

Board of Public Works
Meeting of December 14, 2022
Agenda #6, Legistar 74926

Transportation Commission
Meeting of December 14, 2022
Agenda #9, Legistar 74926

The Complete Green Streets Guide ("Guide") provides little guidance regarding retrofit trees. Yet the oldest areas of the City are some of the areas most impacted by heat island effects and in need of continuing canopy coverage. These areas often have terraces under 6' and thus, per the table in the Guide, would be limited to narrow replacement trees.

Retrofit Table

The retrofit table on page 27 of the Guide requires clarification.

1. What is the meaning of "overhead utility conflicts?" The table for high priority canopy areas define overhead utility conflicts as "higher voltage electric overhead line(s)" but there is not a definition in the retrofit table.
2. What are "higher voltage electric overhead line(s)?" Are they only the high voltage transmission lines? Or are distribution lines also included (since those have a higher voltage than telecommunication lines)? Forestry told the Plan Commission that the primary distribution system would prevent planting canopy trees. That would be a major departure from current practice, where it is only the high voltage power lines that prevent planting of canopy trees.
3. What types of streets can make use of suspended pavement in retrofit areas? The table for high priority canopy areas defines where suspended pavement can be used, the retrofit table does not.

Retrofit trees on 4-6 foot terraces

The table only allows for narrow trees on 4-6 foot terraces. Forestry told Plan Commission that the City would not plant a large canopy tree in a 4-6 foot terrace because there would not be adequate soil volume to support that tree, so the tree would not thrive, and because conflicts could be created with pedestrians, the sidewalk, parked cars, and perhaps traffic traveling down the road.

The issue of soil volume and thriving can be addressed through the use of suspended pavement, such as silva cells. Conflicts could be avoided through proper pruning. There are many instances in the Marquette neighborhood of large, mature, trees on 5' terraces, including Williamson Street (which is becoming a community main street) and Oakridge Avenue.



Google Maps, October 2021, Williamson Street



Google Maps, October 2016, Oakridge Avenue

Undergrounding

The report prepared Stand Associates, *Complete Green Streets: Enhanced Distributed Green Infrastructure and Tree Canopy Guidance* states: "This report does not provide any recommendations regarding undergrounding of overhead utilities as this is already covered in

the City's adopted Undergrounding Policy and in the Urban Forestry Task Force Report." Nor does the Guide address undergrounding.

The Urban Forestry Task Force Report, under Street Design Recommendations (page 22), has two recommendations related to undergrounding:

4. The Undergrounding of Overhead Utility Lines policy criteria should be amended to account for the impact of overhead utility lines on city terrace trees. The criteria should include but may not be limited to: ability to underground, terrace width, availability of space for private trees adjacent to the right-of way, ability to improve canopy coverage, availability of cost-share funding source (e.g., TIF), potential for place-making, etc.
5. Appropriate annual funds for full or partial underground projects as a separate budget line item.

Since the Guide is about street design, it would be appropriate to include undergrounding and establish criteria.

Even partial undergrounding, just of the high voltage power lines, would allow for planting of canopy trees. In 2018, the Finance Committee added a budget amendment to do partial undergrounding of the high voltage wires on part of Jenifer Street. (The project was to be funded with TIF money, but, unfortunately, no amendment was put forth to apply the ½ mile rule.) That amendment said:

"The undergrounding of utility wires will enable larger canopy trees to be planted on the street medians. The model proposed by this amendment is a pilot for partial undergrounding. The goal of the pilot is to remove high voltage power lines from electrical poles and redirecting them underground with a pneumatic bore, while retaining the secondary power lines and cable and telephone above ground. Having high voltage wires underground, canopy trees can be planted safely under the lines without the need for pruning. The goal of piloting this approach is to determine if this is a cost effective solution for maintaining the City's tree canopy without pursuing full undergrounding."

I urge you to modify the Guide to address undergrounding, or partial undergrounding. If undergrounding is not added to the Guide, it will not even be considered as streets are redesigned.

Respectfully Submitted,
Linda Lehnertz