Memo

To: President Lavey & Council Members
Re: ZBA 2024-001 –Lakeland Knoll Open Space Development
Progressive Properties, Inc. Request to Allow Street Trees within ROW

Prior to January 2021, the language relating to street trees being proposed in a new residential development read as follows:

> *Street Tress. Trees shall be provided in the margins of both sides of all streets, public or private, and shall be placed at the minimum rate of one per single family residential lot or at a maximum distance apart of 50 feet. Trees to be installed in the street margins shall be of the large deciduous type or as approved by the Planning Commission. All street trees shall be uniformly spaced to create a tree lined street. Notes should be included on all plans indicating that trees shall not be planted within six (6) feet of water or sewer lines and shall not interfere with any other overhead or underground utility lines. Consideration should be given to the mature size of the three when evaluating placement and species selection.*

Language Adopted 1/11/2021 reads as follows:

> Street trees. Trees shall be provided along both sides of all streets, public or private, and shall be uniformly spaced to create a tree lined street at the minimum rate of one tree per lot or at a maximum distance of 50 feet on center within a ten-foot planting strip immediately adjacent to the road right-of-way. Street trees shall not interfere with any overhead or underground utility lines. Consideration should be given to the mature size and height of the tree when evaluating placement and species selection.

The new language took into account the problems being seen throughout other subdivisions relating to the damage to sidewalks, canopying of the trees over the roads and street deterioration. The original language *did* take into account the proximity of the trees to the water and sewer lines and required that no tree shall be planted within six feet.

Impact of trees within the right-of-way:

Roads:

- An excerpt from "Effects of Tree Canopy on Rural Highway Pavement Condition, Safety, and Maintenance" prepared by the Ohio Research Institute for Transportation and the Environment reads:

  > *"…anecdotal reports from road managers suggest that roadside trees negatively impact the pavement surface directly below. Tree canopy is thought to cause increases in moisture and temperature variation; and subsequently affecting the pavement's structural performance. The detrimental impacts may include; accelerated moisture damage, poor density attainment, differential rutting, and raveling. All these aspects are likely to accelerate pavement damage and reduce the pavement longevity with an undesirable increase in the maintenance and rehabilitation costs. Similarly, tree canopy alongside the roadway can affect the condition of the pavement surface raising safety concerns including; reduced skid resistance due to fallen leaves, limited direct sunlight promotes formation of black ice and fog, and branches and/or fruits falling on passing vehicles or blocking traffic lanes."*

  It should be noted that there are positive and negative findings in the report and the above summarizes the negative aspects of roadside trees.

Sidewalks:

- Tree roots are detrimental to sidewalks causing breaking, heaving and moving. In various subdivisions within the village, we can see first-hand the effects tree roots have on the sidewalks costing individual homeowners and taxpayers at large.

Utilities:

- The Lakeland Knoll request states that the mandated requirements of private utilities conflicts with ordinance location requirements. These easements prohibit any landscape in the first 12 feet of each lot. We recommend private utilities be moved to the rear yards which would accommodate these requirements and meet village ordinance.

The applicant has provided a list of proposed trees to be used that have deep rooting structure to reduce long-term maintenance or disruption to sidewalks and have columnar growth habits less likely to canopy over the roads. However, if the variance is granted as proposed, it would allow these trees to be planted within six (6) feet of village utilities. Tree roots can penetrate into storm and sanitary sewer pipes over time causing blockages and can accelerate damage to public utilities. Providing the greatest buffer possible between proposed trees and public infrastructure will aid in extending the life of our public utilities, extend the life of our sidewalks and roads and relieve the burden of village staff trimming trees that may affect road safety.