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Elizabeth Hughes
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TOWN OF CONCORD
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RE: Residences at Thoreau Development
Architectural Peer Review Report

Dear Elizabeth:

I'm writing to provide you with a review of the proposed 40B development, Residences at Thoreau, that is located at 275 Forest Ridge Road in Concord. I expect to discuss the project with the ZBA at their hearing on December 5, 2024.

As is typical at this stage of a project, the architectural drawings are very schematic, which puts limitations on the depth of analysis that I'm able to perform. However, it is important to note that there have been two working sessions with the project team, as well as public hearings where the Applicant was given detailed feedback on the project. This process has triggered a number of major design revisions, reflected in the most current civil, architectural, and landscape architect generated drawing sets. The design comments in this letter are primarily focused on these revised documents.

This review follows the format of my fee proposal dated February 9, 2024.

1. Review the Developer's Application, Plans and Drawings, reports from other peer reviewers and Town officials, letters from neighboring residents, etc.

Applicant's Documents reviewed:

- Project Eligibility/Site Approval letter prepared by MassHousing dated December 20, 2023.
- Thoreau Club Housing drawing set prepared by The Architecture Team dated December 20, 2023 (21 sheets)
- Residences at Thoreau drawing set prepared by The Architecture Team dated 10/18/2024 (8 sheets).
- Design Memo to ZBA prepared by The Architecture Team dated November 13, 2024.
- Thoreau Residences slide deck prepared for the October 30, 2024 Zoning Board Hearing (11 slides).
- The Residences at Thoreau drawing set prepared by Allen & Major Associates dated October 18, 2024 (38 sheets).
- Design Memo to ZBA prepared by Allen & Major dated November 6, 2024.
- Residences at Thoreau drawing set prepared by Hawk Design, Inc. dated 11/8/24 (5 sheets).
- Site sections, bird's eye views, and context photos prepared by The Architecture Team dated November 13, 2024 (5 sheets).
- Alta Thoreau Cut/Fill Analysis prepared by Wood Partners dated 11/06/2024.
- Traffic Impact and Access Study prepared by MDM Transportation Consultants, Inc. dated October 2024.

Town and Peer Review Reports:

- Letter to MassHousing from Select Board dated November 22, 2023.
- Letter to MassHousing from Concord Housing Foundation, Inc. dated November 14, 2023.
- Residences at Thoreau Staff Project Review dated November 8, 2023.
- Memo to Select Board from Planning Board Members dated November 15, 2023.
- Memo to the Concord Select Board from the Concord Municipal Affordable Housing Trust dated November 9, 2023.
- Memo to the Concord Select Board from the Concord Office of the Town Manager dated November 14, 2023.
- Memo to the Concord Select Board from the Concord Transportation Advisory Committee dated November 20, 2023.
- Memo to Elizabeth Hughes, Town Planner, from the Concord Municipal Light Plant dated November 8, 2023.
- Memo to Zoning Board of Appeals from the Regional Housing Services Office dated February 6, 2024.

Letters, emails, reports from citizenry of Concord:

- Various comments on the project from approximately 16 posted documents dated February 2024 through November 2024 (including correspondence from the Forest Ridge and Black Birch Condominium Associations).

(REFERENCE MATERIALS)

- Chapter 40B Handbook for Zoning Boards of Appeal published by MHP in cooperation with DHCD, MassHousing, and MassDevelopment dated March 2017.
- Local 40B Review and Decision Guidelines published by MHP and Edith Netter, November 2005
- Handbook: Approach to Chapter 40B Design Reviews, prepared by The Cecil Group, Inc. for DHCD, MassDevelopment, MassHousing, and MHP, January, 2011

2. Participate in an initial meeting at the site with the Developer's Design team and a Representative of the Town

An unaccompanied site visit by this reviewer occurred on March 7, 2024.

3. Conduct site visit of the project site and surrounding neighborhood.

The project site is defined by a residential development to the west on Black Birch Lane; to the east and south by the Thoreau Club; undeveloped wooded land to the north; and another small-scale residential development to the south that fronts on Forest Ridge Road in the vicinity of the proposed entry to the subject site. To the south of the development on Sweet Birch Lane, is a 350-unit, 3-story development (The Prescott, also a 40B).

There is a pedestrian walkway on the south side of Forest Ridge Road. The walk connects into the Thoreau Club to the southeast, as well as both sides of the traffic rotary to the northwest. The walkway does not extend into the existing residential neighborhoods on Sweet Birch Lane (pedestrians walk in the roadway), but it does extend to reach most of the homes on Black Birch Lane (the branch of Black Birch that is the immediate abutter to the subject site does not have a sidewalk). The section of Forest Ridge between Route 62 and the northern end of Black Birch has a walkway on the west side. Route 62 (Main Street) in the vicinity of Forest Ridge has a walkway on one side, although it is not consistently on the same side. There are no bike lanes on any of the nearby roadways.

There are amenities that are reasonably close to the site, including the Powder Mill Plaza that features a number of commonly used retail stores (supermarket, pharmacy). From within the subject site, the walking distance to the Plaza is approximately $\frac{3}{4}$ mile (a 15-20 minute walk). The closest major highway is Route 2 (about 3 miles away); West Concord Village is approximately 2.5 miles away from the site, where there is an MBTA commuter train station (the Fitchburg Line).

There do not appear to be any reasonably walkable public amenities (playgrounds, schools, post office, etc.). There is relatively easy access to a few private athletic facilities (The Thoreau Club, the Valley Sports Arena). Given the relative isolation from public amenities, the proposed development will be heavily motor vehicle dependent. As such, the residents of the proposed development may largely rely on on-site amenities for day-to-day recreation.

4. Submit queries for Applicant's design team via staff only, as appropriate.

Through the working session format, there has been discussion of potential changes to the proposed project. This reviewer, through the Planning Department, requested some additional exhibits including more information related to bordering vegetation that is left in place, inclusion of neighboring homes on the landscape plan, etc. These requests will be detailed in this letter report.

5. Provide an oral presentation to the ZBA. A written report shall be submitted in advance of the hearing. Said presentation shall include comments and preliminary recommendations on the following. Visuals with annotations may be included to identify issues and convey recommendations.

Points from this report will be discussed at a ZBA hearing on December 5, 2024. This reviewer has reviewed recordings of the previous hearings on May 16, 2024 and October 30, 2024.

a. Orientation of building in relation to parking areas, open space, and on-site amenities.

All parking for residents is outdoor, surface parking. Some parking spaces are protected by 4 discreet garage structures located on three sides of the development. There are a total of 474 parking spaces proposed, with 40 located within the garage structures. The two residential buildings are surrounded by double-loaded parking lots on all facades other than the facades within the building courtyards (of the total of 16 facades, 10 face parked cars). The northern façade of building B faces a double-double-loaded parking field with virtually no landscaping within the lot.

While this parking arrangement typically allows residents to conveniently park near their unit (especially if the spaces are assigned), there are a number of ground floor units that are potentially negatively impacted by headlight intrusion, noise, and privacy diminished by nearby pedestrian walkways (there are 26 ground floor units in this situation). The landscape plans do not provide sufficient information to determine if plantings could mitigate some of these issues.

Both of the building footprints define programmable courtyard spaces, and the ground floor plans of each structure indicate passage from the corridor into the courtyard. There is also courtyard access from the Amenity area on Building A. Building A includes 120 units, Building B is proposed to be 117 units.

Building A's courtyard includes a swimming pool, sauna, grilling area with associated tables, a fire pit, a "synthetic turf activity area", and sodded lawn areas that provide some distance between the active areas and unit windows and balconies that face the courtyard. The landscape plan indicates a plant bed that follows the building/unit façade, where presumably planting could be introduced to enhance privacy within the unit (the current plans do not provide sufficient information to make that determination). Nine apartments face the courtyard at Building A. There is no program definition on the architectural plans that indicates how the indoor amenity spaces relate to the outdoor spaces.

Building B's courtyard includes a small seating area, a grilling area, a fire pit, planting beds, and an area labeled "activity lawn." Similar to Building A, there is a planting bed that follow the building edge (also, not well defined as far as proposed plantings). There are 9 apartments that face the courtyard. This courtyard is more "squeezed" than Building A's, specifically with respect to the closeness of the activity areas to the ground floor units surrounding the courtyard. Given that the two buildings are designed with virtually the same number of units, this could be problematic.

In order for Building B residents to have access to the swimming pool, they need to exit their building and travel west through the courtyard, cross the parking lot between A and B, and then go through the eastern leg of Building A into its courtyard. This path is defined on the landscape plans, and appears to be coordinated with the architectural ground floor plan. This proposal, while functionally adequate, does not create a meaningful spatial connection between the two courtyards. This connection was arguably better

expressed in the previous, three-building scheme, where two small courtyards between Buildings B and C have a broad parking-lot-crossing that connects with the primary courtyard at Building A.

As far as other areas on the overall site that have designated programs, there are areas reserved for a tot lot and a dog park to the east of Building B, separated from the building by the parking area (which includes one of the garage structures). No detailed plans for these spaces have been provided. The tot lot is not called out on the civil plans.

There are other open areas on the site, most importantly the large areas that have been graded “flat” to provide space for the waste water treatment area and leaching field(s). How these areas are finished (ground cover) and how they may be programmed does not appear to be indicated on the landscape plans. The southeast corner of the site is designed as an infiltration basin.

Currently, the plans do not indicate a connection between the on-site amenity areas with nearby Town paths.

b. Function, use and adequacy of open space and landscaped areas.

As noted above, the subject site does not have easy, pedestrian or bicycle connectivity with off-site public amenities. As such, it follows that to help to minimize use of motor vehicles, the development should look for a degree of “self-sufficiency” to accommodate predictable, daily needs of its residents. The proposed unit count of 237, with a unit mix that creates 401 bedrooms, results in 164 bedrooms that could potentially be occupied by one or more children. The area designated as “tot lot” seems very small (50’ x 40’), and is located in a remote part of the site accessed by crossing one of the parking lots. If there are other areas designated for older children, they have not been called out on the plans.

The courtyard spaces are designed for passive recreation. As noted above, Building B’s courtyard is confined relative to Building A’s. This has the potential of creating visual and acoustical privacy issues with the ground floor levels in particular, but for many more residents, smoke from the courtyard grills could negatively impact homes on all levels of the building. (the grills are about 20 feet from the building façade).

Overall, the current plans that indicate two buildings that are more stories (and that include more dwelling units) than the three structures indicated in the previous design have done a good job of concentrating total building footprint. However, the overall site disturbance required to fit extensive surface parking, sewage treatment, and stormwater management has not drastically changed (reportedly, the undisturbed area has increased by 1.6 acres). Seeing more detail provided by the Applicant on where the increase in undisturbed is located would be helpful.

From this reviewer’s perspective, the biggest site-related issue is the very large areas that are dedicated to surface parking. In addition to the impact on individual dwelling units that is noted above, the large parking fields diminish the site landscape buffers, increase the impervious areas (increasing the need for stormwater management), create heat islands, increase the need for site lighting, and more generally, disassociate the buildings from their surroundings.

As has been noted by others, introducing parking in the basements of the buildings would have a very positive impact on the site plan. Even if basement parking only happened at Building A (which is constructed on significant amounts of fill), it may be possible to eliminate the parking field that separates the two buildings, as well as half of the double-double loaded area on the north side of Building B (which could potentially save more of the existing tree buffer between the development and the neighbors on Black Birch). Expanding courtyard space to the interstitial area would ease up the congested plan in B’s courtyard and create a central shared court that could include a more generous, easily accessible play space, as well as provide a more generous pathway to Building A’s courtyard and shared interior amenities. Ideally, in this scenario, creating an at-grade opening on the north side of Building A that connects directly into the courtyard would be integrated into the plan (as opposed to residents of Building having to enter and exit a corridor to access the shared amenities).

Note that providing basement parking could obviate the need for the four garage structures.

c. *Review of the existing natural features of the site to help inform the architectural review of the design, massing, screening, layout and materials of the building(s).*

Because the proposed development is located at a significantly lower elevation from its nearest residential neighbors to the north (see November 13, 2024 site section B), and because there is considerable distance between the neighbors and the development, there are opportunities for providing effective landscape screening (where existing tree growth left in place is insufficient). It is this topographical feature of the terrain (combined with buffering) that helps to justify taller, more concentrated development of the site.

It is this reviewer's opinion that a survey should be done of the buffering that will be left in place to assess its effectiveness at screening the development from view from the neighbors on Black Birch. It may be necessary to supplement the existing materials with evergreens to achieve this year-round. This includes screening views of rooftop mechanical equipment, which could be accomplished with properly-placed and scaled landscaping, but also rooftop equipment screens (that are not currently depicted on the building elevations).

Note that there is a good chance that without rooftop screening, mechanical equipment will be visible from the entry drive to the new development. This would be unfortunate.

d. *Building design, setbacks, massing and scale in relationship to the surrounding context and topography.*

The revised program for the building includes a total of 237 dwelling units (97@1-BR, 116@2-BR, and 24@3-BR). The schematic architectural plans for Building A indicate an interior amenity area of 9,430 SF. The plans do not indicate what the program is for that space. There is an additional 204 SF, undefined amenity space on the first floor. Building B's amenity area appears to be limited to a 679 SF lobby and mail area on the east side. Missing from the building plans are any indication of where secure bike parking spaces for the residents will be located (as well as outdoor bike racks for visitors).

Generally speaking, the two-piece massing of Building A (a five-story, L-shaped structure, connected to a single-story community building) works very well. As noted above, the impact of the height is mitigated by the local terrain, and the concentrated massing helps with flexibility in site-planning. The bulk of the large piece is broken up with inset corner balconies, large framing of selective areas, horizontal banding, and differentiation of materials and colors. The currently proposed language of the building is contemporary, very much in contrast with the originally submitted historic-ish look. The current path is preferable to this reviewer. Given the degree that the project is insulated from nearby context, a design approach that deviates from other neighborhood residential buildings is appropriate.

Building B's massing is less interesting, as it is all a uniform 5-story height (no smaller scale element), U-shaped. The perspective renderings that have been submitted focus on the massing of Building A. It would be informative to have renderings that show the two buildings together, including views within the space between the buildings. This type of analysis might help to advance ideas for creating a more engaging overall composition. As suggested above, converting the space between the buildings to a landscaped area, along with connecting the pedestrian walkways between A and B would be beneficial. Another option for the interstitial area that would help tie the development together is to create a woonerf ("living street") that could accommodate activity space, along with delivery/drop-off/pick-up/move-in space (current site plans are not clear as far as where these functional areas are).

e. *Impact on streetscape (major thoroughfare and abutting residential neighborhood).*

As noted above, the project is isolated from the street. The most significant impact is traffic that is generated from the project, as opposed to visual impact.

f. *Sensitivity to character defining features on nearby streets, residential multifamily neighborhoods and other developments.*

See comments above regarding relative remoteness of the project site.

g. Viewsheds of the project visible from the public street, public areas and from the vantage of nearby residential neighborhoods.

See comments above related to confirming that the project is suitably screened from neighboring residential development.

h. Pedestrian and vehicular access and circulation, adequacy of accessible provisions. Of particular interest are the implications of access and egress in terms of pedestrians, bicyclists and motorists. Adequacy of visitor loading, drop-off/pick-up facilities; how lack of parking might serve or not serve the project.

Accommodation for bicycles is not addressed in the current plans. Pedestrian circulation within the site could be improved by creating a continuous walkway that circles both buildings, as well as potentially enhancing passage through Building A at ground level to create a better connection to the shared amenities in the courtyard.

Consideration should be given to creating a protected area for a school bus to pick up children (whether it's within the site or near the driveway entry on Forest Ridge Road.

i. Integration of building and site, including but not limited to preservation of existing tree cover, if any.

In addition to providing a tree survey to assess the quality of buffering that is proposed to be left in place, the Applicant should provide a tree protection plan that maximizes the likelihood of survival of trees near site disturbances. Relocating some of the surface parking to basement parking would be a very good strategy for increasing the number of trees that can be saved.

j. Exterior materials.

The proposed façade materials are typical for this type of development, however, consideration should be given to introducing some metal in selective locations on the large blocks (specifically, the large accent frames). Similarly, the single-story community building is a good opportunity of limited scale to introduce more durable, higher quality materials.

k. Exterior lighting

Submitted materials include a lighting plan. This reviewer has no issue with it at this point.

l. Review of landscape elements, planting materials, and planting design to help inform the architectural review of the design, massing, screening, layout and materials of the building(s).

Landscape plans are included in submitted materials. Comments are above.

m. Feasibility of incorporating sustainable building features and energy performance standards in the design, construction and operation of the buildings, such as standards required for LEED certification, Passive House certification, etc.

Concord has adopted the Specialized Building Code. This is a very "high bar" from a sustainability perspective, and may well result in these buildings seeking Passive House certification. In addition, we understand that the Applicant is considering a fossil fuel-free design, and may well incorporate roof-top solar panels. A detailed sustainability narrative should be provided.

n. Any other design-related considerations identified by me, ZBA, town staff, or ZBA working group.

- Applicant should commit to meeting or exceeding all local noise ordinances specific to mechanical equipment.
- Building will need back-up generator(s). Where will this be located?
- EV spaces should be called out in parking plans.
- Because the proposed buildings have elevators, all units are required to conform with MAAB Group 1 requirements. 5% must be Group 2 compliant. No typical accessible unit plans have been provided.
- Has a trash and recycling plan been presented to the Board of Health?
- A site-specific preliminary Construction Management Plan that includes intentions regarding use of site and street for mobilization/laydown space, proposed earth support systems, excavation methods, and

accommodations that must be made to protect neighboring properties, material deliveries, street closures, construction durations, etc.

- Connection to nearby trails should be included in the site design.
- Can areas of pervious paving be introduced? A good place could be parking stalls, leaving normal asphalt paving in the drive aisles.
- Does the walkway from the street meet accessibility requirements (5% or less slope)?
- Why are “street trees” only proposed on one side of the entry drive?
- Are crosswalk improvements proposed where the project walkway meets Forest Ridge?
- Should a “resting place” be provided on the driveway walkway (it is approximately 720 feet long)?

o. Techniques to mitigate negative visual and functional impact.

As noted above, the driving design concept is that the project be separated from the neighborhood context. As such, the success of this strategy hinges largely on the effectiveness of landscape screening.

Environmental and traffic impact of the project is discussed by other peer reviewers.

6. Participate in meetings to include at a minimum municipal staff and the Applicant’s team (“working sessions”) to address the ZBA’s charge to the Applicant. Be available to participate in up to four meetings with staff and Applicant. There have been 2 working sessions with the Applicant’s team, Town staff, and this reviewer. Both meetings were productive and meaningful changes to address concerns were discussed.

Thanks for the opportunity to work with you on the analysis of this project. I hope you will contact me with any questions or concerns about this report.

Sincerely,



Clifford Boehmer, AIA