To: Durham, NH Conservation Commission From: John Parry, 5 Denbow Rd., Durham, NH Date: October 24, 2020 Subject: **Comments on Mill Plaza Application for a Conditional Use Permit**

I am writing to share several comments and concerns about plans for the re-development of Mill Plaza.

I have a BS and an MS in Forestry and Natural Resource Management and have worked for 40 years in the Forestry profession - the last 30 years have been focused on Urban and Community Forestry (managing and protecting natural resources in developed areas). In my work, I have seen improved techniques and new research over the last 30 years which shows that trees and other natural resources in populated areas play a critical role in the health of a community. The cover provided by trees and other vegetation provides a variety of environmental benefits to the people that live there. Managing storm water, reducing energy consumption in buildings, and increasing aesthetics, attracting business, providing a noise and visual buffer are a few examples (and particularly important at the Mill Plaza site). Cities and Towns across the country are recognizing these benefits and working towards setting tree canopy goals and conserving trees as their communities develop. See article at; <u>https://www.cnn.com/2019/07/20/health/iyw-cities-losing-36-million-trees-how-to-help-trnd/index.html</u>

Durham has been growing at a rapid rate, and we know this will continue. With each development trees (or sometime acres of trees) are removed, and along with them the environmental/social benefits they provide. There are few wooded sites remaining in the downtown core area - what will Durham look like in another 25 years? I would like to see the Town take a more proactive approach in protecting green space in developing areas, and I make the following general comments/suggestion on the Mill Plaza re-development;

Protection of Forested Area on the Parcel

It appears some of the wooded acreage on the north side of the parcel will be removed for the proposed development, and more would be removed to accommodate a future, proposed adjacent parking area. Though small, this small urban forest is in a prominent location that provides a valuable visual buffer between the downtown commercial and residential areas. Look at this area on an aerial photo or look on the ground from different viewpoints and you can appreciate how the loss of this woodland will have a negative effect on aesthetics. It would be useful to have the Town develop a graphic depiction of what this view change will look like, so residents are aware. The woodland is on a steep slope and the trees and other vegetation are important in reducing stormwater flow, protecting College Brook and Oyster River. A significant amount of this forested area should be conserved and protected.

Existing Trees to be Protected

There are a number of individual trees existing on the site - some have been identified to save. Trees are often damaged during construction, unless a significant part of the root system is protected. I have seen this occur on many construction sites in Durham. I feel the protection guidelines previously shared (fencing 8 foot minimum from the trunk) will not provide adequate protection for larger trees. Additional protective measures should be taken using accepted professional standards. There are ANSI Standards - Best Management Practices available that are a good resource for this.

Protection of Wetland/Shoreland Setbacks, and other Sensitive Areas

In some past construction sites in Durham, setback areas where construction was not allowed to occur, were stilled used for temporary storage of materials and soil, parking of vehicles and equipment, washout of cement trucks, etc. These "temporary uses" cause permanent soil compaction, erosion and damage to soil and vegetation. All sensitive and protected areas should be fenced off and should prohibit any construction activity, even if temporary.

Tree to be Planted

Trees will be planted to help re-vegetate the site, but there are many small ornamentals on the planting list. Larger trees provide more benefits and better aesthetics. Wherever space allows, or can be created, plant trees that will have a larger size at maturity. Select species that can tolerate the site (parking lots are hotter and dryer than surrounding areas) and add diversity to the Town's tree population (for example, too many pear trees have been planted in past development).

In some of the recent development in the downtown area, building size was maximized, and space left for greenspace and landscaping was minimized. In many places, trees were planted in spaces which they will quickly outgrow, leading to conflicts with buildings, sidewalks, utilities, signs, etc. **Adjust plans to create rooting space for trees to grow to a larger size.** Require more space be left for trees, landscape, greenspace and privacy, and create visual, vegetated buffers between properties.

Planting areas in the parking lot need to be well designed to support large, healthy trees. The trees currently planted in the Mill Plaza parking lot and on Main Street are a bad example of this; these trees grow in small spaces surrounded by compacted soil and have very poor health. **To grow healthy trees, the rooting area needs to have adequate rooting depth and width.** Ideally these areas should have a **rooting depth of 2 ½ feet or more**. The previous plan called for adding 1 foot of new soil, but the existing soil underneath may be compacted and undesirable.

The developed urban area in Durham has very little forested area remaining. Saving existing forest cover and planting new large trees in urban areas is a holistic way to provide environmental benefits and improve quality of life for the people that live and work in Durham. I hope we can begin to promote that more as development occurs.

Thank you for your consideration of the above comments.

John Parry