



CAFES Ottawa

Community Associations for
Environmental Sustainability

Agenda Item 4.1

Trees & Zoning

**Joint Planning & Housing and Agriculture and Rural
Affairs Committee**

Monday, April 29th, 2024

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About CAFES

- Community Associations for Environmental Sustainability (CAFES) was founded in 2010 and is a network of local and neighbourhood environmental leaders and community builders
- Our members include representatives from urban, sub-urban and rural communities
- The network includes over 200 individual and organizational representatives from across 20 wards and over 50 neighbourhoods



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Overview of Presentation

1. Context - tree loss and necessity for urban trees
2. Background - CAFES working group and zoning paper
3. Equity approach to tree canopy and zoning
4. Integration of space for trees and stormwater management
5. Tree Metrics-based recommendations for zoning



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1. Context

- Trees are being lost due to:
 - ◆ Impacts of climate change - wind storms, ice storms, wildfires
 - ◆ Redevelopment, intensification
 - ◆ Invasive species, diseases
 - ◆ Being planted in poor conditions - inadequate soil, not enough space, damage from construction
 - ◆ We are losing our mature trees and new trees are failing to survive to maturity
- **New Zoning By-law provides high-impact opportunity to ensure space is created for trees to thrive**

1. Context

- A healthy, flourishing, mature tree canopy is **essential** for a healthy city
- Tree benefits:
 - ◆ Enhance walkability of city streets
 - ◆ Cooling effects, reducing heat islands
 - ◆ Carbon absorption from atmosphere
 - ◆ Cleans air, contributes to human health
 - ◆ Stormwater management
 - ◆ Food, shelter for wildlife
 - ◆ Support biodiversity
 - ◆ Traffic calming effects
 - ◆ Contributes to positive mental health

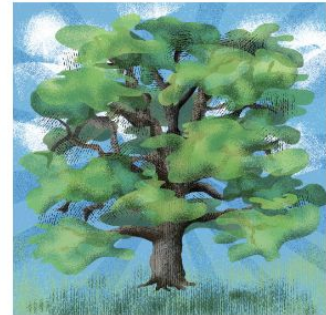
2. Background: CAFES Working Group and Zoning Paper

- A CAFES team of experienced volunteers were engaged in the development the CAFES submission, *Zoning By-law Position Paper: How Zoning can Regulate Trees*
- Intent: to develop a metrics-based position on how zoning by-laws can regulate the space for trees



Zoning By-law Position Paper:

How Zoning can Regulate Trees



**By: Community Associations for Environmental
Sustainability (CAFES Ottawa)**

April 2024

3. Equity approach to zoning and urban forestry

- 40% canopy cover target should be applied to each neighbourhood
- Report on Draft Zoning By-law - CAFES supports the provisions to “even out” urban forest canopy and heat islands in neighbourhoods with fewer trees
- Equity-deserving neighbourhoods like Vanier, Mechanicsville, Centretown, need **zoning requirements** to create protected spaces for trees in face of increased intensification
- Neighbourhoods *do* need to be treated differently depending on specific needs

4. Integration of Space for Trees and Stormwater Management

Section 201: On-Site Stormwater Management

- Draft zoning report - no mention of trees in stormwater section
- Other cities: Toronto, Montreal, Vancouver

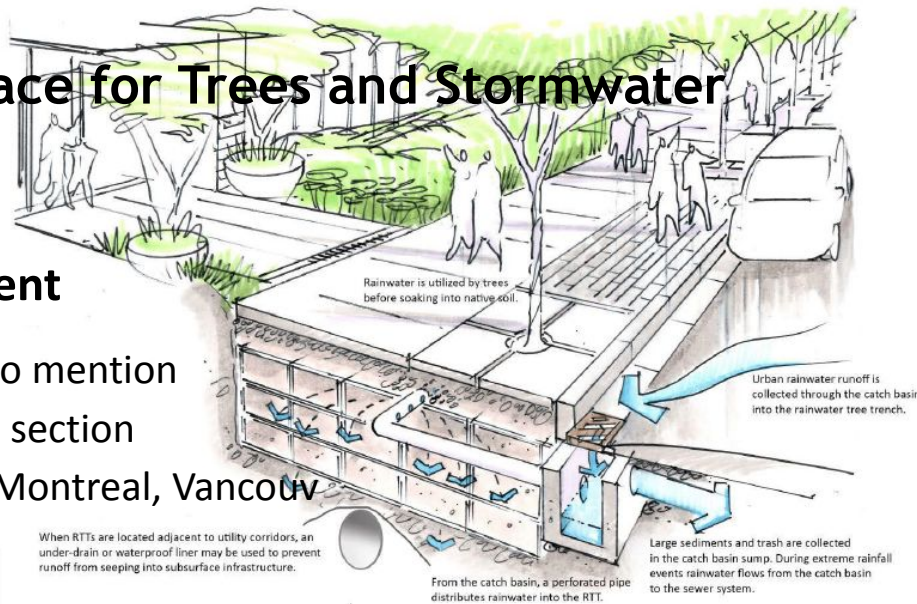
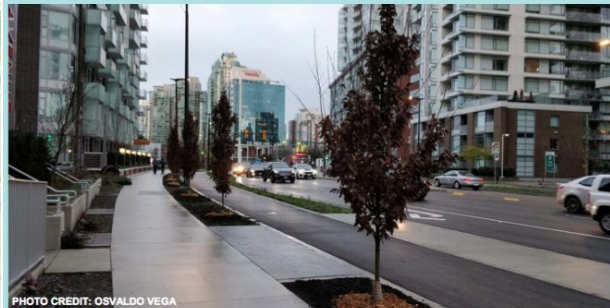


FIGURE 18: RAINWATER TREE TRENCH

Case study:

Rainwater tree trenches at Quebec Street and 1st Avenue, Vancouver



5. Recommendations

Section 201: On-Site Stormwater Management

- Integration between urban forestry, on-site stormwater and zoning provisions - spatial approach
- Green Rainwater Infrastructure - opportunity for cost-effective stormwater management & canopy regeneration
- Link the permeable space requirements for trees to permeability and grading for stormwater attenuation
- Provide technical guidance to builders on how infiltration and catchment basins can be installed underneath trees/greenspace

4. Recommendations

Required Soil Volumes and Area Provisioning

- To ensure trees are planted in sufficient space to thrive and reach maturity, CAFES recommends a city-wide requirement for the following minimum soil volumes and area requirements:

Size Tree	Height at Maturity	Soil Volume	Area (assume 1m planting depth)
Small tree	5-9 meters	10 m ³	3.2x3.2 m
Medium tree	10-15 meters	28 m ³	5.3x5.3 m
Large tree	15 + meters	50 m ³	7 x 7 m



4. Recommendations

Front Yard Setbacks

- Section 214 - Alternative Setbacks - good to see focus on tree retention
- Setbacks are essential to tree canopy
- Wherever possible: **6 m front yard setback** - allows medium canopy tree
- Inner urban / downtown transects with little to no existing setbacks: 3 m with no averaging. Where there is contiguous softscape ROW, there can be space for med or large canopy tree
- Firm setback requirements are needed in equity neighbourhoods



4. Recommendations

Front Yard Setbacks

- These images (Prince Albert Street in Overbrook) of completely paved front yards demonstrate the need for Zoning to regulate the provision of trees and soft landscaping





4. Recommendations

Minimum soft-landscaped space in rear lots

- Where there is an increase in impermeable surfaces, minimum contiguous 25 square meters of rear yards should be soft-landscaped space (with linked stormwater provisions)

4. Recommendations

Part 6 - Parking Provisions

- CAFES supports city's position to eliminate car parking minimums

Section 210 - Provisions for underground structures

-CAFES supports this to enable trees

Section 606: Access for One to Three Parking Spaces

- We support: Single lane shared driveways, 3 meter max driveway widths

Section 607: Parking Lot Provisions

- Recommend a standard for 1 soft landscaped space (5.3 x 5.3 meters = medium sized tree) per every 5 parking spaces



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Thank you for your
consideration

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