

Canopy vs Trees

Precedent

Accuracy (Tree)

vs

Ease of measurement (Canopy)

Preservation requirements (Tree)

Inspection (Tree)



Tree by tree preservation



Canopy preservation

1

Is the DC Tree Bill an effective tree preservation tool?

Prohibition on tree removal?

None - There is no basis to reject a tree removal permit application if the applicant pays the required fees.

Cost to remove a tree?

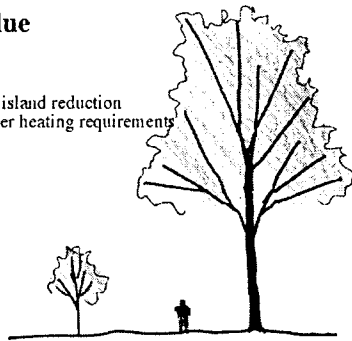
The required fees to remove a large tree is only about \$3,000 per tree. Hardly a significant factor for home construction that regularly top \$500,000.00 in Forest Hills.

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Canopy Value

Height

Shade - Heat island reduction
Wind - Winter heating requirements

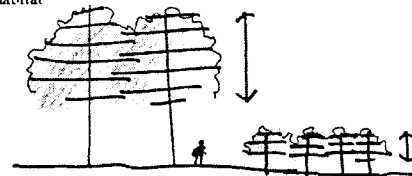


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Canopy Value

Volume

Carbon sequestration
Filtration
Water retention
Habitat



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Canopy Value

Layers

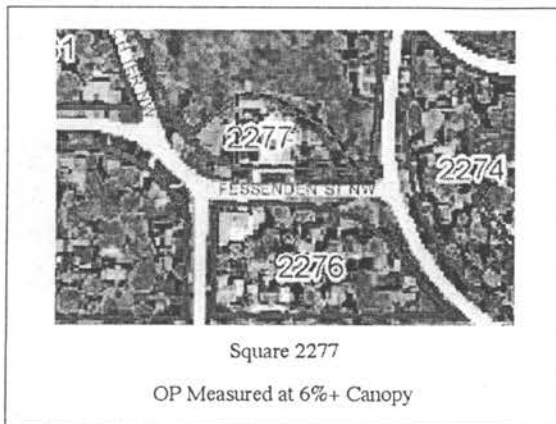
Overstory and understory



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Accuracy of canopy coverage as a legal standard.

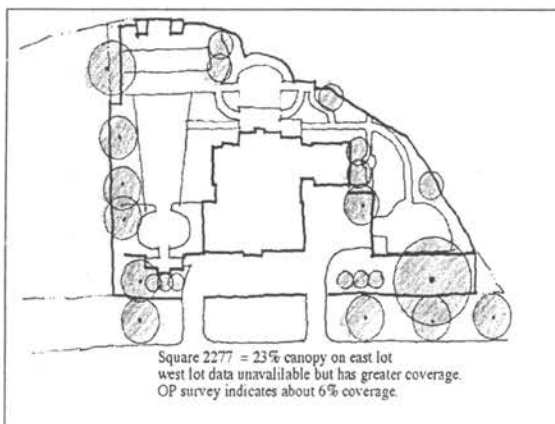
Measuring canopy is highly subjective. Using aerial photography, great variations in interpretations should be anticipated. Even field measurements are subjective and difficult to make. At best that can only be considered as rough estimations.



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Accuracy of estimating future canopy coverage as a legal standard.

While estimating existing canopy is highly subjective. Estimating growth rates of trees is even more subjective. Factors include, species, soil type and compaction, weather, maintenance, tree health, planting methods, competition, and solar access. Wide variation in professional estimates should be anticipated. Existing reliable data sources to factor each variable are limited.

10

Use of DC Tree list of trees.

The current list of acceptable trees as published by DC Tree, is designed for street and public planting locations. The list of trees for natural and garden location should be more inclusive.

11

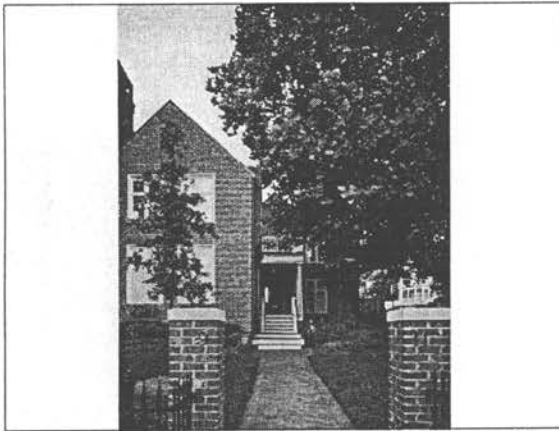
Tree Preservation as an Impediment to Development

Almost any healthy tree can be saved and accommodate almost any residential construction program provided that there is the

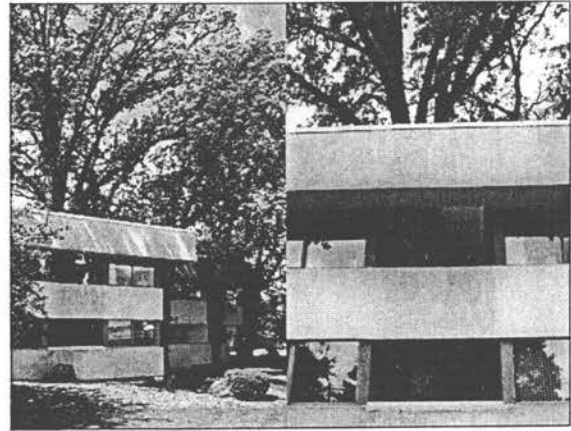
desire and will
and skills

to respect the biology of the tree.
Space is rarely the issue.

12



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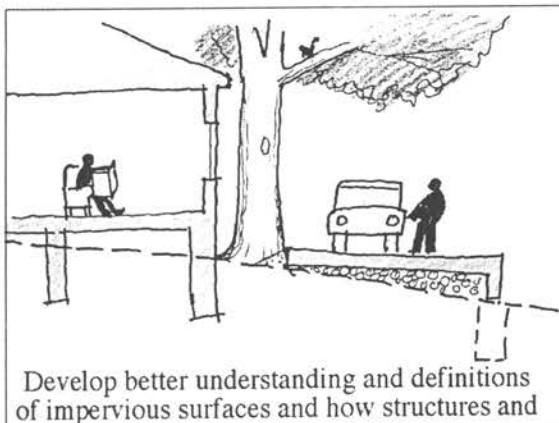
Any changes to the existing tree and slope overlay must provide for...

15

Equivalent protection of pervious surfaces.

Changes to the tree and slope overlay should provide equivalent protection of pervious surfaces.

16



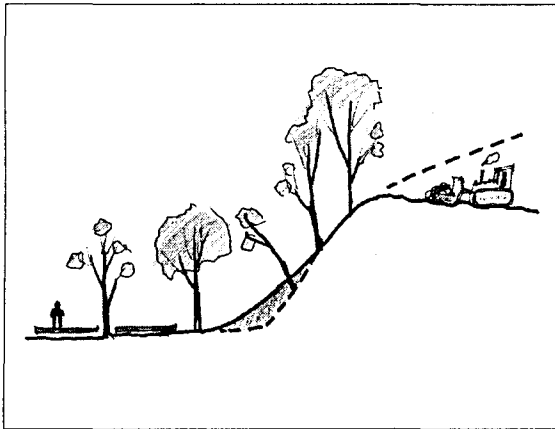
Develop better understanding and definitions of impervious surfaces and how structures and

17

Equivalent Slope Protection

Changes to the tree and slope overlay should provide equivalent protection to existing slopes.

18

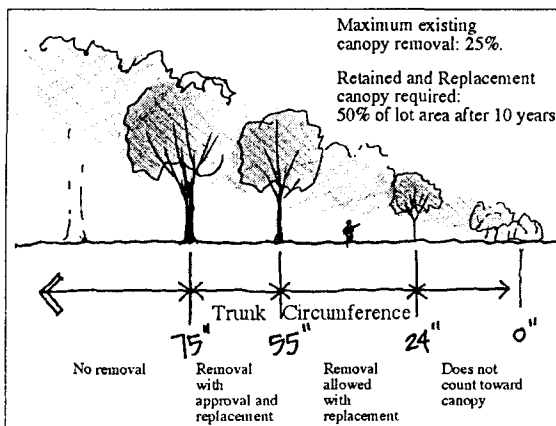


19

Equivalent Tree Protection

Changes to the tree and slope overlay should provide equivalent protection to existing trees.

20



21

Proposed modifications to the proposal.

22

Canopy requirements:

Increase canopy requirements. Set a 50% minimum standard as oppose to the 25%. Even 50% may result in a net reduction.

Require large trees. Replacement trees shall be species that are capable of attaining a similar size at maturity as the tree species being removed.

Define what is included as canopy. Set 24" circumference as the smallest tree that can be included in a canopy calculation.

23

Tree Preservation

Require some level of tree preservation. No permit shall be issued for a tree designated as a "Special Tree" under the "Tree Bill - DC Law 14-309" without a Special Exception review of the Board of Zoning Adjustment. Permits may be granted in the case that the applicant has demonstrated that alternative project development plans to preserve the tree are not feasible."

24

Tree Preservation

Prohibit the removal of very large healthy trees. Trees over 75" in circumference must be protected.

25

Develop measurement standards

Establish a protocol for the measurement of canopy and guidelines for the estimation of tree growth rates to further define the requirements of the overlay.

Establish guidelines as to what is acceptable as pervious surfaces that reflect current tree preservation technology.

26