

ARTICLE 9
LANDSCAPING AND SCREENING

9.01 Purpose

The landscaping and screening regulations provide additional guidance on the development of sites within Douglas County by addressing landscaping and screening requirements. They are designed to improve the appearance of the county; buffer potentially incompatible land uses from one another; and conserve the value of properties within the Douglas County jurisdiction.

Intent

Landscaping and screening material shall support the Conservation Design Regulations of this regulation. Drip irrigation or systems that utilize recycled water are required. Restrictive covenants for new subdivision and other developments shall not include a requirement for irrigated bluegrass for lawn areas. Landscaping using a variety of appropriate tree species that are sustainable to this area shall be established on all building lots within a development prior to occupation and use of those lots. Trees native to this region are preferred. Trees planted prior to the end of construction need to be adequately protected. A 90% survival rate of the required planting after 2 years will be required.

9.02 Applicability

There are two levels of applicability of this Landscaping and Screening regulation.

1. Responsibilities of the developer

The developer of the subdivision or other development shall landscape all common areas, development/subdivision perimeters, and building lots prior to occupation and use of said lots. Said landscaping shall consist of a minimum of one (2) 2" caliper hardwood tree in the front yard and one (1) 2" caliper hardwood (or other approved species) tree in the rear yard. The developer is responsible for the maintenance of said landscaping for a two (2) year period following installation. A landscaping plan for the subdivision or other development shall be submitted at either the time of final plat submission for subdivisions or with the site plan submission for other developments.

Exemptions.

The following are exempt from the Landscaping and Screening provisions.

- A. Reconstruction or replacement of a lawfully existing use or structure following a casualty loss.

- B. Remodeling, rehabilitation or improvements to existing uses or structures which do not substantially change the location of structures, parking or other site improvements.
- C. Additions or enlargements of existing uses or structures which increase floor area or impervious coverage area by less than 20%. Where such additions or enlargements are 20% or greater, these provisions shall apply only to that portion where the new development occurs.
- D. Farmstead buildings or other buildings associated with an agricultural use type in the AG Agricultural Zone District.

9.03 Landscaping Plan Review Procedure

- A. Landscaping plan review required.

A landscaping plan is required for all development and because landscaping is a key element of Low Impact Development techniques, the landscaping plan should be coordinated with grading plans and proposed post-construction stormwater best management practices.

- 1. For subdivisions, PUD-type developments, and other developments where multiple parcels, building lots, or property owners are involved, an overall landscape plan shall be submitted. Such plan shall include the landscaping that is planned for the development's common areas and perimeter. Plan and cross section drawings, to scale, shall be provided along with descriptions of the plant and other materials proposed to be used and verification of the installation timeline and methods to be used. A landscaping plan shall be completed by a landscape architect or registered nurseryman.
 - 2. For a single family dwelling the landscape plan should be submitted with the plans for the dwelling. Such plan shall identify the plant and other materials proposed to be used. Plan drawings to scale shall be provided along with descriptions of the plant and other materials proposed to be used. Certificates of occupancy will not be issued until landscaping has been completed, except for situations where plant materials cannot be installed due to weather conditions. This exception shall not apply to completion of any stormwater best management practices on the property.
- B. Submittal responsibilities for the developer. Submittals pursuant to section 9.02 shall include the following information. Note that these submittal requirements are at the subdivision/development level and not at the individual lot level:

1. Drawings at a scale no smaller than 1 inch = 50 feet. Drawings shall include north arrows, scale, street address, street names, and the name and address of the person or firm preparing the plan.
2. Calculations of the entire site area, the area required for landscaping by this regulation, including Street Landscape Borders, streetyards, public right-of-way, bufferyards, and perimeter and interior parking lot landscaping; and the required quantities of trees, shrubs, ground cover, and other materials required within these landscaped areas.
3. Overall site plan, indicating location of major site features, structures, parking, site circulation, public streets and rights-of-way, pedestrian circulation, site amenities, and other features.
4. Existing plant materials, including location, size, species, and condition, and indication whether existing materials will remain or be removed.
5. Planting plan, including location of all materials, size, and scientific and common name of each material. The planting plan includes the location and type of all ground covers, including non-living materials, and all other landscape features and structures.
6. Location and design of all screening elements required by this regulation.
7. Grading plan showing berms, landforms, and stormwater management facilities, with contours shown at no less than two-foot intervals. Stormwater management facilities shall be consistent with the policies and concepts outlined in the Comprehensive Plan and shall incorporate Best Management Practices.
8. A development obligation statement that establishes the responsibility of the developer to install landscaping and irrigation according to these regulations.

9.04 Landscaping Requirements

Landscaping shall be required adjacent to each street property line and within street yards and street side yards as set forth below.

9.1 Required Landscaped Area in Streetyards

Zoning District	Street Landscape Border	Minimum % of Area of first 100 feet of Streetyard to be Landscaped
AG	NA	NA
RR-1 and RR-2	35 feet	75% of entire street yard
R-1	20 feet	65% of entire street yard
R-2	15 feet	55% of entire street yard
R-3	15 feet	50% of entire street yard
MH	35 feet	65% of entire street yard
MU-1	15 feet	25%
MU-2	10 feet	20%
MU-3	20 feet	15%
LI	10 feet	10%
GI	10 feet	10%

NOTE: Paving is not permitted within side yard setbacks of a lot, in conformance with Article 10.

9.05 Landscaping Materials and Installation Standards

- A. Official List of Recommended and Prohibited Plant Materials. Plantings shall be used in any required landscaped areas or bufferyards consistent with the Nebraska Statewide Arboretum plant list, provided through the Environmental Services Office. All plant materials shall conform in size, species and spacing with this section of the regulation.
- B. Use of inorganic landscaping materials. No artificial trees, shrubs, plants or turf shall be used to fulfill the minimum requirements for landscaping. Inorganic materials, such as stone or decorative pavers, may be used, but the increased impervious surfaces must be mitigated through the installation of one or more best management practices to handle the stormwater runoff from the impervious surfaces. Other concrete and/or asphalt pavement surfaces may not be used within the minimum required landscaped area, except for sidewalks or trails designed for pedestrians and/or non-motorized vehicles.

The intent of restricting the amount of inorganic and/or artificial materials is that many of these materials tend to be impervious and contribute to increased stormwater runoff, which is generally contrary to the goal of no net increase in runoff from new development.

- C. Supplements to the recommended list of plant materials. The Nebraska Statewide Arboretum plant list has been compiled using the latest research data available. Plants other than those listed may be used to fulfill minimum landscaping requirements as approved by the Zoning Coordinator. To be considered for approval, a proposed plant material must be submitted for review with the following information:
1. Common name and scientific name of plant material.
 2. Habitat, geographic climate range and whether plant is native to this region.
 3. Growing characteristics, including evergreen or deciduous, height and spread at maturity.
 4. Suitability for different landscape uses and applications.
 5. Susceptibility to disease and tolerance of environment: heat, drought, pollution stress.
 6. Fruit-bearing characteristics which may be hazardous in pedestrian and parking area.
- D. Encouragement of native landscaping materials. The use of suitable and sustainable native plant materials is encouraged to fulfill landscaping requirements. Native plants, or those plants which occur naturally in this region, have shown greater adaptability to the seasonal and climate changes which occur in this region.
- E. Installation standards.
1. Basic plant materials standards shall include the following:
 - a. Evergreen trees: minimum height of six feet.
 - b. Shrubs: minimum two-gallon size container, or the equivalent height and/or spread.
 - c. Ground cover shrubs: minimum spacing upon installation of 18 inches on center.
 - d. Deciduous shade trees: minimum caliper (diameter) of two inches as measured six inches above the ground.

- e. Ornamental deciduous trees: minimum caliper (diameter) of two inches as measured six inches above the ground.
 2. All other specifications shall conform to the American Standards for Nursery Stock, published by the American Association of Nurserymen for that type of tree or shrub at the time of installation.
 3. All plant material shall be installed free of disease and in a manner that ensures the availability of sufficient soil and water to sustain healthy growth.
 4. Plant materials shall be planted using current best practices as defined by the International Society of Arboriculture and mulched to a depth of three inches to the dripline of the tree/shrub at time of planting or to a radius of 5 feet from the main trunk/stem of the plant, whichever is greater.
- F. Minimum spacing of plant materials shall be as follows:
1. Tree spacing along streets: minimum of one tree for every 50 linear feet of Street Landscape Border.
 2. Spacing of trees: spacing consistent with generally accepted species spread dimension at maturity defined by American Standards for Nursery Stock, or a minimum of one tree for every 50 feet, whichever is less.
 3. Ground cover shrubs: minimum spacing upon installation of 18 inches on center.
 4. Ground cover turf: immediate and complete coverage of area within the season.
 5. Ground cover, creeping: minimum spacing upon installation of 18 inches on center.
- G. Supplemental installation requirements for shrubs.
1. Shrubs shall be installed in a manner that promotes ease of maintenance and quality appearance.
 2. All shrubs shall be installed in designed beds or naturalized settings containing a minimum of three inches of organic contained by some form of edging.
 3. Shrub installations beyond mere shrub beds, such as may contain ground covers, native perennials or seasonal annuals, may be approved without these features at the discretion of the Zoning Coordinator, upon demonstration of quality design and a maintenance contract/commitment.

9.06 Maintenance Responsibility

The owner of the property shall be responsible for the proper maintenance of all required landscaped areas. Landscaping shall be maintained continuously, including all necessary watering, weeding, pruning, pest control and replacement of dead or diseased plant material. Replacement of dead and diseased material shall be of the same type and size set forth on the approved landscaping plan. Replacement shall occur within the present planting season or may be deferred to the next planting season to accommodate unfavorable weather conditions. In no case shall replacement time exceed one year for plant materials in areas other than single family dwelling lots. However, plant materials installed and maintained by the developer in single family dwelling lots shall be subject to the provisions of this section (9.06)

9.07 Performance Guaranties and Surety

If developer or owner of said development fails to install/maintain said landscape improvements consistent with the provisions of this regulation, the developer or owner shall grant Douglas County permission to enter upon the land to install required landscaping and/or screening, and the county shall assess the cost of said landscaping and/or screening improvements on the owner of the property. This provision does not apply to single family dwellings.

9.08 Bufferyard Provisions

These provisions apply when a use is established in a more intensive zoning district (District A) which is adjacent to a less intensive zoning district (District B). The owner, developer or operator of the use within District A shall install and maintain a landscaped bufferyard on his/her lot or site, as set forth in this section. Bufferyard requirements apply only to those districts indicated in Table 9.2)

- A. The bufferyard dimensions set forth in this section apply to zoning districts which share a common lot line or are adjacent but separated by an intervening alley.
- B. When a street separates adjacent zoning districts requiring a bufferyard, the size of the bufferyard shall be ½ the required bufferyard set forth in this section
- C. Each required bufferyard must be entirely landscaped and free of paved areas, accessways, storage or other disturbances.

Table 9.2 Bufferyard Requirements (feet)

		District B: Less Intensive Adjacent District					
		AG	RR-1 RR-2	R-1	R-2	R-3	MH
More Intensive District	MU-1	10	10	10	10	10	10
	MU-2	30	30	20	20	20	20
	MU-3	30	30	20	20	20	20
	LI	30	40	40	40	40	40
	GI	60	60	60	60	60	60

Note 1: Buffer requirements do not apply to single-family or duplex residential uses established in District A.

Note 2: Buffer requirements adjacent to AG and RR districts apply only when the AG and RR districts have residential uses established either by use or approved subdivision, or are designated for residential uses by the county's comprehensive plan/ future land use map.

Note 3: When an alley separates adjacent zoning districts requiring a bufferyard, the size of the bufferyard shall be one-half the required bufferyard set forth in the table above.

Note 4: Each required bufferyard must be entirely landscaped in accord with the provisions of Article 9, and otherwise free of paved areas, access ways, storage, or other disturbances.

9.09 Screening Standards

A. Application

Screening is required between adjacent zoning districts indicated in the Table 9.2. Bufferyard Requirements when one or more of the following conditions in the more intensive zoning district is directly visible from and faces either the boundary of the less intensive zoning district or a public right-of-way:

1. Outdoor storage areas or storage tanks, unless otherwise screened.

2. Loading docks, refuse or trash collection points or dumpsters, and other service areas.
 3. Major machinery or areas housing a manufacturing process.
 4. Major on-site traffic circulation areas or truck and/or trailer parking.
 5. Sources of glare, noise, or other environmental effects.
 6. Bailing or stockpiling of cardboard or other shipping or packaging materials.
- B. Screen Design. A screen of at least six feet in height, including walls, fences, berming, or landscaping, shall be provided that prevents direct visibility of the conditions listed in this section from less intensive uses or public streets. The screen may include the following:
1. A wood, brick, stone, concrete masonry, PVC, stucco, concrete fence or wall at least six feet in height, with a minimum opacity of 75%.
 2. A vegetative screen, using evergreen or deciduous materials, capable of providing a substantially opaque, hedge-like barrier and attaining a minimum height of six feet within four years of planting.
 3. An alternative vegetative screen that provides two overstory deciduous trees and four evergreen trees per 100 linear feet of property line.
 4. A landscaped earth berm with a maximum slope of three to one, that, if used alone, rises to no less than six feet above the existing grade of the lot line separating the zoning districts.
 5. Any combination of these methods that achieves a cumulative height of six feet.
- C. Screening shall not adversely affect surface water drainage.
- D. The finished side of any fence or wall providing screening shall always be oriented toward the public street or adjacent property.
- E. Screening may be interrupted to provide access drives to service areas or for loading purposes to buildings. Such breaks or interruptions shall not exceed 20% of the length of the required screened area.

9.10 Parking Facility Landscaping

Unless otherwise noted, each parking facility shall comply with the following regulations:

- A. Each parking lot shall provide a minimum landscaped buffer of ten feet along any street property line.
- B. Each parking structure shall be considered a structure and subject to the setback and landscaping requirements for its respective zoning district.
- C. Each parking facility that abuts a residential district without an intervening street or alley shall provide a minimum ten foot landscaped buffer along its common property line with the residential district.
- D. Any parking facility that abuts property in a residential district shall provide a fence, wall, landscape screen, or earth berm not less than four feet in height, for the length of the common boundary. A grade change, terrace, or other site or design feature which blocks the sight line of headlights into a residential property may satisfy this requirement, subject to the determination of the Zoning Coordinator.
- E. Each unenclosed parking facility of over 6,000 square feet shall provide interior landscaped area equal to no less than 5 percent of the total paved area of the parking facility. No more than 40 spaces may be provided in a single row of parking without an intervening planting bed or island. Planting beds may also be used to define pedestrian or vehicular traffic flows within the lot. The minimum sizes of a planting bed or landscaped island shall be 8 feet by 17 feet, or 150 total square feet. Such planting beds/islands within parking lots shall be designed using Best Management Practices, and generally provide for the collection of stormwater, from the impervious parking lot, into such planting beds/islands.
- F. Interior landscaping shall be credited toward the satisfaction of overall landscaping requirements set forth in this section.
- G. Landscaping or screening installed in any required landscaped area shall not obstruct the view from the off-street parking facility to any driveway approach, street, alley, or sidewalk. Landscaping shall further not obstruct any views among parking spaces and circulation ways, or visibility between vehicles and pedestrians.

9.11 Planting Requirements

This section establishes the amount of landscaping required in each of the landscape situations set forth by this regulation.

- A. Street Landscape Border: One deciduous tree and five shrubs; one deciduous tree and one evergreen tree; or 1.5 deciduous trees for each 500 square feet of required area.

- B. First 100 feet of Streetyard Landscaping: One deciduous tree and five shrubs; one deciduous tree and one evergreen tree; or two deciduous trees for each 1,000 square feet of required area. All landscaping within the Street Landscape Border shall be credited toward satisfying this requirement.
- C. Public Arterial and Collector Rights-of-Way: One tree for every 50 linear feet of right-of-way. At least 50% of all trees planted shall be deciduous trees.
- D. Bufferyard: One deciduous tree and two evergreen trees for each 1,000 square feet of required area. Vegetative screens shall be credited toward satisfaction of this requirement.
- E. Parking Lot Peripheral and Bufferyard Landscaping: One deciduous tree and five shrubs; one deciduous tree and one evergreen tree; or two deciduous trees for each 500 square feet of required area.
- F. Parking Lot Interior Landscaping: One deciduous tree for each 20 parking spaces within the parking lot.
- G. Residential Development: Two deciduous shade or evergreen trees, one in the front yard and one in the rear yard, shall be installed per single-family, townhouse, duplex, attached single-family or two-family dwelling unit. The trees shall be installed within two years of the start of construction.
- H. Multifamily (high-density residential areas) developments shall provide one deciduous shade or evergreen tree, or two ornamental trees, and three shrubs for every dwelling unit. These requirements are in addition to street yard or buffer yard landscaping requirements.
- I. Variety of Landscaping: A variety of tree and shrub species shall be utilized to provide visual, four-season interest. Not more than 1/3 of the required number of trees and shrubs may be comprised of any one species and at least 1/3 of the required plants should be a coniferous or evergreen species.

9.12 Tree Replacement

Each landscaping plan shall include an inventory of existing trees on the site within the developable area excluding designated open space. Each tree of an approved species shall be replaced by another approved tree according to the following schedule. All replacement trees shall be consistent with the requirements of this Article.

9.3 Tree Replacement Schedule

Caliper measurement of removed tree	Required number of replacement trees for each removed tree
3 inches or less	1 tree
3.1 to 6 inches	2 trees
6.1 to 9 inches	3 trees
Over 9 inches	4 trees

9.13 General Landscape Provisions

- A. Obstruction of view. Landscaping or screening installed in any landscaped area shall not obstruct the view from or to any driveway approach, street, alley or sidewalk.
- B. Earth berm locations. All earth berm locations shall be reviewed by the Zoning Coordinator to determine the effect of the berms on drainage and public utilities.
- C. Exceptions. A development may continue to comply with the bufferyard and screening requirements in effect at the time of issuance of its original permit, regardless of whether an adjacent lot or site is subsequently rezoned to a less intensive district that would otherwise require compliance with bufferyard or screening provisions.