

August 22, 2016

Amanda Lessard, Town Planner  
Town of Windham  
8 School Road  
Windham, ME 04062

**Re: Abby Commons Condominium – Final Site & Subdivision Application  
Windham Project 15-02  
Ralph Vance Land Development, Applicant**

Dear Amanda:

On behalf of our client Ralph Vance Land Development, Inc., we have enclosed the attached Final Site Plan Application and Final Subdivision Plan Application for the above referenced project, along with final plans for Planning Board approval. We have also attached the following agency approvals:

- Stormwater Permit Approval Order #L-26961-NJ-A-N from the Maine Department of Environmental Protection
- Engineered Subsurface Wastewater Disposal System and First Time System Variance Approvals from the Maine Department of Health and Human Services

The water service layout has been approved by the Portland Water District, and the reconfiguration of the Abby Road intersection has been coordinated with the Windham Public Works Director.

Please do not hesitate to contact me with any questions or if you require any additional information, and we look forward to meeting with the Planning Board at their earliest convenience to discuss Final Approval of this project.

Sincerely,

DM Roma Consulting Engineers

*Dustin M Roma*

Dustin M. Roma, P.E.  
President

Cc: Ralph Vance  
Enc.

**Project Name:** ABBY COMMONS CONDOMINIUM

**Tax Map:** 18 **Lot:** 31-C

**Estimated square footage of building(s):** 22 UNITS @ 1,092 SF EACH = 24,024 SF

**If no buildings proposed, estimated square footage of total development/disturbance:**

**Contact Information**

1. Applicant

Name: RALPH VANCE LAND DEVELOPMENT, INC.

Mailing Address: 590 ROOSEVELT TRAIL, WINDHAM, ME 04062

Telephone: 650 - 3060 Fax: E-mail:

2. Record owner of property

(Check here if same as applicant)

Name:

Mailing Address:

Telephone: Fax: E-mail:

3. Contact Person/Agent (if completed and signed by applicant's agent, provide written documentation of authority to act on behalf of applicant)

Name: DUSTIN ROMA

Company Name: DM ROMA CONSULTING ENGINEERS

Mailing Address: 59 HARVEST HILL RD, WINDHAM, ME 04062

Telephone: 310 - 0506 Fax: E-mail: DUSTIN@DMROMA.COM

I certify all the information in this application form and accompanying materials is true and accurate to the best of my knowledge.

Dustin M Roma                      AUGUST 22, 2016  
Signature                                      Date

Applicant

Staff

<b>Final Plan - Major Subdivision: Submission Requirements</b>			
<b>A. Mandatory Written Information</b>			
1	A fully executed application form	X	
2	Evidence that the escrow account balance is greater than 25% of the initial Preliminary Plan deposit	X	
3	If public open space is to be provided, written offers of cession to the Town of Windham shall be provided	N/A	
4	If the subdivider reserves title to spaces within the subdivision, provide copies of agreements or other documents.	N/A	
5	Copies of any outside agency approvals	X	
6	Statement from the Maine Inland Fisheries & Wildlife that no significant wildlife habitat exists on the site	X	
7	Digital transfer of subdivision plan data	X	
<b>B. Mandatory Plan Information</b>			
1	All information presented on the Preliminary Plan, and any amendments suggested or required by the Board.	X	
2	Map and lot numbers for all lots as assigned by the Town of Windham Assessing Department	X	
3	Seal of the Maine Licensed Professional who prepared the plan	X	
4	All public open space for which offers of cession are made by the subdivider and those spaces to which title is reserved by the subdivider	N/A	
5	Location of all permanent monuments	X	



DEPARTMENT ORDER

IN THE MATTER OF

RALPH VANCE ) STORMWATER MANAGEMENT LAW  
Windham, Cumberland County )  
11-UNIT RESIDENTIAL DEVELOPMENT )  
L-26961-NJ-A-N (approval) ) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. § 420-D, and Chapters 500, 501, and 502 of the Department's Regulations, the Department of Environmental Protection has considered the application of RALPH VANCE with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. Summary: The applicant proposes to construct a stormwater management system for 11 duplex residential buildings and 700 linear feet of roadway that will result in a total of 3.38 acres of developed area of which 1.29 acres would be impervious. The applicant proposes to utilize three infiltration basins for stormwater treatment. The project is indicated on a set of plans the first of which is entitled "Grading Plan," prepared by DM Roma and dated April 5, 2016, with a latest revision date of April 5, 2016. The project site is located on the east side of Sandbar Road in the Town of Windham.

B. Current Use of the Site: The proposed project parcel is approximately 4.8 acres in size and is currently a vacant field with no structures.

2. STORMWATER STANDARDS:

The proposed project includes approximately 3.38 acres of developed area of which 1.29 acres are impervious area. It lies within the watershed of Tarkill Pond. The applicant submitted a stormwater management plan based on the Basic and General Standards contained in Department Rules, Chapter 500. The proposed stormwater management system will utilize three infiltration basins.

A. Basic Standards:

(1) Erosion and Sedimentation Control: The applicant submitted an Erosion and Sedimentation Control Plan that is based on the performance standards contained in Appendix A of Chapter 500 and the Best Management Practices outlined in the Maine Erosion and Sediment Control BMPs, which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by, and revised in response to the comments of, the Bureau of Land Resources (BLR).

Erosion control details will be included on the final construction plans and the erosion control narrative will be included in the project specifications to be provided to the construction contractor.

(2) Inspection and Maintenance: The applicant submitted a maintenance plan that addresses both short and long-term maintenance requirements. The maintenance plan is based on the standards contained in Appendix B of Chapter 500. This plan was reviewed by, and revised in response to the comments of, BLR. A homeowners' association will be established that will be responsible for the maintenance of all common facilities including the stormwater management system. The Declaration of Covenants and Restrictions for the association was reviewed and found to meet Department requirements. Prior to the formation of the homeowners' association, the applicant will be responsible for all such maintenance. The applicant may not transfer responsibility for maintenance of the road and for the portion of the stormwater management system that is located in the road right-of-way to the Town of Windham until a letter has been submitted from the Town to the BLR documenting the Town's agreement to maintain both in accordance with the terms of this Order.

Storm sewer grit and sediment materials removed from stormwater control structures during maintenance activities must be disposed of in compliance with the Maine Solid Waste Management Rules.

(3) Housekeeping: The proposed project will comply with the performance standards outlined in Appendix C of Chapter 500.

Based on BLR's review of the erosion and sedimentation control plan and the maintenance plan, the Department finds that the proposed project meets the Basic Standards contained in Chapter 500(4)(B).

#### B. General Standards:

The applicant's stormwater management plan includes general treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. This mitigation is being achieved by using Best Management Practices that will control runoff from no less than 95% of the impervious area and no less than 80% of the developed area.

The proposed project was reviewed by staff from the Division of Environmental Assessment (DEA). The DEA found that the applicant has addressed concerns regarding adjacent property water supplies, snow storage, and maintenance of the infiltration basins. The applicant must insure that the discharge of soluble pollutants to the infiltration area is minimized and that the infiltration area is maintained to assure that its capacity is unimpaired. The applicant provided a letter from the Maine Department of Health and Human Services (DHHS), dated July 8, 2016, that approved a setback

reduction for the installation of an infiltration basin through a Minimum Lot Size Waiver. The waiver allowed the required setback of 300 feet from an infiltration basin to be reduced to 50 feet. The applicant also provided a copy of a signed Abutter Agreement that states the abutter does not object to the placement of the infiltration basin within 100 feet of their leach field. Based on DEA's review, the DHHS waiver, and the Abutter Agreement, the Department does not anticipate that the infiltration area will adversely impact groundwater quality.

The stormwater management system proposed by the applicant was reviewed by, and revised in response to comments from, BLR. After a final review, BLR commented that the proposed stormwater management system is designed in accordance with the Chapter 500 General Standards and recommended that the applicant's design engineer or other qualified engineer oversee the construction of the infiltration basins to insure that they are installed in accordance with the details and notes specified on the approved plans. Within 30 days from completion of the infiltration basins or at least once per year, the applicant must submit a log of inspection reports detailing the items inspected, photographs taken, and the dates of each inspection to the BLR for review.

Based on the stormwater system's design and BLR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 Basic and General Standards.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Section 420-D, and Chapters 500, 501 and 502 of the Department's Regulations:

- A. The applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 Basic Standards for: (1) erosion and sediment control; (2) inspection and maintenance; (3) housekeeping; and (4) grading and construction activity provided sewer grit and materials are properly disposed of as described in Finding 2A.
- B. The applicant has made adequate provision to ensure that the proposed project will meet the Chapter 500 General Standards provided construction of the infiltration basins is overseen and documented as described in Finding 2B.

THEREFORE, the Department APPROVES the above noted application of RALPH VANCE to construct a stormwater management system as described above in Windham, Maine, SUBJECT TO THE FOLLOWING CONDITIONS, and all applicable standards and regulations:

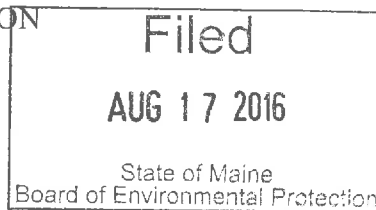
1. The Standard Conditions of Approval, a copy attached.
2. In addition to any specific erosion control measures described in this order, the applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.

- 3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
- 4. The applicant shall include in all conveyances of subdivision lots deed restrictions making the conveyance subject to all terms and conditions of this Department Order, particularly those conditions related to maintenance of the stormwater management system. These terms and conditions may be incorporated by specific and prominent reference to the permit in the deed. All conveyances required by this approval to contain restrictions shall include in the restrictions the requirement that any subsequent conveyance shall specifically include the same restrictions.
- 5. Storm sewer grit and sediment materials removed from stormwater control structures shall be disposed of in compliance with the Maine Solid Waste Management Rules.
- 6. The applicant shall retain the design engineer or other qualified engineer to oversee the construction of the infiltration basins according to the details and notes specified on the approved plans. Within 30 days of completion of the infiltration basins or at least once per year, the applicant shall submit a log of inspection reports detailing the items inspected, photographs taken, and dates of each inspection to the BLR for review.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED IN AUGUSTA, MAINE, THIS 17<sup>TH</sup> DAY OF AUGUST, 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION



BY: *Paul Mercer*  
 For: Paul Mercer, Commissioner

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

DC/L26961AN/ATS#80260



Paul R. LePage, Governor

Mary C. Mayhew, Commissioner

Tel. (207) 287-2070

Subsurface Wastewater Unit

Department of Health and Human Services  
Maine Center for Disease Control and Prevention  
286 Water Street  
11 State House Station  
Augusta, Maine 04333-0011  
Tel.: (207) 287-8016; Fax: (207) 287-9058  
TTY Users: Dial 711 (Maine Relay)  
Fax (207) 287-4172

July 8, 2016

Ralph Vance Land Development, Inc.  
Attn: Ralph Vance  
500 Roosevelt Trail  
Windham, ME 04062

Subject: Approval with Minimum Lot Size Waiver, Abby Commons Retirement Community, Sandbar Road, Windham

Dear Mr. Vance:

The Division of Environmental Health has completed a review of a design for an engineered subsurface sewage disposal system design, to serve Abby Commons Retirement Community. The HHE-200 Form dated 06/16/2016 was prepared by Albert Frick, S.E. and signed by Dustin Roma, P.E. The system was designed by DM Roma Consulting Engineers, with plans signed and stamped by Dustin Roma, P.E.

Hereafter, the term "design engineer" shall refer collectively to DM Roma Consulting Engineers, its staff, and its representatives unless otherwise specified; and the term "owner" shall refer collectively to Ralph Vance Land Development, Inc., its staff, and its representatives unless otherwise specified.

#### Design Flow

The design flow is 3,960 gallons per day (gpd), based upon Table 4C of the Maine State Plumbing Code, Subsurface Wastewater Disposal Rules (Rules). The design flow of 3,960 gpd is approved with the notation that the suitability of the design flow is the responsibility of the design engineer.

#### Treatment Tank(s)

The design includes 11 1,500 gallon septic tanks, each serving two 2-bedroom units. The septic tanks discharge to one BioMicrobics Fast 4.5 treatment unit.

#### Disposal Areas

The proposed disposal area consists of two groups of concrete chambers. Each group would consist of four rows of 11 chambers in cluster configuration.

#### Soils

The soils are shown as 5-B per the Rules on the HHE-200 Form prepared by Albert Frick, S.E.

#### Well Setback

There is one potable water supply well reported within 300 feet of the proposal. This well would be abandoned in favor of a municipal water supply connection.



### Mounding Analysis

The proposed system will not result in groundwater mounding sufficient to intrude into the disposal area, according to the calculations provided by the design engineer.

### Site Transmission Analysis

The proposed system design demonstrates that there are sufficient soils down-gradient to prevent the effluent from surfacing within 50 feet of the disposal field, according to the calculations provided by the design engineer.

### Interagency Review

The Maine Department of Environmental Protection (MDEP) has reviewed the application and stated that "...the proposal is subject to approval under the Site Location of Development Act (SLODA). The proposed on-site engineered subsurface wastewater disposal system is currently under MDEP review pursuant to SLODA standards, including: (1) the geology of the project area and vicinity, (2) effects of the project on groundwater and surface water quality, and (3) public and private uses of groundwater and surface water resources in the project area and vicinity.

"Provided that any concerns resulting from the site review are adequately addressed, no reason will be found to believe that normal operation of the disposal system will result in unreasonable adverse impact on the natural environment or other uses of groundwater and surface water, and provided that the system is properly constructed and maintained."

### Minimum Lot Size Waiver

The Division has reviewed a concurrent minimum lot size waiver application for the subject property. This application was submitted in accordance with 12 MRSA §4807-B. The lot has approximately 4.85 acres of land, whereas 60.6 are required, at 20,000 square feet per 300 gpd of wastewater. (3,960 gpd / 300 gpd = 132; 132 x 20,000 sq. ft. = 2,640,000 sq. ft.; 2,640,000 sq. ft. / 43,560 sq. ft. per acre = 60.6 acres.)

No comments from abutters have been submitted to the Division within the two week notification period.

Pursuant to the language provided in 12 MRSA §4807-B, which is the sole basis for our review, we find that based upon the subsurface wastewater disposal system design prepared by the design engineer, the proposed subsurface waste disposal system otherwise meets the current Rules. As a result, the proposed subsurface wastewater disposal system is therefore not considered to be likely to lower the water quality of, or otherwise pose a threat to, any lake, pond, stream, river or tidal waters, any underground water supply, or to the public health, safety and general welfare.

### Findings

The system meets the Rules, unless otherwise noted. Therefore, the design is approved with the following conditions and comments:

1. The owner must retain the design engineer to oversee construction. The constructed system may not be used unless all pertinent requirements of the Rules have been met.
2. Construction must not commence until the owner has obtained the necessary plumbing permit from the Local Plumbing Inspector (LPI).
3. The design engineer must provide sufficient supervision to assure that the system is constructed as designed and in accordance with the code and other regulations. Attention must be given to site preparation, fill selection and placement, installation of pipes, mechanical and electrical systems.
4. The design engineer must provide the owner and this office with a brief report on the construction including any unexpected conditions encountered and any changes made from the approved drawings. The LPI must not issue the Certificate of Approval until the LPI has received the aforementioned report from the design engineer.
5. The design engineer must test all systems prior to acceptance by the owner. The testing must determine whether the components were correctly installed and whether they function as designed. This includes confirmation that flow dividing devices or configurations function as intended.

6. The design engineer, with the concurrence of the LPI must determine when the site conditions are suitable for construction.
7. Construction must cease whenever the design engineer determines that the site conditions, or workmanship, or materials are unacceptable.
8. The owner and design engineer must inform the LPI of the proposed construction schedule and must also inform the LPI of the progress of construction. They must cooperate fully with the LPI in scheduling any inspections and providing any equipment necessary for the inspection.
9. The design engineer must provide the owner with an Operations and Maintenance Manual containing written recommendations for the operation and maintenance of the system including inspection and pumping schedules and record keeping procedures.
10. The owner must operate the system within the requirements of Rules and the limitations of this design.
11. The owner must inform the LPI and the design engineer of any operational problem and/or malfunction.
12. The Local Plumbing Inspector must inspect the engineered disposal system in accordance with Section 10.D.2 of the Rules. In addition, the property owner must retain the design engineer to inspect the construction of the system. The inspection must be sufficient for the design engineer to determine that the system was installed as designed.
13. This approval is only for the rules administered by this office and it does not consider other federal, state or local regulations. The owner is responsible for compliance with any other pertinent regulations.
14. By accepting this approval and the associated plumbing permit, the owner agrees to comply fully with the conditions of approval and the Subsurface Wastewater Disposal Rules.

Based upon this approval of the design, the LPI may issue the permit required for an engineered system.

Because installation and owner maintenance has a significant effect on the working order of onsite sewage disposal systems, including their components, the Division makes no representation or guarantee as to the efficiency and/or operation of the system.

Should you have any questions, please feel free to contact me at (207) 287-5695, or by fax at (207) 287-4172.

Sincerely,



James A. Jacobsen  
Project Manager, Webmaster  
Division of Environmental Health  
Drinking Water Program  
Subsurface Wastewater Unit  
e-mail: james.jacobsen@maine.gov

/jaj

xc: File  
Heather McNally, L.P.I. via e-mail  
Dustin Roma, P.E. via e-mail  
Albert Frick, SE via e-mail  
William Noble, MDEP via e-mail

Final Plan - Major Site Plan: Submission Requirements		Applicant	Staff
a.	Complete Sketch Plan Application form	x	
b.	Evidence of payment of application and escrow fees	x	
c.	Written information - submitted in bound report		
1	A narrative describing the proposed use or activity	x	
2	Name, address, & phone number of record owner, and applicant if different	x	
3	Names and addresses of all abutting property owners	x	
4	Documentation demonstrating right, title, or interest in property	x	
5	Copies of existing proposed covenants or deed restrictions	x	
6	Copies of existing or proposed easements on the property	x	
7	Name, registration number, and seal of the licensed professional who prepared the plan, if applicable	x	
8	Evidence of applicant's technical capability to carry out the project	x	
9	Assessment of the adequacy of any existing sewer and water mains, culverts and drains, on-site sewage disposal systems, wells, underground tanks or installations, and power and telephone lines and poles on the property	x	
10	Estimated demand for water supply and sewage disposal	x	
11	Provisions for handling all solid wastes, including hazardous and special wastes	x	
12	Detail sheets of proposed light fixtures	n/a	
13	Listing of proposed trees or shrubs to be used for landscaping	x	
14	Estimate weekday AM and PM and Saturday peak hour and daily traffic to be generated by the project	x	
15	Description of important or unique natural areas and site features, including floodplains, deer wintering areas, significant wildlife habitats, fisheries, scenic areas, habitat for rare and endangered plants and animals, unique natural communities and natural areas, sand and gravel aquifers, and historic and/or archeological resources	x	
16	If the project requires a stormwater permit from MaineDEP or if the Planning Board or if the Staff Review Committee determines that such information is required, submit the following:		
	stormwater calculations	x	
	erosion and sedimentation control measures	x	
	water quality and/or phosphorous export management provisions	x	
17	If public water or sewerage will be utilized, provide statement from utility district regarding the adequacy of water supply in terms of quantity and pressure for both domestic and fire flows, and the capacity of the sewer system to accommodate additional wastewater.	x	
18	Financial Capacity		
	i. Estimated costs of development and itemize estimated major expenses	x	
	ii. Financing (submit one of the following)		
	a. Letter of commitment to fund		

	b. Self-financing		
	1. Annual corporate report		
	2. Bank Statement		
	c. Other		
	1. Cash equity commitment of 20% of total cost of development		
	2. Financial plan for remaining financing		
	3. Letter from institution indicating intent to finance	X	
	iii. If a registered corporation a Certificate of Good Standing from:		
	Secretary of State, or	X	
	statement signed by corporate officer		
19	Technical Capacity (address both)		
	i. Prior experience	X	
	ii. Personnel	X	
	<b>d. Plan Requirements - Existing Conditions</b>		
	i. Location Map adequate to locate project within the municipality	X	
	ii. Vicinity Plan. Drawn to scale of not over 400 feet to the inch, and showing area within 250 feet of the property line, and shall show the following:	X	
	a. Approximate location of all property lines and acreage of parcels	X	
	b. Locations, widths and names of existing, filed or proposed streets, easements or building footprints	X	
	c. Location and designations of any public spaces	n/a	
	d. Outline of proposed subdivision, together with its street system and an indication of the future probable street system of the remaining portion of the tract	X	
	iii. North Arrow identifying Grid North; Magnetic North with the declination between Grid and Magnetic; and whether Magnetic or Grid bearings were used	X	
	iv. Location of all required building setbacks, yards, and buffers	X	
	v. Boundaries of all contiguous property under the total or partial control of the owner or applicant	X	
	vi. Tax map and lot number of the parcel or parcels on which the project is located	X	
	vii. Zoning classification(s), including overlay and/or subdistricts, of the property and the location of zoning district boundaries if the property is located in 2 or more districts or abuts a different district.	X	
	viii. Bearings and lengths of all property lines of the property to be developed, and the stamp of the surveyor that performed the survey.	X	
	ix. Existing topography of the site at 2-foot contour intervals	X	
	x. Location and size of any existing sewer and water mains, culvers and drains, on-site sewage disposal systems, wells, underground tanks or installations, and power and telephone lines and poles on the property and on abutting streets or land that may serve the development.	X	
	xi. Location, names, and present widths of existing public and/or private streets and rights-of way within or adjacent to the proposed development	X	
	xii. Location, dimensions, and ground floor elevation of all existing buildings	X	

xiii.	Location and dimensions of existing driveways, parking and loading areas, walkways, and sidewalks on or adjacent to the site.	x	
xiv.	Location of intersecting roads or driveways within 200 feet of the site.	x	
xv.	Location of the following:		
	a. Open drainage courses	x	
	b. Wetlands	x	
	c. Stone walls	x	
	d. Graveyards	x	
	e. Fences	x	
	f. Stands of trees or treeline, and	x	
	g. Other important or unique natural areas and site features, including but not limited to, floodplains, deer wintering areas, significant wildlife habitats, fisheries, scenic areas, habitat for rare and endangered plants and animals, unique natural communities and natural areas, sand and gravel aquifers, and historic and/or archaeological resources	x	
xvi.	Direction of existing surface water drainage across the site	x	
xvii.	Location, front view, dimensions, and lighting of existing signs	x	
xviii.	Location & dimensions of existing easements that encumber or benefit the site	x	
xix.	Location of the nearest fire hydrant, dry hydrant, or other water supply	x	
<b>Plan Requirements - Proposed Development Activity</b>			
i.	Location and dimensions of all provisions for water supply and wastewater disposal, and evidence of their adequacy for the proposed use, including soils test pit data if on-site sewage disposal is proposed	x	
ii.	Grading plan showing the proposed topography of the site at 2-foot contour intervals	x	
iii.	Direction of proposed surface water drainage across the site and from the site, with an assessment of impacts on downstream properties.	x	
iv.	Location and proposed screening of any on-site collection or storage facilities	n/a	
v.	Location, dimensions, and materials to be used in the construction of proposed driveways, parking and loading areas, and walkways, and any changes in traffic flow onto or off-site	x	
vi.	Proposed landscaping and buffering	x	
vii.	Location, dimensions, and ground floor elevation of all buildings or expansions	x	
viii.	Location, front view, materials and dimensions of proposed signs together with method for securing sign	n/a	
ix.	Location and type of exterior lighting. Photometric plan to demonstrate coverage area of all lighting may be required by Planning Board.	n/a	
x.	Location of all utilities, including fire protection systems	x	
xi.	Approval block: Provide space on the plan drawing for the following words, "Approved: Town of Windham Planning Board" along with space for signatures and date	x	

2. Major Final Site Plan Requirements			
a.	Narrative and/or plan describing how the proposed development plan relates to the sketch plan	X	
b.	Stormwater drainage and erosion control program showing:	<del>X</del>	<del>X</del>
	1. Existing and proposed method of handling stormwater runoff	X	
	2. Direction of the flow of the runoff, through the use of arrows and a description of the type of flow (e.g. sheet flow, concentrated flow, etc.)	X	
	3. Location, elevation, and size of all catch basins, dry wells, drainage ditches, swales, retention basins, and storm sewers	X	
	4. Engineering calculations used to determine drainage requirements based on the 25-year, 24-hour storm frequency.	X	
	5. Methods of minimizing erosion and controlling sedimentation during and after construction.	X	
c.	A groundwater impact analysis prepared by a groundwater hydrologist for projects involving on-site water supply or sewage disposal facilities with a capacity of 2,000 gallons or more per day	X	
d.	Name, registration number, and seal of the Maine Licensed Professional Architect, Engineer, Surveyor, Landscape Architect and/or similar professional who prepared the plan	X	
e.	A utility plan showing, in addition to provisions for water supply and wastewater disposal, the location and nature of electrical, telephone, cable TV, and any other utility services to be installed on the site	X	
f.	A planting schedule keyed to the site plan indicating the general varieties and sizes of trees, shrubs, and other vegetation to be planted on the site, as well as information pertaining to provisions that will be made to retain and protect existing trees, shrubs, and other vegetation	X	
g.	Digital transfer of any site plan data to the town (GIS format)	X	
h.	A traffic impact study if the project expansion will generate 50 or more trips during the AM or PM peak hour, or if required by the Planning Board	X	

## **Abby Commons Retirement Community Commercial District Design Standards**

The project has been designed to meet the following required and optional standards outlined in Section 813 of the Land Use Code.

### Required Design Standards: C-1 Zone

- A-1: Building Style. See sections below for specific requirements. The buildings are not a form of advertising.
- A-2: Materials. The proposed materials for the buildings are high quality and will require minimal maintenance to retain the high level of quality. The residential-use duplex buildings will be wood frame construction with vinyl clapboard and/or shake siding, vinyl windows and architectural style asphalt shingles on the roof.
- A-3: Color. The exterior finishes of the vinyl siding, trim and doors will be low-reflectance and non-fluorescent.
- A-4: Roofline. The rooflines are pitched traditional New England style.
- A-5: Façade. The building façade will have ample window, door and garage opening space typical of a residential style.
- A-6: Building style coordination (multi-building). All buildings have been coordinated to be a single style.
- A-7: Entrance. The standards are not applicable for buildings under 20,000 square feet and of residential use.
- A-8: Architectural Details. The architectural detailing and trim are proportional to the scale and design of the building.
- B-6: Screening Utilities & Service Areas. Not applicable for residential use with municipal curbside trash pick-up.
- C-1: Lighting/Photometric Plan. There are no proposed free-standing pole lights.
- C-2: Lighting Coordinated With Architecture. The proposed building-mounted lighting will bring attention to the doorway entrance elements without creating glare or distraction.
- C-3: Lighting Coordinated with Landscaping. The proposed lighting over the doorway entrances will not be negatively impacted by the mature growth of landscaping on the property, and will not result in eventual dark spots.
- C-5: Snow Storage Areas Designated. The site has been designed to allow snow to be pushed over the embankments without damaging the landscaped areas or conflict with the stormwater drainage.
- D-1: Internal Walkways. An internal sidewalk is provided along the new roads and will be connected by a new sidewalk on Sandbar Road connecting the two project phases. There is no adjacent public walkway to connect to. A painted crosswalk will be provided on Sandbar Road at the intersection of Abby Road.

- D-2: Links to Community. The project includes a sidewalk connection that will provide a means of pedestrian access to and from the adjacent Marblehead development.
- D-4: Sidewalks. The project includes the construction of sidewalks.
- D-5: Crosswalks. The project includes painted crosswalks.
- D-6: Bike parking/racks. There is ample private space on each lot for bicycle storage.

#### Optional Design Standards (8 Minimum)

- B-1: Parking Location. Garages are provided for most of the units to provide indoor parking.
- B-2: Internal Traffic Flow. The roadways will be paved and delineated with concrete curbing. Crosswalks will be painted with reflective white pavement markings.
- B-4: Orientation of Buildings. The proposed buildings are located as close to the front setback as practical. Buildings are situated so that they all front towards the street, or have limited visibility of the rear of the buildings.
- B-5: Screening, Parking. Garages are provided for most of the units to provide visual screening of parked vehicles.
- B-8: Low-Impact Design Stormwater. The stormwater basins have been designed utilizing low impact development techniques to infiltrate runoff on-site and provide water quality treatment.
- C-6: Planting Variety. The proposed plant materials strikes a balance between monoculture and too much variety through utilization of clumps of mass plantings between shade trees.
- C-7: Planting suitability. The proposed landscaping requires a relatively low degree of maintenance, and the plantings are resistant to impacting factors and are hardy to Maine winters.
- C-8: Mass Plantings. The plantings are arranged in clumps of mass plantings that will be mulched to have a larger impact on the visual character of the street front.
- C-9: Illumination Levels. The light fixtures installed on the building are in scale with the site and building development. There are no pole mounted fixtures proposed. The illumination levels are appropriate for the site and use.