Alyssa MacLeod

From: Nick Johnson
Sent: Wednesday, December 31, 2014 2:06 PM
To: Alyssa MacLeod
Subject: Parks Commission Discussion - Open Space in Urban Districts
Attachments: Comp Plan - Planned Land Uses.pdf; Comp Plan - Future Land Use Map.pdf

Hello Alyssa,

Per your request, I am writing to explain the relationship between open space and the urban zoning districts. It is my understanding that the Park Commission has requested an informational session to discuss open space within the City's urban planning areas (I-94 Corridor and Village). In order to explain some key factors from the planning and land use side of the equation, I can offer the following thoughts for the Park Commission's consideration:

1) **Density**. With regards to residential development, it is important to note that urban land uses have a higher density requirement than rural land uses. For example, the density of an open space development (i.e. Fields of St. Croix) is 0.45 units per acre, whereas the minimum net density of an urban low density neighborhood is 2.5 units per acre. Please keep in mind that the City's land use categories and density requirements are informed by regional policy driven by the Metropolitan Council. The Metropolitan Council requires an average residential density in sewered areas of 3 units/acre. Therefore, in sewered areas, a certain level of density must be maintained in order to be consistent with the City's Comprehensive Plan. For the convenience of the Park Commission, I have attached the portion of the City's Comprehensive Plan that describes the density requirements of the urban residential categories. In addition, I have also attached the Future Land Use Map, identifying where these land uses are located. The main takeaway with the density requirement is that it is extremely difficult to provide a significant amount of open space while still meeting the minimum residential net density requirement per the City's Comp Plan and regional Met Council policy. To take the density discussion one step further, it is important to share the City's definition of net density:

"NET DENSITY. The number of housing units divided by the amount of net developable land. Net developable land does not include water bodies (including wetlands and lakes, but not stormwater ponds), parks and open space (only if owned by the city and available for public use), arterial right-of-way, and other land reserved for future development or not developable according to city ordinances (i.e., steep slopes or conservation areas)."

Given this definition, there is a direct relationship between the amount of net developable land included in the bottom half of the equation and the resulting density. If a significant amount of private open is provided within an urban residential development, the result is that open space land will not be used for residential lots/units and the density figure will be driven downward to the point where the development is no longer consistent with the City's Comp Plan and regional Met Council policy. The only way for parks and open space to not be counted as part of the "net developable land" is if the land is owned by the City and open to the public. In this case, the City is limited to the State Statutory maximum for parkland dedication of 10% of developed land. Therefore, the City would need to either outright purchase additional open space or develop a new policy to achieve greater open space within urban developments. However, this also begs the questions of how the public open space will be maintained. As opposed to private OP developments, where open space areas are maintained by Home Owners Associations, public open space would need to be maintained by the City.

To summarize, it is very difficult to provide significant amounts of open space while at the same time meet the City's and Met Council's density requirements for urban development, which is served by regional sanitary sewer. Urban development by definition is more dense, with less opportunities for open space. It is important to recognize that the urban planning areas of Lake Elmo (I-94 Corridor and Village) are going to take on different characteristics than the Rural Planning Area, which is low density and served by private septic and other sanitary systems.

2) **Storm Water Regulations and Requirements**. Another critical factor that has led to less usable open space within urban residential development is more stringent storm water regulations that have been adopted by local watersheds and recently at the State level. These modern storm water requirements call for much high levels of storm water infiltration on-site and more rigorous rate and volume control. These rules have resulted in more land area within residential developments consumed by storm water ponds and facilities. Thus, the private open space that does exist within these subdivisions is now mostly consumed by storm water ponds, making the open space areas less usable. As mentioned in the previous discussion on density, areas for

storm water ponds are included in the net developable area, and providing additional open space over and above what is already provided often results in the project not dense enough to meet the City's Comp Plan. Overall, the relationship between the updated storm water rules and the amount of usable open space within urban developments should not be overlooked.

3) **Economics of Development – Cost of Infrastructure.** One final thing for consideration that relates to the amount of open space within urban developments is the cost of the infrastructure needed to serve higher density development. As noted previously, the urban planning areas in Lake Elmo are to be served by regional sanitary sewer. As opposed to individual septic systems, or even private community wastewater systems that exist in some OP developments, the cost of urban sanitary sewer is much higher than that of private systems. In addition, urban streets with curb and gutter, storm sewer, and other urban infrastructure make urban development much more costly than rural development. As the costs are substantially higher, there must be a minimum threshold of density or number of units on a site for the project to cashflow, both for the developer (who builds the infrastructure) and the City (who maintains the infrastructure). Given this factor, it becomes more difficult to provide significant swaths of open space within urban developments because every area that is utilized for open space (and not required storm water ponds) is buildable area that is no longer helping to pay for the construction and maintenance of the urban infrastructure. From the developers that we have worked with so far, they have noted that the break-even point for urban infrastructure is 2.0 units per acre, with 2.5 units per acre being the minimum density for projects to move forward. In addition, if there are larger areas of open space within urban developments, the utilities and other infrastructure must be run longer distances while serving no residences along the way. These are some of the economic factors that drive the design of urban (or suburban) residential subdivisions. While it is easy to question the motives of some developers to simply make a profit, it is also not helpful to ignore the economic realities of development.

These are three factors that play a direct role in determining the amount of open space provided in urban developments. While not a complete list, these three factors should help illustrate the relationship between the amount of open space and developed area in the urban context.

Let me know if anyone has any specific questions. I would be happy to provide additional assistance.

Take care,

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