




Article X Landscape Regulations



Zone Landscaping

Uses other than Single Family or Duplex



June 4, 2015

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Division 51A-10.120

Current Code

MANDATORY:

- Single family and Duplex use
- **Uses other than single family and duplex:**
 - Perimeter Landscape Buffer Strip
 - Screening of off street loading spaces
 - Site trees
 - Street trees
 - Parking lot trees
 - Minimum sizes
 - Buffer Plant material

DESIGN STANDARDS: 9 options, must comply with at least 2

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Current Code vs. Proposed

Current Code-Landscaping

- Street Trees
- Street Buffer (Design Standard - optional)
- Perimeter Landscape Buffer
- Buffer Plant Material
- Parking Lot Trees
- Design Standards
- **9 Design Standard Options** (many sites can comply with only a few, require a minimum of 2 on lot).

Proposed Zone Landscaping

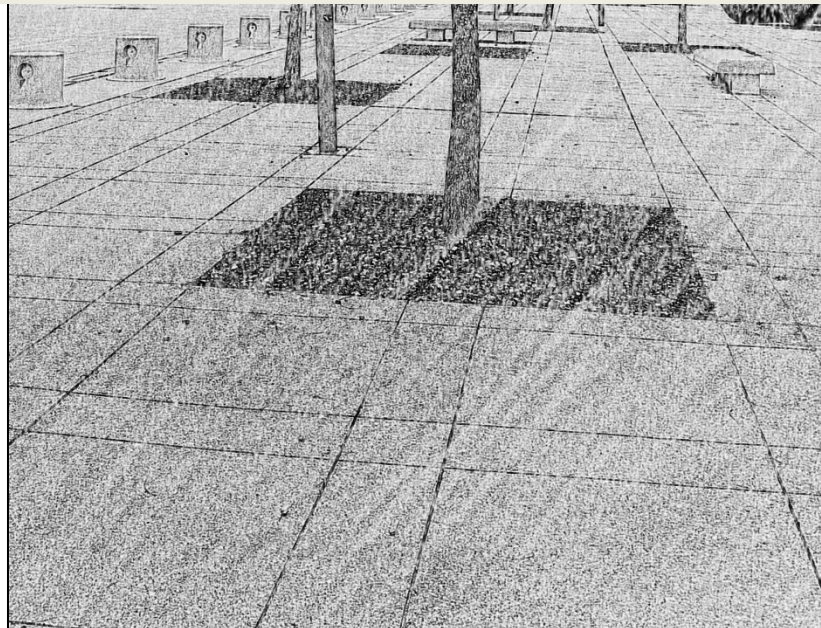
- Street Buffer Zone (street trees and street buffer with average buffer width)
- Residential Buffer Zone
- Interior Zone
- **Comprehensive Design Options** (rated by points - value and emphasis for design or conservation).



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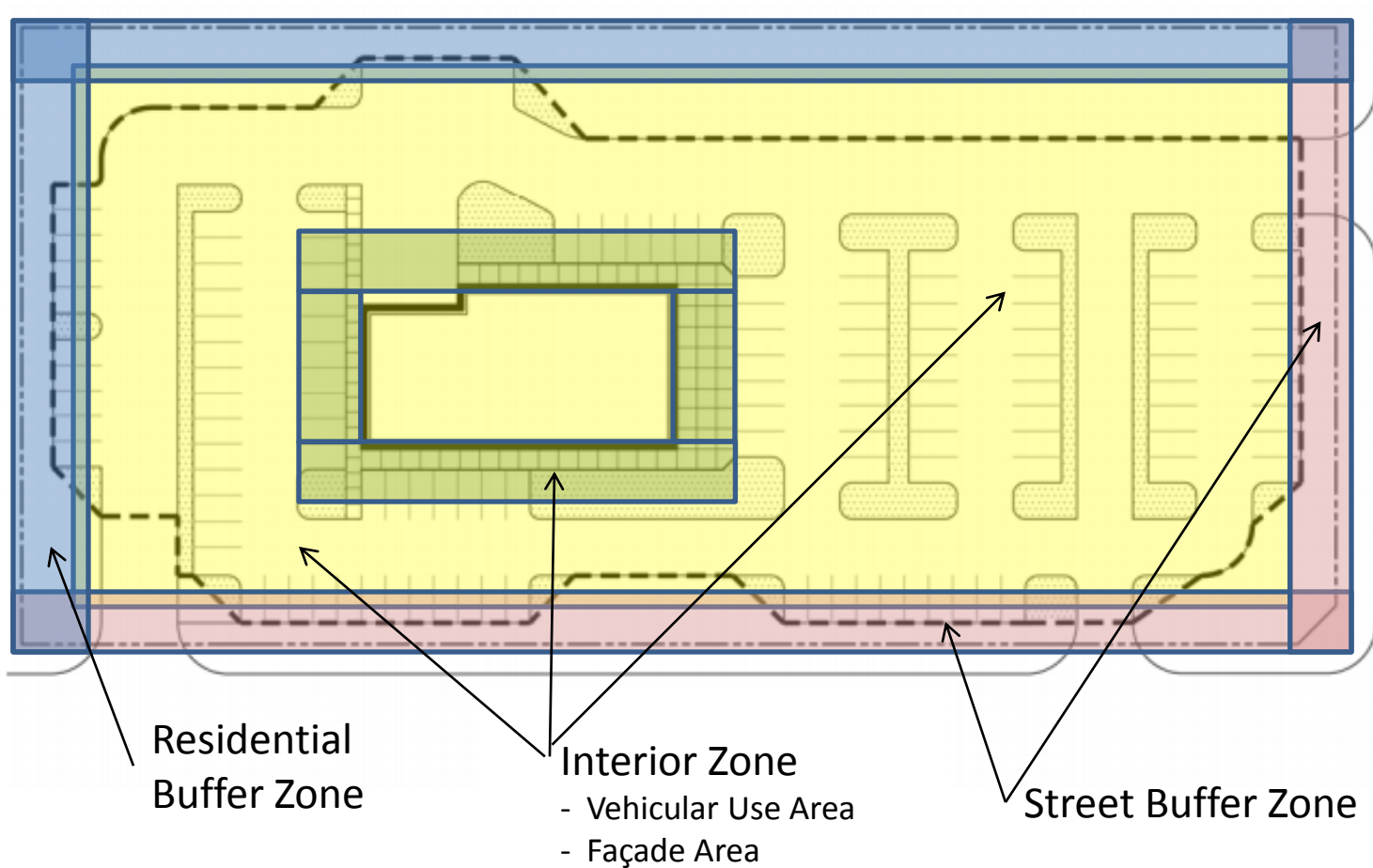


Interior Zone



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Zone Landscaping



* There may be some overlap of zones

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Interior Zone

Proposed

Interior Zone:

- The Building site less the Street Buffer Zone and Residential Buffer Zone (if Residential Buffer Zone is applicable)
- Generally comprised of 2 subareas:
 - Vehicular Use Area
 - Façade area

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Interior Zone

Proposed

Vehicular Use Area:

- Minimum of 10% of the gross vehicular use area shall be landscape area. *(Defines how much area overall to be landscaped)*
- Minimum of 1 Tree planted for each four hundred square feet or fraction thereof of required landscape area. *(Defines how many trees required overall)*
- Landscape Island shall be located at the terminus of parking rows with no more than 10 parking spaces between islands *(Directs location of Landscape areas so as to best relieve the expanse of paving)*
- Each Landscape Island shall contain minimum 1 Tree *(Defines minimum location for trees to disperse the tree canopy across the expanse of paving)*
- Landscape Islands shall have a minimum 160 sq. ft. soil surface area, 8' minimum width *(Defines size of island for minimum growing conditions for tree)*

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Interior Zone

Proposed

Vehicular Use Area (cont):

- As an alternative to providing a Landscape Island every 10 spaces, a Landscape Median may be provided running the length of the parking row
- Landscape Median:
 - Minimum 8' width of permeable surface
 - 1 Tree per 30' (measured between terminus Landscape Islands)
- This does not waive the requirement for terminus Landscape Islands

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Interior Zone

Proposed

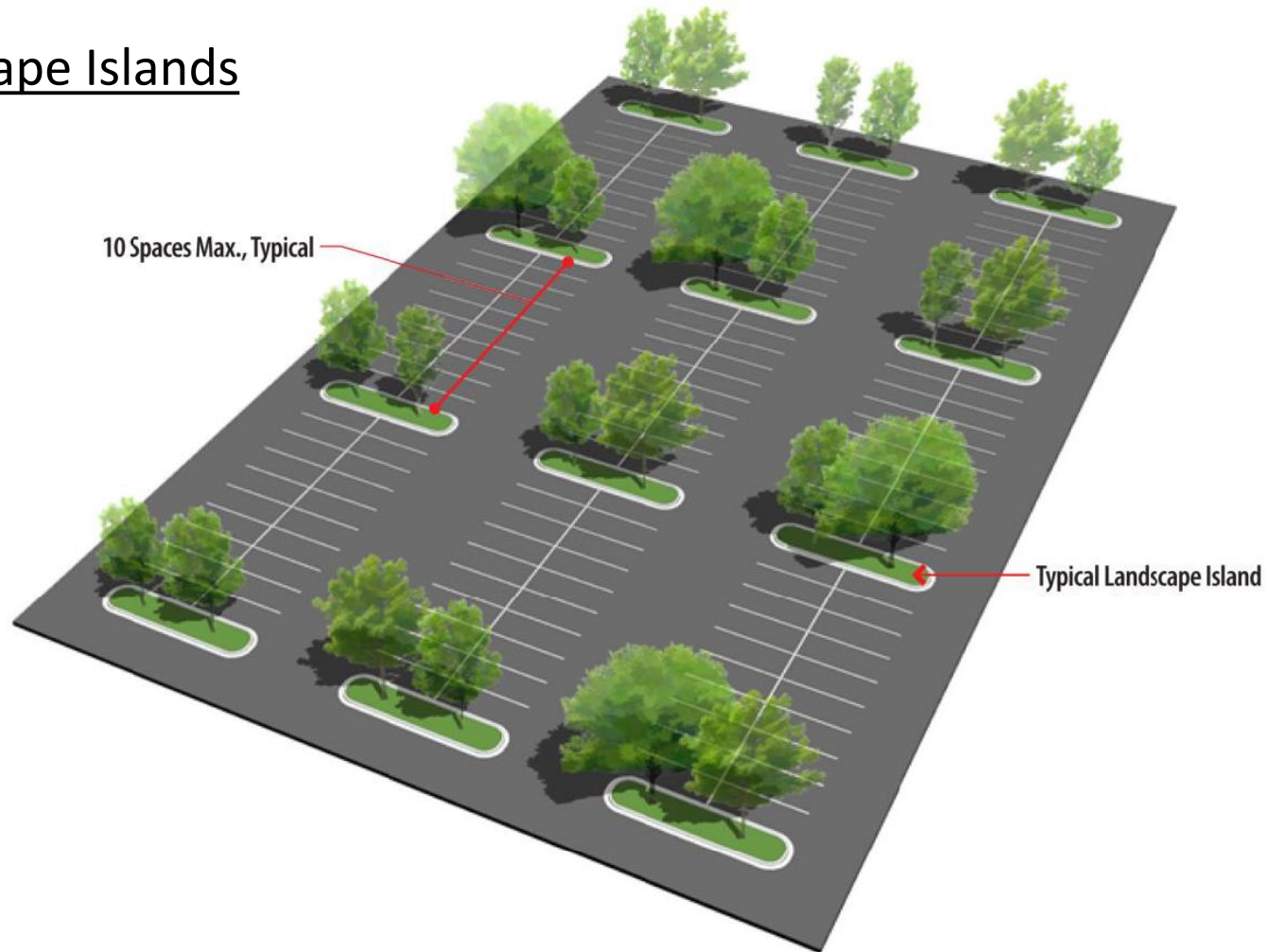
Façade Area:

- If there is an active storefront, office or mixed use building front, must choose from a certain number of façade options.

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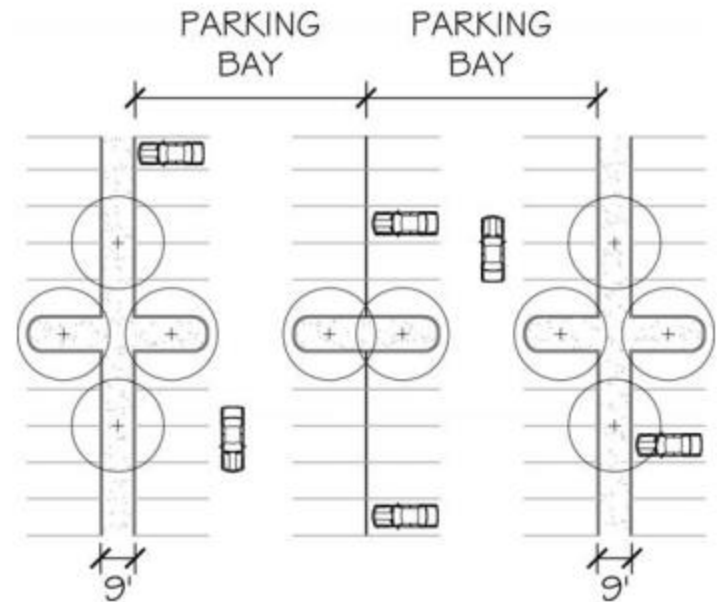
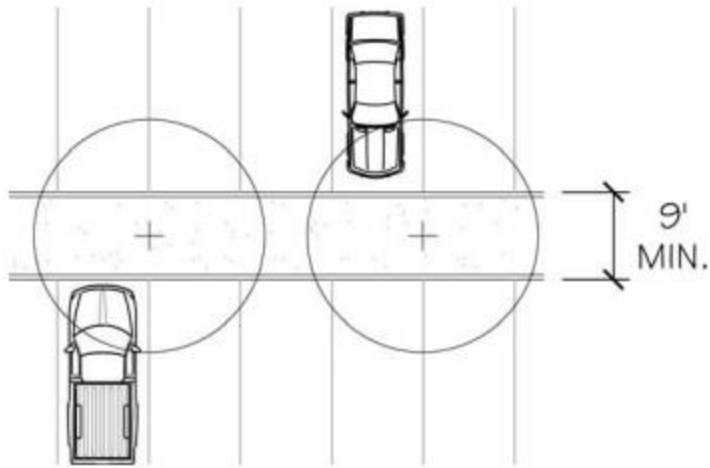
Interior Zone – Vehicular Use Area

Landscape Islands



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Interior Zone – Vehicular Use Area



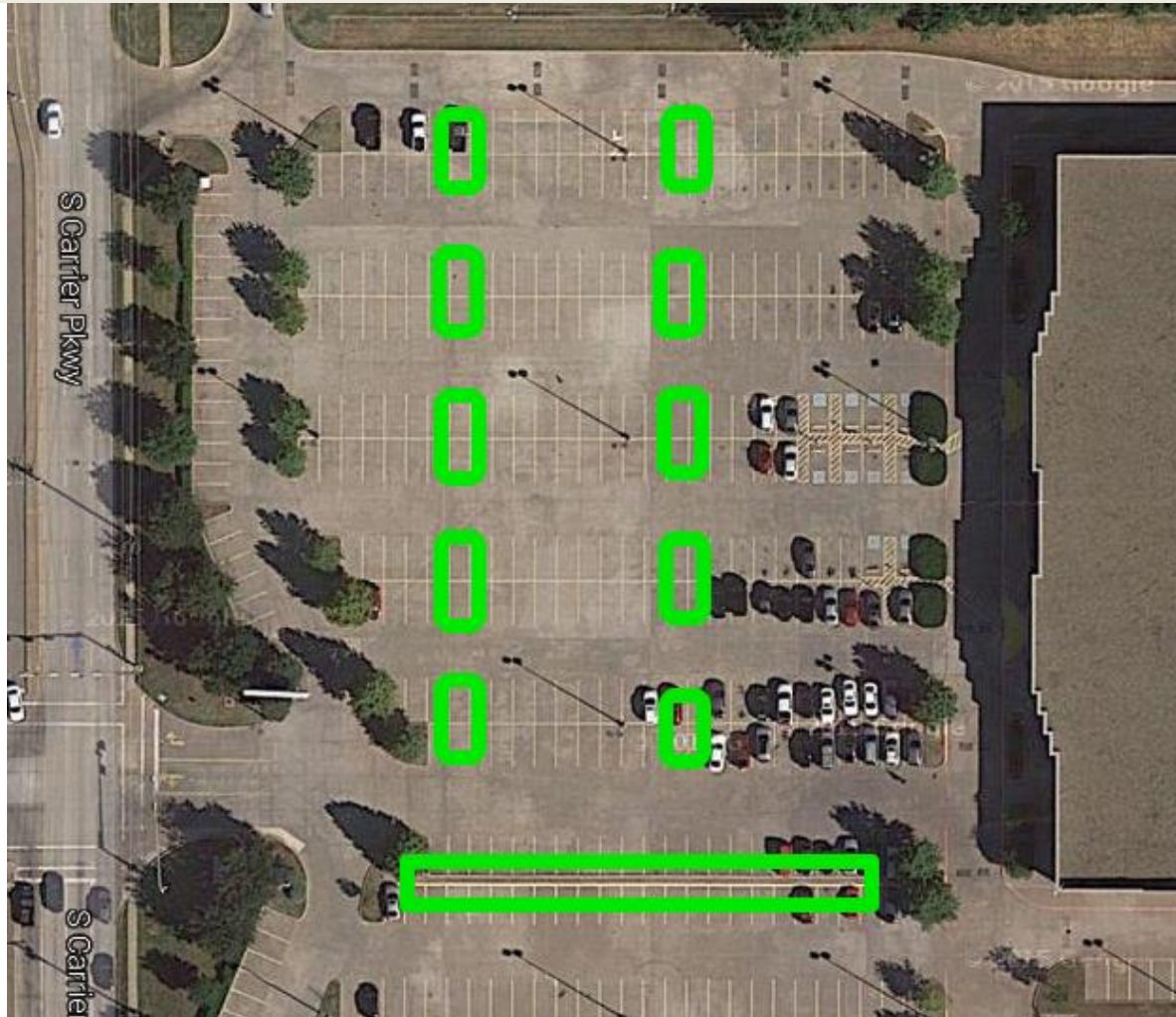
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Interior Zone



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Interior Zone



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Interior Zone



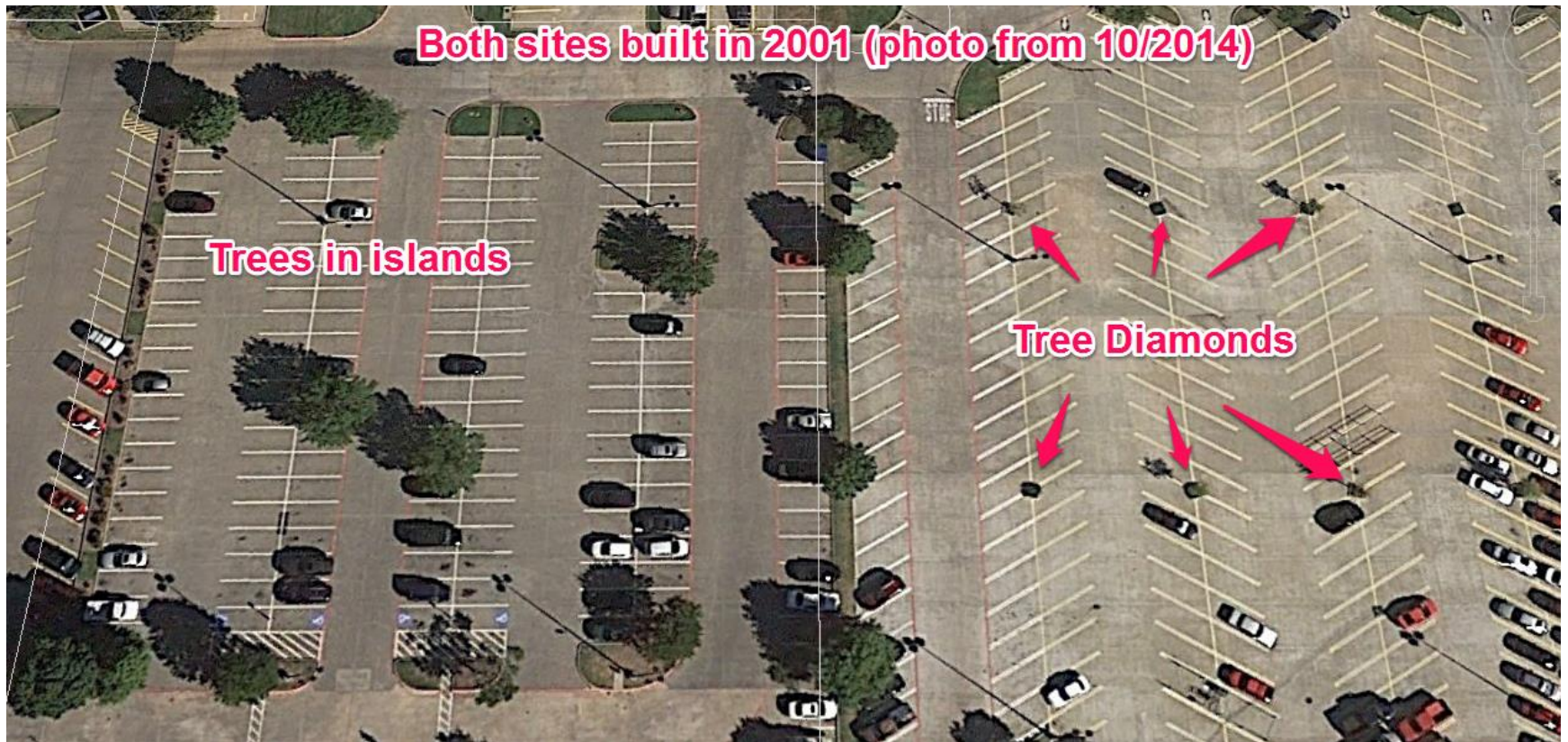
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Interior Zone



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Interior Zone

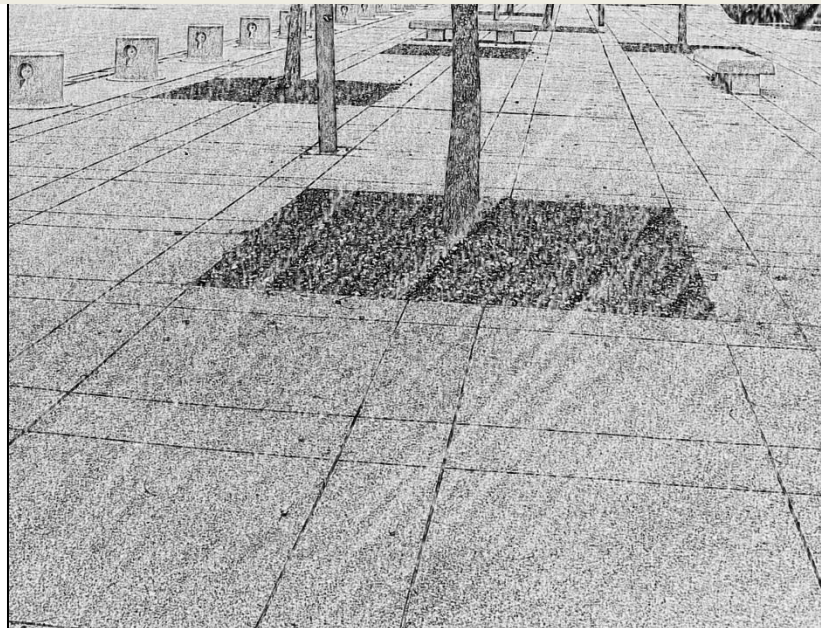




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Design Options



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Design Options

Current Code

Design Standards:

- An applicant must comply with at least two of the following: (*whether the building site is large or small*)
 - Enhanced perimeter buffers
 - Screening of off-street parking
 - Enhanced vehicular pavement
 - Permeable vehicular pavement
 - Pedestrian facilities
 - Foundation planting strip
 - Understory preservation
 - Enhanced pedestrian walkways

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Design Options

Proposed

- Design Standards to be revised and create a comprehensive list of Design Options to enhance the overall landscape and site environment
- Points assigned to each Design Option based on scale of option, impact on overall site, and conservation
- Certain number of points must be achieved above the Zone Landscape requirements

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Design Options

Proposed

- Design Standards revised and added with the goal of creating standards that advance the stated purposes of Article X
- Existing
 - Enhanced perimeter buffers
 - Screening of off-street parking
 - Enhanced vehicular pavement
 - Permeable vehicular pavement
 - Pedestrian facilities
 - Foundation planting strip
 - Understory preservation
 - Enhanced pedestrian walkways

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Design Options

Proposed

Design Options – additional possibilities

- Innovative stormwater management – Design parking lots to convey impervious surface runoff to required tree medians and/or tree islands
- Façade landscape area
- Enhance required minimum buffer widths
- Enhance required buffer planting
- Additional Landscape Islands in parking lots
- Additional or width enhanced Landscape Medians in parking lots
- Bioswales
- Rain Gardens

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Design Options

Proposed

Design Options – additional possibilities

- Water-wise planting
- Low Impact Development (LID) – minimal site disturbance for instance when adjacent to creeks, has significant topography, or significant natural site features
- Tree Preservation
- Engineered solutions for soil volume attainment, including suspended pavements, structural soils, tree trenches.
- Building facade tree and landscape improvements.
- Some options may be associated with tree mitigation options
(to be determined)

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Design Options

Proposed

- Site size may determine number of points required: *(still under discussion)*

< 3 acres	# points
3 to 10 acres	# points
> 10 acres	# points

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Design Options

Enhance buffer dimensions and plant groups



40 feet continuous wide buffer (greater than 15 feet wide minimum average buffer required).

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Design Options



Bioswales, rain gardens, water-wise plantings



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Design Options



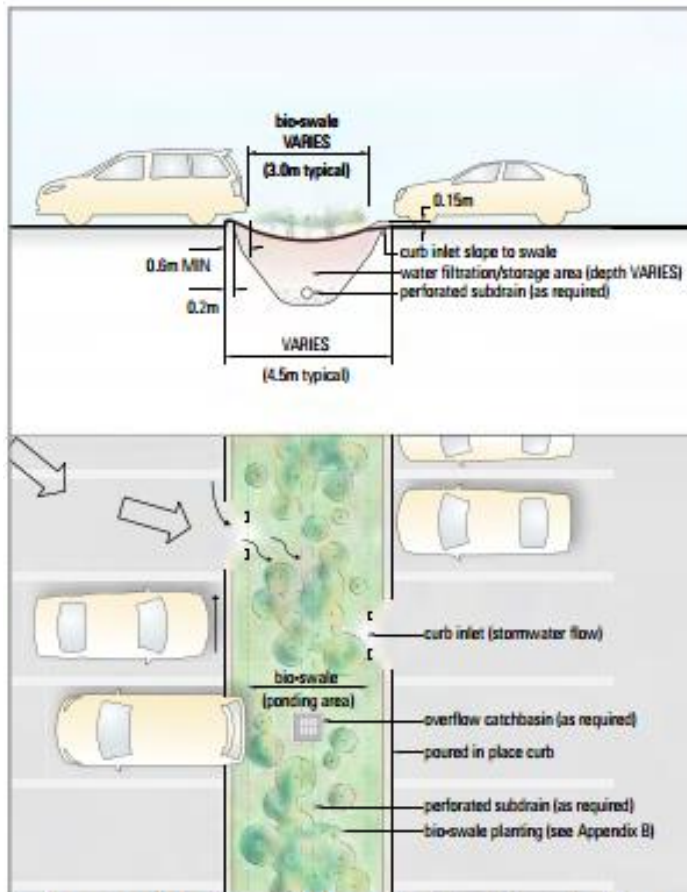
Bioswales, rain gardens, water-wise plantings



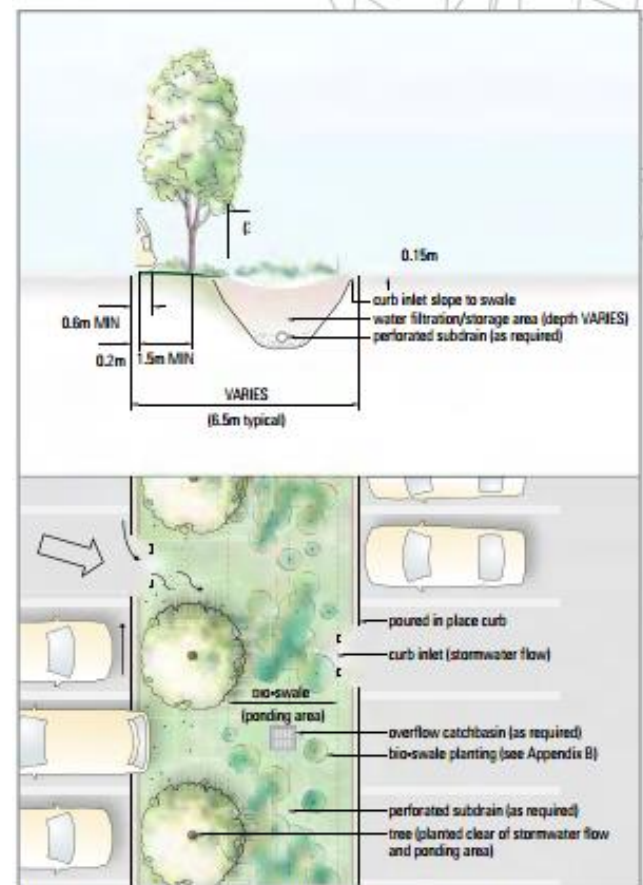
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Design Options

Bioretention with swales



Design concept for bio-retention swale without tree planting

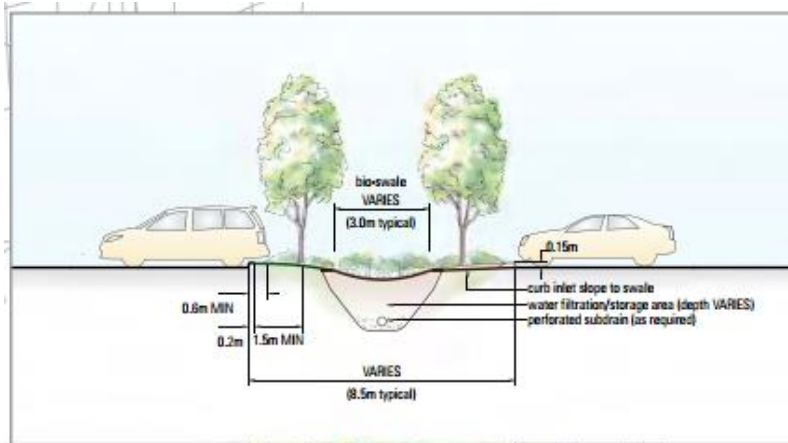


Design concept for bio-retention swale with tree planting

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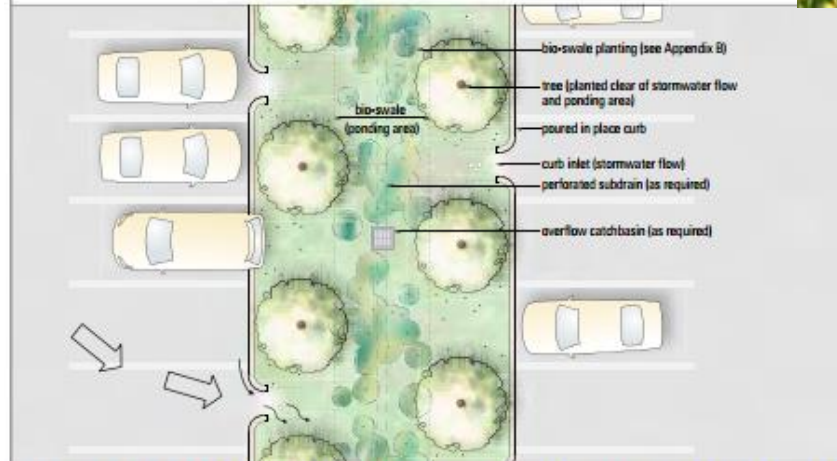
Design Options

Bioretention with swales



Pedestrian Pathways

Expansion of soil surface area for tree root expansion.



Design concept for bio-retention swale with double row of trees (See 4.5 Stormwater Management)



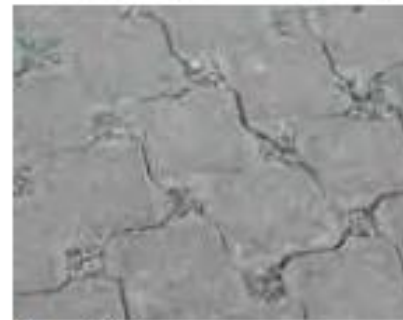
Examples: Toronto Design Guidelines

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Design Options

Facade and permeable pavement improvements

Examples of permeable paving:



Open joint pavers



Porous asphalt



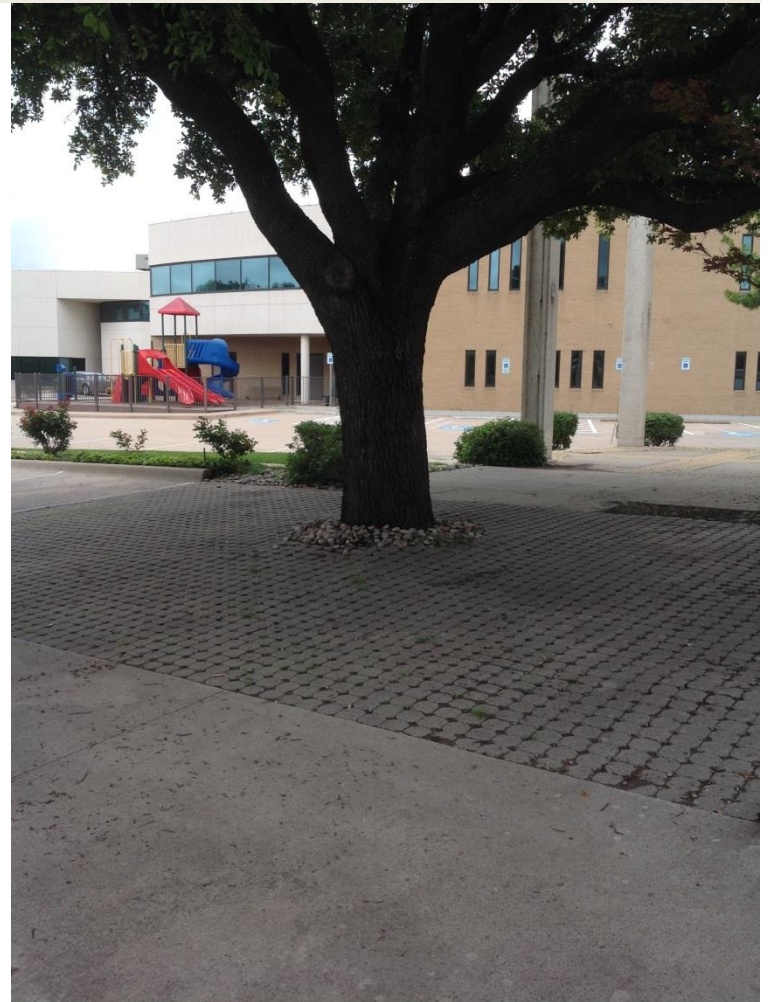
Pervious concrete



Turf grid

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Design Options

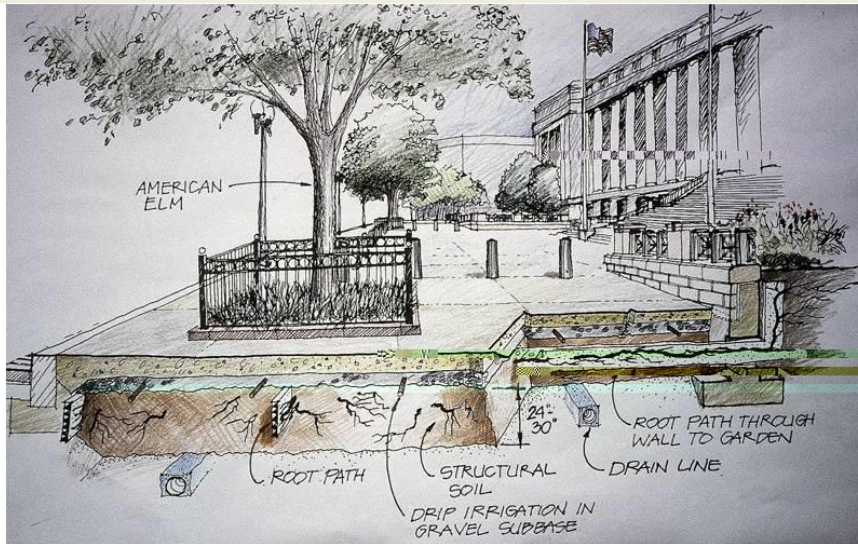


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Design Options

Engineered solutions

Structural soils and tree trenching



Suspended
pavement

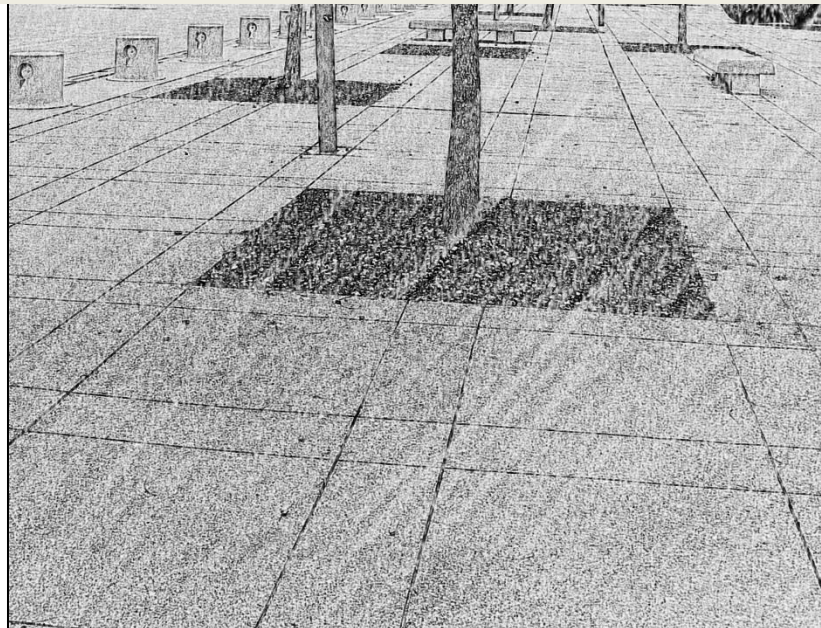




Article X Landscape Regulations



Application of Landscaping



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Application

Current

This division only becomes applicable to a lot or tract when the nonpermeable coverage on the lot or tract is increased by more than 2000 square feet within a 24 month period, *or when an application is made for a building permit for construction work that...*

Proposed

This division only becomes applicable to a lot or tract when the nonpermeable coverage on the lot or tract is increased by more than 2000 square feet within a 24 month period, exclusive of pedestrian walkways, *or when an application is made....*

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Application

Current

Increases the number of stories in a building on the lot; or

Increases by more than 35% or 10,000 square feet, whichever is less, the combined floor areas of all buildings on the lot within a 24 month period.

Proposed

Increases the number of stories that increases the height of a building on the lot; or

Increases by more than 35%, or 10,000 square feet, whichever is less, the combined floor areas of all buildings on the lot within a 24 month period.

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Artificial Lot Delineation

Current

If the building site is over 2 acres the applicant may create an “artificial lot” to satisfy the Landscape requirements. The lot must:

- Wholly include the area on which the construction work is to be done; and
- Have an area that does not exceed 50 % of the area of the building site

Proposed

Add:

- Be inclusive of all new exterior paving additions except pedestrian walkways
- Provide street trees only for artificial lots that are wholly, or in part, within 200’ of the nearest street frontage.

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Landscape Plan Submission

Current

Any person may prepare the landscape plan required under this division. There is no requirement that the plan be prepared by a landscape architect or by a person engaged in the landscape business.

Proposed

(still under discussion)

Add:

Except as otherwise stated, any person may prepare the landscape plan required under this division.

- A landscape architect is required to submit landscape plans for all permits for construction on building sites over (**½ acre, 1 acre, 30,000 sf, 3 acres?**) or larger.

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Landscape Plan Submission

In addition to current requirements, the Landscape Plan must contain:

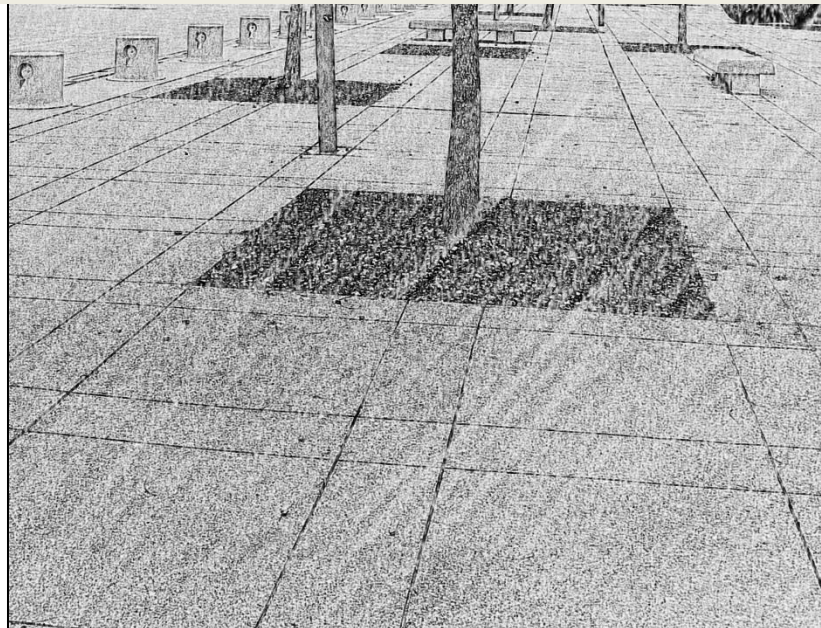
- Location of all utility easements, utilities, including the locations of utility poles, overhead utility lines, and underground utility lines, adjacent to and within the building site.
- Existing trees to be credited to required trees must be located, identified and noted to be saved.
- Trees to be relocated must be identified.



Article X Landscape Regulations



General Ordinance



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Acceptable Plant Materials

Current

- No artificial plant materials
- The use of high-quality, hardy, and drought tolerant plant materials is recommended and encouraged.

Proposed

- No artificial plant materials, including synthetic turf
- The use of high-quality, winter-hardy, and heat and drought tolerant water-wise plant materials is required.
- Palm trees may not be used to qualify for requirements.
- A list of acceptable plant materials will be provided in a LANDSCAPE MANUAL.
- No invasive plant materials.

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Planting Area Requirements

Proposal

(still under staff review)

Add/Modify:

- Section to establish new conditions.
- Allow for surface soil, covered soils, root paths and other engineered options to obtain soil requirements, with recommendations to exceed minimum standards.
- Adjust for large and medium tree minimum soil requirements.
- Large shrub installation requirements.
- Minimum distances between trees.
- Minimum distances between trees and structures and utilities
- Minimum planting area for large and medium trees is 160 square feet per tree.

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Protection of Planting Area

- All landscaped areas will be protected by a raised 6” concrete curb or wheel stop
- Trees shall be planted no closer than 4’ from paving or 3’ when in R.O.W.

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Irrigation

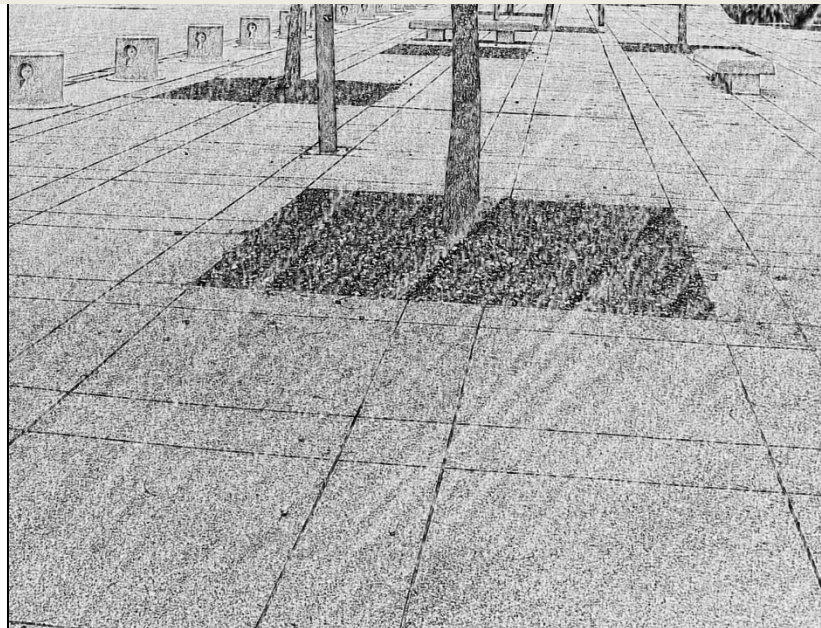
- Amend the section to address 'water conservation' and to direct technical instruction to the Irrigation ordinance.



Article X Landscape Regulations



Landscape and Tree Conservation Manual



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Additional Issues for Consideration

Comprehensive manual to include:

Approved Replacement Tree List/Chart

Large canopy

Medium canopy

Small canopy

Urban Tree

Recommended plant list

Material examples

Examples of design options

Planting details

Technical materials – soil requirements, tree protection, tree maintenance, tree owner support information, etc.

DISCUSSION

- Next

Continue with landscaping for uses other than single family and duplex, general landscape provisions still under review.

Begin residential landscape requirements, including shared access developments.

APPENDIX

REFERENCES:

- Trees, Parking, and Green Law: Strategies for Sustainability – K. Wolf
- Tree Space Design – Casey Trees
- Trees in Urban Design - Phoenix
- Design Guidelines for ‘Greening’ Surface Parking Lots - Toronto
- Complete Streets Design Manual – Dallas
- Athens-Clarke County, Georgia Best Management Practices for Community Trees
- Prince George’s County, Maryland Landscape Manual

All reference material and other sources can be found on the website below

<https://sites.google.com/site/dallastrees/> (Dallastrees.net)