

## 8. Landscaping Standards – General

### 8.1 Landscaping Standards

#### 8.1.1 General

Sections 9 through 14 present the minimum acceptable requirements for the design and construction of some typical, key landscaping system components. These minimum requirements must be met or exceeded by the detailed construction specifications and drawings developed by the Consultant.

#### 8.1.2 Qualifications for Landscape Contractors

- a) Landscape contractors shall be reputable, experienced and have current membership in the Landscape Alberta Nursery Trades Association. Contractor must be willing to provide proof of their experience.
- b) Certified Landscape Trade Journeymen and ISA-certified Arborists are required where applicable.
- c) All work shall be done under the direction and supervision of a foreman with at least 5 years' experience.
- d) All work shall conform to best management practices (BMP) and the Canadian Standards for Nursery Stock (Latest edition).

### 8.2 Park Development Guidelines

- 8.2.1 Parks, open spaces, and reserve requirements are determined at the area structure plan/subdivision stage in alignment with the Town of Whitecourt Municipal Development Plan, Land Use Bylaw and Council approved policies. All parks, open spaces, and reserves are required to be graded, top-soiled, and sodded/seeded. The Town may require the Developer to install low maintenance trees and shrubs, benches, waste receptacles, picnic tables, pathways, lighting, and services to any of these areas.

### 8.3 Boulevard Development Guidelines

- 8.3.1 Boulevard areas are to be graded, top-soiled, and sodded.

- 8.3.2 Coordinate boulevard landscaping with the location of street furniture to avoid conflicts.

### 8.4 Development Guidelines for Arterial Roads, Major Collector Roads and Subdivision Entrance Features.

- 8.4.1 Arterial, major collector roads, and subdivision entrances shall have enhanced landscaping to the satisfaction of the Town. Subdivision entrances off of arterial and major collector roadways that serve in excess of 75 residential lots shall have a unique entrance feature or sign with landscaping to include low maintenance trees and shrubs to the satisfaction of the Town. All planting shall be deer resistant, and conform to fire smart best practices. Signage, retaining walls, and other structural features to the approval of the Town of Whitecourt.
- 8.4.2 Shrubs will be massed within planting beds and planted appropriate to species. Shrubs shall meet the following:
- a) Deciduous: minimum 450 mm height
  - b) Coniferous: minimum 300 mm spread, subject to availability
- 8.4.3 Trees shall meet the requirements specified in Section 11.0.
- 8.4.4 Trees shall be positioned within planting beds or tree wells.
- 8.4.5 Manicured planting beds shall incorporate a minimum 150mm high “Black Diamond” or equivalent edger subject to Town approval.

- 8.4.6 All manicured planting beds shall incorporate a minimum of 100 mm organic mulch (i.e. wood chip mulch) or 75 mm depth inorganic mulch (i.e. decorative crushed granular, crushed shale, or washed rock) to the satisfaction of the Town. Mulch shall be pulled away from the bases of tree trunks and shrub stems as per landscape engineering standard drawing.
- 8.4.7 Islands shall not be grassed unless specifically directed or authorized by the Town.
- 8.4.8 Free-standing architectural features (i.e. signs, sculptures, entry gates, etc.) shall not be located within grassed areas.
- 8.4.9 All paving stones, paving stone headers, concrete, or other special hard surfaced verge or walk shall be subject to the review and acceptance of the Town.
- 8.4.10 Typical cross-section details for island and median planting plans shall show all underground infrastructures.
- 8.4.11 Retaining walls shall be engineered.

## **8.5 Walkway Design Guidelines**

- 8.5.1 Areas adjacent to walkways and trails must be graded, top-soiled, and sodded
- 8.5.2 All pathways and trails are to be illuminated in accordance with the current edition of the Transportation Association of Canada (TAC) guidelines.
- 8.5.3 Trees shall be required adjacent to all walkways along arterial and collector roadways, as well as subdivision entrances, unless otherwise approved by the Town.
- 8.5.4 Provide a minimum of five trees for every 35 m of walkway where trees are required. Shrubs may be substituted at the rate of seven shrubs for every one tree.
- 8.5.5 Trees and shrubs shall meet the requirements specified in Section 11.0.

## **8.6 Major Utility Right-of-Way Design Guidelines**

- 8.6.1 Major utility right-of-ways shall include landscape improvements. Where the utility authority does not approve of landscaping within their right-of-ways, the requirement for all or a portion of the landscaping may be waived, subject to the authorization of the Town.
- 8.6.2 Right-of-way landscape improvements may range from low maintenance naturalization to more formal landscape designs, depending on the existing landscape character established within the right-of-way.
- 8.6.3 Healthy, vigorous trees within or abutting the right-of-way shall be preserved. Any trees that are requested to be removed are subject to Town of Whitecourt approval.
- 8.6.4 Landscape improvements for major utility right-of-ways shall be in accordance with the applicable sections of these Design Standards and subject to the review and acceptance of the Town and the applicable utility authorities.

## **8.7 Public Utility Lot Design Guidelines**

- 8.7.1 PULs shall be graded, top-soiled, and seeded or sodded, to the approval of the Town of Whitecourt.
- 8.7.2 Provide a minimum of 80 trees per hectare within the PUL. Shrubs may be substituted at the rate of seven shrubs for every one tree.
- 8.7.3 Trees and shrubs shall meet the requirements specified in Section 11.0.

8.7.4 Healthy, vigorous trees within or abutting the PUL shall be preserved. Any trees that are requested to be removed are subject to Town of Whitecourt approval.

8.7.5 Pedestrian access may be required to be provided within a PUL to ensure connectivity for trail users.

## **8.8 Stormwater Management Facilities in Parks Design Guidelines**

8.8.1 Dry ponds and areas surrounding new stormwater management facilities must be graded, topsoiled, and seeded or sodded.

8.8.2 Plant materials will be selected with consideration to hydrological characteristics, soil characteristics, facility side slopes, and intended park use.

8.8.3 Provide a minimum of 80 trees per hectare within the public lands around the facility, above normal water level. Shrubs may be substituted for trees at a rate of seven shrubs for one tree.

8.8.4 Trees shall meet the requirements specified in Section 11.0.

8.8.5 Shrubs must meet the requirements of Section 8.5.2.

8.8.6 Inlets and outlets shall be landscaped with mass planting and large rocks, or acceptable alternative concrete revetment, to provide visual screening and security buffering for the public.

8.8.7 Where possible, relatively flat open areas should be designed to encourage active recreational uses.

8.8.8 Special or unique park features (i.e.: artificially pumped dry streams, special play courts, bridges, and other architectural or structural features) must be designed by suitable, accredited professionals, as applicable. All such features which are to be located below the 1:5-year flood line shall be designed to withstand this event to the satisfaction of the Town. Such features may be subject to a maintenance reserve, to be established by the Developer.

## **8.9 Naturalization Design Guidelines**

8.9.1 Existing natural and naturalized areas affected by Subdivision development, which cannot be protected during construction, shall be restored with native plant materials consistent with the surrounding environment, new drainage patterns, soil conditions, and ecological rehabilitation. In such cases, the Town shall be consulted during the design to assist in planning, the selection of appropriate replacement plant materials, and the retaining of wildlife corridors.

8.9.2 The Developer's landscape architect shall design an appropriate mix of native trees, shrubs, ground covers, and native seed mixes, consistent with these Design Standards, to rehabilitate affected naturalized and natural areas.

8.9.3 The landscape architect shall, when required, coordinate this restoration with other consultants to implement geotechnical, structural, and bioengineering principles and recommendations.

8.9.4 Landscape drawings shall identify all existing plant communities to be established and all other information necessary to implement the proposed landscape improvements.

8.9.5 The landscape architect shall specify all tree, shrub, and ground cover sizes. A tree mix of 60% coniferous and 40% deciduous is recommended.

8.9.6 To establish healthy growing environments, 10% of all plant materials shall be of larger sizes.

8.9.7 Forestry stock, seedlings, deciduous tree whips, propagated cuttings, and rooted cuttings may be acceptable for use, subject to Town inspection and acceptance prior to installation.

- 8.9.8 Appropriate plant installation specifications and details shall be included on landscape drawings.
- 8.9.9 Herbicides may be used to eradicate vegetation on natural slopes prior to planting of trees and shrubs, subject to the review and acceptance of the Town. No chemical treatment shall be permitted within 30 m of any body of water.

### **8.10 Environmental Reserve Design Guidelines**

- 8.10.1 At no time shall encroachment into any natural area or designated buffer area occur without express written consent from the Town of Whitecourt. Environmental reserves shall be temporarily fenced and otherwise protected from adjacent construction.
- 8.10.2 Any environmental reserve areas damaged during construction must be rehabilitated to the satisfaction of the Town of Whitecourt.

### **8.11 Multiple Family, Institutional, Commercial, or Industrial, Site Design Guidelines**

- 8.11.1 The front properties of a development shall be used for ornamental plantings only. Property owners are required to landscape the boulevard and the property from the back of the sidewalk up to their property line that is adjacent to the public roadway. Deciduous trees must be planted at regular intervals, and coniferous trees must be planted in clusters of 3, 5, or 7 etc. Trees must be located a minimum of 2 m from property line, and must avoid any conflict with Utility lines. Sightlines must be considered for the building and any site signage appurtenances. Maintenance shall be the responsibility of the Developer/Owner, and not the Town.
- 8.11.2 In order to reduce incompatible characteristics of abutting properties with different land use districts, minimum landscaping standards shall be applied to planting buffers on the interior property lines of the most intense land use.
- 8.11.3 Refer to Appendix E for Landscaping Templates for Buffers and Perimeter Planting on Interior Lots.

### **8.12 Fencing Design Guidelines**

- 8.12.1 All fencing shall be subject to Town of Whitecourt approval.
- 8.12.2 Uniform fencing shall be provided and installed by the developer adjacent to and at the following locations and shall not hinder sight lines:
- Arterial roadways
  - Parks and playfields (trees/shrubs and other landscaping methods are preferred over fencing to buffer parks and playfields adjacent to a roadway, however, park structure and amenities must be adequately setback from the roadway to provide a safe distance from any vehicular traffic)
  - Public walkways and public utility lots
  - School sites
  - Town owned lands (i.e. fire hall sites, etc.)
  - Multiple family sites
  - Neighbourhood commercial sites
  - Institutional sites
  - Other areas as required by the Town.

### **8.13 Site Amenity Design Guidelines**

- 8.13.1 Furniture shall be provided by the Developer and placed at strategic locations through the Subdivision. Refer to Section 14.0. The Town shall maintain the right to stipulate specific requirements for furniture.

## **8.14 Trail Design Guidelines**

- a.) Trails shall be 2.5m wide paved. See Engineering Standard Drawings
- b.) Trail heads shall have gates and lighting installed at all entrances.

## **8.15 General Guidelines – Construction Inspection Process**

- 8.15.1 The Developer's Landscape Architect shall ensure that the contractor(s) adhere to the following procedures through the construction process:
  - a) Ensure that utility locates are performed prior to any construction, including Alberta First Call and other appropriate authorities.
  - b) Review and approve all below grade utilities flagged before construction commences.
  - c) Ensure that Erosion control measure and safety measure i.e. signage, barricades, etc. are arranged prior to any construction.
  - d) Protect existing landscaped areas including natural areas, sod, trees and shrubs.
  - e) Arrange for a project initiation meeting on site with Town Representative to ensure there is a clear understanding of the Town's requirements during construction, establish a construction start date, and agree upon the progress schedule and subsequent inspection stages.
  - f) Approve rough grading, topsoil spreading, new seeding and sodding, new tree locations.
  - g) Approve plant materials prior to installation.
  - h) Coordinate review of topsoil and recommend amendments as required. Contact Town to review topsoil.
  - i) Direct the review and inspection of all construction and installation while in progress.
- 8.15.2 The Town will inspect plant materials prior to installation for vigor and form requirements and the existence of disease or pests if requested.
- 8.15.3 The Developer's Landscape Architect shall notify the Town's representative 2 business days in advance at each stage of construction when the work is ready for inspection.
- 8.15.4 Contractor(s) shall provide details of the source location in writing if requested by the Town.
- 8.15.5 The failure of construction to comply with approved plans and specifications will be considered sufficient cause to stop work or invoke the security clauses of the Development Agreement. Construction deficiencies shall be rectified to meet the appropriate plans and specifications, at the Developer's expense.
- 8.15.6 The Developer's Landscape Architect shall submit a request to the Town in writing for plant material substitutions. If approved, the Developer's Landscape Architect shall identify the approved changes on the red line or plan of record drawing, as appropriate.
- 8.15.7 Every precaution shall be taken not to damage, injure or mark existing structures or landscaping on town owned property. Should the developer, its consultants, contractors, employees, or equipment incur any damage, it shall be restored at the developer's expense to the satisfaction of the Town. If remediation work is not done by the developer, the work will be complete by the appropriate Town department or delegate at the developer's expense.
- 8.15.8 The Developer shall ensure that adjacent property is protected from dust, sand, and wet soil during construction. It is the Developer's responsibility to ensure all debris is removed from adjacent lands, and construction damage is repaired to its original condition.

## **8.16 Additional Guidelines – Construction Completion Certificate**

In addition to the guidelines provided in Section 1.19, the following guidelines apply to the Construction Completion Certificates (CCCs) for landscaping activities.

- 8.16.1 When landscape construction work is satisfactorily complete, the Developer's Landscape Architect shall submit a written request for a CCC inspection of the works using the form provided in Appendix B-2. The request shall include a maintenance schedule, three (3) copies of the approved or redline drawings at an 11x17 size, and PDF submitted electronically or on a USB.
- 8.16.2 Landscape CCC includes the following:
- a.) Turf and Plantings for Boulevards, including planting islands and entrance features.
  - b.) Turf and Planting for MR, ER, PUL, SWMF, Road Boulevards
  - c.) Parks, Park Amenities and Playground Equipment
  - d.) Hard Surfaces and Special Pavements
  - e.) Fencing
- 8.16.3 In preparation for acceptance of the development by the Town, CCCs shall be issued subject to the following conditions and procedures:
- a.) All stages must be 100% complete prior to a CCC inspection for landscaping. Boulevards must be 100% complete prior to a CCC inspection for landscaping.
  - b.) The Developer's Landscape Architect, contractor(s), and the Town Representatives shall attend the CCC inspections. Attendees shall be requested to sign the CCC form to show agreement with any noted deficiencies.
  - c.) CCC inspections for all sod/seeded areas will occur once grass is established at minimum to second cutting.
  - d.) Following the CCC inspection, the Town will forward a copy of the inspection report listing all deficiencies to the Landscape Architect, or delegate, and the contractor.
  - e.) All deficiencies identified during the CCC inspection shall be repaired or corrected within a maximum of 3 weeks. Upon the correction of all listed deficiencies, the Landscape Architect or Delegate will request a re-inspection. If all deficiencies are corrected, the Town will approve the CCC. If deficiencies are not corrected by the agreed date, the Developer's Landscape Architect must request a new CCC inspection. The maintenance period will commence from the CCC approval date.
  - f.) The Developer shall maintain all work prior to the CCC and during the maintenance period after the CCC approval dates.
- 8.16.4 CCC inspections may be requested at any time. At the discretion of the Town of Whitecourt and weather permitting and site amenities can be inspected year round, provided snow cover, temperature, and other considerations do not prevent the ability to perform a thorough inspection. If an inspection occurs after October 15 of any year additional warranty is required as described in Appendix B.

## **8.17 Maintenance**

- 8.17.1 Upon issuance of the CCC, a two-year maintenance period for all landscaping activities is required.
- 8.17.2 If a CCC inspection occurs after October 15 of any year additional warranty may be required.
- 8.17.3 Maintenance shall include but not be limited to pruning, watering, fertilizing, cultivating, mowing, weeding, re-seeding, top dressing, aerating, sweeping, raking, replanting, mulching, tightening and repair of guy wires and stakes, resetting plants to proper grades or upright position, restoration of the planting saucer, application of such sprays, wraps, or other materials as necessary to keep plantings free of insects, rodents, weed, diseases and in vigorous and viable condition.
- 8.17.4 All grounds must be kept in a clean and tidy condition and the Developer shall be responsible for repairing any damages that occur during the Maintenance Period.
- 8.17.5 The Developer shall immediately report any damage caused through maintenance to the Town and complete repairs and replacements to the approval of the Town within seven (7) days from date of approval given for repair/replacement.

- 8.17.6 Weed, pest, insect, and disease control chemicals to be applied only in accordance with current regulations. Developer to provide signage 48 hours prior to spraying and Town to be given 96 hours notice prior to spraying.
- 8.17.7 Ensure all catch basins, swales, and ditches are clear and draining freely.
- 8.17.8 Daily maintenance logs shall be kept during the warranty period and may be required to be submitted to the Town of Whitecourt prior to issuance of a Final Acceptance Certificate.

**8.18 Additional Guidelines – Final Acceptance Certificate**

In addition to the guidelines provided in Section 1.22, the following guidelines apply to the Final Acceptance Certificates (FACs) for landscaping activities.

- 8.18.1 After the required maintenance period has come to an end, the Developer's Landscape Architect shall submit a written request for an FAC inspection using the form provided in Appendix B-2. If amendments were made to any of the landscaping activities following issuance of CCC, new as-built redline drawings will be required as per section 8.17.1.
- 8.18.2 FAC inspections may be requested between June 1 and September 30, weather permitting, at the discretion of the Town and provided snow cover, and other considerations do not prevent the ability to perform a thorough inspection.