

Chapter 65 | Landscaping and Screening and Lighting

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Section 65.010 Purposes

The landscaping and screening regulations of this chapter establish minimum requirements for landscaping and screening. The regulations are intended to advance the general purposes of this zoning code and to help:

- 65.010-A** Maintain and enhance the city’s appearance;
- 65.010-B** Mitigate possible adverse impacts of higher intensity land uses abutting lower intensity land uses;
- 65.010-C** Reduce the impacts of noise and glare.
- 65.010-D** Maintain and improve air quality;
- 65.010-E** Protect surface water quality ~~in the Arkansas and Verdigris Rivers~~ and reduce the negative impacts of stormwater runoff by reducing impervious surface area and providing vegetated areas that filter and retain greater amounts of stormwater on site;
- 65.010-F** Moderate heat by providing shade;
- 65.010-G** Encourage wise use of water resources;
- 65.010-H** Encourage preservation and replacement of existing trees and landscaping; and
- 65.010-I** Encourage greater use of low-impact development practices.

~~65.010-J Outdoor Lighting~~

~~The outdoor lighting regulations of this chapter are intended to help ensure adequate lighting for motorized and nonmotorized travelers; provide for the efficient use of energy; and reduce the impacts of nuisance lighting and glare on nearby areas.¹~~

Section 65.020 Principles

~~The regulations of this chapter will be interpreted, administered and enforced in accordance with the following general principles:~~

- ~~**65.020-A** Preservation of existing, healthy trees and shrubs is a top priority and is strongly encouraged.~~
- ~~**65.020-B** Trees, shrubs, groundcover and turf must be the primary sources of landscaping and must be installed and maintained to reduce stormwater runoff and ensure safe visibility at intersections and points of vehicular access.~~

¹ The outdoor lighting regulations are not a subject of this update. The current lighting regulations have been moved to their own chapter (Chapter 67).

~~65.020-C~~ Property owners are responsible for maintaining all required trees and landscape materials and for replacing any trees and plants that die.

~~65.020-D~~ The design of landscape areas to promote low-impact development practices (e.g., bioretention basins, rain gardens, filter strips, and grassed swales) is strongly encouraged and may be used to satisfy the landscaping regulations of this zoning code, subject to compliance with all applicable standards of the *Stormwater Management Criteria Manual*.

~~65.020-E~~ The alternative compliance provisions of Sec. ~~65.100-D~~ are intended to accommodate creativity in landscape and screening design and address site-specific barriers that prevent strict compliance with the regulations of this chapter.

Section 65.030 **Applicability**²

The landscaping and screening regulations of this chapter apply as set forth in the individual sections of this chapter. The following are expressly exempt from the landscaping and screening regulations of this chapter:

~~65.030-A~~ Agricultural uses;

~~65.030-B~~ Public parks and open spaces;

~~65.030-C~~ Detached houses, attached houses and duplexes (existing or proposed);

~~65.030-D~~ Reconstruction of any building that was in existence on January 1, 1994 and that is later damaged or destroyed by tornadoes, straight-line winds, ice storms, fire, floods, hail, lightning strike, or other forces beyond the reasonable control of the property owner~~an act of God; and~~

~~65.030-E~~ Interior remodeling;

~~65.030-F~~ Land for which a landscape plan was approved by the planning commission before January 1, 1994, pursuant to its review of a planned unit development or corridor development, provided that the required landscaping was installed in accordance with the approved detailed landscape plan by January 1, 1995;

~~65.030-G~~ Construction of a structure, other than a building, that does not increase the developed area of a lot more than 30 square feet.

~~65.030-H~~ Developed area of a lot if all proposed new buildings and/or additions to buildings contain less floor area than the floor area of existing buildings which remain on the lot after completion of the new construction.

~~65.030-I~~ For the purposes of this section, "developed area" means the area of a lot that on January 1, 1994, was covered by a structure, off-street parking or loading areas, or other areas paved with an all-weather material, and "existing buildings" means buildings completed and existing before January 1, 1994.

Section 65.040 **Street ~~Yard Landscaping~~Trees**

65.040-A **Purpose**

Street yard landscaping trees helps maintain and enhance the appearance of the city, contribute to pedestrian safety and comfort and while also offering offer environmental benefits by allowing the infiltration of stormwater, reducing urban heating and improving air quality.

² Still need to clarify that IMX and River Design Overlay are exempt from some or all of this chapter.

65.040-B Applicability

The street tree planting requirements of this section apply to all the following, except as otherwise expressly stated:

1. Construction of any principal building;
2. Any addition to or enlargement of an existing principal building when the addition or enlargement exceeds 20% of the building's existing floor area; and
3. Any increase in impervious coverage on the subject lot that exceeds 20% of the lot's existing impervious coverage.

65.040-C Requirements

1. Number

At least one canopy tree is required per 30 feet of street frontage. If canopy trees are not appropriate due to the presence of overhead power lines or other obstructions, at least one understory tree is required per 25 feet of street frontage

2. Location

a. Required street trees must be installed within the street right-of-way or within 20 feet of the street right-of-way.

b. The land use administrator is expressly authorized to approve an alternative compliance landscape plan for installation of street trees in alternative locations when there is not adequate room for tree planting within the street right-of-way or within 10 feet of the street right-of-way or when compliance with Sec. ~~65.040-C2.a~~ would result in a poor growing environment for the tree or damage to public or private improvements.

~~a.c.~~ Required street trees may be located within pervious landscape areas or within ~~tree~~three wells.

3. Spacing

Street trees are not required to be evenly spaced, but the distance between street trees may not exceed 60 feet.

4. Materials, Installation and Maintenance

See Section 65.080 and Section 65.090.

Figure 65-165-1: Street Trees



~~At least 20% of the required street setback area must be established and maintained as landscaped area. At least one tree must be preserved or planted and maintained or replaced in required street yard landscape areas for each 1,200 square feet of area, or fraction thereof.~~

~~The street yard landscaping requirements of this section (Section 65.030) do not apply in the CBD district or to properties where no street setback is required, provided that in MX districts, at least one street tree is required per 25 feet of street frontage. Required trees in MX districts may be located on the subject property or in the abutting right-of-way. The landscaped area must be at least 5 feet in width and extend along the entirety of abutting street right-of-way, except at points of vehicular or pedestrian access. This area may be counted towards satisfying the minimum landscaped area requirements of §65.030 B1.~~

~~For nonresidential development on lots of record as of December 31, 1993, that are no more than one acre in area, minimum off-street parking requirements are reduced by one space for each 300 square feet of street yard landscaping required by §65.030 B1.~~

Section 65.050 Interior Parking Lot Landscaping

65.050-A Purpose

The interior parking lot landscaping regulations of this section are intended to help mitigate the visual and stormwater runoff impacts of parking lots and provide shade for parked vehicles and pedestrians.

65.050-B Applicability

Unless otherwise expressly stated, the interior parking lot landscaping regulations of this section apply to all the following:

1. The construction of any new principal building or addition to a principal building that increases the floor area on the subject lot by more than 10%;

2. The construction or installation of any new parking lot containing 10 or more parking spaces;
3. The expansion of any existing parking lot that increases the number of parking spaces or amount of paved area by 33% or more; and
4. The excavation or reconstruction of any existing parking lot that contains 10 or more parking spaces if the excavation or reconstruction involves the removal of 33% or more of the asphalt, concrete or other parking lot surface material.

65.050-C Exception

Parking area used solely for the display and storage of motor vehicles for sale, lease or rental are exempt from the interior parking lot landscaping requirements of this section.

65.050-D Requirements**1. Landscape Area**

- a. At least 35 square feet of interior parking lot landscape area must be provided for each parking space. If compliance with this regulation would result in the loss of required parking spaces, the amount of parking required is automatically reduced by the amount needed to accommodate the required interior parking lot landscape area.
- b. When at least 50% of interior parking lot landscape area consists of depressed bioretention areas used for stormwater management, the minimum interior parking lot landscape area requirement is reduced from 35 square feet per parking space to 28 feet per parking space. To receive this bioretention credit, the ponding area must be at least 6 inches and not more than 18 inches in depth and planted with native wildflowers/forbs and grasses.

2. Trees and Plant Material

Required interior parking lot landscape areas must be landscaped at the minimum rates established in Table 65-1.

Table 65-1: Minimum Interior Parking Lot Planting Requirements

<u>Trees and Plant Material</u>	<u>Minimum Number Required</u>
<u>Shade Trees</u>	<u>1 per 10 parking spaces</u>
<u>Shrubs</u>	<u>2 per 10 parking spaces</u>
<u>Ground Cover</u>	<u>Complete coverage of required landscape areas</u>

3. Location and Design

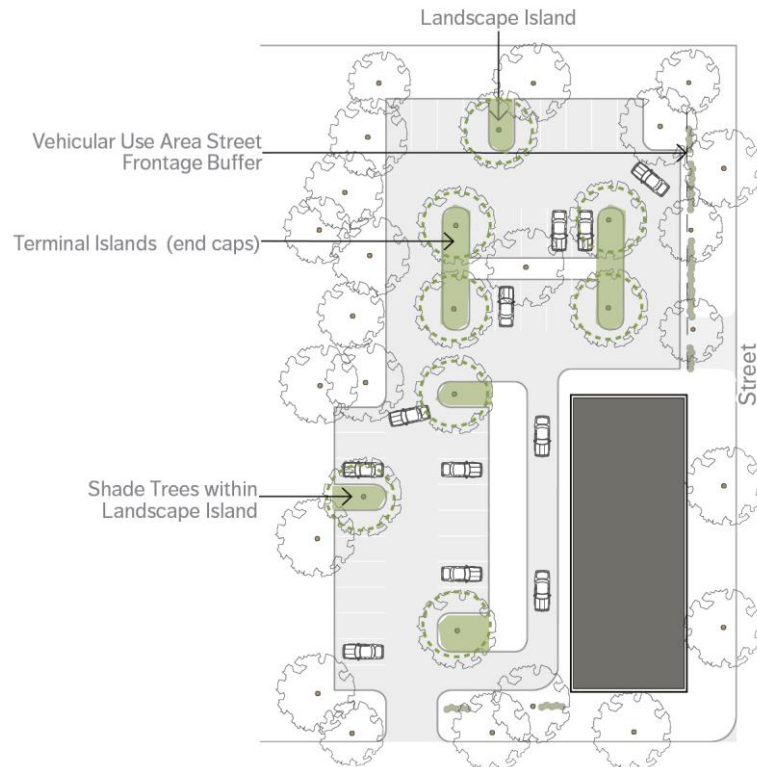
- a. Interior parking lot landscaping must be provided in the form of landscape islands that comply with all of the following requirements:
 - (1) They must be bordered by a paved surface on at least 2 sides;
 - (2) They must be at least 7 feet wide, as measured from the back of the curb;
 - (3) They must include at least one tree per island and be covered with ground cover plants or mulch;
 - (4) They must be protected by curbs or other barriers, which may include breaks or inlets to allow stormwater runoff to enter the landscape island; and
 - (5) They must be located so that every parking space is within 100 feet of a landscape island containing a tree.

- b.** Parking rows that end abutting a paved driving surface must have a landscape terminal island (end cap) at that end of the parking row. All other parking lot landscape islands must be located to comply with all applicable regulations of this section.
- c.** The land use administrator is expressly authorized to approve landscape plans that do not provide terminal islands at the end of each parking row or that otherwise provide for reduced dispersal of interior parking lot landscape areas when proposed landscape planting areas are combined to form functional bioretention areas or to preserve existing trees and vegetation.

4. Vehicle Overhangs

A portion of a motor vehicle parking space may be landscaped instead of paved to meet interior parking lot landscaping requirements. The landscaped area may be up to 2 feet of the front of the space as measured from a line parallel to the direction of the bumper of the vehicle using the space. Groundcover plants must be provided in the allowed overhang area.

Figure 65-265-1: Interior Parking Lot Landscaping



5. Relationship to Vehicular Use Area Buffer Regulations

Landscape areas and plant material provided to satisfy the vehicular use area buffer regulations of [Section 65.060](#) may not be counted toward satisfying the interior parking lot landscaping regulations of this section ([Section 65.050](#)).

4.6. Materials, Installation and Maintenance

See [Section 65.080](#) and [Section 65.090](#).

Section 65.060 Vehicular Use Area BuffersLandscaping**65.060-A Purpose**

The vehicular use area buffer parking lot landscaping regulations of this section are intended to help soften the mitigate the visual and operational impacts of parking lots and other vehicular use areas³and provide shading when such areas are adjacent to streets or residential zoning districts.

65.060-B Applicability

Unless otherwise expressly stated, the vehicular use area buffer regulations of this section apply to all the following:

1. The construction or installation of any new vehicular use area with a contiguous paved area of 3,500 square feet or more; and
2. The expansion of any existing vehicular use area that results in the addition of 3,500 square feet or of paved area, in which case the vehicular use area perimeter landscaping requirements of this section apply only to the expanded area.

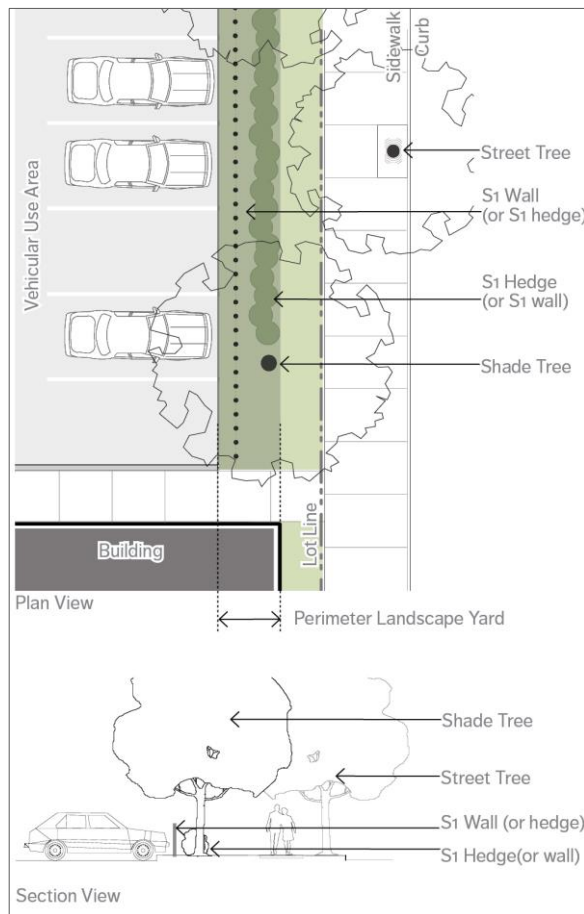
65.060-C Requirements**1. Street Frontage Buffers**

- a. When a vehicular use area is located adjacent to a street right-of-way, street frontage buffers must be provided in accordance with the regulations of this subsection to physically and visually buffer the vehicular use area from the right-of-way.
- b. Street frontage buffers are required only when the vehicular use area is located within 100 feet of the right-of-way and there are no intervening buildings between the vehicular use area and the right-of-way.
- c. Except as expressly stated for vehicular use areas in the CBD zoning district (see [65.060-C1.e](#)), street frontage buffers must be at least 7 feet in width and be planted with at least one shade tree per 30 linear feet of landscape. An S1 low-profile screen must also be provided within the street frontage buffer, in accordance Sec. [65.070-C1](#).
- d. Trees planted to satisfy the street tree planting requirements of [Section 65.040](#) may be counted toward satisfying street frontage buffer tree planting requirements.
- e. In the CBD zoning district, required street frontage buffers must be at least 3 feet in width and include a minimum 3-foot tall decorative metal or wrought-iron fence or brick, stone, cast stone, or stamped concrete wall.
- a.f. Groundcover plants must be provided in all street frontage buffer areas that are not covered by fences or walls.

³ Vehicular use area = An area on a lot that is not contained within a garage or similar enclosed or partially enclosed structure that is designed and intended for use by motor vehicles, including parking lots, vehicle storage and display areas, loading areas; and driveways and drive-through lanes.

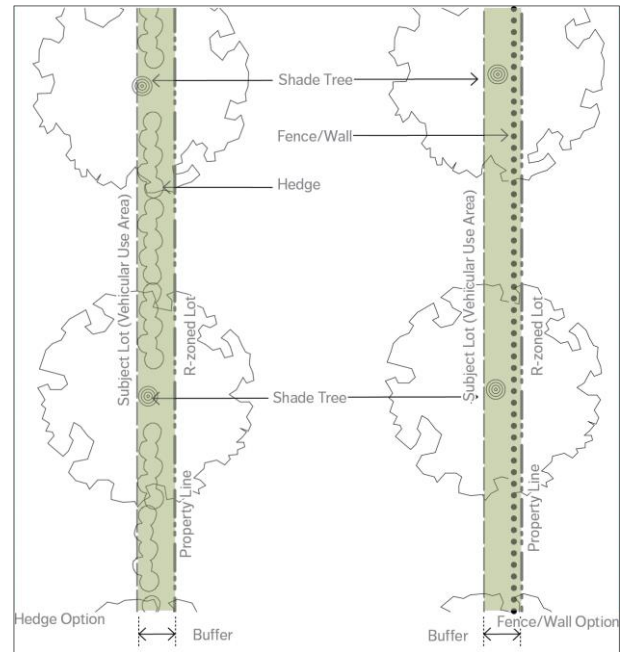
- g.** The 2-foot vehicle overhang allowance described in Sec. 65.060-C4 applies to parking spaces abutting street frontage buffer areas.

Figure 65_465-3: Vehicular Use Area Street Frontage



Buffer

Figure 65_365-2: Vehicular Use Area R District Buffer



2. R District Buffers

- a.** When a vehicular use area is located adjacent to an R-zoned lot, an R district buffer must be provided in the form of an F1 screen, in accordance with 65.070-C2.
 - b.** R district buffers are required only when the vehicular use area is located within 100 feet of an abutting R-zoned lot and there are no intervening buildings between the vehicular use area and the abutting R-zoned lot.
 - c.** Groundcover plants must be provided in all R district buffer areas that are not covered by fences or walls.
 - d.** The 2-foot vehicle overhang allowance described in Sec. 65.060-C4 applies to parking spaces abutting R district buffers.
- 3.** The following parking lot landscaping requirements apply in surface off-street parking lots that are not located in the CBD zoning district.

- ~~a.~~ Off-street parking areas located within 25 feet of a street right-of-way, residential zoning district or residential development area must be separated from the abutting rights-of-way, residential districts and abutting residential development areas by a landscaped area that is at least 10 feet in width and that contains an S1 screen (see §65.060-C1) containing at least 3, 5-gallon shrubs per 10 linear feet. This area may be counted towards satisfying the minimum street landscaping requirements of §65.030-B1 if it is located within the street yard.
- ~~b.~~ All parking spaces must be located within 50 feet of a tree. Required parking lot trees must be located in a landscaped area that is at least 64 square feet in area and that has a minimum width or diameter of 8 feet.
- ~~4.~~ Trees must be preserved or planted and maintained or replaced in CBD-zoned surface parking lots that have 20 or more parking spaces and that are located within 25 feet of a public street right-of-way, as follows:
 - ~~a.~~ At least one tree must be provided per 35 linear feet of public street right-of-way that is located within 25 feet of the parking lot; and
 - ~~b.e.~~ Required trees must be located within 10 feet of the public street right-of-way.

~~5.3.~~ Materials, Installation and Maintenance

~~See Section 65.080 and Section 65.090.~~

Section 65.070 Screening

65.070-A Purpose

Screening requirements are intended to partially or completely shield expressly identified uses and site features from view of abutting streets or other abutting lots.

65.070-B Features Required to be Screened

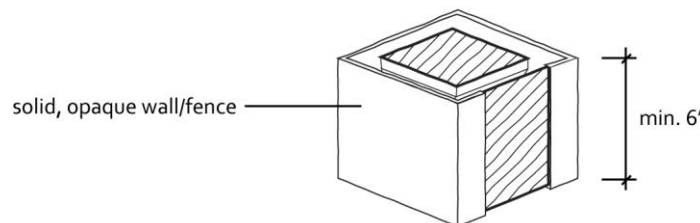
1. General

This subsection establishes screening requirements for several common site features that require visual separation from streets and abutting lots. Other uses, districts, structures and activity areas may also require screening in accordance with other provisions of this zoning code.

2. Dumpsters and Recyclable Material Bins

All dumpsters and recyclable material bins must be screened from view of the street and all abutting properties. Required screening must consist of an ~~F1-screening~~ **opaque** fence or wall ~~in accordance with §65.070-C2 with a minimum height of 6 feet.~~ One side of the storage area must be furnished with an opaque, lockable gate.

Figure 65-5: Dumpster and Recycling Bin Screening



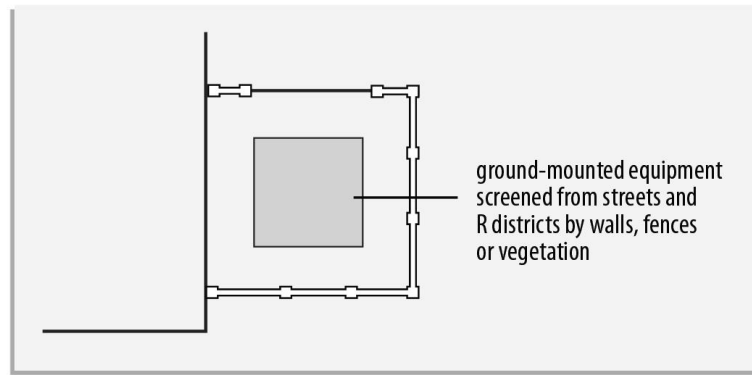
3. Mechanical Equipment

a. Ground-mounted Equipment

Mechanical equipment located at ground level, such as heating or cooling equipment, pumps, or generators must be screened from view of the street and any

abutting R districts by walls, fences or vegetation. Screening must be at least as tall as the tallest part of the equipment required to be screened.

Figure 65-6: Screening of Ground-mounted Equipment

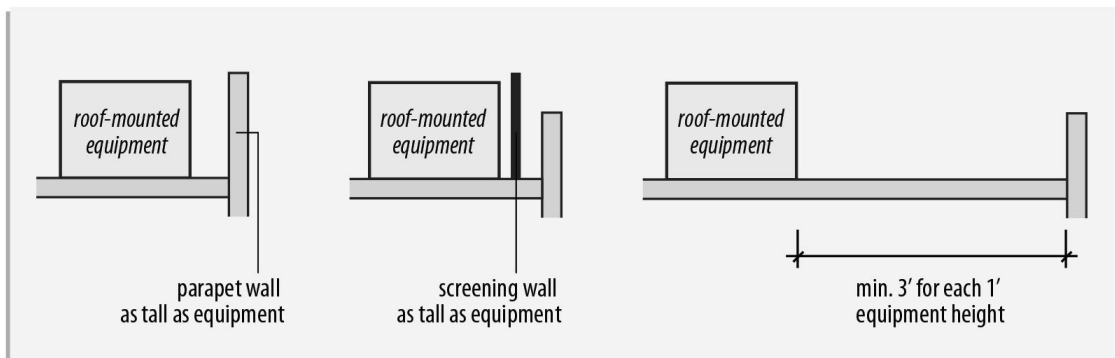


b. Roof-mounted Equipment

Mechanical equipment placed on roofs must be screened in one of the following ways, if the equipment is within 50 feet of an R zoning district:

- (1) A parapet along facades facing the R district that is as least as tall as the tallest part of the equipment;
- (2) A screening fence or wall around the equipment that is as least as tall as the tallest part of the equipment required to be screened; or
- (3) An equipment setback from roof edges facing the R district by at least 3 feet for each one foot of equipment height.

Figure 65-7: Screening of Roof-mounted Equipment



65.070-C Type of Screens

1. S1, Low-profile Screen

a. Purpose

The S1, low-profile screen is intended to help soften visual impacts of certain site features and provide an “urban edge” along lot borders and other site features, while maintaining some visibility of the areas required to be screened.

b. Design

The S1 screen requires shrubs planted to form a continuous visual barrier (hedge) at least 3 feet in height. A 3-foot tall brick, stone, cast stone, or stamped concrete masonry-wall may be substituted for the shrubs.

2. F1, Screening Fence or Wall**a. Purpose**

An F1 screening fence or wall is required in those instances where a complete visual barrier is needed.

b. Options

F1 screening requirements may be met by either of the following options.

- (1) The installation of an opaque fence at least 6 feet in height and at least one tree per 25 linear feet of fence; or
- (2) The installation of a masonry wall with a minimum height of 6 feet.

c. Street Setback

When located in the required street setback, required F1 screening fences and walls may not exceed 4 feet in height.

~~d. Existing Fences and Walls~~

~~When a fence or wall already exists that provides screening that is as least as effective as would be achieved with a new F1 screening fence or wall, the development administrator is authorized to waive or reduce the fence or wall requirements of this subsection.~~

3. Materials, Installation and Maintenance

See Section 65.080 and Section 65.090.

4. Modification of Requirements

a. Applicable screening requirements may be eliminated-waived or modified through the alternative compliance approval process (see §65.100-D) or through the special exception approval process when:

- (1) Existing features provide a visual screen equivalent to the screening requirements of this section;
- (2) The screening requirements cannot be achieved; or
- (3) The screening is prohibited by other ordinances or regulations.

b. An extension of time to install required screening may be approved through the special exception approval process when the properties benefited by the screening are undeveloped.

5. Screening or Setbacks Triggered by Proximity to Nonresidential Areas/Features

When ~~the erection of~~ a screening wall or fence or setback is required by this zoning code because a use abuts one or more R districts, such wall, fence, or setback is not required if the actual use of the abutting R district is a freeway, expressway, turnpike, nonresidential use ~~previously approved by the board of adjustment~~; or a nonresidential development area. This exemption from screening does not apply to junk or salvage yard s-uses.

Section 65.080 Landscape and Screening Material**65.080-A General****1. Applicability**

The regulations of this section apply to all trees, plant materials, and other features used to satisfy the landscaping and screening requirements of this zoning code.

2. Recommended and Prohibited Species List

The planning and development director is authorized to prepare a list of recommended and prohibited plant species for use in administering and enforcing the regulations of this chapter.

3. Selection

Trees and plants used to satisfy the requirements of this zoning code must:

- a. Meet or exceed the plant quality standards of established in the latest edition of the American Association of Nurserymen Standard for Nursery Stock (ANSI Z60.1);
- b. Be included as a recommended species on the recommended and prohibited species list or be adapted for growing conditions in the Tulsa area, as determined by the native or naturalized species, except as otherwise approved by the land use administrator; and
- c. Not be artificial plants or listed as a prohibited species on the recommended and prohibited species list prepared, and updated from time to time, by the planning and development director.

4. Planting Areas

- a. All planting areas must have amended soil to help ensure the health of newly installed plant material.
- b. All planting areas must be contained by edging material other than vegetation.
- c. Organic mulch must be provided around trees and to cover bare soil around other plant materials.

65.080-B Trees**1. Types**

Unless otherwise expressly specified, required trees may be deciduous (broadleaf) or evergreen (conifers).

2. Size**a. New Trees**

New or transplanted trees provided to satisfy the requirements of this zoning code must comply with the following minimum size requirements:

- (1) Deciduous Canopy trees must have a minimum caliper size of 1.5-2.0 inches and be at least 8 feet in height at the time of installation;
- (2) Understory trees must have a minimum caliper size of 1.5 inches at the time of installation; and
- (3) Evergreen trees must have a minimum height of 6 feet at the time of installation.

b. Overhead Power Lines

Trees to be installed below overhead power lines must be selected from the list of understory trees specified in the recommended and prohibited species list or be otherwise expressly approved by the land use administrator.

c. Existing (Preserved) Trees

(1) Preserved trees will be credited toward satisfying the tree planting requirements of this zoning code in accordance with the regulations of this subsection (65.080-B2.c).

(2) Credit will be given on the following basis:

(a) Trees up to 6 inches in diameter at breast height (DBH) will be credited on a 1:1 basis.

(b) Trees larger than 6 inches DBH, up to 12 inches DBH will be credited at a ratio of 2:1;

(c) Trees that are more than 12 inches DBH up to 24 inches DBH will be credited at a ratio of 3:1; and

(d) Trees that are more than 24 inches DBH will be credited at a ratio of 5:1.

(3) The tree preservation incentive credits provided in this subsection (65.080-B2.c) may not be used to reduce the number of trees required by this chapter by more than 50%.

(4) To receive tree preservation credit, the following additional conditions must be met:

(5) Preserved trees for which credit is given must be in good health and condition and may not be prohibited species;

(6) The original grade of the dripline area of a preserved tree may not be changed;

(7) Tree protection fencing must be installed around the outer limits of the dripline area and remain in place from commencement of construction activity until all exterior work is complete.

~~(4)~~(8) Tree protection fencing must consist of orange vinyl construction fencing, chain link fencing, snow fencing or other similar fencing at least 42 inches in height and supported at maximum of 10-foot intervals by posts or stakes sufficient to keep the fence upright and in place. A visible warning/no-disturb sign must be affixed to fence at 100-foot intervals.

(9) The land use administrator is expressly authorized to reduce off-street parking requirements to allow for the preservation of existing trees.

~~To encourage preservation of existing mature trees and the planting of larger trees, each square foot of pervious landscaped area within the dripline of a tree with a diameter at breast height of 6 inches or more is counted as 1.5 square feet of landscaped area for the purpose of meeting street yard landscaping requirements of Section 65.040 and the parking area landscaping requirements of Section 65.050, provided that:~~

Overlapping dripline areas may only be counted once;

~~At least 50% of the dripline area must be permeable;~~

~~The original grade of the dripline area may not be changed; and~~

~~The 1.5 square foot incentive credit may not constitute more than 25% of a site's landscaped area requirement.~~

3. Species

If more than 10 trees are required, no more than 40% may be of a single species. If more than 25 trees are required, no more than 25% may be of a single species. This requirement applies to trees being planted, not to existing trees.

65.080-C Shrubs

1. New Shrubs

a. Deciduous shrubs must have a minimum container size of 2 gallons.

b. Evergreen shrubs must have a minimum container size of 5 gallons.

c. Shrubs may also be balled and burlapped.

d. If more than 75 shrubs are required, no more than 40% may be of a single species.

2. Existing (Preserved) Shrubs

Existing shrubs may be used to satisfy the landscaping and screening requirements of this zoning code if protected and maintained during site development and construction phases of work and if such plants are not otherwise prohibited.

65.080-D Ground Cover

1. All required landscape areas that are not planted with trees or shrubs must be covered with ground cover plants, which may include turf. Mulch must be confined to areas underneath trees and shrubs and is not an allowed substitute for ground cover.

2. Ground cover plants other than turf must be minimum 4-inch pot or plug size. Areas planted in ground cover other than turf must be planted at distances appropriate for the species and at a density that will achieve complete coverage after the second full growing season.

65.080-E Mulch

All required trees and shrubs must be located within a mulched area and be separated from turf by a minimum distance of 4 feet. Mulch within such areas must comply with the following requirements:

1. Mulch must be applied to provide at a 2-inch (minimum) to 4-inch (maximum) soil cover, with no weed barrier material visible.

2. At least 50% of the total mulch area must be comprised of organic mulch, such as bark, shredded wood, wood chips, or other organic matter. Mineral mulch such as decorative stone, river stone or tumbled glass may be used in up to 50% of the mulch area.

3. Organic mulch must consist of regionally sourced, fully chipped or shredded, un-splintered wood product or bark chips free of soil, rocks, weeds, metals, toxins, and foreign objects.

65.080-F Fences and Walls

Unless otherwise expressly stated, fences and walls provided to meet the regulations of this chapter are subject to the regulations of this subsection.

1. Fences must durable and constructed with materials that are customarily used for fences, including wood, decorative rigid vinyl (polyvinyl chloride), metal or wrought iron. Fence posts must be structurally stable.
2. The finished side of all fences must face the adjacent property or street. Chain-link fencing may not be used to satisfy the regulations of this chapter.
3. Walls, raised planting beds and planters must be constructed of brick, stone or other durable masonry material approved by the land use administrator.

Section 65.090 Landscape Installation, Irrigation and Maintenance**65.090-A Installation**

1. Required landscaping must be installed in accordance with an approved landscape plan.
2. All trees and plant material must be installed in accordance with sound nursery practices, in a manner designed to encourage vigorous growth.
3. All newly installed trees must be staked.
4. Trees and plant material suitable for planting must be balled and burlapped or container grown. Planting areas should be at least twice the diameter of the root system or the container.
- ~~2.5.~~ All landscaped areas that are adjacent to pavement must be protected with curbs or equivalent barriers. Flush curbs, curb cuts, or other methods must be used to direct stormwater to landscape areas that abut paved areas.
6. Landscaping may not obstruct traffic visibility at street intersections or driveways and must comply with the at access points to streets intersection sight distance regulations of Title 24 (§103.A) of the Tulsa Revised Ordinances.
- ~~3.7.~~ The city is not liable for any damage to above-ground or below-ground improvements or landscaping within the public right of way, even when such damage or destruction is the direct result of government action. When landscaping is placed or installed within the public right-of-way, the city has no obligation to replace or repair such landscaping if removed or damaged by city field operations or other governmental functions.

65.090-B Protection

All landscape areas provided to meet the requirements of this zoning code must be protected from potential damage by adjacent uses and development, including parking and storage areas.

65.090-C Irrigation

1. An underground irrigation system must be provided for all required landscape areas. All required landscaped areas must be provided with irrigation in accordance with one of the following 2 options:

- a. A permanent, underground irrigation system with a controller that meets EPA “WaterSense” criteria for use of local weather and landscape conditions to tailor watering schedules to actual conditions on the site; or
- b. A temporary irrigation system that provides sufficient water to ensure that all trees and plants will become established.

~~1.2.~~ Irrigation systems must comply with all applicable building and plumbing codes.

65.090-D Timing of Installation

All required landscaping ~~and appurtenances, except trees,~~ must be installed prior to the issuance of a final certificate of occupancy, provided that the development administrator is authorized to issue a temporary certificate of occupancy once the subject property owner deposits cash or an irrevocable letter of credit with the city in an amount equal to 100% of the estimated cost of the uninstalled landscaping. The letter of credit must be in a form approved by the city attorney. ~~All required trees must be installed within 120 days after issuance of a certificate of occupancy or temporary certificate of occupancy.~~

65.090-E Certificate of Installation

Within a ~~CO district,~~ PUD or MPD district or whenever a mandatory or optional development plan is approved, certification of installation of required landscaping must be provided as required by any express provisions of the ~~CO district,~~ PUD or MPD district or mandatory or optional development plan approval that was granted. In all other cases, ~~within 120 days of the issuance of a certificate of occupancy or temporary certificate of occupancy,~~ written certification by ~~the owner of the property,~~ an architect, landscape architect or engineer licensed to do business in the State of Oklahoma must be submitted to the city stating that all landscaping and appurtenances have been installed in accordance with the approved landscape plan.

65.090-F Maintenance

1. Required landscaping and screening must be continuously maintained, including necessary watering; weeding; pruning; pest control; litter and debris clean-up; and replacement of dead, diseased or damaged plant material.
2. Failure to comply with an approved landscaping plan, including failure to maintain required landscaping and screening and failure to replace dead, diseased or damaged landscaping, constitutes a violation of this zoning code and is subject to penalties and enforcement under Chapter 85.
3. The property owner and the owner’s successors in interest are jointly and severally responsible for maintenance of trees and landscaping in accordance with the approved landscape plan and the regulations of this zoning code. Any dead, diseased or damaged trees, landscaping or screening materials must be removed and replaced by the current property owner within 90 days of date that written notice of the obligation to remove and replace required landscaping is issued by the city.

Section 65.100 Landscape Plans

65.100-A Preparation of Landscape Plan

1. Required landscape plans must be prepared and sealed by an ~~architect,~~ landscape architect ~~or engineer~~ licensed to practice in the State of Oklahoma if the subject property:

 - a. Is subject to an approved mandatory or optional development plan; or

- b. Has an area of more than ~~50,000~~ 20,000 square feet and is occupied by buildings with a combined gross floor area of more than 15,000 square feet.
2. All other required landscape plans must meet the same requirement or be accompanied by written certification from an architect, landscape architect or engineer licensed to practice in the State of Oklahoma, that the landscape plan is in conformance with the minimum requirements of this chapter.

65.100-B Required Information

All building permit applications for sites requiring landscaping must include a landscape plan that includes at least the following information:

1. General

The date, scale, north arrow, and name of the property owner;

2. Site Features

- a. The location of property lines and dimensions of the site;
- b. The approximate center line of existing water courses;
- c. The approximate location of significant drainage features;
- d. The location and size of existing and proposed streets and alleys, drive aisles, parking areas and sidewalks on or adjacent to the lot;
- e. The location of all existing and proposed buildings and structures on the lot;
- f. Existing topography and proposed grading;
- g. Area in which grading and vegetation removal will occur; and
- h. The location of existing and proposed utility easements and overhead utility lines on or adjacent to the lot.

3. Proposed Landscaping

- a. The location, size and type of proposed landscaping (trees, shrubs, groundcover) and the location and size of the proposed landscape areas;
- b. Planting details and specifications, including type of mulch and edging to be used in landscape areas;
- c. The method of protecting any existing trees and vegetation proposed to be preserved, including the identification of existing and finished contours illustrating the limits of grading near the drip line of any trees;
- d. The proposed irrigation plan for each required landscape area, including a list of abbreviations and symbols, water main size, water meter size and location, point of connection, backflow prevention assembly size, make and model;
- e. The schedule of installation of required trees, landscaping and appurtenances;
- f. The location of all existing and proposed structures on the site;
- g. The existing topography and proposed grading; and
- h. The area and dimensions of each landscape area and the total landscape area provided on the site.

65.100-C Administrative Review

After receipt of a complete landscape plan, the development administrator must:

1. Approve the landscape plan as complying with the requirements of this chapter;
2. Approve the landscape plan with conditions of approval that will bring it into compliance with the requirements of this chapter; or
3. Reject the landscape plan as failing to comply with the requirements of this chapter.

65.100-D Alternative Compliance Landscape and Screening Plans

1. To accommodate creativity in landscape and screening design and to allow for flexibility in addressing atypical, site-specific development/redevelopment challenges, the land use administrator is authorized to approve alternative compliance landscape plans prepared by an architect, landscape architect or engineer licensed to practice in the State of Oklahoma. In order to approve such alternative compliance landscape plans, the land use administrator must determine that one or more of the following conditions or opportunities are present:
 - a. The site has space limitations or an unusual shape that makes strict compliance impossible or impractical;
 - b. Physical conditions on or adjacent to the site such as topography, soils, vegetation or existing structures or utilities are such that strict compliance is impossible, impractical or of no value in terms of advancing the general purposes of this chapter;
 - c. Safety considerations such as intersection visibility, utility locations, etc., make alternative compliance necessary; or
 - d. Creative, alternative landscape plans will provide an equal or better means of meeting the intent of the landscaping and screening regulations of this chapter.
2. The land use administrator is expressly authorized to approve alternative compliance landscape plans for projects implementing low-impact development practices or seeking sustainable development or green building certification from nationally recognized organizations, such as the International Code Council, the U.S. Green Building Council, the International Living Future Institute, or the U.S. Green Building Initiative, as follows:
 - a. Sites implementing low-impact development (LID) solutions meeting the general LID and stormwater regulation guidelines of Oklahoma State University's Division of Agricultural Sciences and Natural Resources may be approved as alternative compliance landscape plans.
 - (1) LID plans must be sealed by a landscape architect licensed to practice in the State of Oklahoma.
 - (2) LID development solutions may be provided in the street right-of-way, subject to approval by all applicable city agencies. Such improvements must be maintained by the adjoining property owner.
 - (3) All aspects of an LID project, including permeable pavement, bioretention areas, rain gardens, filter strips, grassed swales, green roofs, wetlands natural stream restoration or preservation will be considered part of the approved alternative compliance landscape plan.

- b.** Plans for sites for which property owners are seeking sustainable development or green building certification from nationally recognized organizations may be approved as alternative compliance landscape plans.
 - (1)** Landscape plans must be sealed by a landscape architect licensed to practice in the State of Oklahoma.
 - (2)** Landscape improvements may be provided in the street right-of-way, subject to approval by all applicable city agencies. Such improvements must be maintained by the adjoining property owner.
 - (3)** All proposed aspects of the proposed certification, including hardscape material selections, site lighting, grey water irrigation systems and other components of the site may be considered as part of the approved alternative compliance landscape plan.