

May 18, 2015

Scott Gustin, AICP, Senior Planner
Department of Planning and Zoning
149 Church Street
Burlington, VT. 05401

**Re: Nathaniel Hayward, 380 Colchester Ave.
Parcel 046-3-058-000; Zone: RL Ward: 1
Revised Preliminary & Final Subdivision**

Dear Scott,

Please find enclosed the following items for this submission:

- Sheets C1.0, C1.1, C1.2, C2.0, C2.1, and C2.2 for 380 Colchester Avenue, prepared by Engineering Ventures, P.C., and dated February 27, 2015 and last revised May 15, 2015 (2 copies)
- Half-size (11x17) set of plans prepared by Engineering Ventures, P.C. (1 copy)
- A set of colored rendered building elevations, architectural cross sections, and perspective view for the proposed building (2 copies)
- A report entitled "Stormwater Management Narrative for 380 Colchester Avenue", prepared by Engineering Ventures, P.C., and dated March 31, 2015, last revised May 15, 2015.
- A report entitled "380 Colchester Avenue Infiltration Feasibility Testing Report", prepared by Engineering Ventures, and dated May 15, 2015.
- 11x17 Sheet entitled "HYD-4: Stormwater Maintenance Plan for 380 Colchester Avenue" prepared by Engineering Ventures, and dated May 15, 2015.
- A CD containing an electronic version of all items listed above.

The plans and corresponding information have been revised to address DRB sketch plan review comments (dated July 15, 2014), staff comments to the Design Advisory Board (dated 4/28/15), stormwater comments in an email from Greg Johnson, Burlington Stormwater/GIS Technician (dated 4/13/15), and conditions recommended by the Design Advisory Board (from the 4/28/15 meeting) and the Conservation Board (from the 5/4/15 meeting).

Staff Comments

1. Definitive Building Envelopes, avoiding the steep slopes, should be defined on lots 2 & 3.

Definitive Building Envelopes, which depict a more defined buildable area excluding steep slopes, have been identified on the Site Plan. See Sheet C1.1.

2. Specimen trees should be retained insofar as possible, and a tree protection plan should be submitted as part of any construction plan for development of lot 2 or 3.

The site grading and layout of the proposed driveways have been revised to save 3 more specimen trees than previously shown. The trees that will be saved are an 18" Locust south of the proposed driveway for Lots 1 and 2, the 10" Apple east of the existing building, and the 10: Butternut Tree located near the west end of the proposed driveway between Lots 1 and 2.

It should be noted that this development has been designed to minimize disturbance to woods as best as possible. This was discussed with the Design Advisory Board at the 4/28/15 meeting and we had thought to try to save 5 additional trees as a result of that meeting. Due to the site constraints and locations of these trees, we were unable to save 2 of the ones shown to the DAB.

3. Driveway locations and sight lines should be evaluated by the DPW.

We have not received any comments on the site lines from the DPW; however, it should be noted that the project will essentially be keeping the same locations as the existing curb cuts and the development will not be adding any curb cuts. In addition, we will be removing some existing vegetation from the clear site lines that currently exist for the driveways. This should result in the site having approximately the same sight distances as currently exists for the site.

4. The shared Lot 1 and Lot 2 driveway should be shifted entirely onto Lot 2, and the accompanying 3 surface spaces for the triplex should be eliminated. Construction of the Lot 2 driveway should take place only upon construction of a home on Lot 2.

This item was discussed at the Design Advisory Board meeting on 4/28/15. It was decided at that meeting that this comment is no longer applicable.

5. Outdoor lighting details are needed. Lighting fixture locations need to be indicated, and fixture specification sheets need to be provided.

Lighting details were provided at the Design Advisory Board Meeting on 4/28/15. We have included these details with this submission.

6. Provision for trash and recycling should be noted.

A concrete area located between the at-grade parking spots and the building has been shown on the plan. As indicated on a note on the Site Plan, this area will be utilized for trash and recycling totes. See Site Plan, Sheet C1.1.

7. Materials for the rear steps should be noted.

The rear steps have been called out at concrete steps. A railing will be provided for these steps. See Site Plan, Sheet C1.1.

8. Utility meter and vent locations should be noted on the elevation drawings and placed on secondary elevations.

Utility meter and vent locations have been noted on the elevations.

Stormwater Comments pertaining to 4/13/15 email from Greg Johnson:

1. Although generally explained in the rain garden/bioretenion calcs, do you have detail sheets for the rain gardens and their respective pipes/inlets/outlet structures?

Sheet C2.0-Site Details was forwarded to Greg Johnson on April 14, 2015. This sheet contains all the necessary information and details for the Rain Garden/Bio-Retention Areas.

2. For the EPSC plan, could we get some sort of protection (inlet filter? Etc) on the existing catch basin? Given that this is right next to one of the entrances, I would like to see some protection there.

Detail # 6 – Fabric Inlet Protection – has been added to Sheet C2.2, which calls out for the EPSC measure to be utilized for the existing catch basin within Colchester Avenue. The EPSC Plan on Sheet C1.2 has been revised to show the existing catch basin within Colchester Avenue to be protected.

3. I can see that this project requires taking down some of the larger trees on this site. Currently, I can imagine that these larger trees serve a great benefit in intercepting rainfall before it even hits the ground. Have you explored the possibilities of new plantings? Have you chatted with Warren Spinner about this?

The plans have been revised to save some additional trees, 2 within the R.O.W. and 1 on-site. The two R.O.W trees (the existing 18" Locust Tree just south of the existing curb cut and the 10" apple tree in front of the existing building) and the on-site tree (the 10" Butternut Tree south of the driveway on what is proposed Lot 2) have been revised to be saved. Also, it should be noted that this project is based on a Conservation Development Design (CDD) which has resulted in a small dense development area after setting aside most of the site to remain wooded and undeveloped. In addition, the rain gardens will provide intentional treatment and opportunity for infiltration and evapo-transpiration. This issue was discussed with the Design Advisory Board Meeting on 4/28/15 and the plan was recommended for approval based on additional trees being saved. As mentioned in a previous response, Owe had thought to try to save 5 additional trees as a result of that meeting. Due to the site constraints and locations of these trees, we were unable to save 2 of the ones shown to the DAB. The Applicant is open to planting some new street trees if the Development Review Board requests. We did talk with Warren by phone and he indicated that this could be worked out with the planning staff and boards.

4. Plowing and Snow storage in the back? Has this been explored yet? I want to make sure that if the west edge of the parking lots are where snow is going to be stored, that the melt doesn't cause an erosion issue in the future on the steep slopes.

Snow storage will be along the driveways or in the western side of the driveway, however, the site has been designed so that all runoff drains to the front of the property and does not run down the steep embankment to the west of the development. In addition, the drive and parking area pavement extents have been reduced based on input from staff and the DAB which will result in less snow removal required and more room for storage.

5. Lastly, for final approval, I would need a copy of the proposed maintenance & inspection plan for the bioretention areas.

A plan entitled "Stormwater Maintenance Plan for 380 Colchester Avenue (Sheet HYD-4)", prepared by Engineering Ventures, P.C., and dated 4/15/15 has been included with this submission.

Design Advisory Board Conditions:

1. Add walkway from southern driveway to the front door.

A four-foot wide sidewalk has been added from the eastern-most the at-grade parking space, running along the southern side of the existing building, and connecting to the front porch, as recommended at the 4/28/15 DAB meeting. See Site Plan, Sheet C1.1.

2. Construct a roof to shelter the rear (western) doorway.

A roof over the western entrance around the rear of the building had been added to the elevations.

3. Note that a handrail along the rear existing steps will be required.

A railing is called out for the concrete steps along the rear of the building. See Site Plan, Sheet C1.1. The owner will specify the type of railing prior to permit issuance.

Conservation Board Recommendations:

1. Provide infiltration information.

Infiltration feasibility testing was performed on May, 14, 2015 by Engineering Ventures, P.C. The testing was done with two percolation tests, one located near proposed Bio-Retention Area #1, and one within Bio-Retention Area #3. The test results have been included in a submitted report entitled "Infiltration Feasibility Testing for 380 Colchester Avenue", prepared by Engineering Ventures, and dated May 15, 2015. It should be noted that Engineering Ventures recommends additional infiltration testing be conducted during construction to verify infiltration feasibility rates.

We trust this submission is complete and meets the guidelines for Preliminary/Final Plan Approval, Subdivision Approval, and Planned Unit Development Approval set forth in the Burlington Comprehensive Development Ordinance. If you need any other information or have any questions about this submission, please do not hesitate to contact me.

Sincerely,



Kevin Worden, P.E., Vice President