

# Landscape Point Adjustment

## UDC CODE TEXT AMENDMENT

CASE NUMBER: PLN-14-00004

PREPARED BY: Logan Graves

MEETING JULY 21, 2014 – Planning Commission

DATES: JULY 28, 2014 – City Council

**RECOMMENDATION:** The Planning and Development Office recommends approval of the proposed text amendment pursuant to the review criteria outlined in Article 2, Section 2.4.1d of the Cheyenne Unified Development Code (UDC).

**STAFF REPORT UPDATE (7/22/14):** At its meeting on Monday, July 21, 2014, the City of Cheyenne Planning Commission recommended approval of the above described UDC Text Amendment by a vote of 5 to 0.

## OVERVIEW

During the 2014 UDC Annual Review, the Development Office received a proposal to amend the City's current Landscape Standards. Specifically, the proposal is a recalibration of the current point values assigned to trees, shrubs, and ground covers, and a consolidation of tables 6-8 and 6-9.

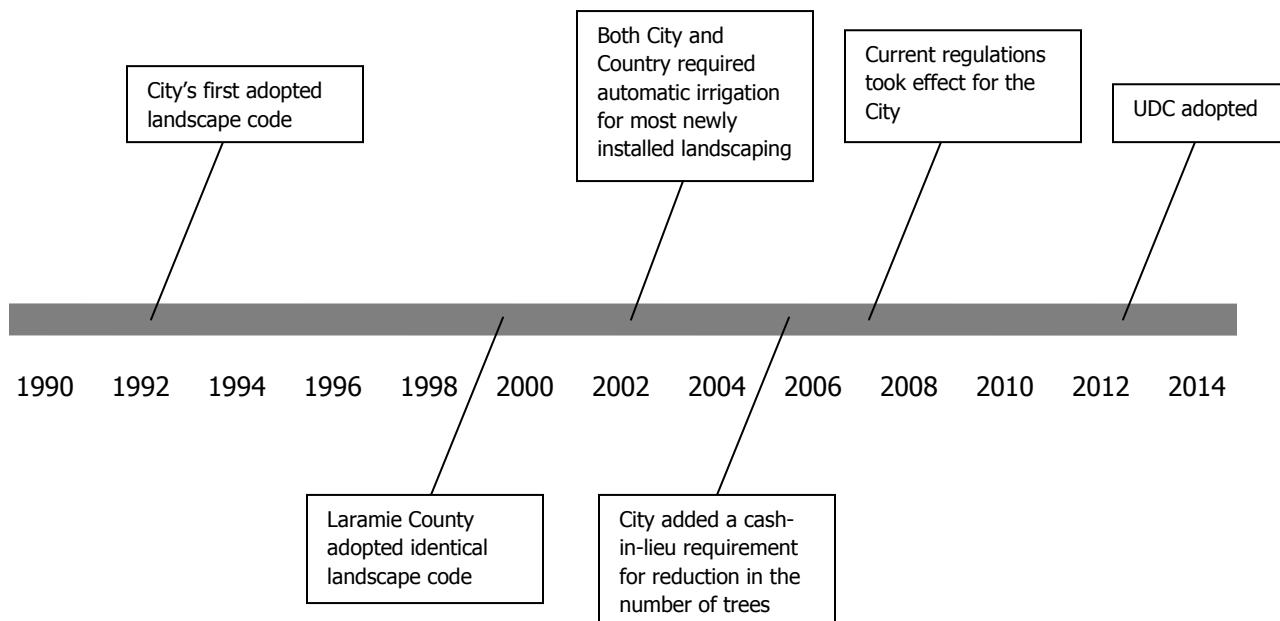
The purpose of the recommended changes is to: 1. encourage the use of large tree species; 2. encourage shrubs as a viable alternative to large expanses of grass; 3. encourage low-water use vegetation throughout development sites, and; 4. promote wise and efficient use of water by reducing resource inputs for managed landscaped areas.

Staff is proposing to revise the existing Landscape Standards to include the proposed recommendations. All development applications requiring a landscape review would be required to comply with the provisions of this ordinance. The recommended code language in underline-strikeout format is attached to the staff report (Attachment 1).

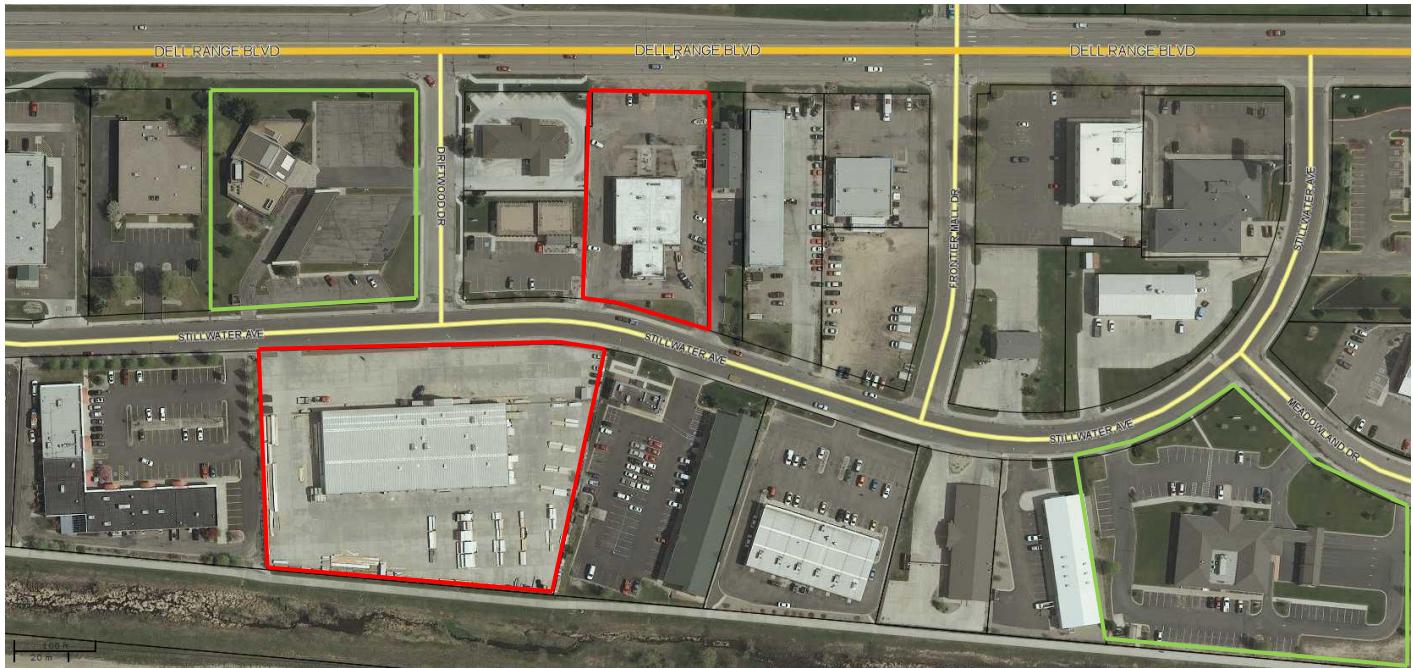
## PURPOSE OF LANDSCAPE STANDARDS

Landscape standards are a tool most communities use to enhance the environmental and ecological function of un-built portions of sites. Landscapes make important contributions and should be viewed as an integral part of a city's infrastructure. Healthy landscapes leverage the social, economic, and environmental value of cities and play a crucial role in reducing stormwater runoff, preventing erosion, enhancing water quality, improving air quality, and reducing energy costs and heat island effects. Additionally, landscape standards establish consistent elements across districts, enhance compatibility, and help mitigate potential impacts when different uses locate next to each other through the use of buffers and other landscape elements. Cheyenne's landscape code has seen incremental changes over the past 22 years, each update adding more flexibility and a wider range of options. The most notable change was made in 2007, where the current point system was instituted. The 2007 update also incorporated significant quantity reductions, reducing internal trees by up to 20% and street trees by up to 50%. Since that time, minor adjustments have been made.

## HISTORY OF CHEYENNE'S LANDSCAPE STANDARDS



As shown in the timeline on the previous page, landscaping has been part of the community for over 20 years and is perhaps the most visible of design standards. To a large degree the community is just starting to see the results of early landscaping efforts. The image below is a great illustration of how landscaping is used to enhance the visual character and aesthetic qualities of Cheyenne. The parcels outlined in red were developed prior to 1992; the year Cheyenne adopted its first landscape code. The parcels outlined in green were developed sometime after the landscape code was instituted.



- Red — Sites developed prior to landscape regulations
- Green — Sites developed after landscape regulations were adopted

## CURRENT LANDSCAPE STANDARDS

Currently, the amount of required landscaping for a development project is based on a point system where points are determined by lot coverage requirements of a particular zoning district. Each zoning district has a coverage allowance, which is the percentage of a site allowed to be occupied by buildings, structures, parking areas, driveways or similar improvements. The remainder of the site, or the portion of site not allowed to be covered is divided by 500 to get the minimum points required for the project. Point values are assigned to various landscape materials and have been calibrated over time to ensure points can be functionally and evenly distributed across various landscape components. Components include the landscape setback, parking lot, landscape buffers, and other plantings. The amount of required landscaping is met if the cumulative number of points provided by the landscape materials is equal to or exceeds the required number of points. It is important to note that street trees are not included in the point system.

Another key element of the landscape code is the percentage of living material required. All required landscape areas must consist of a minimum 75% ground cover by living grass or other plant materials based on the mature size of vegetation.

## PROPOSAL

The proposed amendment involves four major elements. Each element will be addressed in the following order:

1. TABLE CONSOLIDATION
2. TREES
3. SHRUBS
4. GRASS

### 1. TABLE CONSOLIDATION

*Discussion:* The purpose of this action was to consolidate Tables 6-8 and 6-9, eliminating redundancy and plant material categories rarely used. The UDC currently contains 10 categories in Table 6-8, many of which are similar and hard to distinguish between. The proposal would reduce the number of tree type categories to 5. Similarly, Table 6-9 contains 8 categories under "Landscape Feature" and the proposal would reduce the number of categories to 4 (see Attachment 1). The purpose of these changes is to render the tables more user friendly. Generally speaking, reducing the bulk of the tables would likely result in greater clarity for the general public and design professionals alike. This in turn would likely increase consistency and predictability for these users, and would ultimately benefit planning staffs efforts to administer the code.

*Recommended Code Change:* The recommendation to consolidate Tables 6-8 and 6-9 is supported by staff.

### 2. TREES

*Discussion:* The proposal to increase the point values assigned to trees was brought forward in an effort to incentivize larger tree species and provide some reduction in the number of trees required. Some feedback the Development Office has received is that the existing regulations present challenges related to spacing and quantity requirements. Specifically, the concern is that applicants are forced to use more ornamental trees in order to fulfill the tree point requirement. The proposed amendment is intended to resolve this issue by allocating more points to larger tree species, which will in turn provide more room for them on site. The proposed point values are as follows:

Plant Type	UDC Point Value	Proposed Point Value	% Change in Point Value	% Change in Landscaping
New deciduous tree (30' or greater)	1.25	1.5	20% increase	17% decrease
New ornamental tree (less than 30')	1	1	0% increase	0% decrease
New 6' evergreen tree (30' or greater)	1.25	1.5	20% increase	17% decrease
New 4' evergreen tree (less than 30')	1.25	1	25% decrease	20% increase

A key goal of the landscape ordinance is to maintain the core function of landscape elements. Trees provide many important functions as previously mentioned in this report, and large tree species in particular are most effective in achieving these physical functions. Currently, the landscape code's distinction between large tree species and ornamental trees is vague, and there is concern as to whether the point differential between large tree species and ornamental trees is enough to encourage larger tree species. So in an effort to determine

whether a gap exists between the effort to promote large trees and the implementing regulations, staff analyzed a number of landscape plans that were reviewed between the years 2012 and 2014. The result indicated that on average, large tree species are being used at a rate of 2:1, which shows that the current point structure has been fairly successful in encouraging the use of larger trees. However, this being said, the proposal to increase the point differential from .25 to .5 will likely tip the scales even more in favor of large tree species. Overall, staff is supportive of the adjustment.

*Recommended Code Change:* The recommendation to increase the point values assigned to large deciduous and evergreen trees is supported by staff.

### 3. SHRUBS

*Discussion:* The purpose of this amendment is to encourage the use of shrubs as an alternative to large expanses of grass. The point values assigned to shrubs would be increased as follows:

Plant Type	UDC Point Value	Proposed Point Value	% Change in Point Value	% Change in Landscaping
Existing or new evergreen or deciduous shrubs	.1	.25	150% increase	60% decrease

The landscape ordinance contains many moving parts, meaning the number of ground cover points required may be less than the 75% coverage requirement. This is not a concern from an administrative standpoint, but does require an applicant to be aware of both the points and coverage requirements. There is likely some discrepancy now, so this is not a dramatic change. Generally speaking, the increase in the point values assigned to shrubs should work well with the decrease in point values assigned to grass. Ultimately, the adjustments should effectively encourage more use of shrubs for ground cover which advances water wise landscaping.

*Recommended Code Change:* The recommendation to increase the point values assigned to shrubs is supported by staff.

#### 4. GRASS

*Discussion:* Grass areas can make significant positive contributions to the environment, but are often extremely demanding of inputs and resources. The purpose of this amendment is to incentivize water-conserving landscapes and encourage a broader use of shrubs. The proposal includes the following point value adjustments:

Plant Type	UDC Point Value	Proposed Point Value	% Change in Point Value	% Change in Landscaping
Sod forming grass (1/2" or more)	.5	.25	50% decrease	100% increase
Seeded, native, short-grass (1/2" or less)	1.50	.75	50% decrease	100% increase

Categorically, the proposed changes reduce the number of grass options from 4 to 2. Traditional sod forming grasses have a lower point value than native grasses. Native grasses are adapted to the climate and local soils, making them more water-efficient and less reliant on fertilizers or soil amendments. This weighted system in conjunction with the proposed reduction in point values should effectively shift landscapes away from high-water-use design choices toward water-efficient, low maintenance design choices.

*Recommended Code Change:* The recommendation to decrease point values assigned to the various grass mixes is supported by staff.

#### POLICY CONSIDERATIONS

The very core of any landscape ordinance is the level of landscaping required. The levels currently prescribed are thought to be the minimum necessary to accomplish the objectives of the ordinance and promote the health, safety, and welfare of the community. While striking a balance is not always easy, the City aims to balance the many goals and interests of the community in an equitable fashion.

The code amendments proposed herein seek to incentivize landscape design choices that are higher quality and less resource consumptive. Staff is supportive of the adjustment strategy and agrees that point values should better reflect the intent of the landscape standards. Overall, this code amendment presents a great opportunity to establish a baseline of where our current landscaping thresholds are, monitor the success of the landscape standards, and identify any further code amendments as needed.

**AMENDMENT REVIEW:** In reviewing, providing comments, and making recommendations and decisions on a proposed UDC Amendment, the Staff, Planning Commission and City Council shall use the following criteria as outlined in Article 2, Section 2.4.1.d(1-3), UDC

**PLANCHEYENNE.** *The amendment is in accordance with general goals and policies of the Comprehensive Plan, or is necessary to address an emerging issue not anticipated in the Comprehensive Plan and is not inconsistent with the plan.*

Principle 1.5: The community will continue to act strategically to position Cheyenne as a competitive community and northern anchor of the Front Range region, recognized for its high quality of life.

Policy 2.1.A: The community will continue to stabilize and enhance the City's established and older core neighborhoods by applying infill standards (which are designed to protect their character).

Policy 2.2.B: The community will continue to incorporate a mix of uses in new neighborhoods including complementary non-residential uses such as neighborhood commercial services, where feasible and appropriate, that serve nearby residents and are designed and operated in harmony with the residential characteristics of a neighborhood.

Policy 5.2.B: The community will continue to encourage developers to use site sensitive design that takes into account resources.

Principle 5.3: The community will conserve natural resources and landscapes.

Policy 5.4.A: The community will encourage water conservation and reduce water use through the use of drought-tolerant vegetation, efficient watering techniques, and the use of non-potable water for landscape irrigation.

Policy 5.4.D: The community will continue to encourage the use of water-conserving landscaping design and materials.

Policy 7.4.B: The community will continue to plan for a long-term water supply, including conservation measures.

**CONCURRENCY.** *The amendment is consistent with the Wyoming Statutes, and specifically the Municipal Planning and Zoning statutes.*

The proposed amendment is in accordance with the Comprehensive Plan and is consistent with the referenced statutes.

**POLICE POWER.** *The amendment promotes the general health, safety and public welfare.*

The amendment promotes the health, safety and welfare of the community.

## RECOMMENDATION

Staff recommends approval of the ordinance.

Recommended Motion: Move to approve the text amendment as initiated from the UDC Annual Review, to increase point values assigned to larger evergreen trees, deciduous trees, and shrub border plantings, and reduce point values for large expanses of turf grass.

## ATTACHMENTS

Attachment 1: Underline-strikeout format of proposed changes

# ARTICLE 6

## DESIGN REGULATIONS

### 6.3 LANDSCAPE STANDARDS

- b. **Parking Landscape Areas.** The parking landscape area shall consist of internal landscape areas and perimeter buffers as required by Section 6.2.
- c. **Required Open Space.** The required open space shall consist of any Civic Open Space required by Section 4.4, Section 6.6, Section 6.7, or Section 6.8, when applicable.
- d. **Other Open Areas.** Foundation planting areas adjacent to building elevations which form the major public views of the building from adjacent streets and properties, screening and buffering areas required by this section, and other un-built portions of the site shall also be used for allocation of required landscape materials.

#### 6.3.4 Point System

The required landscape material within the Landscape Setback Area, Parking Landscape Area, and Required Open Space shall be based on a point system established below. All points shall be distributed evenly across the site.

- a. **Trees.** The sum of all Tree points, as defined in Table 6-8 below, from trees used in the landscape must exceed the required landscape area divided by 500. For the purpose of calculating the Tree Point requirement, utility easements within internal landscape areas, athletic fields, and playgrounds may be subtracted from the required internal landscape area.

TABLE 6-8: TREE POINTS

Tree types	Size or Quantity	Point Value
Existing mature tree approved by City Forestry.	1	1.5 - 3
New 1.5" caliper deciduous tree (single trunk or clump) with a mature height of 30' or greater and a mature canopy of 30' or greater.	1	1.5
New 1.5" caliper ornamental tree with a mature height less than 30' and a mature canopy less than 30'.	1	1
New 6' evergreen tree with a mature height of 30' or greater and mature spread of 20' or greater.	1	1.5
New 4' evergreen tree with a mature height less than 30' and a mature spread less than 20'.	1	1
Existing clump of 2 to 3 mature trees approved by City Forestry.	+ clump of 2-3 trees	+.5 - 3
New 1.5 inch caliper deciduous tree requiring less than 1 inch of supplemental watering per week during hot, dry periods.	+	.25
New 1.5 inch caliper deciduous tree with a mature height of 30' or greater and a canopy greater than 30' in diameter.	+	.25
New 4 foot high evergreen tree requiring less than 1 inch of supplemental watering per week during hot, dry periods.	+	.25
New clump of 2 to 3 trees requiring less than 1 inch of supplemental watering per week during hot, dry periods.	+ clump of 2-3 trees	.25
New 1.5 inch caliper deciduous tree.	+	+
New 1.5 inch caliper ornamental tree.	+	+
New 4 foot high evergreen tree.	+	.25
New clump of 2 to 3 trees:	+ clump of 2-3 trees	+

## ARTICLE 6

### DESIGN REGULATIONS

### 6.3 LANDSCAPE STANDARDS

- b. **Ground Cover and Non-tree Landscape Features.** The sum of all Ground Cover and Non-tree Landscape Feature points, as defined in Table 6-9 below, from ground cover and non-tree landscaping features used in the landscape must exceed the square footage of the required internal landscape area divided by 500.

**TABLE 6-9: GROUND COVER AND NON-TREE LANDSCAPE FEATURE POINTS**

Landscape Feature	Size or Quantity	Point Value
<b>Shrubs</b>		
Existing or new evergreen or deciduous shrubs requiring less than 1 inch of supplemental watering per week during hot, dry periods. Minimum size = 5 gallon container.	10 shrubs	.4
Existing or new evergreen or deciduous shrubs. Minimum size = 5 gallon container.	10 shrubs	.75
Existing or new evergreen or deciduous shrubs.	1	0.25
<b>Ground Covers</b>		
Kentucky bluegrass or similar grass requiring 1 inch or more of supplemental watering per week during hot, dry periods.	500 sq. ft.	.5
Kentucky bluegrasses, fescues, or similar sod-forming grasses requiring a ½ inch or more of supplemental watering per week during hot, dry periods.	500 sq. ft.	0.25
Existing or new Fescues or similar grass requiring less than 1 inch of supplemental watering per week during hot, dry periods.	500 sq. ft.	.75
Existing or new Buffalo grass, Blue Grama or similar grass requiring 1/2 inch or less of supplemental watering per week during hot, dry periods.	500 sq. ft.	1.25
Native short grass Prairie used to blend developed land with surrounding open spaces as described in Section 6.3.7.f.2.	500 sq. ft.	1.5
Seeded, native, short-grass prairie species or mixes requiring less than a ½ inch of supplemental watering per week during hot, dry periods.	500 sq. ft.	0.75
Ornamental grass or perennials. requiring less than 1 inch of supplemental watering per week during hot, dry periods. Minimum size = 2 1/4 inch container. Less than 15 percent exposed mulch 2 to 3 years after planting.	100 sq. ft.	1
Other ornamental grass or perennials. Minimum size = 2 1/4 inch container. Less than 15 percent exposed mulch 2 to 3 years after planting.	100 sq. ft.	.5
<b>Other Landscape Elements</b>		
Gazebo or outdoor structure	100 sq. ft.	1
Picnic Tables	1	.5
Benches	1	1
Art—As approved by the Art in Public Places Committee or City Council.	1	up to 4*
Gardening space for residents or development users—Includes signage, fencing, water access and maintenance agreement.	100 sq. ft.	1
Athletic field, grass or artificial.	100 sq. ft.	2
Hardscaped athletic area or aesthetic plaza.	100 sq. ft.	.75
Playground with ADA approved surface.	100 sq. ft.	2
Path or trail with ADA approved surface.	100 sq. ft.	2
Water conservation features—As approved by the Director.		1—10 points
Other—As approved by the Director.		varies

\* In no case more than half the required ground cover points.

# ARTICLE 6

## DESIGN REGULATIONS

### 6.3 LANDSCAPE STANDARDS

#### 6.3.5 Screening and Buffering

- a. **Required Buffer Level.** The required screening and buffering levels, shown in Table 6-10 below, apply to common property lines and alleys. Screening and buffering requirements do not apply between zone districts not listed in the table.

		Lowest District to Highest District																	
		LR-1	LR-2	NR-1	NR-2	NR-3	MR-1	MR-2	HR-1	HR-2	MUR	MUB	NB	MUE	CB	CBD	P	LI	HI
Highest District to Lowest District	HI	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2			
	LI	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1		
	P	2	2	2	2	2	2	2	2	2	2	1	1	1	1			1	2
	CBD	2	2				2	2										2	2
	CB	2	2	2	2	2	2	1	1	1	1	1	1				1	2	2
	MUE	2	2	1			1	1							1		1		2
	NB	2	2				1	1							1		1	2	2
	MUB	2	2				1	1							1		1	2	2
	MUR														1		2	2	2
	HR-2	1	1				1							1	1		2	2	3
	HR-1	1	1				1							1	1		2	2	3
	MR-2											1	1	1	2	2	2	2	3
	MR-1								1	1		1	1	1	2	2	2	2	3
	NR-3													2		2	2	3	
	NR-2													2		2	2	3	
	NR-1													1	2		2	2	3
	LR-2								1	1		2	2	2	2	2	2	2	3
	LR-1								1	1		2	2	2	2	2	2	2	3

- b. **Design of Buffer Levels.** The buffer levels shall be designed according to the standards in Table 6-11.

TABLE 6-11: DESIGN OF BUFFERS			
	Level 1	Level 2	Level 3
<b>Intent and Use</b>	Intended to provide a visual break and soft transitions between different sites, and to blend different sites more seamlessly.	Intended to provide visual break and minimize potential visual impacts on adjacent sites.	Intended to separate potentially incompatible sites and uses and to minimize any visual, physical, or noise impacts on adjacent sites.
<b>Landscape Width</b>	10'	15'	25'
<b>Plant Materials</b>	<ul style="list-style-type: none"> <li>• 1 deciduous shade or coniferous six-foot evergreen tree for each 50 linear feet of buffer or 2 ornamental trees for each 50 linear feet of buffer; plus</li> <li>• 1 shrub for each 10 linear feet of buffer</li> </ul>	<ul style="list-style-type: none"> <li>• 2 deciduous shade or coniferous six-foot evergreen trees for each 50 linear feet of buffer or 1 deciduous shade or coniferous six-foot evergreen tree and 2 ornamental trees for each 50 linear feet of buffer; plus</li> <li>• 3 shrubs for every 10 linear feet of buffer</li> </ul>	<ul style="list-style-type: none"> <li>• 3 deciduous shade or coniferous six-foot evergreen trees for each 50 linear feet of buffer or 2 deciduous shade or coniferous six-foot evergreen trees and 2 ornamental trees for each 50 linear feet of buffer; plus</li> <li>• 3 shrubs for every 10 linear feet of buffer</li> </ul>
<b>Screen</b>	n/a	n/a	<ul style="list-style-type: none"> <li>• A 6'-six-foot-high solid fence with required plant material located to the outside; or</li> <li>• 1 six-foot evergreen tree for every 10 linear feet of buffer.</li> </ul>
<b>Ground Cover</b>	All remaining areas of the buffer shall be planted with ground cover meeting any of the standards in Table 6-9		

# ARTICLE 6

## DESIGN REGULATIONS

### 6.3 LANDSCAPE STANDARDS

- 3. Tree quality shall meet the most current available American Standard for Nursery Stock (ANSI Z60.1) specifications.
  - 4. Plant spacing should allow for the growth characteristics of the trees without adversely affecting the expected mature size of nearby trees or the function or maintenance of structures, walks, drives or parking.
  - 5. Tree species selection should reflect species historically found in the neighborhood.
  - 6. Soil improvement is required in all soils upon which lawn or turf will be installed. The top six inches of soil, including amendments uniformly worked through the soil, shall have an organic matter percentage greater than 3% and salinity less than 1.0 milliohms per centimeter.
  - 7. Landscaping shall not conflict with traffic visibility requirements in Article 4 of this Title.
  - 8. Clumps of trees (such as aspen, populus tremuloides), where used, shall be credited as only one of the required trees.
  - 9. Landscaping should not interfere with the general function and safety of any gas, electric, water, sewer, telephone or other utility easement. Landscaping shall be limited to an eight-inch mature height within 5' of a fire hydrant.
  - 10. Healthy existing indigenous vegetation on a site may be credited toward required landscaping in this Article.
  - 11. Where two different landscape requirements apply by any section of this code, the greater requirement shall be met.
- c. **Size Specifications.** Minimum planting/installation size and characteristics of plant material shall be as follows:

**TABLE 6-12: LANDSCAPE SIZE SPECIFICATIONS**

Plant Type	Minimum Size Specification
Deciduous shade trees	1.5" caliper measured 6" above ground
Deciduous ornamental trees	1.5" caliper measured 6" above ground
Evergreen trees	4' <b>or 6'</b> high measured from the ground to the midpoint between the uppermost whorl and the tip of the leader
Evergreen and deciduous shrubs	five-gallon container
<b>Ornamental grass or perennials</b> <small>Ground covers and vines</small>	2.25" container

- d. **Tree Species Diversity.** To prevent uniform insect or disease susceptibility and eventual uniform senescence on a development site or in the adjacent area or the district, species diversity is required and extensive monocultures are prohibited. In limited areas the City Forester may approve deviations from the minimum requirements to reflect species historically found in the neighborhood. The following minimum requirements shall apply to any development plan:

**TABLE 6-13: TREE SPECIES DIVERSITY**

Number of Trees On Site	Maximum Percentage of Any One Species
10—19	50%
20—39	33%
40—59	25%
60 or more	15%

- e. **Percentage of living materials.** Unless otherwise specified, any required landscape area, including the internal landscaping area, screening and buffering areas, landscaped setback and parking strips, shall consist of a minimum 75% ground cover by living grass or other plant materials based on mature size of vegetation.
  - 1. The foliage crown of deciduous trees shall not be used in the 75% or other required percentage calculations.
  - 2. The remaining 25% of the required landscape area may be covered with bark, wood chips, rock, stone or similar materials. Bark, wood chips, rock, stone or similar materials may be used as an initial ground cover until vegetation matures.
  - 3. Artificial trees, shrubs, vines, turf or other artificial plants shall not be considered as outside landscape materials, except for turf used in athletic fields.
- f. **Irrigation systems.** An automatic irrigation system shall be provided to regularly irrigate all living plants within all landscape areas according to the plant's water needs.
  - 1. Automatic irrigation system design shall include the following:
    - (a) An electronic automatic controller with battery backup and adjustable calendar capabilities.
    - (b) Each valve shall irrigate a landscaped area with similar site, slope, soil conditions and watering needs of plants. Turf and nonturf areas shall be irrigated on separate valves. Drip and broadcast irrigation shall be on separate valves.
  - 2. *Exception:* Areas landscaped with short-grass prairie