

APPENDIX A

OFFICIAL PLAN POLICIES RELEVANT TO SURFACE PARKING LOTS

3.1 THE BUILT ENVIRONMENT

3.1.1 THE PUBLIC REALM

POLICY 12

“Design measures which promote pedestrian safety and security will be applied to streetscapes, parks, other public and private open spaces, and all new and renovated buildings”

3.1.2 BUILT FORM

POLICY 2

“New development will locate and organize vehicle parking, vehicular access, service areas and utilities to minimize their impact on the property and on surrounding properties and to improve the safety and attractiveness of adjacent streets, parks and open spaces by:

- a) using shared service areas where possible within development block(s) including public and private lanes, driveways and service courts;
- b) consolidating and minimizing the width of driveways and curb cuts across the public sidewalk;
- d) providing underground parking where appropriate;
- e) limiting surface parking between the front face of a building and the public street or sidewalk; and
- f) integrating above-ground parking structures, where permitted or appropriate, with building design, and have usable building space at grade facing adjacent streets, parks and open spaces”

POLICY 5

“New development will provide amenity for adjacent streets and open spaces to make these areas attractive, interesting, comfortable and functional for pedestrians by providing:

- a) improvements adjacent to the boulevards and sidewalks, including street trees, lighting and other street furniture
- b) co-ordinated landscape improvements in setbacks to create attractive transitions from the private to public realms;
- c) weather protection such as canopies and awnings;
- d) landscaped open space within the development site;
- e) landscaped edges of surface parking lots along streets, parks and open spaces to define the street edge and visually screen the parked autos;
- f) safe pedestrian routes and tree plantings within surface parking lots; and
- g) public art, where the developer agrees to provide this, to make the building and its open spaces more attractive and interesting.”

3.4 THE NATURAL ENVIRONMENT

POLICY 1

"To support strong communities, a competitive economy and a high quality of life, public and private city-building activities and changes to the built environment including public works, will be environmentally friendly, based on:

- a) protecting and improving the health of the natural ecosystem, by:
 - i) minimizing air, soil and water pollution;
 - iii) managing the quantity and improving the quality of stormwater and groundwater infiltration and flows;
- d) preserving and enhancing the urban forest by:
 - i) providing suitable growing environments for trees;
 - ii) increasing tree canopy coverage and diversity, especially of long-lived native and large shade trees; and
 - iii) regulating the injury and destruction of trees
- f) reducing the adverse effects of stormwater and snow melt based on a hierarchy of watershed-based wet weather flow practices which recognize that wet weather flow is most effectively managed where it falls, supplemented by conveyance, then end-of-pipe solutions"

POLICY 2

"New development will include stormwater management in accordance with best management practices. This should include source control and on-site facilities to manage stormwater where rain and snow fall, and to ensure it does not produce a net increase in stormwater flows or degrade stormwater quality. On-site facilities are not always feasible, in which case alternative management solutions will be considered"

POLICY 18

"Innovative energy producing options, green industry and green building designs and construction practices will be supported and encouraged in building renovation and redevelopment through:

- a) innovative methods of reducing stormwater flows;
- b) advanced water conservation and efficiency measures;
- d) establishing and extending district heating and cooling facilities, wind and solar power installations and other renewable energy systems;
- f) the development of innovative green spaces such as green roofs, and designs that will reduce the urban heat island effect"

2.4 BRINGING THE CITY TOGETHER: A PROGRESSIVE AGENDA FOR TRANSPORTATION CHANGE

POLICY 7

"Policies, programs and infrastructure will be introduced to create a safe, comfortable and bicycle friendly environment that encourages people of all ages to cycle for everyday transportation and enjoyment including:

- b) provision of bicycle parking facilities in new developments"

POLICY 8

"An urban environment and infrastructure will be created that encourages and supports walking throughout the City through policies and practices that ensure safe, direct, comfortable, attractive and convenient pedestrian conditions, including safe walking routes to schools, recreation areas and transit"

4.6 EMPLOYMENT AREAS

POLICY 6

"Development will contribute to the creation of competitive, attractive, highly-functional Employment Areas by:

- g) providing landscaping on the front and any flanking yard and adjacent to any public parks and open space to create an attractive streetscape and screening parking, loading and service areas."

APPENDIX B

PLANTING GUIDE

The reference material provided in Appendix B is intended to assist with the planting and selection of tree and plant species within and adjacent to surface parking lots. The Planting Guide provides general recommendations only. Applicants are encouraged to generate site-specific solutions that enhance the site conditions and are consistent with the surrounding context.

B1. GENERAL PLANT SPECIFICATIONS

Install plant material that meets or exceeds the following minimum sizes:

- deciduous street tree 70mm caliper
- deciduous trees 60mm caliper
- small deciduous trees 50mm caliper
- coniferous trees 1500mm ht.
- deciduous shrubs 600mm ht.
- coniferous shrubs 600mm ht. or spread
- perennials 2 years container grown

B2. SOIL QUALITY SPECIFICATIONS

Good quality soil shall consist of a minimum 0.9m* depth, over and above any required drainage system and/or granular material, of sandy loam soil with the following composition:

Sand (50%-60%)
Silt (20%-40%)
Clay (6%-10%)
Organic (2%-5%)
pH = 7.5 or less

*Note: In landscaped areas without tree planting, the minimum depth for good quality soil can be reduced to 0.6m.

B3. NATIVE SPECIES PLANTING LIST

The Native Species Planting List provides a catalogue of species native to the Toronto area that should be considered for use in a parking lot environment. The List includes Native Trees, Shrubs, Grasses, Ferns and Wildflowers. The List also recommends which plants are suited to the growing conditions of the various parking lot features defined below:

Street Perimeter – refers to the planting area flanking the street facing portion of a site. If appropriate, perimeter planting areas facing parks and other public open space should be treated in a similar manner to a street perimeter.

Non-street Perimeter – refers to the planting area along parking lot edges not adjacent to a street.

Island – refers to a landscaped area within a parking lot, typically used to define driveways and ends of parking rows.

Median – refers to a linear landscaped area within a parking lot, typically used to define driveways, separate parking rows and provide pedestrian connections.

Bio-retention Area – refers to a landscaped area that is designed to collect, retain, filter, infiltrate, evapotranspire and/or treat stormwater and snowmelt.

The Native Species Planting List (see following pages) is intended to promote the use of native species and broaden plant diversity within a parking lot. It is not intended to be absolute or restrictive. Where appropriate, the use of suitable non-natives is also encouraged.

Native Trees		Parking Lot Features*									
Common Name	Species	Attributes	Light	Soil	Moisture	Height	Street Perimeter	Non-street Perimeter	Island	Median	Bio-retention Area
Red Maple	<i>Acer rubrum</i>	orange to bright red fall colour	☀️	sand, loam	moist-wet	25m	✓	✓			✓
Silver Maple	<i>Acer saccharinum</i>	fast growing, tolerant	☀️	sand, loam, clay	moist-wet	35m	✓	✓			✓
Blue Beech	<i>Carpinus caroliniana</i>	Interesting thin, smooth, slate grey bark	☀️	loam, sandy-loam	moist	8m		✓		✓	✓
Bitternut Hickory	<i>Carya cordiformis</i>	fast growing	☀️	sand, loam	moist	20m		✓		✓	✓
Hackberry	<i>Celtis occidentalis</i>	fast growing, tolerant	☀️	loam, clay	dry-wet	15m	✓	✓	✓	✓	✓
Red Cedar	<i>Juniperus virginiana</i>	provides food & shelter for wildlife, tolerant	☀️	sand, loam	dry-moist	4m		✓			✓
Tulip Tree	<i>Liriodendron tulipifera</i>	Golden yellow fall colour	☀️	loam	moist	25m		✓			
Black Tupelo	<i>Nyssa sylvatica</i>	Salt tolerance, dark red fall colour	☀️	loam	dry-wet	15m	✓	✓		✓	✓
White Spruce	<i>Picea glauca</i>	provides wildlife habitat, salt tolerance, year-round screening	☀️	sand, loam, clay	moist	25m		✓			
Sycamore	<i>Platanus occidentalis</i>	interesting, peeling bark	☀️	sand, loam, clay	moist-wet	30m					✓
Trembling Aspen	<i>Populus tremuloides</i>	leaves flutter in wind, fast growing, tolerant	☀️	sand, loam, clay	moist	25m					✓
Bur Oak	<i>Quercus macrocarpa</i>	provides food & shelter for wildlife	☀️	loam, clay	dry-wet	15m	✓	✓	✓	✓	✓
Red Oak	<i>Quercus rubra</i>	fast growing, wildlife value	☀️	sand to loamy-clay	dry-moist	25m	✓	✓		✓	✓
White Cedar	<i>Thuja occidentalis</i>	provides wildlife habitat	☀️	sand, loam, clay	dry-wet	15m					✓

*Note: All landscaped areas with tree planting must be continuous with at least 30m³ of good quality soil at 0.9m depth. The use of structural soil or other installation is encouraged to extend rooting zones under adjacent hard surfaces.

Native Shrubs		Parking Lot Features*							Bio-retention Area		
Common Name	Species	Attributes	Light	Soil	Moisture	Height	Street Perimeter	Non-street Perimeter	Island	Median	
Downy Serviceberry	<i>Amelanchier arborea</i>	white flowers, berries attract birds	☀️	sand-silt-clay	dry-moist	10m	✓	✓	✓	✓	✓
Smooth Serviceberry	<i>Amelanchier laevis</i>	white flowers, berries attract birds	☀️	sand-silt-clay	dry-moist	10m	✓	✓	✓	✓	✓
Buttonbush	<i>Cephalanthus occidentalis</i>	fragrant flowers attract bees	☀️	sand-silt-clay	moist-wet	3m					✓
Red-osier Dogwood	<i>Cornus stolonifera</i>	white flower, tolerant, attractive red colour in fall	☀️	sand-silt-clay	moist-wet	3m					✓
Bush Honeysuckle	<i>Diervilla lonicera</i>	fast growing, tolerant, small yellow flowers	☀️	sand-silt-loam	dry	1m	✓	✓	✓	✓	
Witch-hazel	<i>Hamamelis virginiana</i>	yellow star shaped flowers in fall	☀️	sand-silt-loam	moist	6m		✓			✓
Winterberry	<i>Ilex verticillata</i>	attractive red fruit in winter	☀️	peat-muck-silt	moist-wet	4m					✓
Sweet Gale	<i>Myrica gale</i>	conelike flower clusters, scented leaf	☀️	sand-silt-loam	moist-wet	1m					✓
Ninebark	<i>Physocarpus opulifolius</i>	showy white flowers	☀️	sand	dry-moist	3m	✓	✓	✓	✓	✓
Fragrant Sumac	<i>Rhus aromatica</i>	scented leaves	☀️	sand	dry	2m		✓			✓
Staghorn Sumac	<i>Rhus typhina</i>	brilliant fall colour	☀️	sand-silt-clay	dry-moist	6m		✓			✓
Pasture Rose	<i>Rosa carolina</i>	rose hips persist into winter	☀️	sand-silt-loam	dry	1m			✓	✓	✓
Swamp Rose	<i>Rosa palustris</i>	attractive pink flowers	☀️	sand-silt-clay	moist-wet	2m					✓
Purple-flowering Raspberry	<i>Rubus odoratus</i>	showy purple flowers	☀️	silt-loam	dry-moist	2m		✓			✓
Maple-leaf Viburnum	<i>Viburnum acerifolium</i>	black berries	☀️	sand-silt-clay	dry-moist	2m	✓	✓	✓	✓	✓
Nannyberry	<i>Viburnum lentago</i>	white flowers, brilliant fall colour	☀️	sand-silt-clay	moist-wet	6m	✓	✓	✓	✓	✓
Highbush Cranberry	<i>Viburnum trilobum</i>	red berries attract birds	☀️	sand-silt-clay	moist-wet	4m					✓

*Note: All landscaped areas with tree planting must be continuous with at least 30m³ of good quality soil at 0.9m depth. The use of structural soil or other installation is encouraged to extend rooting zones under adjacent hard surfaces.

Native Ferns, Grasses and Wildflowers		Parking Lot Features*							
Common Name	Species	Attributes	Light	Moisture	Street Perimeter	Non-street Perimeter	Island	Median	Bio-retention Area
Big Bluestem	<i>Andropogon gerardii</i>	turkey foot seed head, very tall	☀	Dry	✓	✓	✓	✓	✓
Wild Columbine	<i>Aquilegia Canadensis</i>	attracts hummingbirds, self-seeds	☀☀	Dry-Moist	✓	✓	✓	✓	✓
Wild Ginger	<i>Asarum canadense</i>	spreads by creeping rhizomes	☀	Moist					✓
White Wood Aster	<i>Aster divaricatus</i>	heart shaped leaves, spreads	☀	Dry-Moist	✓	✓	✓	✓	✓
Fringed Sedge	<i>Carex crinita</i>	attracts butterflies	☀	Moist-Wet					✓
Turtlehead	<i>Chelone glabra</i>	attracts butterflies	☀	Moist-Wet					✓
Dutchman's Breeches	<i>Dicentra cucullaria</i>	grows under Sugar Maples	☀	Moist					✓
Riverbank Wild Rye	<i>Elymus riparius</i>	stabilizes soil	☀	Moist					✓
Bottle Gentian	<i>Gentiana andrewsii</i>	spreads from root crowns	☀	Moist					✓
Wild Geranium	<i>Geranium maculatum</i>	deciduous woods	☀	Dry-Moist					✓
Thin-leaved Sunflower	<i>Helianthus decapetalus</i>	attracts butterflies	☀	Moist					✓
Dense Blazing-star	<i>Liatris spicata</i>	moist prairie/meadow	☀	Dry-Moist					✓
Great Blue Lobelia	<i>Lobelia siphilitica</i>	attracts hummingbirds	☀	Moist-Wet					✓
Evening Primrose	<i>Oenothera biennis</i>	tall, tolerates disturbed sites	☀	Dry-Moist	✓	✓	✓	✓	✓
Sensitive Fern	<i>Onoclea sensibilis</i>	wet woods, rapid spreader	☀	Moist					✓
Foxglove Beardtongue	<i>Penstemon digitalis</i>	open woods, best in groupings	☀	Dry					✓
Christmas Fern	<i>Polystichum aristochaites</i>	compact, woods/streams, evergreen	☀	Dry-Moist					✓
Green-headed Coneflower	<i>Rudbeckia laciniata</i>	moist meadows, very hardy	☀	Moist					✓
Rough-leaved Goldenrod	<i>Solidago patula</i>	swamps, wet meadows	☀	Moist					✓
Indian Grass	<i>Sorghastrum nutans</i>	large seed head, prairie/savannah	☀	Dry	✓	✓	✓	✓	✓
Foamflower	<i>Tiarella cordifolia</i>	spreads by stolons, groundcover	☀	Moist					✓

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APPENDIX C

REFERENCES

Listed below is the selection of City of Toronto policy, standard or guideline documents referenced within the Design Guidelines for 'Greening' Surface Parking Lots.

- Toronto Official Plan
- Zoning By-laws
- Secondary Plans
- Toronto Green Development Standard
- Wet Weather Flow Management Guidelines
- Toronto Urban Design Streetscape Manual
- Access Management Guidelines
- City of Toronto Accessibility Design Guidelines
- City of Toronto Bike Plan

