June 4, 2020

Planning Board 8 Newmarket Road Durham, NH 03824

RE: Continued Public Hearing - Mill Plaza Redevelopment. 7 Mill Road. Continued review of formal application for: 1) Site plan and 2) Conditional Use for mixed use redevelopment project and activity within the wetland and shoreland overlay districts. A revised general layout has been submitted for review. Colonial Durham Associates, property owner. Sean McCauley, agent. Joe Persechino, Tighe & Bond, engineer. Ari Pollack, attorney. (Rick Taintor is serving as the Town's Contract Planner.) Central Business District. Map 5, Lot 1-1.

Topics in this letter: Landscaping onsite, natural buffer to College Brook, big picture, plan specifics

Greetings,

I understand that the applicant wishes to "wrap up the landscaping" at the June 10 meeting. But before we do so, we need to address the big picture: Where can landscaping occur?

First, I will raise some of those big picture questions—on which some landscaping details depend. Then I will turn to overall comments, and then to specifics of the May 20, 2020 landscaping plan.

Big picture concerns related to site layout of structures, manmade and natural:

- What must we fix? What can we fix? What would we like to fix?
 - What structures may be considered immutable and what are flexible?
 - What uses may continue and what must be altered?
 - What part of "landscaping" depends on those answers?
- "Vesting" or "grandfathering": We need clarification about what may legally be "grandfathered." That would benefit both the community and the applicant. Without knowing these parameters, how can we proceed in a meaningful way?
 - Please see attorney Christine Fillmore's article from May 2008 that addresses "Six Common Myths about Nonconforming Uses" (see Planning Board's website "Other Planning Information," PDF titled "Grandfathering")
 - Are elements governed by site plan regulations eligible for "grandfathering", or only zoning? (Are minor elements such as foundation strip plantings eligible?)
 - What about original Conditions of Approval that were never met? For example, the original site plan was to have had an elevated bicyclist and pedestrian way along the southerly edge of the development. That became an erratically maintained marked strip of pavement.
 - We all know that vehicular access/egress for the Plaza is challenging, particularly when exiting against the declining sun. In fact, it's where a fatal accident occurred in 2009, for which the family of the deceased sued the Town. I believe the Town could require an improvement. "Driveway Regulations: Not even a grandfathered property owner has the legal right to maintain a driveway access that constitutes a

- potential threat to the integrity of a public road or to the public safety. RSA 236:13, VI gives planning boards 'continuing jurisdiction over the adequacy and safety of every existing driveway, entrance, exit, and approach to a [municipal] highway,' whether or not the driveway ever received planning board approval." [See page 4, above Fillmore article.]
- How about the proximity of asphalt to the College Brook? Early in the original development, a critical mistake was made relative to the location of the pavement to the College Brook. This mistake resulted in a condition inherited by Colonial Durham but detrimental to the community—the asphalt was already too close to the Brook even before our Wetland and Shoreland Protection Overlay District zoning ordinances were enacted. Historical documentation includes the next point.
- On October 17, 1978, Durham's Public Works Director wrote to the developer (Lehoullier) that "Due to the fact that the McAuliffe plan [, i.e., by the former project engineer] showed the brook in the wrong location, your present engineer had to redesign the parking lot closer to the brook than was originally anticipated. The new plan shows 1 1/2 to 1 slopes on the outside edge of the parking lot, which are extremely steep and vulnerable to erosion. I indicated to you that the toe of any slope running within three feet of the existing brook would have to be riprapped a minimum of three feet from the toe, extending upwards on the slope. From this portion up to the top of the slope, or any other portion which is a minimum of three feet from the brook, there would have to be sufficient ground cover in order to protect against erosion."
- Original relevant conditions of approval that were not met
 - These include a raised bike and pedestrian path along the southern edge of the property (and even the downgraded pavement-marking bike route was not maintained), and inadequate vegetative buffering to the abutting neighborhood.
 - The base conditions were inherited by the current property owner but both were not addressed by Colonial Durham over the years, as they could have been, and should now be redressed.
- The Settlement Agreement's requirement for "increased natural buffer along the southern property line adjacent to the College Brook"
 - Where is that addressed in this landscaping plan? If I have missed it, no doubt others have, as well. That likely means it is inadequate.
- Pedestrians and bicyclists—It cannot be said often enough: every single person who uses the Plaza is a pedestrian, whether arriving as one or becoming one upon leaving a vehicle or bicycle. Residents of and visitors to Buildings B and C will be traversing the Plaza several times a day, whether to UNH or to socialize or patronize downtown businesses. A goal of the site plan and landscaping plan should be to make walking through the site attractive and safe, which means pathways that connect likely destinations the most direct way possible and shade trees along those pathways.
- College Brook bank stabilization, removal of invasive species, and steps to mitigate negligence and/or damage incurred by Plaza operations over the past fifty years

May 20 landscaping plan, overall comments—We need:

- A more user-friendly plan; who among us can read where what tree, let alone plant, is supposed to go? This should not be a *rubber stamp* exercise simply because we cannot read the details and we generally trust the applicant's expert who has drawn up the plan.
- A written narrative guiding Board members and the community through the plan. While the applicant's team may present this information during a meeting, it is reasonable to expect a narrative for later reference prior to deliberations. It could be along the lines of: "ABC trees, which do well under intensive use parking lot conditions and will reach XY feet at maturity (in about Z years), will be interspersed with ABC trees and ABC shrubs along the median strips. Between the sidewalk and Building B will be ABC shrubs and ABC perennials. The ABC perennials were chosen for their low maintenance and ability to withstand drought/wet feet/road salt, as well as provide pollinators/birds with food. Located near the southern border, they will blend with the existing native species."
- Less emphasis on decorative elements and more on functional benefits, e.g., shade, air
 quality, and on hardiness in the challenging conditions of an expansive parking lot
- Clarity about which existing mature trees will be retained and how they would be adequately protected during construction; over the past six years we have seen too many damaged, and subsequently removed, mature trees at project sites, some prominent, e.g., Madbury Commons/Madbury Road
- An understanding of the likely attainment of maturity and longevity of selected species and assurance that they have low maintenance requirements
- Suggestions for a perpetual vegetation maintenance contract and guarantee
 - knowledgeable maintenance will be required. For example, to avoid risk of disease, a Snowdrift crabapple should not be pruned in the spring, unlike many other trees or shrubs, according to the Missouri Botanical Garden website's "Plant Finder" tool. Who will be hired to follow that advice? How will that advice be codified for care as the years pass with maintenance personnel turnover?
 - requirements that go beyond the Site Plan regulations, due to the expanse of heatgenerating asphalt and intense vehicular use, both of which create particularly difficult challenges for vegetation
- More emphasis on species selection and protection of newly planted trees so that
 eventually we will be living with mature trees. Again, given the expanse of the
 asphalt heat island and intense vehicular use in conjunction with heavy foot traffic,
 we need appropriately chosen and located mature trees to attract and make
 pedestrians safe and comfortable during anticipated higher temperatures due to
 climate change
 - selection of species that will thrive despite challenging conditions
 - Even if "good" soil used and "good" planting procedures adhered to, the underlying soil in this area is marine clay. Roots have a very difficult time with this type of soil to begin with, let alone if they have to make their way under compacted soil and heat-baked asphalt. This means that trees and plants must be chosen for clay tolerance; otherwise, they will look good as long as the roots live in what is in essence a huge container ("flower pot"), but when they hit the clay

- outside that good soil, they may not thrive. It could take a few years to get to that point, but it is best to choose appropriate to soil and exposure.
- space to grow: a six-foot median is inadequate (note that the current medians are 9 to 10 feet wide). Because this is a Conditional Use application, the Board may require additional space—and the site plan regulations also authorize the Board to require more than the minimum standards specified therein.
- Fewer perennials, and choices more appropriate to the uses of the site (this is not a homeowner property) and microclimates onsite. Perennials:
 - tend to look nice for only a few months out of the year, in part because we have a short growing season and in part because of natural growth patterns.
 - often require high maintenance and are apt to look ratty or die unless tended
 - are easily trampled in a parking lot by pedestrians taking shortcuts (see the rain garden in the Sammy's parking lot)
 - are particularly vulnerable to heat island effect, snow removal practices (road salt), drought conditions, and improper care, in part because they have shallower roots
 - provide little to no function unless they are pollinators near native habitats (of which a parking lot is not one)
 - compete with trees for water and nutrients

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May 20 landscaping plan, specific comments:

Sheet L00.7 (titled "Landscape Proposed Plan Parking Island Study Non-Conforming Locations")

- Parking sections—It appears that the applicant is counting chickens before they hatch, i.e., assumes it will obtain a waiver for site plan regulation Part III, section 5.8.11 (the requirement to break up the parking into no more than 40 spaces). I might go along with that IF the Board required strips to be wide enough to allow for growth and ongoing health of large mature trees plus pedestrian passage—or at least 10 feet. Board members have said we are OK with fewer but healthier mature trees (on February 12, 2020, Barbara Dill said, "I'd rather have 2 living trees than 20 dead ones," and James Bubar stated, "I would rather have nothing there [at the end caps] than a dead tree"), and I imagine residents would concur....And where are the "shopping cart/carriage return" corrals we find at other Hannaford supermarket lots?
- **Median strips** in the parking area in front of Hannaford are shown planted with both trees and perennials. These median strips appear to be the minimum width required in Durham's site plan regulations. Existing on-the-ground median widths are 9 to 10 feet, depending on how one measures, and yet there still is not room for either root growth or pedestrians to walk past the trees. (Trees planted decades ago are stunted or have died.)
 - How can six feet accommodate healthy tree growth, perennials (up to 12 at some end caps), car overhangs, and pedestrians? Answer: They cannot. Section 5.8.12. states, "medians shall be a **minimum** of six feet in width" (emphasis added).
 - Therefore, widen the median strips and eliminate some, if not all, perennials.

- Require tree planters for all trees. (See below.)
- End caps—Site plan regulations require that "A landscaping peninsula shall be placed at the end of each parking row (such a peninsula is also referred to as an "end cap"), in line with the adjoining parking spaces, measuring at least the same dimensions as the adjoining parking spaces, wherever the row of parking spaces is adjacent to a perpendicular travel way. Each peninsula shall be planted with one shade tree, or one ornamental tree if use of a shade tree is not practical, for lack of space for roots." (See section 5.8.5 in Part III.) The Board should not grant a waiver to allow a reduction. Applicant is nibbling away wherever possible at benefits to the community. In this case, both safety and provision for aesthetics and functions of vegetation are at issue.
- Areas to the south of the parking spaces, between what appears to be a sidewalk or other walkway and the College Brook, are labeled "Existing vegetation to remain."
 - Does this mean that all the invasive plants, e.g., poison ivy and Japanese knotweed, will remain?
 - ...and all the diseased, damaged, and dying trees and shrubs, including the snow-damaged arborvitae planted by CDA a few years ago, are to remain as is, despite the extensive and explicit criticism from resident and horticultural expert John Hart, as he testified to you in February?

Sheet L2.0 (titled "Landscape Overall Plan")

- **Deceptive inclusion of nonexistent parking area** labeled "Proposed Parking Under Separate Application" (and paths to said nonexistent area). No such application is before the Planning Board. The proposal must be considered on its own merits. Were we in a courtroom, I would hope the judge would say something like, "The jury shall disregard this portion of the plan."
- **Foundation planting strip:** Appears to be missing, implying that CDA is counting chickens before they hatch. Site plan regulations require (see section a 5.8.9 in Part III: note the word "shall") "a minimum 4 foot wide foundation planting strip between the building and any parking lot or driveway situated on the front or side of the building." Flexibility in 5.8.9 refers only to the location relative to the sidewalk and whether the strip is continuous. Rationale for requirement: A foundation planting strip adds to pedestrian interest and, if vegetation is chosen well, may help with

passive cooling. but selection of vegetation must take into account the building's and sidewalk pavement's radiant heat and snow removal practices. (Or, preferably, snow removal practices should accommodate the vegetation.)

- **Tree pits:** These should be stormwater tree planters with catchbasins:
 - "...a tree planter installed as part of a road reconstruction and sewer improvements. The tree planter combines a tree well and catchbasin with an engineered soil that provides a growing medium and water quality filter. The planter was designed for considerations of low maintenance



Figure 12 - Stormwater Tree Planter Combined with Catch Basin

and winter maintenance in that it can be cleared easily by snow plow and sediment and debris removal is limited to a deep sump and cleaning by vactor truck. With the tree planter grate the sidewalk area is usable for pedestrian travel. Tree planters, bioretention, and other forms of infiltration or biofiltration can be combined with streetscapes for added functionality." [source: "Mill Pond Nutrient Control Measures Final Report," prepared for the Town of Durham by Robert Roseen, November 30, 2018]

Perennials—At the risk of questioning a professional landscape architect, I wonder whether better alternatives could be found.

- End caps: I would guess that any perennials planted at the end caps farthest from the Hannaford building will struggle to survive. They will get short shrift for maintenance and be trampled by pedestrians seeking shortcuts (human nature).
- Stormwater area: Unless I am mistaken, specimens should be able to withstand wet feet. But on the basis of both experience and fact sheets from the Missouri Botanical Garden ("MOBot," in the same hardiness growing zone as Durham), the native columbine prefers "medium, well-drained soil in full sun to part shade. Wide range of soil tolerance as long as drainage is good....and as for the foxglove, MOBoT notes: "...A biennial or short-lived perennial."

Sheet L2.2 (titled "Planting Plan")

- Landscape Plan South: Where are trees to provide **visual and aural buffer between the parking lot and the homes on Faculty Road**? I can assure you that residents will care more about that than about green roofs, yet this plan suggests that the applicant does not care about its neighbors.
- Plant choices: "Not all plant material species and quantities shown will be used. Final plant material specifications dependent on conformance to, and approval by, local and state regulations and agencies." (Note #2)
 - It seems that too much is being crammed onto the site, in general
 - I hope that some choices will be reconsidered. For example, Stewartia ovata is native to the Southeastern United States, growing in zones 5 to 9—which means it is marginally hardy in Durham, yet 12 are proposed for the plan.
- **Irrigation**: "No permanent irrigation system is proposed." (Note #3) Why not?

Will this landscaping plan provide long-lasting functional and aesthetic benefits? Will it redress some of the woeful inadequacies of the original plan—including buffers to the neighborhood—and mitigate or correct the damage to vegetation resulting from decades of the Plaza's neglect and operational abuse?

That is what I believe many residents seek—not a site full of perennials or trees that are at risk of avoidable damage or death.

Sincerely yours,

Robin Mower