4.0 STREETSCAPE APPROACH

The following section of the Streetscape Design Guidelines provides elements and a palette of streetscape materials to be incorporated in the future design of all public spaces throughout Downtown Sudbury.

The City of Sudbury has already undertaken improvements to the Downtown area by adding interlocking brick sidewalks, these streets need streetscape improvements with a light touch to complement the improvement work that has already been completed. The resulting design will add post-top decorative streetlights, the exposed aggregate paving band, street trees and landscaping.

The existing planters will be cut and brought to the pedestrian scale by adding a backless bench along on side.

4.1 SIDEWALK ZONES

The Zone System (See Figure 1)

Sidewalks in the Downtown area need to be designed to accommodate larger volumes of pedestrian traffic than in residential areas. The specified streetscape materials and furnishings identified in the following sections of this report require appropriate placement between street curbs and building façades. Streetscapes in these areas are multi purpose, and generally consist of the following three zones: the building zone, the pedestrian zone, and the planting zone. The actual dimensions of these zones, defined by function and activity, may vary throughout the Downtown. The zone system divides the sidewalk corridor into three zones to ensure that pedestrians have a sufficient amount of clear space to travel.

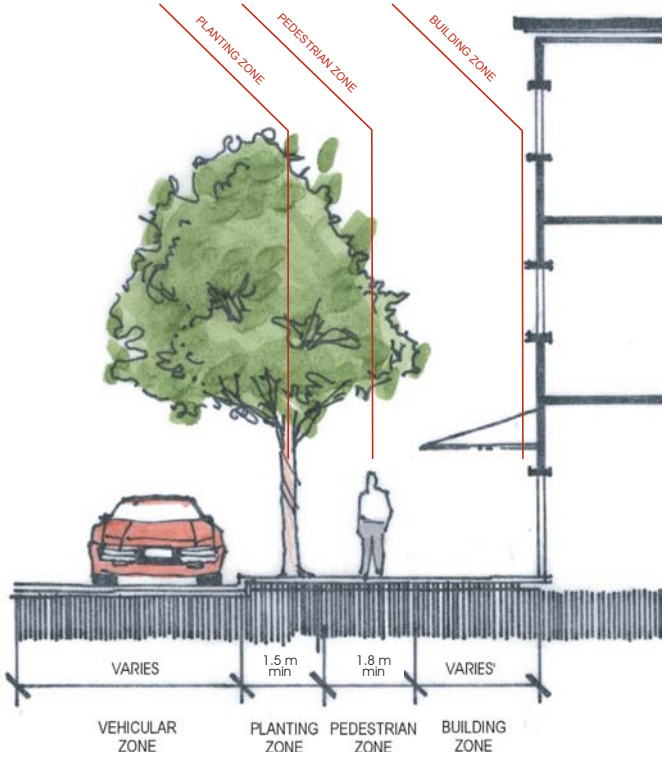


FIGURE 1 *THE ZONE SYSTEM*

Building Zone:
The building zone is the area between the building wall and the pedestrian zone. Pedestrians do not feel comfortable walking directly adjacent to a building wall or fence. At a minimum, pedestrians prefer to keep at least 0.6 m (2 ft) of distance away from the building wall. Where additional sidewalk width exists within the remaining Building Zone, such spaces may accommodate seating areas, sidewalk café uses, movable container plantings and/or permanently installed foundation plantings.

Pedestrian Zone:
The pedestrian zone is the area of the sidewalk corridor that is specifically reserved for pedestrian travel. This area should be free of all obstacles, protruding objects, and any vertical obstructions hazardous to pedestrians. The pedestrian zone should be at least 1.8 m (6 ft) wide or greater to meet the desired level of service in areas with higher pedestrian volumes. This allows pedestrians to walk side by side or for pedestrians going in the opposite direction to pass each other.

Planting Zone:
The planting zone lies between the curb line and the pedestrian zone. This area provides a buffer from the street traffic and allows for the consolidation of elements like utilities (poles, hydrants, telephone kiosks, etc.), and street furniture (benches, signs, etc.) The intent is to ensure that the pedestrian travel zone is free of ALL obstacles. On local and collector streets, 1.2 m (4 ft) is preferred and on arterial and major streets 1.8 m (6 ft) is preferred. Additional space will be required for transit stops and bus shelters, which may include a boarding pad typically 1.5 m x 2.4 m (5 ft—8 ft). This allows snow to be stored in the planting zone and keeps the pedestrian zone obstacle free.

Clear Zone:
In addition to the three previously stated sidewalk zones, clear zones must be maintained at all sidewalk intersections. Clear zones are areas of a streetscape where only traffic signals, lighting, and street signs are permitted. Clear zones accommodate higher pedestrian volumes that typically occur at sidewalk intersections, and permit safe viewing distances for both pedestrians and motorists. All Clear zones include a sidewalk intersection and a 3 m area measured from building

corners at street intersections (See Figure 2). Where approved by the City and adjacent property owner(s), items such as mailboxes, newspaper boxes and other literature dispensary containers must generally be located beyond the building zone and within the clear zone. Due to safety and security concerns, such elements must never be placed within the pedestrian zone or adjacent to a public building or outdoor gathering area. Where inadequate building zone area exists, such items may be considered within the planting zone, provided they are not located beyond the clear zone and at least 0.30 m (1 ft) from the face of the adjacent curb.

Regardless of location near an intersection or elsewhere, placement of all proposed streetscape components must meet the zone requirements set forth in the City's Zoning By-law.

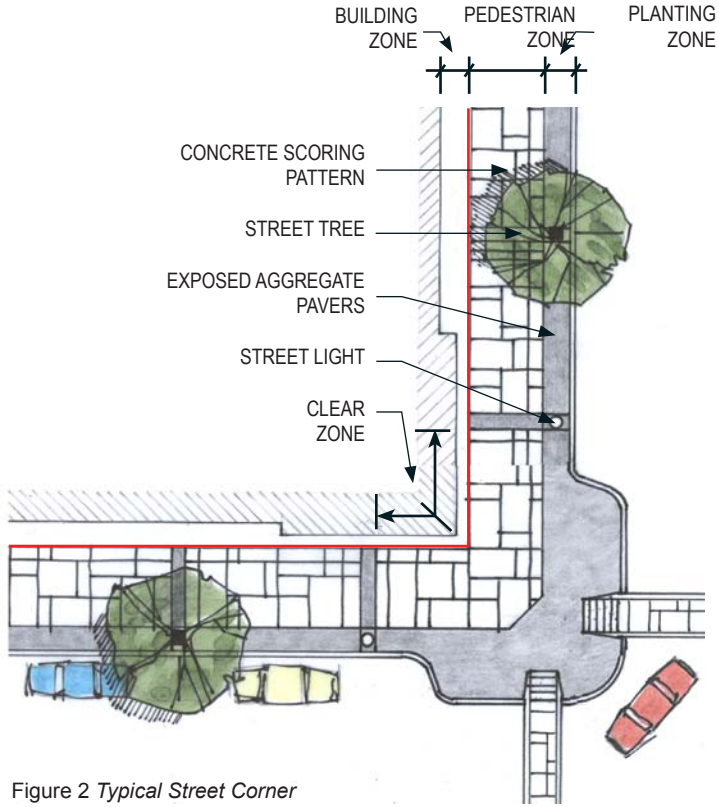


Figure 2 *Typical Street Corner*

4.2 Ground Plane

Special paving materials can provide variety and appeal to hardscape surfaces while defining different areas of activity.

Paving patterns should be simple and only two pre-approved styles should be used for Downtown Sudbury.

Continuous exposed aggregate paving is proposed within the planting zone areas typically used for piling snow during winter months. All other zones may be paved with concrete, as further defined below.
Standard concrete can be an attractive material for sidewalks, curbs, accessible ramps, and crosswalks when handled with a bit of creativity. For example, scoring patterns (prescribed paving joints where sidewalks shift during annual freeze-thaw cycles) can be used as an inexpensive, low-key design feature. Rather than using the standard scoring pattern consisting of squares, a pattern of simple, interlocking rectangular components intended to mimic stone pavers should be considered.

A paving material's inherent colour should not be altered in an attempt to falsely replicate another paving material. Specifically, coloured concrete and coloured paving installed with the intent of producing durable, inexpensive faux cobblestone or brick paving patterns should not be used. Simple, easily replicated, non-coloured paving patterns (such as previously noted interlocking, rectangular pattern) must be utilized where textured paving is desired.

The building zone should not be paving using the approved pattern but left smooth to accomodate cast-in-place street names, building numbers and art work (cast-in-place poetry, etc.).

4.2.1 Sidewalks

Sidewalks should be designed as high quality public spaces promoting active use by residents and visitors and enhancing the pedestrian experience. As previously noted, sidewalk installations should include:

a) a minimum width of 3.5 m

b) a 1 m - 1.5 m band of exposed aggregate pavers (see photo) laid adjacent to, and flush with, the inside face of the street curb (within the Planting Zone)

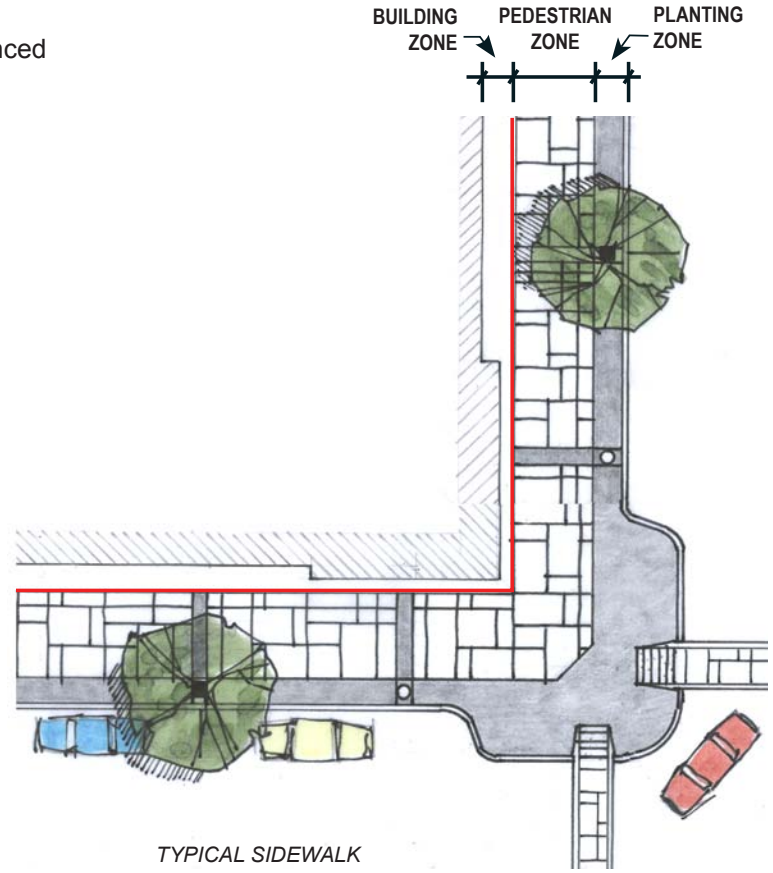
c) a secondary band (0.50 m width), to be installed perpendicular to the curb approximately every 7.5 metres and aligned with new streetlight and street tree locations (see Figure 3)

d) the finish materials and pattern of the sidewalk should be maintained through driveways, alleyways and curb ramps

e) street trees should be located within the centre of the planting zone and planted in an adequate pit under a metal grille

EXPOSED AGGREGATE

f) At corners, consideration should be given to the widening of boulevards to provide enhanced sidewalk conditions that include decorative planting areas, seating areas and other amenities (i.e., public art, fountain, etc.).



TYPICAL SIDEWALK

4.2.2 Barrier-free Sidewalk Ramps

Barrier-free sidewalk ramps are necessary for access between the sidewalk and the street for people with disabilities. However, barrier-free sidewalk ramps can create a barrier for people with vision impairments who use the curb to identify the transition point between the sidewalk and the street. Because curb ramps eliminate the vertical edge of the curb used by pedestrians with vision impairments, it is necessary to install detectable warnings to mark the boundary between the sidewalk and street. Warning strips should be composed of brick pavers that complement but are visually different than the paving within the Planting Zone.

In addition to street intersection locations, barrier-free sidewalk ramps should also be provided at all access driveways, alleys, and other locations where existing grades require the use of ramps to maintain accessible routes. Barrier-free Sidewalk Ramps should include:

a) Minimum ramp width should be 1.2 m (4 ft) in new construction. In restricted spaces only, the minimum width should not be less than 915 mm (3 ft).

b) Significant changes of grade as pedestrians travel from the down slope of the ramp to the up slope of the gutter should be 13% or less. Counter slope should not exceed 5%.

c) Curb ramp alignment should be perpendicular to the curb face. The ramp needs to be aligned within the crosswalk with a straight path of travel from the top of the ramp to the roadway to the curb ramp on the other side.

d) Detectable warnings (see Figure 3) across the lower part of the ramp are required. Detectable warnings should have a visual contrast with the adjacent walking surfaces.

e) Transition points between adjacent curb ramp surfaces should be flush.

f) Level landing at the top and bottom of the curb ramp should be 1.2 m x 1.2 m (4 ft x 4 ft) and the cross slope should not exceed 2% in any direction. This is necessary to allow wheelchair users to manoeuvre off the ramp.

g) Align the curb ramp within the marked crosswalk, so there is a straight path of travel to the barrier-free sidewalk ramp on the other side.

h) Provide adequate drainage to prevent the accumulation of water and debris on or at the bottom of the ramp.

i) Minimize ramp length by lowering the sidewalk to reduce the curb height; applicable in areas with narrow sidewalks.

4.2.3 Traffic Calming Measures

A combination of paving enhancements and bulb-outs (curb extensions) are proposed at street intersections to slow vehicle approach and turning speeds, while creating shorter crosswalks and more prominent staging areas for pedestrians who are crossing the streets.

Bulb-outs, which are already included in many Downtown areas, should include (see Figure 4):

a) a design to narrow road to 6 m (20 ft) for two-way traffic.

b) opportunities for landscaping.

c) vertical delineators, bollards or object markers to make visible to snowplow operators.

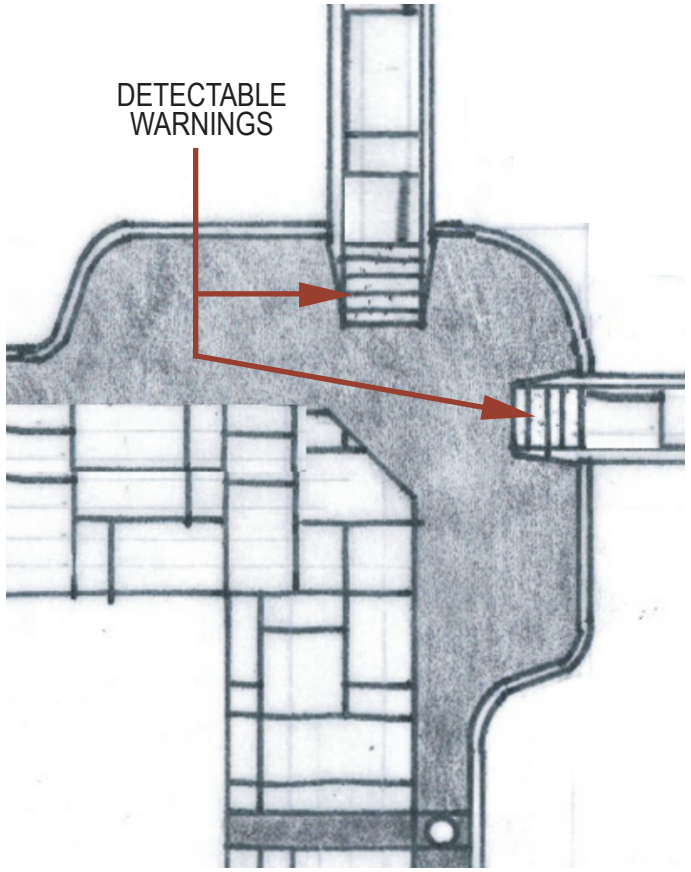


FIGURE 3 *DETECTABLE WARNINGS*

4.2.4 Crosswalks

Crosswalks should convey the Downtown character in materials and finishes. Crosswalks within and leading into the area should be of the same character or finish materials.

Crosswalk widths will vary throughout the Downtown. Local crosswalks should be a minimum of 2 m wide, collector crosswalks should have a minimum width of 4 m, and gateway crosswalks should be 3 m wide.

Where crosswalks are used at major collectors on streets with two or more lanes of vehicular traffic each way, island medians should be used to provide safe pedestrian crossing. Pedestrian signal lights will increase pedestrian safety and overall traffic flow.

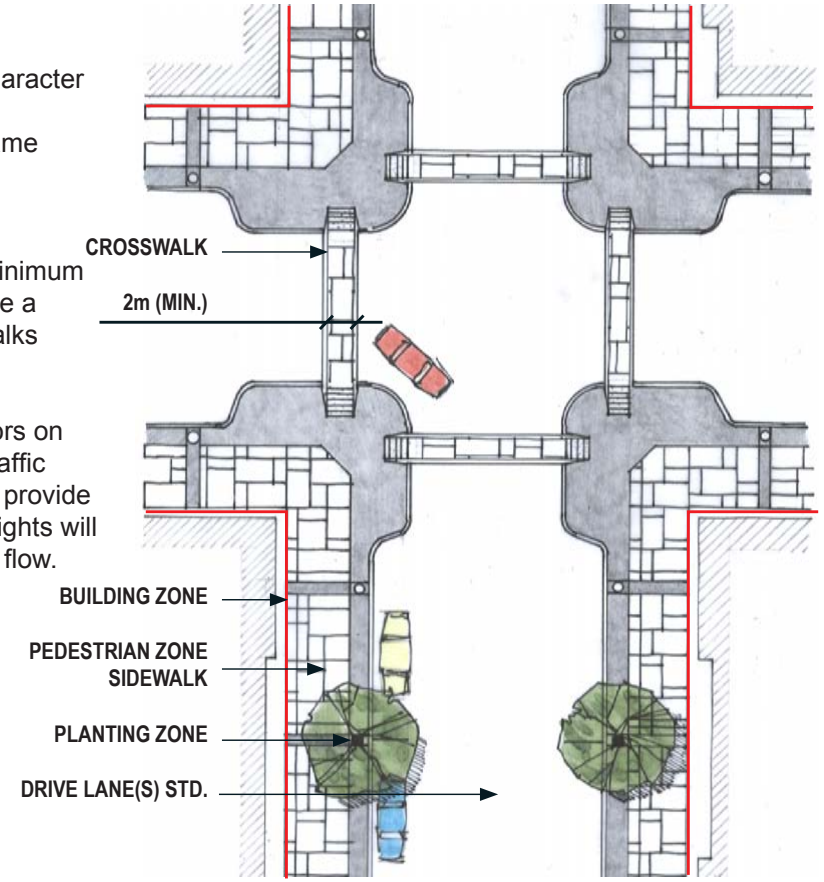


FIGURE 4 *BULB-OUTS*

4.3 Street Trees

For decades, the City and its residents have focused on regreening industrially damaged areas of the Sudbury landscape. Building on this successful initiative, this effort should be extended to the urban parts of the City.

Plantings provide a variety of benefits to the character of a streetscape – shade from the sun, cleaning of the air, and protection from harsh winds. They additionally create a sense of place that attracts people to a Downtown urban area. In a Downtown commercial district, plantings are the main element that makes a city street inviting to people to shop.

Trees are the most effective element to unify the visual character of the streetscape. Trees provide shade and comfort to pedestrians, and enhance the visual and environmental qualities of the street. At entries, trees are used to create natural gateways and focal points.

Birch and Maple trees are the species recommened for the Downtown area. These trees provide a four season effect and engage pedestrians and mortorists alike.

While the addition of new trees as specified herein will help create the desired character for Downtown Sudbury, all healthy, existing trees should be saved to further accent the new plantings and provide variation in size and scale.

The following recommendations for species were selected for Downtown Sudbury:

4.3.1 Proposed Street Tree Species

White Birch *(Betula papyrifera)*

Features: Attractive smooth white bark, clear yellow fall colour.

Description: Birch is noted for its thin, white papery bark, which is very noticeable and attractive. It has an upright oval form and is often grown as a multi-trunked specimen. Foliage develops a very nice yellow colour in the fall. Although the White Birch is an excellent shade tree, the canopy is open enough to allow good growth of lawns and other plants underneath.

Requirements: Full sun. An organic mulch or ground cover planting will help keep summer soil temperatures cooler. Birch trees are well adapted to low moist sites and will not tolerate prolonged drought. They are very tidy shade trees.

Sugar Maple *(Acer saacharum)*

Features: Excellent fall colour and attractive form.

Description: Sugar Maple has a dense, upright oval to rounded crown. The lobed medium green leaves develop outstanding fall colour ranging from clear yellow to golden orange to orangish red. Sugar Maple makes an excellent specimen or shade tree in sites with ample root and crown space, native to the hardwood forests of Northeastern North America, from Nova Scotia west to Southern Ontario.

Requirements: Requires a fertile, well-drained soil and ample moisture. Full sun or

partial shade. Performs poorly in compacted soil with limited root space.

4.3.2 Proposed Street Tree Placement

Street trees may only be located within the Planting Zone with the following criteria:

a) A minimum offset of 1.0 metre from the curb to accommodate snow storage, large vehicle movements and to minimize salt damage.

b) Tree locations should be staggered on opposing sides of streets.

c) Tree species will be alternated between White Birch (*Betula papyrifera*) and a Maple Species every second tree.

d) Careful coordination of tree placement, lighting, and parked vehicles will prevent blocked lighting patterns and blocked access to car doors caused by poorly located street trees and light poles.

e) Trees should be spaced consistently at 6.0 m intervals. Appropriate clearances from utility boxes, streetlights, and sight triangles should be considered.

4.3.3 Street Tree Installation

The International Society of Arborists, the Canadian Nursery Trades Association or Landscape Ontario standards of planting and maintenance are to be followed:

- Excavate to a depth 200 mm deeper than the height of the root ball, with a width 750 mm greater than the root ball.

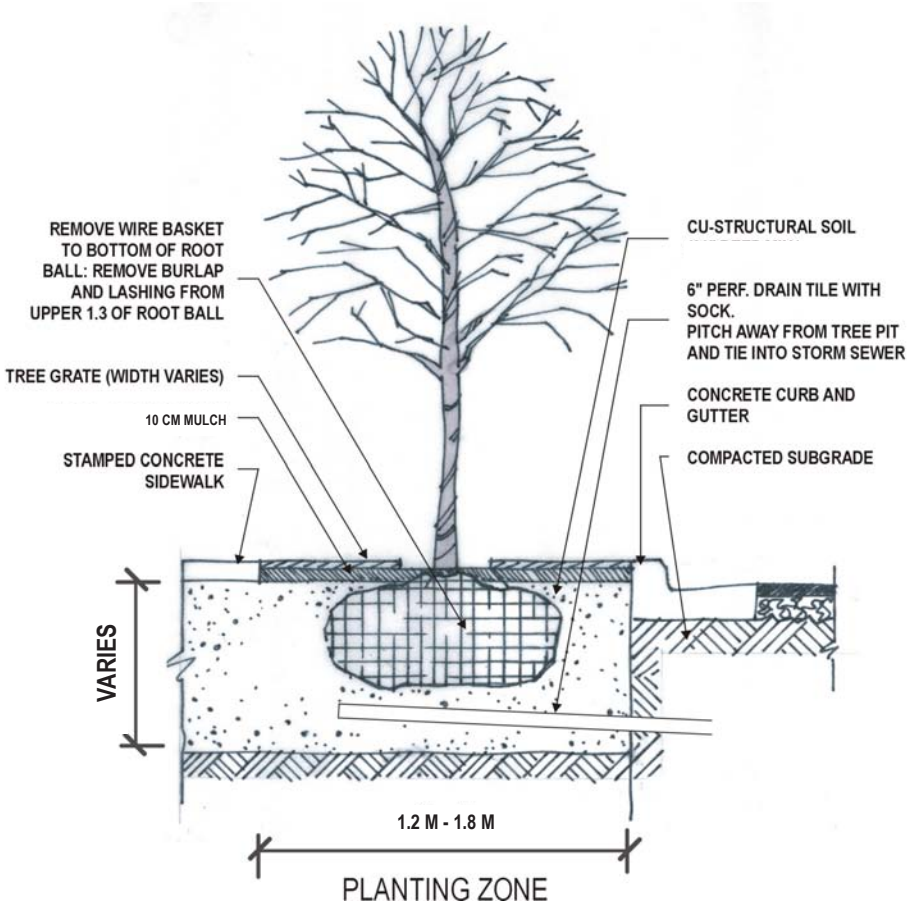
- Loosen the planting hole to a depth of 200 mm.

- Loosen burlap and cut away minimum at least 50% of the burlap without disturbing the root ball (if in a wire basket, cut away as much of the wire basket while the tree is in the hole, as possible).
- Place plant material to a depth equal to the depth they were originally growing in the nursery.

- Tamp soil around the root system in layers of 150 mm to eliminate air pockets. When two-thirds of the planting soil has been placed, fill the hole with water. After the water has penetrated into the soil, complete backfilling.
- Build a 100 mm deep saucer around the outer edge of the hole to assist with watering.

- The hardwood trees will be staked following International Society of Arborist standards.

- The trees will be mulched to a depth of 10 cm filling the saucer, leaving 50 mm free around the trunk to avoid trunk rot.



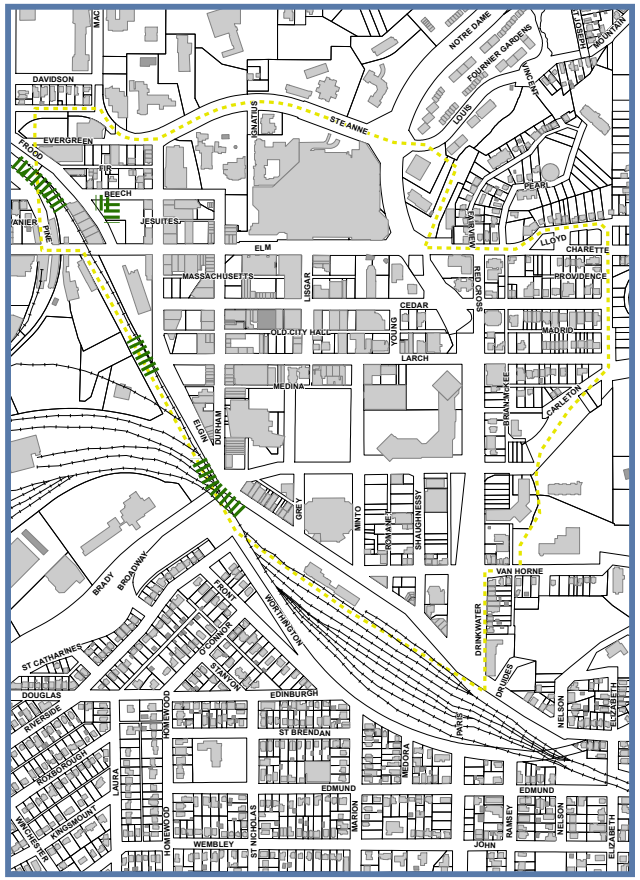
STREET TREE INSTALLATION

4.4 Boreal Strips and Trellis

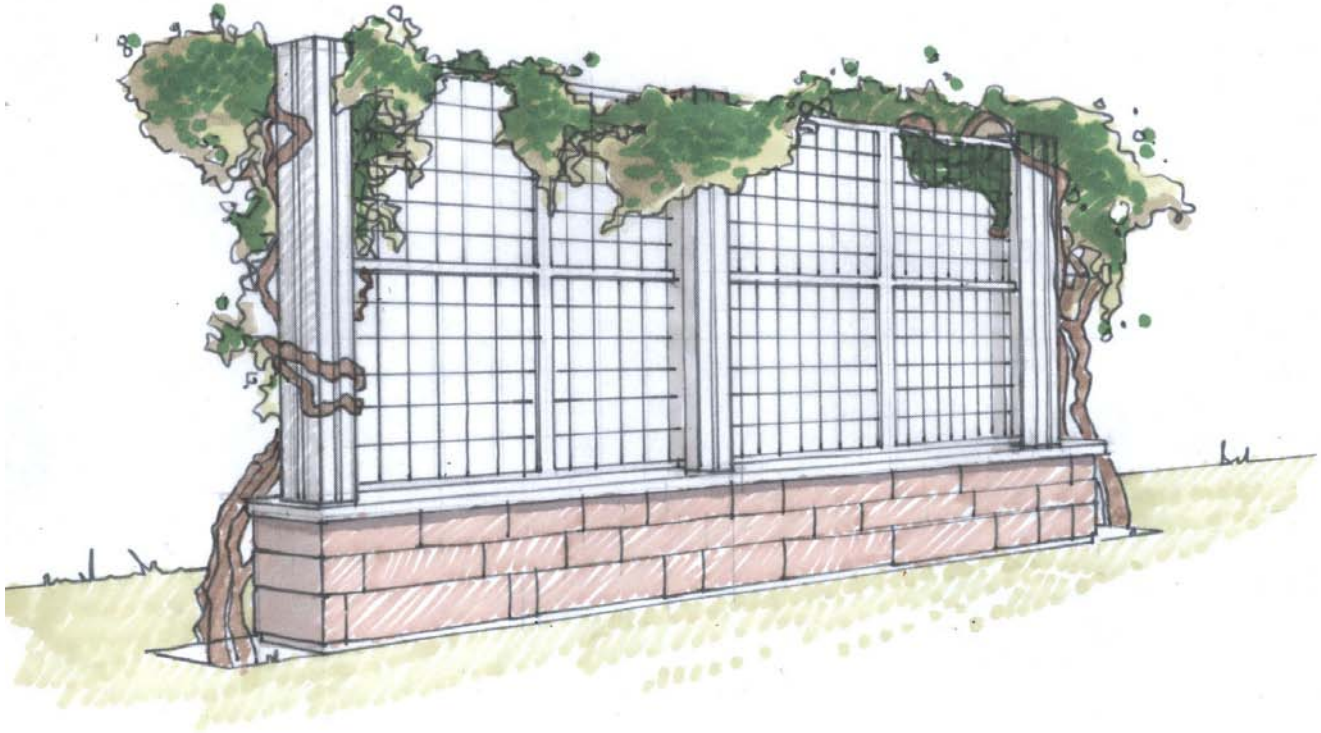
The boreal strips and trellis' are intended to provide an area of landscape along all public streets which form the perimeter of the Downtown, where there are parking and service areas and where buildings are adjacent to areas of open space. The buffer landscaping should blend with the natural and neighboring environment to provide a less congested experience for the public.

Size and spacing of landscape elements should be consistent with the size of the site, related to any identifiable streetscape, and be appropriate to the scale and character of the structures.

The buffer strips will be planted to replicate the environment of a boreal forest landscape.



BOREAL STRIPS AND TRELLIS LOCATIONS



PROPOSED TRELLIS FENCE TO BLOCK UNSIGHTLY LANDSCAPES

4.5 Palette of Materials

Throughout this document, brushed nickel and cedar are recurring themes that were chosen for the materials to appear in the downtown area. This palette was chosen to reflect the mining and forestry heritage, as well as, to celebrate the natural landscape.

4.5.1 Street Furnishings

The Legacy of the City of Greater Sudbury is based on its involvement in mining operations. The incorporation of site furnishings into the streetscape directly respects this heritage. The selection of all streetscape furnishings must have a timeless quality to them and they must work together as a unified series of items.

Proposed site furnishings, including benches, litter and ash receptacles, bollards, bicycle racks, bus shelters, parking meters, fences and sign poles (excluding existing vehicular wayfinding signs) are to be a silvery-white metal, the look of brushed nickel and incorporate cedar.

THE BIG NICKEL

4.5.2 Benches

A bench frame made from HS steel tube and flat bar, protected with rustproof coating has been selected for use within the Downtown area. Seat and back employ wood slats finished with sealer, and a steel tube or laser steel panels to incorporate the Downtwon logo as a “branding theme” or to recognize sponsers into each bench.

All benches should typically be located within the building zone and oriented toward the pedestrian and vehicular zones of the adjacent street. They are best placed near street corners (but outside the established clear zones), mid-block spaces, bus stops, and other desirable resting locations. Locations in proximity to shade provided by street trees and buildings are also preferred. Bench locations must not create unsafe obstructions for building entrances and fire hydrants.

4.5.3 Litter and Ash Receptacles

As with the bench options noted in the previous section, proposed litter and ash receptacle options presented in this section are constructed of rustproof steel and wood slats finished with sealer, available in various finishes. Together, the benches and litter receptacles, which are often located in close proximity to each other, will appear visually coordinated.

All litter receptacles must be permanently mounted to sidewalk pavement as per receptacle manufacturer's specifications. They must be located near street intersections (but outside the established Clear Zones), at mid-block crosswalks, and near proposed bench locations. Typically, two litter receptacles located on opposite corners of a street intersection will be sufficient. Installation of recycling containers should also be considered.

Unlike the bench locations typically located within Building Zones, litter and ash receptacles are to be placed within Planting Zones of all streetscapes. Litter receptacles may not be used to post advertising materials.

ASH RECEPTACLE

LITTER RECEPTACLE

4.5.4 Bollards

Bollards are used to channel both vehicular and pedestrian movement.

There are two types of bollards proposed. Those used in public spaces to protect and define pedestrian pathways will be a decorative bollard that matches the street furnishings in appearance and durability. Bollards may be lighted.

The maximum spacing of the bollards will be 2.0 m (6 ft) on centre in areas where traffic separation and security are required.

A less expensive steel bollard filled with concrete and painted in a matching colour will be provided for all service and dumpster locations.

4.5.5 Bicycle Racks

Providing opportunities for the safe storage of bicycles promotes an alternate means of urban transportation. It also supplies an amenity for couriers, shoppers, and commuters who bike to the Downtown from surrounding areas.

Bicycle racks should be provided at parks and plazas and in parking garages. The bicycle racks should be located near street intersections and in the planting zone. Typically, one bicycle rack per block is sufficient to accommodate users' needs.

4.5.6 Bus Shelters

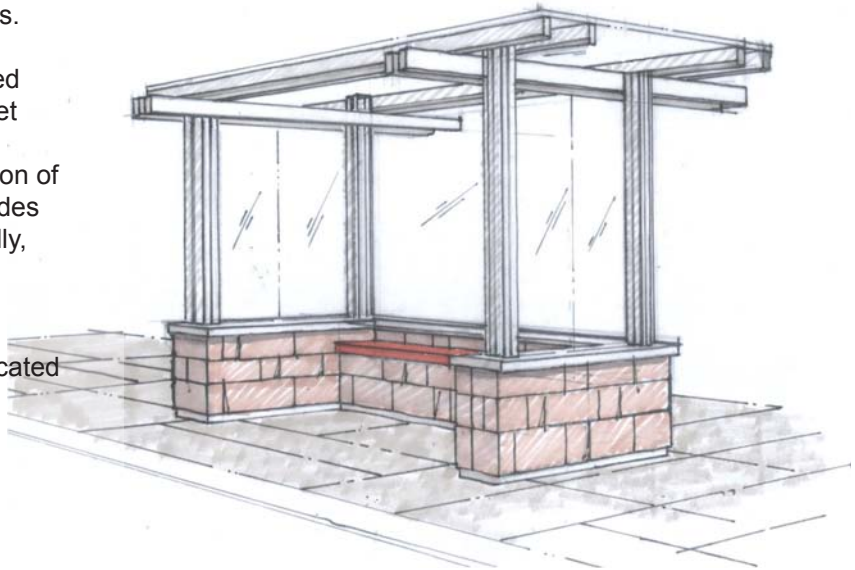
Currently, there are very few bus shelters within the Downtown Core. Most are at the bus terminal, and one is located outside Tom Davies Square.

Bus shelters provide improved waiting conditions for commuters who utilize public transportation in place of automobile use. To complement other street furnishings, all future bus shelters (and eventual replacement of existing shelters) must have a brushed nickel finish.

Safety stripes attached to a shelter's glass panels must be of a colour compatible with the City's wayfinding colours.

Likewise, any benches used to furnish future shelters must also comply with these Guidelines.

Wherever possible, bus shelters must be located to avoid conflicts with existing street trees, street lights, utility poles, and other street furnishings. Shelters should also be placed with consideration of architectural features on adjacent building facades to avoid obstruction to building entrances. Ideally, shelter placement in front of existing structures should align with architectural features such as column locations, fenestration, or other façade treatments. Shelter locations must never be located within clear zones.



4.5.7 Fences

Decorative fencing should be used where appropriate to enhance and define open spaces, landscaped areas, parking lots and setback areas.

- Decorative cedar or brushed nickel fencing, 1m – 1.5 m (3 to 4 ft) in height is encouraged.
- Solid fencing should be limited to service areas.
- Chainlink fencing and barbed wire is prohibited anywhere in the Downtown.

EXAMPLE OF APPROPIATE FENCING

4.5.8 Utilities and Equipment

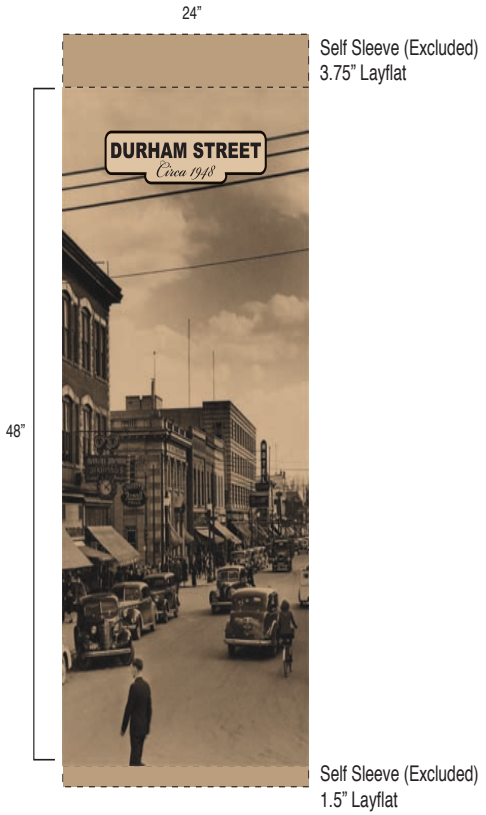
Utility boxes and mechanical equipment should be placed against a building when possible. When not, they should be low and unobtrusive to the public's view.

- They should not limit the visibility of landscaping, art or storefronts.
- They should be screened when possible.
- Should be well-maintained and kept free of graffiti.
- Colour – brushed nickel.

4.5.9 Street Banners and Flags

Banners and other seasonal decorations may be mounted to proposed light fixture poles. Their graphic designs must be clear and simple in order to quickly convey an intended message to both pedestrians and motorists. Banner colours should match colours selected for Downtown Sudbury's pedestrian and vehicular wayfinding systems.

- Banners should include at least one air vent and be as low as possibly permitted by the City of Greater Sudbury.
- Banners should be colourful, fun, and simple in design and text to quickly convey a message. Text should be limited to one-third of the banner area to create a more attractive and dramatic design.
- Banners are an opportunity for public art use for local artists. Sculptures can also be made for light poles.
- Fabric banners should be made of high quality fabric, and removed immediately when loose, frayed, or faded. Banners can also be made of metal.



4.5.10 Sculptures and Artwork

Art attracts people and humanizes the Downtown, making it an experience that all can share. As we strive to make the Downtown a four season experience, public art is available all the time. The connectivity of the Downtown is strengthened through the promotion of art, as it calls people to explore the Downtown and moves them from one sculpture to another. Perhaps the most important public element to be considered for the street and public areas is public art, as it will continue to be the common thread throughout the entire Downtown. In addition to permanent art, temporary art is also important as a way to draw people into the Downtown.

One of the ways to expand the opportunity for art is to take it beyond the decorative elements to the functional elements. It is possible and advisable to incorporate art into functional items (or functional items into art). This practice further creates the authentic and celebratory experience we want for the Downtown.

The following streetscape elements are recommended elements for artistic expression/ commissions:

- Manhole covers
- Tree guards
- Elements within Planted Medians
- Major Gateway Markers
- Trellis'

MANHOLE COVER

4.6 Lighting

The basic objectives of street lighting can be grouped into four interrelated categories: safety, security, convenience, and aesthetics. Satisfaction of human needs in these four areas is the reason for the existence of lighting systems and the ultimate standard by which they should be judged. Attainment of these objectives requires that the lighting design go far beyond the simple satisfaction of quantitative criteria for illumination. The qualitative aspects of the design, while difficult to quantify and prescribe, are typically the most important.

4.6.1 Design Principles

All outdoor lighting shall meet dark sky (Leadership in Energy Efficient Design or LEED Standard) friendly standards (i.e., lighting that reflects down and out rather than up, or lighting that is timed to dim or turn out when not needed).

Full cut-off fixtures, mounting heights, and shielding should be utilized to effectively control glare and light trespass especially into residential units. Any exterior lighting designs will take into account all existing and planned exterior lighting sources.

Lighting can serve many purposes beyond street poles:

Architectural - The unique architectural details on the Downtown buildings can be highlighted with up lighting.

Retail Display - Storefronts and restaurants can bring attention to their retail displays through lighting.

Identity - The lights on the Downtown bridges and monuments give an identity to the Downtown. Other focal points can benefit from the same treatment.

Landscaping - Greenery and flowers can be enjoyed at night when it is well lit. Lighting can create a 24 hour environment.

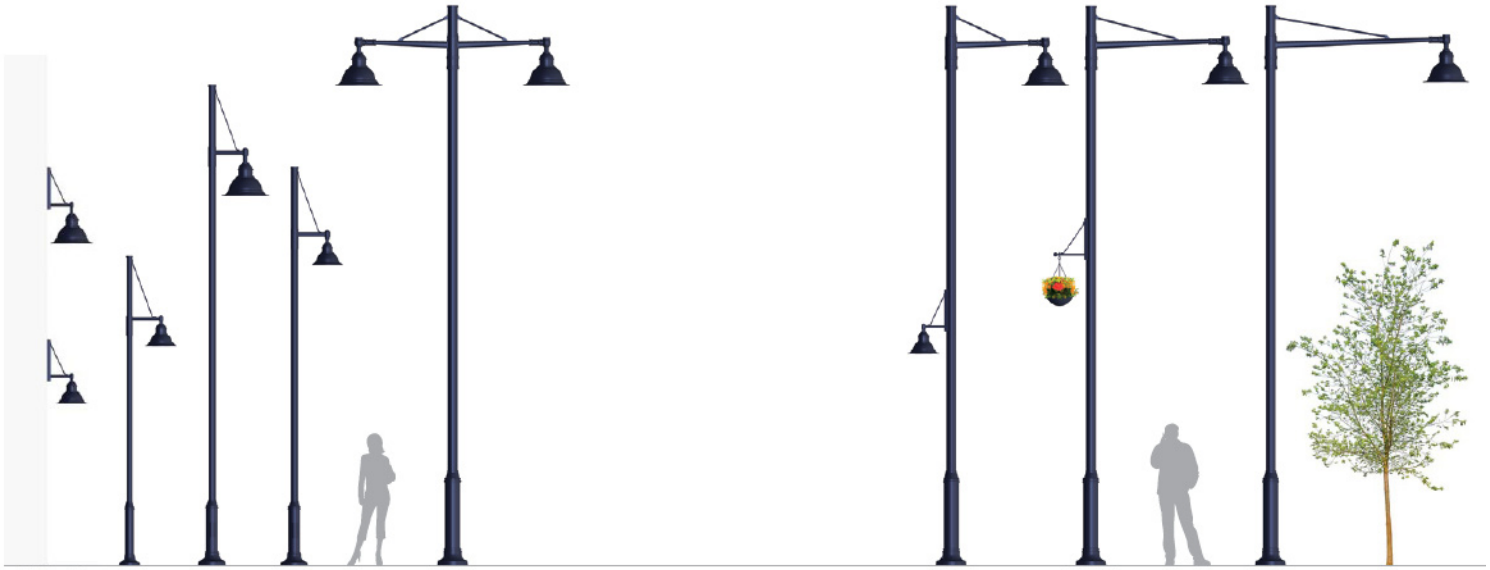
For most landscape lighting, where accent and aesthetics are the principal concerns, the operative word is subtle. Let the eye see the detail and never the source. Contrary to popular misconceptions, there is no need to eliminate lighting. Excellent landscape lighting, in general, tends to demonstrate the concepts that ambiance, comfort, security and safety are enhanced.

4.6.2 Street Lighting

Street lighting becomes a unifying element in streetscape design by harmonizing the contrasting elements and scales of buildings, trees, and amenities. The fixture chosen recalls an old mining helmet, is both alitte bit industrial and a little bit contemporary. The proposed standard call is for a minimum of five metres poles spaced approximately fifteen metres apart, along both sides of the Streets within the Planting Zone. Final spacing will be determined in relationship to and coordinated with the planned street tree plantings so that street trees and light poles do not conflict with each other. The poles are to be brushed nickel. Afixed to the base of the poles could also be a trellis to maximize plantlife in the downtown and keep unsightly posters from the bases.

The arms and wall bracket will be one-piece construction. Finials, plumb housing, spools and wall bracket mounting are made of cast aluminum with a brushed nickel. All exterior hardware shall be tamper resistant. Double luminaires are optional. Various finishes are available.

The existing light standards could be retrofitted (where appropiate) by replacing the head only and adding the trellis to the bottom of the pole (see image).



PROPOSED LIGHT FIXTURES - DOMUS SMALL SERIES, LUMEC

4.7 Other

4.7.1 Signage

Critical to any streetscape design is a proper signage component. There is, however, a balance that must be struck between proper signage and over signing a street corridor.

Signage within the Downtown area should be complimentary and supportive of the urban streetscape.

The appendices include recommendations for an amendment to the City of Sudbury Sign By-law that would apply specifically to the Downtown (discussed further in the Implementation Section).

4.7.1.1 Wayfinding Signage

Easily getting from the fringes of the City to the City Centre draws people to the Downtown area. The proper design and location of wayfinding signage brings them back time and again, giving them an incomparable sense of familiarity with the area. Visitors appreciate signage that allows them to quickly find Downtown public parking.

The purpose of wayfinding signage is to provide a system of information that enables users to successfully navigate through the City to public areas by showing them their location in relation to their surrounding environment and possible destinations.

- It clearly defines primary routes to these public destinations (both vehicular and pedestrian)
- It enables users to locate public parking facilities adjacent to or in proximity to their intended destination
- It enhances the overall image of the City of Greater Sudbury by helping to better define its unique Downtown area.

Wayfinding signage should be located at key pedestrian locations and entry points. Vertical wayfinding signage could compliment the proposed.

PROPOSED WAYFINDING SIGNAGE

4.7.1.2 Directional Signage

Successful traffic signage combines people's basic use of streets and challenging aesthetic streetscape elements.

A unified style of signage will emerge from the current variety of signage treatments and will present visitors to the Downtown with one image and with visual queues to their location.

In Downtown Sudbury:

- All traffic signage not mounted on traffic signals or light poles will be mounted on decorative poles to match the proposed street lighting poles.
- All traffic signage will have the rear face of the sign will be brushed nickel.
- All traffic signal poles will be brushed nickel.

PROPOSED STREET SIGN

4.7.1.3 Business Signage

Building identification signs should be incorporated prominently on the front façade or rooftop, and should be compatible with the building design in scale, material and colour.
Building identification signs should be applied as large scale building elements, including awnings, banners and rooftop signs to contribute to an artful and dynamic building presence that will be attractive and visible to passing pedestrians and motorists.

A consistent design for building identification should be applied to the whole commercial development to establish a coordinated image and orientation to commercial areas.

Sandwich signs on the sidewalks need to be placed in the building zone next to the building; they should not be located in the Pedestrian Zone.

Not recommended are:

- Signs that are out of scale with the building, and with neighbouring buildings and signs.
- Signs of inappropriate materials, such as plastic or vinyl.
- Insertion or attachment of signs in such a way as to inflict damage to the building.
- Internally lit signs.

4.7.2 Awnings

Awnings have traditionally been used for storefronts facing south, to protect merchandise from degrading effects of the sun and to protect customers from inclement weather. Retractable awnings were cranked out in response to these weather conditions. They were constructed of canvas fabric, and when fully extended, projected over most of the sidewalk.

In addition to their functional attributes, awnings add colour, texture and a strong horizontal alignment to the streetscape and can brighten an otherwise plain façade.

Awnings should contribute to the appearance of a building and the visual character of the streetscape.

The following standards are designed to improve the visual character of buildings and the streetscape:

- Use awnings that have a simple shape
- Use fabric made of weather resistant material
- Consider using retractable awnings because they are more flexible in changing weather

- Use awnings to create shaded spaces and shelter in front of a building for shoppers
- Use awnings to cool interiors and save energy
- Use awnings as signs
- Colour should be used to bring together the elements of the entire façade
- Colour should complement and enhance the architectural character and detailing of a building
- Colour should be considered in the context of the entire commercial corridor and can add character and interest to the building's façade. Use bright colours for accents
- Backlighting or illuminated awnings are not permitted
- Awning must be made of durable material/fabric; plastic awnings are not allowed.

The use of awnings or overlapping signs will require a special agreement with the City, as discussed in the Implementation Section.

4.7.3 Supplemental Plantings

Throughout Downtown Sudbury, there are places where there are undesirable views to parking and service areas from adjacent streetscapes. Such places could be enhanced with supplemental plantings. Typically, these potential planting areas do not exist within the public streetscape as defined in Section 2, but are located, instead, on private property.

The following five (5) evergreen and semi-evergreen plant suggestions are provided to enhance such areas typically located at the perimeter of public streetscapes. These suggestions may be supplemented by the document entitled “Trees and Shrubs for Sudbury” and/or with recommendations from the Vegetation Enhancement Technical Advisory Committee:

1. Common Juniper *(Juniperus communis)*

Requirements: Grows well on rocky outcrops.

Description: Dark green needle-like “leaves” with bluish-white berries. Branches are greenish-brown.

2. Downy Serviceberry *(Amelanchier arborea)*

Requirements: Prefers dry to fresh wooded areas, and develops a massive, deep root system.

Description: White flowers have 5 petals; small red to purple berries in July and August.

3. Chokecherry *(Prunus virginiana)*

Requirements: Prefers dry clayey or sandy sites.

Description: Usually 2-3 m in height; fragrant white flowers in spring and deep red-coloured berries that are almost black when ripe in August-September. The berries are grouped in larger clusters than pin cherries.

4. American Mountain Ash *(Sorbus Americana)*

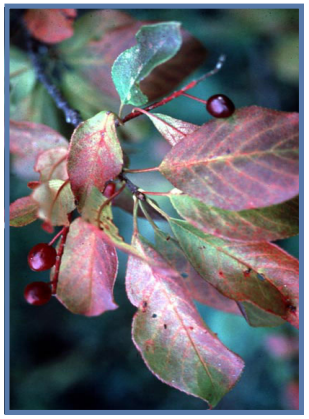
Requirements: Grows in dry to moist, sandy to fine loamy sites.

Description: Grows to 10 m in height; small white flowers are in clusters 5-15 cm in size, and berries are an orangish-red

COMMON JUNIPER

DOWNY SERVICEBERRY

CHOKECHERRY



CHOKECHERRY

colour. It has white spring flowers and winter persistent orange fruit.

5. English Ivy *(Hedera helix)*

This versatile evergreen ivy can be grown as a maintenance free ground cover, climbing vine or in a hanging basket. It can climb as high as fifty feet, attaching itself to wood and brick via aerial rootlets. English Ivy provides summer shading.

The climbing nature of English Ivy makes this an ideal plant for hiding unattractive but necessary pipes on the outside of buildings.

This ivy grows well in shade making it ideal for problem areas like under trees. The vigorous and dense growth pattern of English Ivy also make this plant ideal for weed and erosion control. The plant also does well in sunny locations.

To address perceptions of safety, no supplemental plantings may exceed a mature height of 1.0 m (3 ft) adjacent to parking areas and 2.0 m (6 ft) next to service areas such as dumpsters. All suggested

AMERICAN MOUNTAIN ASH

AMERICAN MOUNTAIN ASH

ENGLISH IVY

plant materials noted above may be easily pruned to meet these height requirements.

4.7.4 Planted Medians

Planted medians create a consistent aesthetic approach for continuing the appearance of a “green” corridor through the Downtown. This planted space will need to be at least 2.0 m (6 ft) wide to provide enough area for a staggered or paired planting arrangement.

These medians should be planted with low grading, attractive landscaping, and drainage systems. The medians will also provide a place for directional signage and announce key intersections, while introducing colour and greenery to beautify Downtown Sudbury,.

ENGLISH IVY

PLANTED MEDIAN

Planted medians will:

1) Enhance the overall Downtown appearance, raising property values and improving the Downtown's overall economic attractiveness;

2) Calm traffic;

3) Provide practical relief to pedestrians and bicyclists crossing the roadway by providing a mid-point crossing island at crosswalks; and

4) Improve traffic safety by creating a barrier to head-on collisions.

4.7.5 Container Plantings

The single most defining element in the streetscape is dramatic floral displays in permanent planters and movable containers. The re-use of natural stone should be used to retain earth. Container plantings should have the following components:

Drama – Unusual combinations of forms and textures creates a strong lasting impression.

PLANTED MEDIAN

Height – Tall material creates a bold visual presence.

Lushness – Planters and containers should be full of plants. Weak floral statements become lost in the urban environment.

Spill – Containers should be overflowing with plants that cascade down the sides.

Colour – Bold use of colour is the single most noticed feature in planter landscapes.

Container materials should be environmentally friendly.

Self-watering containers and watering system inserts for regular containers should be used. They are more costly initially, but the time saved by watering less often will compensate for this expense. Also, if situations do not allow for daily watering, plants in self-watering pots will be more successful.

Containers must have drainage holes in their bottom sides, and these holes must be covered with fine wire mesh (or fabric cover supplied by the container manufacturer) before planting mix is added.

CONTAINER PLANTINGS

Free-standing pots come in all shapes and sizes. When grouping a mixed selection of container plantings, the shape, size and number of pots should be proportionate to the site. Pots may be placed on stairs and doorsteps, and boxes may be mounted on window ledges and façades of buildings. If there are no ledges, half-baskets or boxes can be supported on brackets attached to the wall below windows. Railings can hold half-baskets.

Choosing the right plants for containers can provide year-round interest and enjoyment. Spring is a rich season because of the great number of bulbs that grow well in window boxes and pots. Spring flowering bulbs can be planted in autumn. In summer, many annuals are available that flower simultaneously over several months. Mums, pansies, vines and berries are good choices for autumn. During the coldest months, winter arrangements can be displayed into early spring.

Where bold, seasonal colour is not desired, containers may be planted with more permanent installations of evergreen materials with proven root hardiness and an ability to survive in containers throughout the winter months. Permanent plantings are especially warranted on streets where extensive underground utilities and vaults render street tree plantings impossible.

CONTAINER PLANTER

4.7.6 Parking Meters

Parking meters contribute to the visual 'clutter' of Sudbury's streetscapes. For this reason, consideration must be given to incorporation of parking meters on pole-mounted light fixtures wherever possible. Such consolidation effectively eliminates the need for two or three separate poles, typically required for a light fixture and two adjacent meters. Where a separate pole is necessary, it must be of the same colour as the meter component (preferably nickel).

Another alternative to the use of individual pole mounted parking meters is the use of automated meter boxes which give timed receipts for purchased parking time. A receipt is placed by the motorist where it can be seen by the parking inspector. Beyond removing visual streetscape clutter; this system also increases parking revenues, since excess meter time cannot be transferred to another vehicle.

The City of Greater Sudbury is currently investgating the replacement of many of the parking meters within the Downtown, this is further discussed in the implementation section.

4.7.7 Pedestrian Lighting

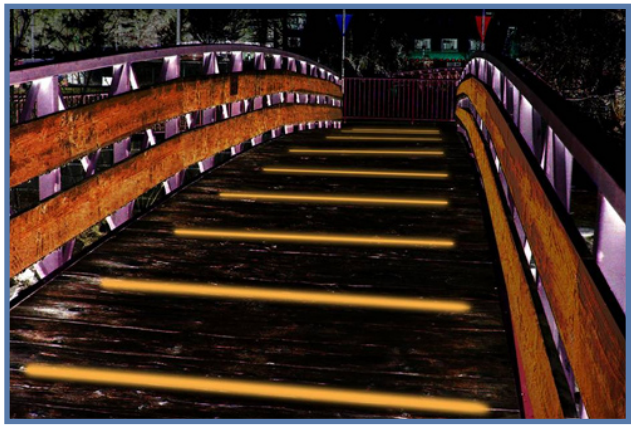
Good outdoor lighting can create and encourage a pedestrian friendly environment, which is especially beneficial to neighbourhood business districts. Pedestrian lighting improves walkway illumination for pedestrian traffic and enhances community safety and business exposure.

Pedestrian lighting needs to be transitional in areas that link one activity or function to another. Some examples are:

- linkages can be from parking areas to streets, or community buildings
- from shops to alleyways to parking areas.

Effective lighting needs to take peripheral space into account for pedestrian night vision by:

- supporting pedestrian activity at the street edge
- locating street lights where good light is provided to building frontages
- having conspicuous entrances and illuminating ground floor interiors
- treating site lighting as a seamless extension of adjacent street lighting
- reducing illumination levels gradually as distance from the street increases
- ensuring that the edges of the space are consistently well lit
- avoid glare and other effects that compete with the public lighting system
- avoiding dark spots or sudden changes in illumination that may impair vision and raise fears about personal safety
- utilizing shop window lighting for pedestrian areas. This places focus on the merchandise (benefits to the retailer) whilst lighting the paved area for pedestrians (benefits for Owner).



4.7.8 Street Element Incorporation

By incorporating desirable streetscape elements such as signs and banners into a lighting system layout, visual clutter is minimized. Relocating these items, if possible, to a streetscape component that must be there to provide a necessity, such as night illumination, reduces the number of overall streetscape components. Frequently, signage can be attached to streetlight poles via semi-permanent or pre-installed hangers. Plant hangers and parking meters, in locations where a design dictates, can be mounted directly to light poles on pre-manufactured brackets. Through careful selection of light poles included in these Guidelines, provisions have been made for inclusion of these potential elements. Common traffic signaling equipment can also be incorporated into the spacing and placement of light fixture poles, if not included directly on standard streetlight poles. More often than not, pedestrian crossing signals and equipment are independently mounted at each street corner. Maximizing use of all available pole space aids with elimination of visual streetscape clutter.

4.7.9 Selective Building Highlighting

At times, it may be appropriate to illuminate privately or publicly-owned buildings at the request of the owner. In an effort to limit the amount of street clutter, it may be possible to incorporate separate, customized lighting systems into the street-lighting pole system.

Highlighting specific structures can make Downtown Sudbury a festive, active destination, while assisting with nighttime orientation and navigation for visitors and residents. It is recommended that a façade lighting plan be completed in an effort to select appropriate structures to be highlighted, and to define appropriate façade lighting techniques.

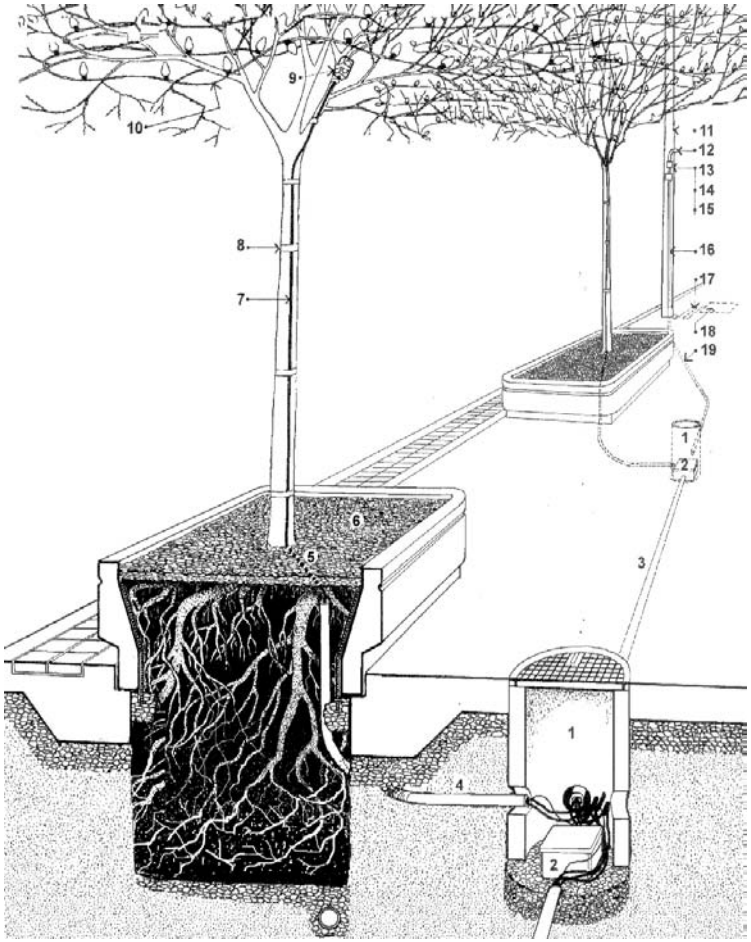
Lighting of specific structures must achieve appropriate light levels, while utilizing lighting adds to the overall aesthetics of the public streetscape.

4.7.10 Holiday Lighting

Holiday lighting can create a special warmth and appeal in the Downtown district and create a true sense of place. The ambiance created can successfully draw residents and visitors alike, and tends to have a traffic calming effect.

Holiday lighting may be incorporated to decorate the trees that line the streets, to enhance the trees in the pedestrian islands/planted medians, or both. They may utilize white lights year-round, or be exchanged for coloured lights during the holiday season.

While the lights themselves can be incorporated at a later date, the electrical service to the trees and island locations needs to be addressed as part of the infrastructure and hardscape improvements. (See next page for detail.)



DECORATIVE TREE LIGHTING DETAIL

Legend for Decorative Tree Lighting Details

1. handwell as per City specifications.
2. scepter box or equivalent, with low voltage potted transformer (500 watt 120 / 24 volt)
3. rigid 50 mm PVC conduit installed 450 mm below grade.
4. flexible 38 mm PVC conduit
5. S.O.W. cabtire under mulch in TL 1 under precast panel in TL 2
6. 80 mm of mulch (in raised tree planters only)
7. continuous run of S.O.W. cabtire from transformer in handwell into crown of tree
8. vulcanized rubber tape to secure S.O.W. cabtire
9. receptacle box with cover secured with vulcanized rubber tape 2.5 m above grade minimum
10. low voltage decorative lights draped over branches (wires not to be wrapped around any part of the tree)
11. hydro pole
12. 25 mm PVC weather head
13. B 100 hub with close nipple and female adaptor
14. service entrance switch Square D Q02rb or equivalent
15. contactor switch with photocell
16. 50 mm rigid steel conduit for service wire
17. #6 ground wire in 12 mm rigid steel conduit
18. ground plate or approved Hydro inspected grounding means
19. female adaptor – Sceptre fitting

4.7.11 Sidewalk Cafés

A sidewalk café allows diners an opportunity to enjoy the weather and watch the pedestrian traffic while being provided customary restaurant services.

The City of Sudbury has a Sidewalk Café Program. They provide guidance to businesses through a by-law, which is further discussed in the Implementation Section. The Downtown Area should look at the laneways within the downtown as innovative locations for sidewalk cafés if sidewalk width is an issue.

Restaurants should be permitted to operate outdoor cafés on public sidewalks within the Building and Pedestrian Zone, provided that pedestrian circulation and access to building entries is not impeded.

No less than 1.8 m of sidewalk must remain unobstructed by tables, chairs, or other encumbrances, and be available for the free-flow of pedestrian traffic at all times. Two metres is recommended where sidewalk widths allow. All sidewalk cafés must be located in front of or beside the associated restaurant and on the same side of the street.

The limits of sidewalk cafés should be delineated by elements such as planters, posts, low fencing or rope/chain. Fencing that surrounds the entire dining area is permitted, however, it may not be solid, made of plastic, permanently affixed to the ground, or greater than one metre in height. Rope or chain is preferred.

Umbrellas are encouraged as they make the café experience more enjoyable by shading diners from the sun, offering limited protection from rain, and adding colour to the streetscape. However, they must be removed daily when the restaurant closes and never interfere with pedestrian traffic or vehicular line-of-sight. They should be clean, safe and well maintained, and there should be no greater than one per table.

4.7.12 Outdoor Merchandise

The display of goods for sale outside of a storefront is an excellent technique to blur the line between the inside and the outside while adding visual interest to the street. No less than 1.8 m of sidewalk must remain unobstructed by any goods or other encumbrances, and be available for the free-flow of pedestrian traffic at all times. Two metres is recommended where sidewalk widths allow. All outdoor merchandise will be removed each day at the close of business.

4.7.13 Sidewalk Vendors and Pushcarts

Vendor kiosks and pushcarts located within the public right-of-way are a welcome addition to Downtown streets. They provide a convenient place to buy food or goods and add life to the streetscape. Specific locations for these operations may be prescribed by Downtown Sudbury.

4.7.14 Street Performers

Street performers, also known as “buskers,” can add a lively, colourful, and entertaining dimension to the Downtown. Street performers may not obstruct pedestrian or vehicular traffic or building entrances.

4.7.15 Utilities and Equipment

Utilities should be buried below grade - typically in the boulevard section of the right-of-way - as part of new construction and reconstruction of a road right-of-way.

Above-grade utilities should be sited with regard for their visual impact on the streetscape. Joint service trenches are recommended for efficiency, and should be located within the road right-of-way. Consider installing traffic signals on poles that are placed beside the street and are compatible with pedestrian-scaled light fixtures.

Place necessary utilities, such as transformers and overhead wires, so that they are as visually unobtrusive as possible. Encourage the siting of dumpsters and trash storage areas to be as unobtrusive as possible.