

Landscape Drawings Submission Checklist

Landscape drawing submissions to the Town of Whitchurch-Stouffville should contain the following information:

- ☐ Signed and stamped for construction by a Professional Landscape Architect who is Certified and Licensed in the Province of Ontario.
- ☐ Property lines, adjacent streets and land uses.
- ☐ Locations of easements, site triangles, 0.3 metres reserves, road widenings and land dedications.
- ☐ Buildings adjacent to the street, including entrances, intersections, pedestrian connections.
- ☐ Streets, driveways, intersections, crossing points, bus stops, drop-offs, bike lanes, sidewalks, parking areas.
- ☐ Watercourses, bridges, ravines.
- ☐ Retaining walls, fences, stairs and berms.
- ☐ Utilities and services (e.g. fire hydrants, streetlights, telephone poles and pedestals, transformer vaults, guy wires, hydro poles and above-ground service boxes).
- ☐ Lighting including streetlight poles, bollards.
- ☐ On-site building entrances and overhangs.
- ☐ Landscaped areas indicated.
- ☐ Location of existing and proposed trees, shrubs and groundcovers, identify existing vegetation to be retained/preserved.
- ☐ Location of areas that are accessible to the public, areas to be dedicated for park purposes and play/amenity space.
- ☐ Design of gateway features.
- ☐ Location and details of proposed landscape features including decorative paving, waste containers, curbing, retaining walls, site furniture, signs and planters (with surface treatments indicated).
- ☐ Town of Whitchurch Stouffville Landscape Standard Notes and Details to be included on plan.

- ☐ Retaining walls in excess of 0.6 metres with handrailing and/or guard rail in compliance with Ontario Building Code (OBC) are accompanied by an Engineer's stamp.
- ☐ Acoustic fence is accompanied by an Engineer's stamp.
- ☐ Storm water management details such as Bioswales.
- ☐ Locations of landscaping features are to be compatible with utilities, servicing and signage.
- ☐ Landscaping features are to be located to improve energy conservation (e.g. cold and wind screening, shading).
- ☐ Utilize low maintenance, hardy, species, select species for compatibility with site conditions and year-round appearance, prioritize native species where possible.
- ☐ Locate trees, determine soil volume per Schedule A3 Planting Design Checklist.
- ☐ If the site plan is within a Registered Plan of Subdivision, the landscape plans must comply with approved streetscape plan and/or tree preservation plan.
- ☐ Incorporation of 2D Matrix Barcode (QR codes) on signage for wayfinding and municipal information to be considered.
- ☐ Crime Prevention Through Environmental Design (CPTED) is to be incorporated including but not limited to:
 - Natural surveillance is enhanced by maximizing visibility through the careful placement of physical features and/or activities
 - Building access is clearly visible from the street to deter crime
 - Public space has been clearly defined as separate from semi-private and private space so that users develop a sense of ownership over it
 - Long term landscape maintenance measures will be performed to allow for the continuation of the intended use(s) of the space
- ☐ The Accessibility for Ontarians with Disabilities Act (AODA) principles are to be incorporated including but not limited to:
 - Accessible pedestrian corridor and road crossings, ramps, curb drops, ramps, handrailing, slopes and materials
 - Visible markings at crossings
 - Audible and visible signals at road crossings

- Tactile walking surface indicators
- Braille markings on way-finding signs
- Seating areas are provided at intervals of approximately every 200 metres along the mid-block walking connection block, trail/network corridor, etc.

Development Submission Checklist

Submissions of development plans must be submitted to the Town of Whitchurch-Stouffville for circulation, review and approval. Existing conditions and the anticipated impacts of the proposed development on existing conditions will be illustrated and included with the associated application, where required including the following information:

- ☐ The drawings shall include the extent of the adjacent right-of-way to the centre line as well as lands 6.0 metres beyond all property limits.
- ☐ All development proposals on lands which have existing trees and vegetation shall provide a Tree Inventory, Arborist Report and Preservation Plan. The submission shall include all existing trees located within the site and within 6.0 meters of the proposed development limits, grading limiting, servicing works, and associated construction areas.
- ☐ No net loss of trees as a result of development or tree planting compensation off-site.
- ☐ All Landscape Plans shall be completed by a professional landscape architect in good standing with Ontario Association of Landscape Architects. Landscape plan submissions illustrating proposed landscape works shall clearly illustrate, label and/or locate the following:
 - ☐ Property line, boundaries and legislated requirements within and adjacent to the proposed development, including type and locations of easements, utility or transportation corridors, reserves, road widenings (if applicable), daylight triangles, sight lines, setbacks, fence, as applicable, etc.
 - ☐ Phasing and limit of work as applicable.
 - ☐ Street names and designations consistent with registered plans.
 - ☐ Existing and proposed lot and block numbers, and/or municipal address numbering.
 - ☐ Adjacent right-of-way including boulevards, sidewalks, multi-use pathways, trails (as applicable).
 - ☐ Proposed/revised sidewalk locations, cross walks, tactile warning plates, depressed curbs, shall be illustrated and labelled.
 - ☐ Existing and proposed transit bays, stops or shelters.
 - ☐ Above and below grade site servicing and elements that impact the overall design, including above ground utility lines, light poles, hydro poles, hydrants, hand wells, streetlights, community mailboxes,

signs, transformer boxes, cable and bell boxes, manholes, catch basin locations, etc.

- ☐ Proposed surface treatment and vegetation including street trees, planting beds, buffer planting areas, sodded and/or seeded areas, adjacent boulevard conditions.
- ☐ Tree preservation and protection works.
- ☐ Construction details that accurately convey the design intent of all proposed landscape elements.
- ☐ Existing and proposed signages, gateway features, site furniture, etc.
- ☐ Boulevard Design Requirements:
 - ☐ AODA Compliance: All proposed boulevard spaces should meet Accessibility for Ontarians with Disabilities Act (AODA) standards for barrier-free design.
 - ☐ Positive Drainage: Ensure proper grading to avoid ponding and maintain positive drainage away from structures.
 - ☐ Cross Fall Specifications:
 - Concrete/Paved Sidewalk: Provide a minimum 2% crossfall for effective drainage, and a maximum 5% longitudinal slope.
 - Soft Boulevard (landscaped area): Limit cross fall to a maximum of 4% to maintain accessibility and prevent erosion.
 - Positive Drainage: crossfall should be away from property line toward street or catch basin.

Planting Design Checklist

Submissions of proposed Planting Details must be submitted to the Town of Whitchurch-Stouffville for circulation, review and approval. Please ensure the following information is included in the submission:

Street Tree and Shrub Species Selection

- ☐ Shrub planting proposed for headlight screening purposes shall consist of low-growing, hardy shrub species that maintain effective year-round screening while preserving visibility and safety requirements.
- ☐ No trees and shrubs shall be permitted within any daylight triangle.
- ☐ Tree species selection shall consider road section type and offsets from the road or other infrastructure.
- ☐ Plantings within right-of-way boulevards in urban road cross sections will be subjected to harsh growing conditions and will require tree species that are salt-tolerant, drought tolerant, single-stem, high-branching and that require minimal maintenance.
- ☐ Street tree planting within right-of-way boulevards in rural road cross sections generally have less salt applied. Two adjacent conditions generally exist; farmland (where native and non-native species are acceptable), and naturalized areas (where native species are required due to the sensitivity of the adjacent land).
- ☐ Species selection must be appropriate for the conditions at the planting location including consideration of available planting space and soil conditions, sight lines, etc.
- ☐ Large canopy shade trees should be used wherever possible to maximize the urban forest canopy, reduce the urban heat island effect and enhance pedestrian comfort.
- ☐ Street tree species selection should maximize species biodiversity with a preference for the use of native species, considering species that are tolerant of urban conditions (pollution, salt, drought, soil compaction).
- ☐ Do not locate trees where regulated traffic signage (approaching light standards mounted with traffic signs or other signposts) will be obstructed.
- ☐ Where permissible, align trees with utility poles, to allow for clear zone for snow storage Setbacks indicated in this manual for utilities represent typical distances and may differ from setbacks required by a utility provider. Coordinate tree locations and obtain approval from utility

providers before tree installation. Obtain locates for utilities prior to tree planting operations.

- In low areas prone to flooding, include only species known to tolerate such site conditions.
- ☐ Where tree planting is required on slopes exceeding 3:1, trees should be limited to smaller sizes such as container grown, potted or bare root stock.
- ☐ Where trees are located within 1.5 metres of a hard surface, curb or structure, a root barrier system is to be installed
- ☐ Ensure that the selected planting heights and species selection are controlled to maintain clear sightlines and appropriate visibility for safety and functionality. Plants within the Visible Site Triangle at intersections shall not be taller than 1m at maturity. Plant materials should be selected and maintained to avoid obstructing views within the public realm.
- ☐ Select tree species that reinforce a consistent streetscape character along each street or block.
- ☐ Use a limited palette of species to create visual cohesion and identity.
- ☐ Maintain consistency in canopy structure, mature height, and spread to ensure a uniform street profile.
- ☐ Coordinate foliage colour, seasonal interest, and overall form to enhance continuity throughout the corridor.
- ☐ Preserve and integrate existing healthy trees where feasible to retain established character.
- ☐ Select species appropriate to site conditions (soil volume, microclimate, utilities, and urban stressors) to ensure long-term viability.
- ☐ Avoid frequent or abrupt changes in species within short distances unless required for specific design or environmental conditions.
- ☐ Introduce species variation at logical breaks (e.g., intersections, gateways, or land use changes) to subtly differentiate sub-areas while maintaining overall cohesion.
- ☐ Monoculture arrangements of street tree species are to be avoided, restrict groupings of the same species to a maximum of five to nine trees of the same species in a row.
 - Ensure that no single species exceeds 5%, no single genus exceeds 10%, and no single family exceeds 20% of the overall tree population, to improve long-term resilience against pests and diseases.

- No more than 4 trees of the same species planted adjacent to each other, either along or across the boulevard, unless otherwise approved by the Town.
- Where species transitions are required, alternative species shall be selected based on comparable mature height, canopy form, structure, and foliage characteristics to maintain overall corridor coherence.
- Small grouping of trees are permitted where required to maintain rhythm and continuity; however, these shall not result in large monoculture blocks or visually dominant clusters.
- Establish a rhythmic and legible planting pattern along the street by using a limited palette of complementary species, ensuring visual cohesion without creating monocultures.
- While a consistent street character is encouraged, ensure compliance with Urban Forestry best practices by maintaining species and genus diversity (e.g., avoid over-reliance on a single genus across the corridor).

Hydro Corridor & Utility Constraints

- ☐ Within and adjacent to Hydro corridors, select species in accordance with Hydro One planting guidelines, ensuring compatibility with overhead wires and utility clearances.
- ☐ Prioritize low-mature height species and small-stature trees beneath or near overhead utilities to minimize future conflicts and maintenance requirements.
- ☐ Maintain required horizontal and vertical setbacks from hydro infrastructure and confirm that proposed species will not encroach on wires at maturity.
- ☐ Avoid large-growing canopy species within the Hydro corridor; instead, consider ornamental or columnar forms that are better suited to constrained conditions.
- ☐ Ensure a clear transition in species selection between Hydro-constrained areas and unconstrained boulevard conditions, while still maintaining an overall cohesive streetscape character.
- ☐ Coordinate tree placement and species selection with other utilities (e.g., transformers, poles) to ensure long-term viability and reduced pruning requirements.

Tree Soil Volume Requirements

Provide tree soil volumes in accordance with municipal engineering standards.

General Recommendations:

- ☐ Tree planting should have a minimum volume of 30 cubic meters per tree of high quality, uncompacted soil for growth. In continuous planting trenches, the volume may be 15 to 20 cubic meters per tree.
- ☐ Where structural soil is applied, the volume required is 40 cubic meters per tree.

Tree Setbacks

Street trees should be aligned with light poles and hydro poles to maintain visual order and minimize conflicts with utilities.

- ☐ Provide dimension of minimum horizontal distance between underground/aboveground servicing and utilities and centerline of tree trunk.
- ☐ Provide dimension of minimum horizontal distance between underground/aboveground servicing and utilities and centerline of tree trunk.
 - Tree Setbacks - Utilities
 - Communications Box 2 metres
 - Gas Main 2 metres
 - Fire Hydrant 3 metres
 - Hydro Pole 5 metres
 - Light Pole 5 metres
 - Water Main 3 metres
 - Transformer 3 metres from door, 1.5 metres other sides
 - Tree Setbacks - Other
 - Entranceway or Driveway 3.5 metres
 - Ditch or Swale Centreline 2 metres
 - Fence Line 2 metres
 - Minor intersection 10 metres
 - Major intersection 15 metres
 - Multi-Use Paths / Bike Lanes 2 metres
 - Property Boundary 2 metres

- Road Sign (other than stop sign) 5 metres
- Road - Urban 1.2 metres from back of curb or edge of pavement
- Road – Rural 5.0 metres from the face of curb or edge of pavement
- Sidewalks 1.5 metres
- Stop Sign 15 metres
- Structure or Building 5 metres

Tree Spacing

Spacing of street trees should reflect the growth habits of the particular species, along with the following guidance:

- ☐ Space trees 8 to 12 meters apart to provide a continuous canopy along the road corridor.
- ☐ Trees may be planted at different or smaller intervals (such as buffer areas), at the discretion of the Town, when factors such as available soil volume, location or species can be taken into consideration.

Planting Plan Checklist

Submissions of proposed Planting Plans must be submitted to the Town of Whitchurch-Stouffville for circulation, review and approval. Refer to Schedule A3 for Planting Design Checklist and Schedule A2 for Development Submission Checklist for further information.

- ☐ Include planting details that are in accordance with Town standards.
- ☐ Show dimensions of tree planting pits.
- ☐ Include details for tree protection such as fencing, root barrier treatments as applicable.
- ☐ Include details for structural soil, tree cell treatment around roots as applicable.
- ☐ Include notes for planting soil, planting, pruning, hydrovac operations, removals, maintenance, tree protection as applicable.
- ☐ Choose species from the planting list provided by the Town.

Please ensure the following information is included in the Plant List Table submission:

- ☐ Plants should be grouped by vegetation type (deciduous trees, coniferous trees, shrubs, aquatics, groundcovers, vines, perennials, seed mix, etc.).
- ☐ A species key and reference list.
- ☐ Botanical species name to be italicized and used as the primary identifier.
- ☐ Common species name and cultivar (if applicable).
- ☐ Size (caliper, height, spread).
- ☐ Quantity, to reflect installed quantities.
- ☐ Plant spacing for group plantings (shrubs, perennials, etc.).
- ☐ Condition of root ball (container, wire basket, etc.).
- ☐ General requirements for spring dug/spring planting, and special characteristics of relevance (salt tolerance, drought tolerance, native species).
- ☐ Indicate whether native or non-native species.

Roundabout Design – Centre Island Checklist

Submissions of proposed roundabout designs for the centre island must be submitted to the Town of Whitchurch-Stouffville for circulation, review and approval. Please ensure the following information is included in the submission:

- ☐ The planting design is to follow the principles in the **Canadian Roundabout Design Guide (CRDG) (2017)**, published by the Transportation Association of Canada (TAC), which provides standardized practices for planning, safety, and geometry.
- ☐ Planting in large masses of the same species, spaced closely in continuous beds to ensure efficient establishment, reduce watering requirements, discourage weed growth and facilitate low maintenance conditions.
- ☐ Plant selections must consider seasonal interest and create visually a appealing effect.
- ☐ Plant selections may consider design characteristics to provide a visual identity for the location or municipality. consider seasonal interest and create visually appealing effect.
- ☐ Plant material species selection to consider soil volume, drought resistance, and exposure to road salt, radiant heat, and wind.
- ☐ Landscape planting must be designed to protect for clear access to utilities or other infrastructure.
- ☐ Fixed elements that can cause injury such as trees, light poles are to be located in the center of the design in the 'high landscaping zone'.
- ☐ Components of the design are to create visual cues for drivers to navigate in the correct direction, at a reduced speed, and should not provide a distraction.
- ☐ The design should avoid inviting pedestrians into the travel lanes of the roundabout.
- ☐ Shrubs located within roundabout and boulevard shall have a maximum mature height of 0.6 metres above finished grade and shall be maintained in a manner that does not obstruct sightlines, to the satisfaction of the Town.
- ☐ All proposed shrub species within roundabout and boulevard shall be selected and maintained to ensure compliance with applicable engineering and transportation safety standards.

Low Landscaping Zone

- ☐ Arrangements of plant material in this area are restricted to low ornamental grasses, dwarf and spreading shrubs or groundcovers with a maximum height of 0.6 metres height in order to maintain sightlines for circulating traffic and provide clear visibility to traffic control signs. The maximum height of the plants should be lower than the plants in the High Landscaping Zone.
- ☐ Consideration may be provided for the use of low-maintenance ornamental surface treatments such as mulch or aggregate in this area.
- ☐ Fixed objects, such as sculptural elements or public art, must not be located in low zones.

High Landscaping Zone

This area of a roundabout is typically graded to create a mound of sufficient height (typically +0.6 metres) to contribute to limiting sight lines which helps reduce speed.

- ☐ Plant material should be of greater height to block headlight glare through the middle of the central island and should include trees.
- ☐ Evergreen tree species are preferable to deciduous trees to provide year-round visual screening.
- ☐ Consider including vertical elements such as public art in this zone. Planting shall be designed to allow for visibility of the feature.

Landscape Median Planting Checklist

Submissions of proposed landscape median plantings must be submitted to the Town of Whitchurch-Stouffville for circulation, review and approval.

Please ensure the following information is included in the submission:

- ☐ The goal for minimum required soil volume is 30 cubic meters for a single tree or 15 to 20 cubic meters of shared soil volume for 2 or more trees. This is based on a minimum tree pit or soil trench depth of 900 mm. Depending on available space the depth may need to be increased to meet the proper soil volumes, but should not exceed a depth of 1200 mm.
- ☐ Safety for maintenance operations is an important factor, and use of shrub/perennial massing should be considered.
- ☐ The minimum inside raised median width for trees is 2.5 metres; the preferred minimum inside raised median width for shrubs and perennials is 2.0 metres.
- ☐ Medians containing trees are required to have a minimum 350 mm planter wall height to mitigate the impacts of salt spray; medians only containing shrubs and perennials require a 150 mm high curb/planter wall for mulch and soil containment.
- ☐ Plant materials must be drought and salt tolerant and shall not interfere with intersection sight-triangles.
- ☐ Tree species selection shall not be low branching which could obscure views.
- ☐ A minimum clear stem height of 2.0 metres shall be provided from finished grade to the first branch of all trees, unless otherwise approved by the Town.

Streetscape Design Checklist

Submissions to the Town of Whitchurch-Stouffville for circulation, review and approval should contain the following documents where applicable:

- ☐ Arborist Report / Tree Inventory
- ☐ Tree Preservation Plan
- ☐ Landscape Plan
- ☐ Streetscape Plan
- ☐ Composite Utility Plan
- ☐ Landscape Details
- ☐ Irrigation Plan (where applicable)
- ☐ Landscape Cost Estimate

Optional but Recommended

- ☐ 3D Renderings / Streetscape Sections
- ☐ Cross-sections showing right-of-way, and public/private Interface