Detail should be revised to require a minimum cover of 4' (with insulation) for building sewer services and the forcemain.
- ✓ **This comment has been addressed.**

Erosion Prevention and Sediment Control

- 1) On Sheet #4, the Winter Inspection Schedule table states to "Inspect silt fencing with ski tape". This note should be revised to remove the reference to 'ski tape'; all silt fencing should be inspected.
- ✓ **This comment has been addressed.**
- 2) On Sheet #4, the Erosion Control Specifications note #3 should be revised to require stabilization of disturbed areas with seed and mulch prior to September 15, not November 1.
- ✓ **This comment has been addressed.**
- 3) On Sheet #4, the Landscaping Specifications should be revised to remove the references to November 1 and replace it with September 15. In addition, the detail should be revised to require the use of non-Phosphorus based fertilizers unless otherwise warranted by soil testing.
- ✓ **This comment has been addressed.**
- 4) On Sheet #4, the Inlet Protection Detail should be revised to require the geotextile fabric wrapped around and secured to the grate to be removed when the project is complete and all disturbed areas have been stabilized. In addition, this detail should include a requirement to clean the catch basin upon project completion.
- ✓ **This comment has been addressed.**

Lighting

- 1) Per Section 704.D.1 of the LDC, lighting will be required for the parking area. Accordingly, the plans should be revised to include the locations and specifications for proposed lighting, along with a numerical grid of illumination levels throughout the access drive, parking, and walk areas on the project site; with appropriate lighting statistics presented as well.

- **The applicant has stated “We are not proposing any lighting for the parking spaces serving the units as this is a parking area, not a parking lot. Pole lighting would not be appropriate in this area which is surrounded by single family homes.”**

While we do not necessarily disagree with the applicant, Section 704.D.1 of the LDC requires pole lighting to provide even illumination for parking spaces and interior walkways for parking lots of ten (10) spaces or more. We will defer to the Village staff and Planning Commission for further discussion on this item.

The Community Development Department recommends that the Planning Commission approve the application for Final Site Plan Review for a Planned Unit Development to construct six single family residential units with twelve parking spaces at 41 Maple Street in the R-2 District, by Ronald Bushey, owner, with the following stipulations

Proposed Stipulations

1. All Staff comments in this Staff Report shall be addressed and satisfied prior to any Zoning Permit issuance.
2. Stormwater management will be provided entirely on-site. The Village Engineer will review the final plans for Code compliance.
3. All work shall comply with the Village of Essex Junction LDC.
4. The applicant shall complete (to Staff's satisfaction) and sign a Sewer Capacity Voluntary Permit Revocation form prior to the Village releasing a Letter of Capacity to the State of Vermont prior to Site Plan approval.
5. Each house shall have a sprinkler system in the kitchen and furnace room.
6. All water and sewer utilities for the property shall be private.
7. The submission of record drawings for site utilities to the Village of Essex Junction shall occur upon completion of construction, in both AutoCAD and PDF format. This information shall also be provided in shapefile format in Vermont State Plane Meters, NAD83.
8. A Landscape Plan shall be developed to meet Staff approval, and the Village LDC.
9. Any additional useable space for bedrooms that is added to the houses will require revised water/sewer capacity approval from the Agency of Natural Resources.
10. Add bike racks.
11. Applicant shall provide an additional visitor parking space or ask for a waiver of one parking space.
12. Applicant shall provide Homeowners documentation for review and approval by the Village attorney and staff prior to any house sale on this property.