

10. Landscaping Standards – Pathways and Trails

PART I – DESIGN

10.1 Objectives

- 10.1.1 The following guidelines are intended to assist in the development of a high-quality and fully integrated pathway system.
- 10.1.2 The objective of the planning guidelines is to lay out a pathway network which links together residential area parks, natural areas, riverbanks, and public recreational facilities.

10.2 Pathway Classifications

- 10.2.1 The Town of Whitecourt pathway and trail systems facilitate non-motorized movements for recreation and transportation purposes.
- 10.2.2 The park trail system is a multi-use facility and no one user or type of user is to be given preference. The spine of the system parallels the major physical features of the park systems, including waterways, escarpments and ravines. It should be designed as a continuous facility that connects individual communities to:
 - a) Town wide and Regional Parks and recreation cultural facilities;
 - b) Natural features, including water courses, escarpments, ravines, river valley parks and associated open space;
 - c) Local pathway, bikeways and trail systems; and
 - d) transit routes.
- 10.2.3 The local pathway system provides secondary routes within the Town, linking residential areas to facilities such as neighborhood parks, schools and other local community designation. Local pathway may also serve as links to the park trail systems.
- 10.2.4 Town of Whitecourt pathways and trails are classified into four categories as follows:
 - a) Shared Use Trails – Unpaved: Trails with an unpaved surface, typically hard-packed gravel, shale, dirt, or other natural media. Suitable for biking, walking, running and more, except where otherwise indicated by local signage (i.e. Memorial Point Trail).
 - b) Shared Use Pathways – Paved: Pathways with a paved asphalt surface suitable for biking, walking, running and more, except where otherwise indicated by local signage (i.e. Riverside Trail).
 - c) Paved Off-Street Pathways: Pathways with a paved surface, which serve as arterial connectors providing access between roadways, pathways, subdivisions, back alleys, and parks. These pathways are components of the Whitecourt sidewalk network (i.e. Mink Creek Road Trail system).
 - d) Special Use Trails: Trails that serve a specific function such as the Mountain Bike Trails and the OHV/Snowmobile Trails (i.e. Creekside Trail).

10.3 Planning Guidelines

- 10.3.1 Alignments
 - a) Pathways and trails shall be shown schematically in an Area Structure Plan and confirmed in further subdivision and/or development applications.
 - b) Where desirable pathways and trails should be routed along the edges of environmentally significant areas or into locations with less sensitivity in natural environmental parks in order to minimize the impact on the park or natural area and reduce future damage and desire lines.
- 10.3.2 Street Crossings
 - a) Route pathways and trails to street intersections where possible.
 - b) Mid-block crossings are discouraged. If mid-block crossings are to be provided, appropriate line markings must be provided, and signage is to be installed to Town standards.
 - c) Avoid necessity for building mid-block pedestrian overpasses on major streets.

- d) Adjust subdivision layout to minimize quantity of crossings.
- e) Line up pathways and trail entrances to ensure visual continuity.

10.3.3 Play Equipment Sites

- a) Pathways and trails should not be within at least 5 m from play area surfaces.
- b) Provide a minimum 2.4m wide asphalt link from the play equipment site to adjoining or pathway or trail.

10.3.4 Parking Lots

- a) Route pathways and trails to facilitate pedestrian access to buildings on site.
- b) Provide asphalt links from parking lots adjacent to pathways and trails.
- c) Locate pathway and trail entrance at street.

10.3.5 Natural Areas

- a) Align trails around significant areas and sites; never through.
- b) Avoid damage to natural features, vegetation and wildlife habitat.
- c) Send proposed design plans for all natural areas and Reserve parcels to the Town for approval.

10.4 Design Guidelines

The objective of the design guidelines is to produce a safe and enjoyable pathway and trail system incorporating the needs of multiple users (i.e. walkers, child strollers, runners/joggers, people with disabilities, cyclists, in-line skaters and skateboarders), and therefore, stringent attention must be given to design details. Where location and design considerations prevent transportation and recreation functions from being accommodated together, the recreation function should be given a higher priority.

10.4.1 Safety Clearance and Setback requirements

- i. Avoid locating pathways or trails over manholes.
- ii. Ensure a 2.5 m minimum clearance from park water services.
- iii. Set back pathways and trails a minimum of 1.0 m from face of curb.
- iv. Provide minimum 0.5 m clear of all obstacles on both sides (i.e. trees, signs, light poles etc.).
- v. Provide minimum 2.1 m clear of all obstacles overhead (i.e. tree branches, bridges, etc.).

10.4.2 Safety Railings

- i. Safety railings shall be installed when a pathway or trail is within two metres of the top of a 2:1 slope or steeper, and the slope is greater than or equal to one metre in depth.
- ii. Minimum railing height and design to be in accordance with the Town's Engineering Standard Drawings, or equivalent as approved by Town.
- iii. Chain link fence is only acceptable when the wire mesh is attached to, but not protruding, above the top rail. Attachment shall be with a knuckle finish.
- iv. Wooden fences are not preferred.

10.4.3 Trail & Pathway Entrances/Wheelchair Ramps

- a) For pathway or trail entrances and wheelchair ramps, extend pathway or trail to street curb in all cases.
- b) Ensure pathways and trails join streets at right angles.
- c) Line up entrances for visual continuity where route crosses street.
- d) Ensure catch basins or manholes are not located at entrances or wheelchair ramps.

10.4.4 Sight-Lines

- a) Where possible, ensure no obstructions to visibility within 5.0 m of junction with other pathways/trails and streets (trees, shrubs, utility boxes, fences etc.).

10.4.5 Maximum Grades

- a) Over 8%: re-route, unless otherwise authorized
- b) 5% to 8%: not longer than 50 m (keep bicycles and pedestrians separate and avoid curves and constrictions). Where such portion of a pathway or trail network meets a roadway, provide tee bollards at the entrance to prevent bikers from accidentally entering the roadway.
- c) 3% to 5%: no longer than 200 m.
- d) Under 3%: acceptable (required if wheelchair accessible).

- 10.4.6 Super-elevation
 - a) On curves 2%,
 - b) Maximum 5%
- 10.4.7 Minimum Design Curve Radii
 - a) Minimum design curve radii of 7.5m
$$\text{Minimum } r = v^2/[127 (e+f)]$$
- 10.4.8 Stairs
 - a) Stairs are not acceptable within a pathway or trail network.
- 10.4.9 Lighting
 - a) Provide on all paved off-street pathways as required by the Town.
 - b) Provide on other shared use trails as required by the Town. Minimum requirement of 1 streetlight at all trail heads entrances.
- 10.4.10 Amenities
 - a) In general, provide one pathway or trail entrance every 150 m or as needed.
 - b) One park bench every 400 m; one trash receptacle every 400 m. Environmentally sensitive areas should be assessed on an individual basis.

PART II – GENERAL

10.5 Examination

- 10.5.1 Report to the Town, in writing, any conditions or defects encountered in the site before or during any construction upon which the work of this section depends and which may adversely affect its performance.
- 10.5.2 Do not commence work until those conditions or defects have been investigated and corrected.
- 10.5.3 Commencement of work shall imply acceptance of existing surfaces and conditions and no claims for damages or extras resulting from such conditions or defects will be accepted later, except in cases where such conditions could not have been known prior to commencement of work.
- 10.5.4 Protect all existing trees and planting areas. In accordance with Appendix D.

10.6 Samples

- 10.6.1 Samples of sub-base and asphalt may be requested by the Town. Sieve analysis (ASTM-D698) may be required for sand and crushed gravel. Submit one test result per 1,000 tonnes of material, or one test per minimum 100 m of pathway.
- 10.6.2 Retain approved samples on site until work has been inspected and approved.
- 10.6.3 All work shall conform to approved samples.

10.7 Inspection

- 10.7.1 The contractor shall have an approved set of drawings and specifications available prior to calling the Town for an inspection.
- 10.7.2 The contractor shall obtain approval for the pathway alignment and sub-base (i.e. compaction and depth of gravel) prior to surfacing with asphalt.

PART III – PRODUCTS

10.8 Sub-Base

10.8.1 25 mm minus crushed gravel, minimum 150 mm depth, 98% standard proctor density.

10.9 Asphalt Concrete

10.9.1 Surface: Type ACO hot mix asphalt concrete, in accordance with the requirements provided in Section 3.0.

10.10 Signage

10.10.1 Coordinate with the Town to ensure appropriate Town branding is included on all signage.

10.10.2 Information Signs

- a) Signboard shall be 19 mm Crezon. Signboard back and edges shall be primed with an exterior primer and painted using a white exterior alkyd paint.
- b) Face shall be white Scotchcal vinyl film. Lettering, name panel, and signature to be screen printed using compatible ink or superimposed using die cut Scotchcal vinyl film. Alternate vinyl films will be considered provided the product has a written guarantee for a minimum life expectancy of five years.
- c) Park name panel to be burgundy, Pantone 209c or 207u, with a black border. Park name lettering to be white Helvetica medium.
- d) SC signature to be black, PMT to be supplied as required.
- e) Foundation post shall be 200 mm x 200 mm full dimension recycled plastic, 3.66 m long. Set post in 400 mm diameter concrete footing with fillcrete in accordance with Section 5.13.5.
- f) Appearance post shall be 200 mm x 200 mm full dimension recycled plastic, 1.9 m long.
- g) Fastening hardware to be galvanized steel.
- h) Signboard cap to be 19 mm extruded aluminum channel, or approved alternate, and painted white to match the signboard.

10.10.3 Playground Signs

- a) Signboard shall be 19 mm Crezon. Signboard back and edges shall be primed with an exterior primer and painted using a white exterior alkyd paint.
- b) Sign shall be 300 mm x 350 mm in size.
- c) Wording and lettering to be submitted to the Town for review and approval prior to fabrication.
- d) Sign designs provided by manufacturers that match and attach to equipment may be considered.

PART IV - EXECUTION

10.11 Asphalt Pathway Paving

10.11.1 Conform to the applicable requirements for asphalt paving testing, and inspections outlined in Sections 3.23 to 3.39.