## 6. Landscape Design


#### Abstract

Adopt an approach to the design of the landscape that maintains and enhances the general topography and natural landscape of the City, as well as the defining characteristics of the building, site, streetscape and character area. Stress the use of vegetation and minimise the environmental and visual impacts of paved parking areas, driveways and site structures.


Westmount is a green city on the hillside of Westmount mountain. The natural character and presence of vegetation owes much to the foresight that provided large areas of public and private open space in the City. The high quality of landscape design and maintenance contributes to this special character. The general absence of fences, walls, gates or hedges along the streets of the City establishes a feeling of openness, and the varied topography provides visual interest. The variety of landscaping settings contributes to the visual character of the City.

Modifications to the landscape affect the nature and character of the street and neighbourhood in much the same way as do modifications to the building envelope.

A permit is required for landscape work in new projects and existing buildings that results in significant changes to the site, including: grading and drainage pattern; introduction or modification of steps, walls, fences, and garden structures; paving; hedges along property lines and facing the street; and, to the landscaping concept of significant buildings (category I and I*).


Summit woods, a wildflower and bird reserve on the heights of Westmount Mountain, is included in the Mount Royal Heritage Site. This site is protected under the Cultural Heritage Act, (CQLR chapter P9.002), as well as the applicable municipal regulations of Westmount. This is the first such area in Québec to be designated for both its natural and historic interest by the Ministère de la Culture et de Communication du Québec.

These landscape guidelines should be read in conjunction with the entire set of design guidelines and all other applicable by-laws.

There is a wide variety of site contexts throughout Westmount. Properties are found on the summit of the mountain, on the slopes, and on the plateau overlooking the St. Lawrence River. Each site has its own particular characteristics that should be reflected in design proposals.


Existing Conditions
Drawing should include:

- the size and shape of the property;
- the location and profile of the buildings(s);
- the existing topography;
- existing walls, steps, pools and garden structures;
- utility easements \& building lines;
- vegetative cover;
- the location and profile of the building(s).

Proposed Conditions
Drawing should include:

- all changes to grades \& drainage patterns;
- changes or additions to fences, walls and other site components or additions;
- changes or additions to planting; a planting list showing the location, type and size of the proposed material should be provided on the plan.


### 6.1 Streetscape and site <br> Reinforce the positive aspects of the landscape setting of the character area and streetscape using design components that contribute to the existing visual setting. In addition, adapt landscape design proposals to the particular context and existing man-made and natural features of the site.

### 6.1.1 $\quad$ Relation to streetscape and street

All landscaping elements that extend above ground level, such as rock gardens, and hedges and other potential obstacles, should be set back one metre from the sidewalk to allow for snow removal and maintenance. Retaining walls, fences and hedges at the corners of streets or lanes must be located behind the building line at a height that will not obstruct views of traffic.

Landscape the property in front of the building line of a residential lot with grass or other vegetation. As there is usually a strip of City-owned land between the front of the property and the sidewalk, avoid proposals for excessively elaborate planting and the installation of irrigation equipment on City property. The installation of electrical wiring for private residential lighting on City property is not permitted.

Design fences, decks, railings and other man-made features to harmonize with the character of the building and street.

### 6.1.2 Preservation of existing significant features

Retain natural and man-made features that are important to the overall character of the site such as escarpments, rock outcroppings, mature trees, ground covers, retaining walls, steps, fences, and paths.

The preservation of the original features is especially important with category I* properties and any changes to these properties should be supported with appropriate historical records justifying the proposed use and form of the landscape. The introduction of new, man-made components (fences, walls, steps, etc.), as well as modifications to grade and to site plantings should be consistent with and derived from the streetscape and character area.

Modifications and repairs to buildings in Westmount may affect the property with which they are associated. In the case of significant landscapes, a site plan should be submitted indicating where materials will be stored and/or removed from the site, and how significant features are to be protected.

### 6.2 Fences and hedges

### 6.2.1 Permanent fences and hedges

Fences are permitted at the sides and rear of buildings subject to the height and transparency limits outlined in the column to the right. Fences or gates are not permitted in front of a building or the projection of its street facade, other than in exceptional circumstances where they are physically required to deal with unusual site topography (when there is a precipitous drop) or on those few exceptional heritage properties where they were used historically (as presently existing or as documented) in which case they can be rebuilt to match their original design.

Open lawns are generally preferable to hedges; however, hedges or other plant materials (other than trees) are permitted within the front yard provided their height does not exceed one meter. On some streetscapes, the use of formal hedges would be incompatible with the open landscaping character and the use of informal planting is more appropriate.

Fences should be designed to harmonize with the style of the house and streetscape and the same material should be used for all fences on a property. An open fence in conjunction with a hedge or a vine is a good solution because it provides enclosure and privacy in the summer, openness and light in the winter, and security year round.

- Wrought iron (or equivalent) is generally the best choice for a fence visible from the street.
- Chain link has a character that is not compatible with Westmount streetscapes although it might be considered at the rear and sides of a yard provided the mesh is covered with green vinyl and it is enclosed within a hedge. This might require setting it back to allow room for the hedge.
- There are new types of open metal fencing that provide the advantages of chain link but are more acceptable from a design point of view.
- Solid board fences that totally block light and air are not permitted. Wood fences with some transparency are generally permitted at the side and rear of properties. However, in some parts of Westmount, they would undermine the predominant open landscape feeling; here, fences on the side and rear that are visible from the street should be open and wrought iron. All exposed wood used to construct fences and garden structures must be painted or stained an opaque, subdued colour that does not let the grain show through.


### 6.2.2 Snow fences

Residents may not put snow fences on City property. Burlap or wood snow fences or material to protect vegetation may be installed temporarily on private property and should be located and of a colour to minimize public visual impact. Avoid using white or bright colours, as well as styrofoam forms.

On some streets, wood fences and railings predominate whereas on others, wrought iron is most common.


Wood fences facing the street must be well-detailed and largely transparent, such as a traditional picket fence.


A wrought iron fence is highly appropriate when visible from the public way.


The visual impact of a high fence should be reduced by dividing the upper and lower parts.


#### Abstract

Materials Most modest changes in grade can be achieved by moulding the surface of the earth. Where retaining walls are required, dry stone or jointed stone walls are encouraged. Untreated concrete walls are unacceptable and must be parged or faced with stone or brick. Precast concrete blocks and railroad ties are unacceptable in front yards when adjacent to public ways.


## Fences on retaining walls <br> Retaining walls are prohibited in front of the building line unless they are the only way to deal with a sloping site



The maximum overall height of a fence including the retaining wall is 2 meters ( 6 '$6 "$ ).


If the overall height would exceed the maximum permitted, the fence must be set back from the top of the wall to create a ledge for planting.

### 6.3 Grading

Maintain and enhance the natural topography and profile of the site to assure compatibility with the grades of neighbouring properties and adjacent sidewalks.

### 6.3.1 Protection of the building

Landscape construction proposals should be designed to avoid endangering the building.

Ground surfaces should slope away from buildings. Where building foundations rest on clay, the root systems of nearby trees can dehydrate the clay, causing ground shrinkage and building settlement. Plant trees a good distance from foundation walls. Branches of trees overhanging a roof can damage the slates or shingles and can clog gutters with leaves in the autumn.

### 6.3.2

## Slope of the land

Ensure that slopes of paths are gentle enough to allow easy through the property. Walkways should be paved with a non-slip surface with a slight cross slope or crown to shed water. Grass lawns should have a minimum 1\%-2\% slope for proper drainage. Landscape berms should be sloped 1:3. Where more than three steps are required, handrails should be provided and lighting considered.

### 6.3.3 Retaining walls

Retaining walls should be avoided or reduced to the minimum possible height, especially in front of buildings.

If retaining walls are unavoidable on a sloping site, they shall be integrated with the landform, be of a minimum possible height and be masked by vegetation. If visible from the street or a neighbouring property, they should be stone or stone-faced with Montreal limestone (or match existing stone walls). The use of vegetated retaining walls is also encouraged, if there is enough lateral distance. This might also be required on walls not visible from the street, particularly with category I buildings, to maintain design consistency where there are several walls in a single landscape. Parged concrete might be acceptable for low retaining walls perpendicular and set well back from the street. The design should reduce any negative impact on the lower side, especially when it is seen from the public way or a neighbour's property.

The construction of retaining walls on City property or in front of the building line is not permitted. However, under certain exceptional circumstances, vegetated retaining walls, brick or natural stone walls up to 4'-6" high may be authorized by Council upon recommendation from the Architectural and Planning Commission and the Director of Public Works where this is required to deal with a particular site configuration. These will only be considered in cases of safety or when a design solution with a retaining wall has less negative impact on the natural topography than a design without one.

### 6.4 Planting <br> Maintain, reinforce, and improve the vegetative cover of the site.

A maximum of $30 \%$ of all front yards, excluding driveways, may be devoted to hard surface including pedestrian walkways. The remainder should be used for lawn, ground cover, gardens, rock gardens or other "soft" landscaping. Avoid the use of loose stones and pebbles close to sidewalks. The use of semi-permeable paving for driveways not fitting within the $30 \%$ area is recommended.

Plant hardiness, soil moisture, sunlight and exposure to wind and air-born salts, all effect the health and longevity of plants. Plants are often the most visible and unifying element of the streetscape and the site. They can reduce glare, control the effects of wind and snow and help to conserve energy.

### 6.4.1 <br> Trees

The cutting of any mature healthy tree is strongly discouraged anywhere in the City. The cutting of any City tree is forbidden unless authorized by the City. The cutting of trees on private properties, or located anywhere on the site of an assembly building, on a vacant lot or within the Mount Royal Heritage Site (for a description of the limits, refer to section 5.7 ) is prohibited without a Certificate of Authorization for tree cutting. Every attempt should be made to preserve large-caliper trees. New trees should be located bearing in mind their future growth and the effect of shade and the roots on adjacent structures.

Where the building line permits, front yard landscape design must take into account features of the public domain so that sufficient space is reserved for the planting of a tree and its growth to maturity. Some native trees cast deep shadows and the use of shade plants and ground cover is encouraged in these locations. Some Wetland trees such as willows and poplars require moist soils and should be kept at least 7 meters from buildings, retaining walls, pools, etc.

### 6.4.2 Hedges

Select plant material appropriate to the $2000 \mathrm{~mm}\left(6^{\prime}-66^{\prime \prime}\right)$ height restriction on both fences and hedges. Hedges at the front of properties are limited to $1000 \mathrm{~mm}\left(3^{\prime}-33^{\prime \prime}\right)$, and should be selected and trimmed so as not to exceed the maximum permissible height. Hedges may not be appropriate on certain properties and streetscapes where there is a predominance of completely open lawns.

### 6.4.3 Ground covers, plants and flowers

Avoid removing ground covers from steep slopes as they serve to stabilize slopes and reduce erosion. Remove all ragweed from the site and avoid the use of barberry, female Ginkgo biloba and other plants that may be poisonous, noxious or harbour disease.
6.4.4

Lawns
Grass lawns should generally be limited to slopes of 1:3 or less. The seed mix should reflect the location and the available sun. The form of the lawn should reflect the constraints of effective maintenance.


Refer as well to By-law 1303, Protection of trees; and to By-law 1300, Certificate of Authorization for tree cutting.

High Hedge Plant Material (about 2 meters or 6 feet high for the sides and rear of a property)
Persistent - freeform
Juniperus scopuerum 'Springback'
Persistent - trimmed
Taxus cuspidata
Thuya occidentalis
Seasonal - freeform
Amelanchier canadensis
Hydrangea panticulata
Lonicera a tatarica
Spirea x van houttei

## Low Hedge Plant Material

(about 1 meter or 3 feet high for the front, sides and rear of a property)
Persistent - freeform
Picea abies Little Gem' Persistent - trimmed

Buxus microphylla
Koreana
Seasonal - freeform
Spirea x bulmada
Cornus alba
`Elegantissima' Seasonal - trimmed Euonymus altatus `Compactus'
Hydrangea arborescens


Parking aprons are destructive of the landscape, the streetscape and the general character of an area. The City makes street parking permits available to those who cannot park on their property.

## Criteria for existing parking aprons

If modified, the design of the existing aprons must meet the following criteria: - the actual paved area should be a maximum of 9 'x18' or smaller; it is recommended to resurface the apron in a semi-permeable or permeable hard surfacing;

- the maximum permissible slope is $5 \%$; - it must be paved with stone, brick, unit pavers or a similar material; grass, mud, or gravel parking areas are not permitted; asphalt and gravel paving is permitted for parking areas accessible from lanes;
- the entire parking apron must be physically separated from the walkway leading to the front door of the building; - shrubs or other vegetation should be used to screen the parked car from public view as much as possible.


### 6.5 Parking and driveways

Locate and design parking and driveways so that they are as inconspicuous as possible and reduce the heat island effect. Parking aprons in front of the building line are not permitted.

### 6.5.1 $\quad$ Parking behind the building line

Parking must be accommodated behind the building line in a garage or on a driveway. Vehicular access from the street (parking aprons, driveways, or access to garages) is not permitted if a public or private lane or driveway gives access to another part of the property. A driveway may not be created if it would require the destruction of a tree in good health in front of the building line. No driveway paving shall be permitted within 1.5 meters of any tree on City property, nor can City trees be cut.

Driveways
Only one vehicular access (curb cut) is allowed per property unless it is physically impossible to accommodate driveways to multiple garages located close to the street in which case adjoining curb cuts may be permitted. Vehicular access points at different parts of the property are not permitted. However, on corner lots, two curb cuts are permitted, one on each street if spaced a minimum of 120 feet ( 36.36 meters) apart, measured along the curb line.

The maximum width of a driveway on City property between the front of the private lot and the sidewalk is 3 meters (about 10 feet), unless the specific circumstances would prevent proper access.

The maximum permissible slope is $12 \%$. Driveways should be as narrow as possible and normally not exceed ten feet in width. Driveways must be physically distinct and separated from the pedestrian walkway leading from the sidewalk to the front door, by means of planting beds, trees, curbs and/or other landscape features. No parking is permitted on the pedestrian walkway.
6.5.3 $\quad$ Parking in advance of the building line

Parking aprons in front of the building line are prohibited. Owners are encouraged to eliminate existing parking aprons and reduce unnecessary paving areas devoted to parking in order to re-establish a green and open front lawn unencumbered with cars. Therefore permeable hard surfacing is encouraged as replacements to existing parking aprons and is considered as part of the $30 \%$ maximum hard surfacing in front yards.

Changes and improvements to existing parking aprons in advance of the building line must conform to the proposed criteria listed. Parking aprons that block direct access to the front door are a safety hazard and are not permitted.

## Commercial parking lots

Commercial parking lots must be set back from the sidewalk and screened with shrubs and trees.

### 6.6 Swimming Pools <br> The design of a swimming pool and landscape should respect the natural topography of a site. It is not permissible to take an approach that excessively carves out the mountain (any sloping site) or creates an artificial plateau that would have a negative impact on the general topography and natural landscape and neighbouring properties. Only subtle changes to the natural topography should be considered. This section should be read in conjunction with By-law 1303.

### 6.6.1 Integration

Several concerns must be addressed in order to integrate a swimming pool into the landscaping: the visibility of the pool and its associated structures from the public way; its proximity to the property line; the maintenance of a certain percentage of porosity to allow rainwater into the soil; and finally, the physical impact on the natural topography.

The first two issues relate to the impact of the swimming pool on the community; the second two with its impact on the natural environment. Every effort should be taken to ensure that all these concerns are addressed in the siting and design of the pool and its associated structures.

### 6.6.2 Siting

Swimming pools should preferably be established in the rear yard of a property. They are not permitted in the front yard. If it is impossible to fully locate the swimming pool in the rear yard, the siting could encroach slightly into the side yard, provided that encroachment does not represent more than $25 \%$ of the area of the swimming pool.

To maintain porosity of the site, the swimming pool, its required deck, and additional paved surfaces should not exceed 40\% of the area of the rearyard.

To mitigate the impact of noise and lighting of swimming pools on adjacent properties, a minimum 4 foot planting setback from all property lines is required beyond the required deck of the pool. This section should be read in conjunction with By-law 1303.

Generous planting should surround the deck, in order to screen the pool from neighbouring properties.

### 6.6.3 Enclosure

Swimming pools should be fully enclosed by a fence to prevent access, as per the requirements of the zoning by-law and of the provincial requirements for safety around residential swimming pools. If the swimming pool is facing a public way, park or public stairs, the required fence should then be set back $3^{\prime}-0^{\prime \prime}$ from the property line, in order to allow adequate planting to screen the fence.

## Decks - Summary of Key

 Provisions of the By-LawDecks above the ground supported on posts or foundation walls are considered to be structures and must comply with the requirements of the zoning-by-law with respect to side and rear yards, building lines and site coverage.

The height of a screen erected on a deck or balcony to provide visual privacy must not exceed 1.68m (5'$6 "$ ).
 set directly on the ground is better related to the natural landscape and needs less maintenance than a deck.


Although a privacy screen may be desirable to the owner, it may have an unacceptable negative impact on the neighbour. The City's approval of the construction of a deck, balcony, steps or other landscape features may be conditional on a privacy screen not being erected.

### 6.7 Garden structures

## Assure that garden structures are

 properly integrated within the landscape design of the site and that they are visually unobtrusive from the public right-of-way.
## Decks

The impact of decks or balconies on neighbours' views, sunlight and privacy should be minimised. They should not be more than 2 meters off the ground and must not extend more than 3 meters from the building face unless the underside cannot be seen from the public way or an adjacent property. In addition, in the case of attached or semi-detached buildings, decks more than a meter off the ground should be set back 2 meters from the side property line unless it can be demonstrated that the impact on the neighbouring property is minimal.

Large decks more than a few feet off the ground are rarely appropriate; however, exceptions might be considered in areas where an exceptional or outstanding precedent exists for a larger deck and it can be demonstrated that the impact on neighbouring properties is minimal.

The distance from the edge of a free-standing deck to any property line must be greater than the height of the deck off the ground unless it abuts a similar deck on the adjacent property.

A link towards a garage roof deck should be of a minimum width, approximately one meter.

## 6.7 .2 <br> Privacy screens

Avoid using privacy screens on decks or balconies where they would create inappropriate impacts such as the loss of view or of sunlight to an adjacent building or property. Avoid proposals for new decks or balconies that would necessitate erecting inappropriate screens. Privacy screens on balconies or roof decks should not be designed as fences but rather as features integrated into the building design.

### 6.7.3

## Gazebos, trellis and sculptures

Garden structures and ornaments that require foundations are subject to the same set of design approvals and other siting requirements as any building structure. They, in addition to planter boxes and other objects visible from the public way, should complement the architecture and landscape of the site and avoid visually intruding on neighbouring properties.

### 6.8 Environmental considerations

## Design site interventions to reduce the heatisland effect and minimise negative impacts on adjacent or public properties.

### 6.8.1 $\quad$ Site drainage and irrigation

Design watering systems to avoid unnecessary consumption of water and to ensure that public sidewalks remain dry. Consider the use of large or small drip irrigation systems that avoid loss through evaporation. Drainage should avoid shedding water on neighbouring properties or across public sidewalks.

Since percolation of rain water through the soil serves to irrigate vegetation and to reduce runoff to the sewer system, avoid the use of unnecessary or excessive impervious paving materials.

Interventions on the site must not increase the volume, flow or particle content of stormwater runoff. Wherever possible, the following low impact stormwater management techniques should be used:

1. more permeable surfaces;
2. vegetated ditches;
3. green roofs;
4. redirection of downspouts towards planted areas or rainwater collection barrels.

Permits for all new buildings and major additions of $40 \mathrm{sq} . \mathrm{m}$. ( 430.56 sq. ft.) or more and all landscaping projects of 92.9 sq. m. (1000 sq. ft.) or more as well as any project which increases the hard landscaping area must also provide a storm water management strategy.
Permeable surfacing materials must be used to reduce soil sealing.

### 6.8.2 Site and building lighting

In order to limit the detrimental effects of light spillage on neighbouring properties, lighting required for decorative and security purposes should be directed towards the ground in locations where it is needed. It should be selected and installed to avoid glare, direct light beams and spill over from floodlights beyond property lines. Time controls and dimmers should be used to ensure that the light is on only when needed. The washing of private residences with the project of artificial light to the extent where the majority of any vertical surface of the building's facade is illuminated is prohibited

### 6.8.3 Mechanical equipment / Site acoustics

Select, locate and install air-conditioners, heat pumps, condensers and generators so as to minimize the visual and acoustic impact on the neighbouring properties.

Equipment should be located within the building. If this is not possible, it may be located on the ground but cannot be installed inside the prescribed building line or inside the required side and rear yards. Large generators should be housed in fully enclosed accessory buildings or within the existing building. This section should be read in conjunction with the requirements of the Noise By-Law for the maximum permitted noise level at day \& night time and as per the requirements of the Zoning By-Law for the required setbacks. Since the noise level has a tendency to increase as the equipment ages, it is best to start with very quiet equipment, to shield it with low fencing incorporating acoustic baffles and planting. Ensure that the equipment is well maintained and in good working order to guarantee that noise levels are kept at a minimum.


Heat pumps must be hidden with planting to minimise the visual impact as illustrated in the lower photograph.

### 6.8.4 <br> Sustainable site development and maintenance

Landscape proposals should seek to reduce the consumption of water and energy, to recycle materials, and to avoid the unnecessary use of chemicals. Cisterns that conform to the plumbing code, and rain barrels and other water collectors that are well-integrated in the landscaping are encouraged.

Products made from recycled materials certified as environmentally positive (e.g. recycled stone, and re-used face bricks) as well as ground surfacing materials of a clear or reflecting colour that reduce negative heat-island effects would be acceptable in the landscape design of horizontal surfaces and for parking areas, if they meet the following criteria:

- Made of durable materials
- Do not alter character-defining features of the property
- Are compatible with the building form and materials
- Are in harmony with the surroundings
- Are not visually prominent from the street

The design of a landscaping proposal should be supported by a green vision based on sound ecological design criteria while using durable materials.

