

Staff Responses to Landscaping Letter

The Planning Commission received a letter from Kate Dinsmore of WGM Group showing edits to the landscaping article in strikethrough/underline. Planning Commission recommended Council adopt all edits in the letter. While some of the changes were recommended by staff through amendments, most of the changes are not recommended by staff. This document describes why staff do not recommend certain changes, and what the outcome of these changes are. Page number headers coincide with the pages of the letter from Kate Dinsmore.

Page 1:

2. Applicability

(a) The landscaping requirements of this division apply to all land. The applicability of specific landscaping requirements varies and is addressed in each section of this division.

~~(b) The landscaping standards of this division do not apply to the D-C Downtown Core & D-T Transition districts.~~

- The letter proposes exempting the D-T Downtown Transition zoning district from all landscaping.
- Staff do not recommend this change because **applying landscaping to Downtown Transition was one of the primary reasons for the creation of this zoning district.**
- The D-T district applies to residential areas that currently have green space, e.g. East Pine Street, East Spruce Street and the residential area behind the Hip Strip. **Some areas in D-T are zoned residential under Title 20** and the new designation as “downtown” is a big change. **Landscaping acknowledges the historic pattern and character of these neighborhoods while greatly increasing density and allowable building heights.**
- The D-T district creates a **transition from Downtown Core**, the most intensive district, **to adjacent neighborhoods.** A low landscaping percentage helps to create the transition.
- Per a staff recommended amendment the D-T district is exempt from activity area, but would require general site landscaping and parking lot landscaping.

Section 4.9.02-B. General Site Landscaping

1. Applicability

The general site landscaping requirements of this section apply to the following:

- (a) ~~New mixed-use and non-residential buildings;~~
- (b) New residential development in apartment buildings and mixed-use buildings with seven or more dwelling units in a single building;
- (c) ~~Townhome Exemption Developments of seven or more dwelling units (based on a single declaration);~~
- (d) Existing residential development in apartment buildings and mixed-use buildings that is expanded to seven or more new dwelling units in a single building;
- (e) Building additions on parcels with seven or more dwelling units in a single building, mixed use development with any number of residential units, or non-residential development;

(g) There is no requirement for general site landscaping for apartment and mixed-use buildings in the U-MU4 zoning district.

- Taken all together, the revisions to the applicability section of general site landscaping proposed by this letter substantially undermine the landscaping requirements.
- Moving “Mixed-use”:
 - The term “mixed-use” is moved from (a) to (b) and (d). As a result, landscaping would only apply to mixed-use buildings that have 7 or more dwelling units. Mixed-use buildings have a commercial component and residential component.
 - Staff do not recommend doing this because it would be **inconsistent** with requiring landscaping on commercial development.
 - The change is **ineffective as an incentive** because it only incentivizes providing 6 or fewer dwelling units in mixed-use districts that allow for much more housing.
 - The change has **high potential for abuse as a loophole**. For example, a large commercial development, including big box stores, could add just one small dwelling unit and entirely get out the requirement to preserve permeable areas, plant trees, and plant shrubs.
- “Single Building” and UR-4 Exemption:
 - The letter proposes that the units all be in one building in order to trigger general site landscaping. The letter also proposes to exempt apartments in UR-4.

- Take into consideration that this letter was written prior to Council's amendment to remove the maximum number of dwelling units per building in UR-1, UR-2, and UR-3.
- Prior to this ^ amendment by Council, the only residential districts that allowed a single building to have 7 or more units were UR-3 and UR-4.
- **At the time the letter was written, the outcome of these edits was to exempt all residential districts, except for UR-3, from general site landscaping. Staff do not recommend this because it is not a transparent way to exempt all residential districts, except UR-3.**
- Using the word "in a single building" means that **a large development containing ten 4-plexes on one-site would not require any landscaping, despite having 40 units.** Large developments should require landscaping. It is possible for this type of project to happen in limited urban and urban residential zoning districts.
- Exempting Townhome Exemption Developments from Landscaping
 - Townhome exemption developments are generally a lower density housing option because they do not allow units to be stacked. In other words, they're a land intensive housing type.
 - Right now, landscaping does not apply to TEDs. As a result, we're seeing projects being built with no trees or vegetation (all paving and river rock). TEDs function similar to condos and in order to promote the land use plan's environmental goals, staff recommend applying landscaping to TEDs with 7 or more dwelling units. This means we do not recommend cutting that line of code.
 - If Council moves forward with eliminating this line of code, the motion needs to redact Staff Recommended Amendment #56 from the January 5th memo to prevent conflict.

2. Building additions smaller than ~~15~~**30%** of the gross floor area of the existing building are exempt from coming into full compliance with general site landscaping tree and shrub requirements. In other words, the parcel is not required to be brought into full compliance with this section but cannot create or increase a landscaping deficit.

- In Section 4.9.02-B.1.e.2, the code says that someone can add an addition up to 15% of the buildings area in size without needing to comply with general site landscaping. The intent of this code section was to allow some flexibility and to clarify landscaping application to additions, which causes a lot of confusion in Title 20 today.
- The letter recommends increasing this threshold to 30%. While that might not sound very big for small buildings, a 30% addition to a structure like Walmart, a movie theater, or the mall would be very large. **In order to require planting trees in deficient landscaping areas with large additions, staff do not recommend this change.**

Page 3:

(b) General site landscaping must consist of one Class 2 tree per 1,000 square feet of required general site landscaping area. Tree classes are described in Section 4.09.02-1.

- ~~1. Class 1 trees may be substituted at a ratio of two Class 1 trees to one Class 2 tree.~~
- ~~2. Class 3 trees may be substituted at a ratio of one Class 3 tree to two Class 2 trees.~~

- The letter recommends requiring one tree per 1,000 square feet of required general site landscaping area instead of 1 tree per 800 square feet. It also recommends getting rid of the different tree substitutions.
- These changes were not carried forward into staff recommended amendments. **The substitution tool provides flexibility.** For example, it might work better on a site for a developer to site one really big tree instead of 3 smaller trees. The overall goal is to improve tree canopy, which can be done by mixing trees of different sizes.
- The 1 tree per 1,000 square feet of required landscape area requirement comes from Title 20. Note that using the substitution tool, one Class 3 tree would be required for 2,400 square feet of landscape area. The UDC reduces required landscaping percentage. For example, in most residential districts the general site landscaping requirement was reduced from 35% in Title 20 to 20% in the UDC.
- **Staff recommend the UDC focus primarily on trees as a climate tool, maintaining the 1 tree per 800 square feet requirement, considering the large reduction in overall landscape area from Title 20.**

*A Council amendment proposes to retain the tree class substitution system.

2. Perennials, bunchgrasses, and groundcovers may be substituted for shrubs at a ratio of three perennials to one shrub.

- Staff did not carry forward this change because the definition of perennials already includes bunchgrasses and groundcover plants. While staff are not opposed to the change, the change isn't necessary.

Page 4:

- City Council already voted against reducing the required general site landscaping percentages in the residential districts.

- See Page 1 in this document for why staff do not support reducing D-T to 0% landscaping.
- The letter proposes to change general site landscaping from 15% to 10% in urban mixed-use districts. **This was not carried forward into staff recommended amendments because 15% is already a low requirement.** Some mixed-use areas are currently very deficient in terms of tree canopy, creating large “hot spots” (see Russell Street to Bancroft Street between Mount and South Ave).

Page 5:

~~(b) The required general site landscaping area may be reduced by a maximum of 50% when a green roof is provided. Green roofs must incorporate herbaceous plants and shrubs. Green roofs shall have at least a four inch soil depth and 70% vegetation coverage.~~

- The letter recommends getting rid of the green roof incentive. The incentive allows developers to reduce the required general site landscaping percentage by 50% if they provide a green roof.
- The letter’s reasoning is that the code section needs more specific language before the incentive is effective. Staff did not eliminate it from the draft because it does provide some specifics, like the required amount of vegetation coverage and soil depth. Since staff will be back soon to amend the code, **staff recommend keeping this in code to test out, while providing flexibility.**

(d) The landscaping reductions in this section ~~do not~~ reduce the required number of general site landscaping trees and shrubs. Required vegetation may and should be integrated into the above planting systems.

- The code says that when incentives are used to reduce landscape area, the full number of trees is still required. The letter recommends that the incentives reduce the number of trees in addition to the area.
- **Staff recommend the code focus more on canopy coverage and vegetation as environmental tools rather than size of landscape area.** Landscape area has been greatly reduced, and is reduced further with incentives. For this reason, staff did not carry forward the recommendation. **Trees and shrubs can be incorporated into the remaining landscaping space, activity areas, and parking lots.**

Section 4.9.02-C. Tree Conservation

1. Established trees with a diameter breast height (DBH) of six inch or greater should be retained and protected whenever possible. These retained trees count towards the general site landscaping tree requirements, and shall be protected during construction by establishing a tree protection zone that does not allow for any disturbance within the inner ½ of the drip line of the retained tree.

~~2. Unless otherwise approved by the Urban Forester, the removal of desirable trees in good condition with a diameter breast height (DBH) of six inches or greater, single stem, must be mitigated by providing one or more replacement trees with a total combined DBH that is at least equal to the total DBH of trees that are removed.~~

~~(a) A minimum of 1 replacement tree and maximum of 6 replacement trees are required per removed tree Table 4.9.01 3 General Landscaping Requirement in Special Use Districts~~

~~(b) When landscaping is required, the total replacement trees required for the project shall not exceed 200% of the number of trees required by this article.~~

~~(c) For projects that do not require general site landscaping, 1 replacement tree shall be required per tree removed.~~

~~(d) Replacement trees shall count towards the tree planting requirements of this article.~~

3. When it is determined that the removed trees are hazardous, diseased or of an undesirable species, the Urban Forester may waive the tree replacement requirement. Undesirable species include: Blue Spruce, Siberian Elm, Autumn Blaze Maple, non-native Willows, hybrid Poplars (including Siouland poplar), and Junipers.

4. The Urban Forester is authorized to collect a mitigation fee, not to exceed \$1,000 per replacement tree, to fund off-site tree planting when inadequate area exists on the project site for the healthy growth of replacement trees.

- The code requires large trees to be maintained. When this is not possible, new trees must be planted on site to make up for the removed tree, or the developer can pay a mitigation fee.
- The letter recommends getting rid of the option to replace the trees on site, so it just says the city can require a mitigation fee. **Staff believe this provides a lot less flexibility than the original draft because it doesn't allow trees to be made up on site, so the only option left is to pay the city.**

2. Applicability

(a) Activity area is required for the following:

~~1. New residential apartment buildings and mixed-use developments of seven-thirteen or more dwelling units;~~

~~2. Townhome Exemption Developments of seven or more dwelling units;~~

3. Existing residential development that is expanded to seven-thirteen or more dwelling units on a parcel.

- The letter says to only apply activity area to apartment buildings with 13 or more dwelling units. **At the time of this letter, this meant exempting all residential districts except for UR-4 from activity area.** Staff recommend applying it to any residential or mixed-use development with 10 or more dwelling units.
- When this letter was written, the only residential district that allowed 13 or more dwelling units in an apartment building was UR-4. Staff did not carry this recommendation forward because activity area should apply to large projects in all residential district (e.g. ten 6-plexes in one project).
- With Council's amendment to remove maximum number of units per building in all urban residential districts, the outcome is that landscaping could be triggered by this letter's language in any urban residential district. However, **large projects in limited urban residential districts should not be exempt, regardless.**
- **Activity area is intended to serve people, not certain structures.** Staff's proposal focuses on number of units (density) because this is directly related to strain on parks. Staff didn't recommend limiting this requirement to certain building types since there isn't a direct relationship between building type and strain on parks, like there is with added density.
- See discussion on TED's earlier in this document. Note that "common areas" do exist in some TED projects today.

(b) The activity area requirements of this section do not apply to the following:

~~1. Development on parcels in subdivisions approved after January 1, 1995 that were with subject to the parkland dedication requirements in effect on or after the effective date of this UDC (Article 1.1).~~

~~2. Development on parcels in the D-C Downtown Core district and D-T Downtown Transitional district.~~

- This code section exempts development in subdivisions that provided parkland dedication after 1995. **See Staff Recommended Amendment #33 in the January 5th memo which provides an alternative.**
- Staff proposed different language that exempts subdivisions after 2005. Staff's recommended amendment also makes it clear that the parkland has to actually exist, meaning it can't be in a future phase that may never get platted.
- Staff recommend 2005 because before this date, the parks required with subdivision often don't meet modern standards and expectations. **Parks from subdivisions prior to 2005 are often "leftover" areas without amenities.**
- Note that staff recommended amendments did carry forward the exemption to activity area in the Downtown Transition district.

Page 7:

- Note this page contains several revisions that were carried into staff recommended amendments or modified slightly and carried over.

~~(d) Outdoor activity areas must be separated from buildings, vehicular use areas, and rights-of-way using one of the following options:~~

~~1. A minimum 5-foot wide landscaped buffer containing at least one tree for every 30 linear feet of buffer length. Shrub beds or other planting systems may be used but are not required;~~

~~2. On site sidewalks;~~

~~3. Fencing complying with the requirements of Article 6.4 Fences.~~

~~(e) Activity areas cannot be used for snow storage.~~

- Staff proposed an alternative to (d). See Staff Recommended Amendment #35 in the January 5th memo. **Rather than cutting the requirement, staff recommend reducing**

the requirement to only focus on separating activity areas from vehicular areas for safety purposes.

- The letter says to cut the requirement that activity areas cannot be used for snow storage. Staff do not recommend this change because it's become an issue in the past. **An activity area that has all of the snow from the parking lot on it can't be used in the winter, and is likely to ice over in the spring.**

Page 8:

(b) **Playground.** Playgrounds installed to meet the requirements of this section shall:

1. Be a minimum area of 550 square feet. On-site sidewalks are not counted towards the minimum area;
2. Contain elements to support active play for children ages two to five or five to twelve such as slides, balance features, swings, and climbing features. Natural elements such as logs and boulders meet this requirement if arranged in such a manner as to create a play space for enjoyment by children. Equipment shall meet Consumer Product Safety Commission (CPSC) Public Playground and ASTM standards for playground safety and fall zone surfacing requirements.

(c) **Common Area Courtyard.** Courtyards installed to meet the requirements of this section shall:

1. Be surfaced with ADA-A accessible hardscape;
- ~~2. Have seasonal shade on at least 30% of the courtyard provided by trees or by structure (e.g. pergolas, shade sale);~~
3. Include seating. Areas containing grills, tables, outdoor games, and additional landscaping count towards the courtyard space.

(d) **Active Recreation Lawn.** Active recreation lawns installed to meet the requirements of this section shall:

1. Have a minimum length and width of 40 feet;
2. Have a slope of 25% or less;
3. Be irrigated and planted with turf grass;
4. Have topsoil with a minimum six-inch depth;
5. Not contain above ground utilities and sidewalks other than Accessible routes.

- Playground: Staff didn't make these changes in staff recommended amendments memos. Staff are open to just removing the age range completely so it just says children, rather than creating two buckets like the letter says. Staff amendments didn't

add the clarification at the end about fall zone surfacing requirements because it's part of the standards that are already listed.

- Common Area Courtyard: Staff amendments recommended the first change shown in this section to just say “accessible”. Staff did not carry forward cutting the requirement to provide shade in courtyards. **Without shade, courtyards are not as useful/inviting in the hot summer months.**
- Active recreation lawn: **5% is too steep to serve the purpose of this activity area type** (play field, sports). Staff recommended amendments updated the draft to 3%. Staff do not recommend allowing sidewalks to break up the lawn, **because it shrinks and defeats the purpose of the lawn.** Sidewalks should be routed around the lawn to get people from buildings to parking and other features, or the developer can select a different type of activity area.

Page 9:

(f) **Ornamental Garden.** Gardens installed to meet the requirements of this section shall:

1. Contain internal pathways;

~~2. Contain automated irrigation;~~ -----

3. Have a minimum topsoil depth of one foot; or raised planters

4. Include ornamental plantings, trees, and other amenities such as benches, hammocks, and gazebos to support resident use of the space;

~~5. Provide a plan for continuous maintenance at the time of permitting.~~ -----

- Staff do not recommend getting rid of the requirement for automated irrigation. Maintenance staff are unlikely to regularly water gardens by hand. At large projects, residents are unlikely to water the area themselves.
- Staff amendments did add raised planter options.
- Staff do not support removing the requirement to provide a plan for maintenance of the garden. The letter says to get rid of this requirement because it's somewhat redundant with a general standard. However, staff believe this is good clarification for this specific type of activity area.

(h) **Shared Rooftop Deck.** Rooftop decks installed to meet the requirements of this section shall:

~~1. Be accessible to all residents;~~

2. Contain seating;

~~3. Incorporate landscaping elements such as planters or green roof areas. A minimum of 10% of the deck area shall be occupied by planters or green roof planting areas. Planters shall include 24 in. soil depth and may be grouped to allow design flexibility.~~

~~4. Provide lighting.~~

~~5. Rooftop deck area counts as 2.5x activity area.~~

- Staff do not recommend removing the clarification that rooftop decks needs to be accessible to all residents. Staff are not confident we can rely on building code like the letter suggests.
- Staff recommend keeping the language that requires planters or green roof areas, contrary to the letter. Seating alone does not create an active space.
- Staff did recommend scratching part of (h)3 so that the code is less stringent and more flexible. See staff amendment #39 in the January 5th memo.
- Staff do not recommend making rooftop decks worth more for activity area. **Staff do not see any reason to incentivize this type of activity areas over other types.**

Page 10:

(i) Patios, Plazas and Balconies. Outdoor hardscaped areas of any size that include seating and may include shading and plantings.

- Plazas are already an activity area option – they are called courtyards, so staff did not recommend this change.
- Staff did not recommend adding patios and balconies because they're small, do not provide recreation opportunities, and don't promote community space for the project.

5. Cash-In-Lieu

(a) The activity area requirements may be met through cash-in-lieu. A combination of on-site activity area and cash-in-lieu is permitted.

(b) Cash-in-lieu for activity areas shall be provided at an amount of ~~0.01 acres~~ 100 square feet of land per dwelling unit. City Council determines the cash value of ~~0.01 acres of land~~ for activity area by resolution.

(c) Cash-in-lieu shall be dedicated to the Parks and Recreation Department to support improvements to nearby public parks that serve the residents of the development.

- Staff do not recommend changes to cash in lieu for activity area. Cash-in-lieu (CiL) is an option, not a requirement. A combination of cash-in-lieu and actual activity area is allowed.
- The CiL amount of .01 acres is aligned with CiL for parkland dedication in subdivisions. This ensures equity across development types and parts of the city. **It also allows the city to set the price per square foot across all development types and is more predictable.** CiL of 100 square feet would require a different price per square foot be used from CiL in subdivisions.

2. Applicability

The interior parking lot landscaping standards apply to the following:

(a) Any new parking lot or vehicular use area containing ten or more parking spaces or more than ~~3,000~~ 3,300 square feet of paved area;

(b) The expansion of any existing parking lot or vehicular use if the expansion would create ten or more new parking spaces or more than ~~3,000~~ 3,300 square feet of additional paved area. The requirements of this section apply only to the expanded area;

(c) The excavation and reconstruction of existing parking lots or vehicular use areas containing ten or more parking spaces or more than ~~3,000~~ 3,300 square feet of paved area if such excavation and reconstruction involve the removal of more than ~~25~~ 50% of the paved surface. The requirements of this section apply only to the portion of the parking lot or vehicular use area that is excavated and reconstructed.

(d) Interior parking lot landscaping does not apply to parking structures or drive-throughs.

- The adoption draft triggered parking lot landscaping at 3,000 square feet of paved area. For reference, 3,000 square feet is the size of a 10-space parking lot with a drive isle. The extra 300 square feet allows a longer access drive to get to the parking lot without triggering the requirements. Staff included these changes in the recommended amendments memo.

- Staff do not recommend changing the threshold for landscaping existing parking lots to 50%. When the pavement is completely removed and replaced, that is an opportunity to add landscaping islands and bring that area up to code.

*The interior parking lot landscaping applicability relates to a City Council amendment to preserve the 3,000 square foot requirement.

Page 11:

~~3. At least one Class 2 deciduous tree is required per 150 square feet of required interior parking lot landscaping area.~~

(b) Location and Design

~~1. Parking lot landscaped islands are required. No linear grouping of parking spaces shall exceed 40-15 spaces in a row without a landscaped island.~~

2. Required landscaped islands must have a minimum width of eight feet, not including the width of curbs, and extend the depth of the adjacent parking space(s).

~~3. Required landscaped islands must have a minimum soil depth of three feet.~~

4. Required landscaped islands must contain at least one Class 2 or Class 3 tree. Class 1 trees shall only be allowed where a larger class of tree would create conflicts with overhead utility lines or fire apparatus access.

~~5. For parking lots with more than 10 stall, Any parking row that ends adjacent to a paved driving surface, regardless of the aisle's length, must have a landscaped island at that end of the parking row.~~

6. If the minimum ten percent interior parking lot landscaping requirement is not met by providing interior landscaped islands, then landscaping bordering paved parking and vehicular use areas may be counted to meet interior parking lot landscaping requirements. In order to be counted, the border landscaping must have a minimum depth of six feet and a maximum depth of fifteen feet from the edge of the vehicular use area or adjacent on-site sidewalk.

- **Class 1 trees are too small to shade parking lots.** Removing the Class 2 tree requirement for parking lots may not meet the intent of this code section.
- Staff did carry forward the change to require a landscape island every 15 parking spaces instead of every 10 parking spaces. This reflects the current title 20 requirement, though does provide less shade. This change was made due to public comments opposed to an increase in parking lot island requirements from Title 20.
- Staff do not recommend scratching the soil depth requirement. **This requirement ensures the trees actually survive.**

- Staff do not recommend the change clarifying “parking lots with more than 10 stalls” because that’s already covered by the applicability for 3,300 square feet. **This change is redundant.**

*Island spacing relates to Council proposed amendment to revert to the adoption draft.

Page 13:

Change allowing the building to count as perimeter parking lot landscaping:

- Staff incorporated this, but in a different way. Instead, staff recommend making parking behind a building exempt from the standard which has the same outcome. See staff amendment #44 in January 5th memo.

Page 13-14, Buffers:

(d) The requirements of this section do not apply to parking lots with less than 20 spaces.

- The intent of the buffer is to screen headlights and industrial uses from abutting properties. This **mitigates the impacts of increased density**. Having a lot of new neighbors next door often means a lot of vehicles.
- This standard prevents headlights from being directed at the neighbor’s house. Staff did not recommend exempting parking lots with less than 20 spaces. **Headlights from 19 cars coming and going at night can still be very impactful to neighbors.**

3. Standards

(a) Minimum buffer widths are based on the zoning district. Buffers shall be a minimum width of: ~~six feet.~~

1. Six feet in D-T, UR-4, and Urban Mixed-Use zoning districts;
2. Eight feet in T-MU, CD-2, U-R1, U-R2, U-R3, Rural Residential, and Limited Urban Residential zoning districts; and
3. Ten feet in LU-MU, I-1, I-2, OP-1, OP-2, and CD-1 zoning districts; _____

(b) Landscape buffers shall provide a landscaped area with a minimum ~~six~~four-foot-tall opaque fence. The fence may be four feet tall where a six-foot fence is prohibited by Article 6.4 Fences. One tree and six shrubs are required per 30 linear feet of fence or wall.

1. In Limited Urban Mixed Use and Special Use zoning districts, the buffer requirement may be met with a landscape berm instead of a landscape area with fence. The height of the berm must be between 4 and 6 feet. The berm shall have a maximum slope of 3:1.

- Staff did partially incorporate these changes into the staff recommended amendments memo (see #47 in January 5th memo). The buffer width was simplified, and buffers that screen headlights allow a 4-foot-tall fence instead of a 6-foot-tall fence.
- Staff do not recommend reducing the fence height for buffers that are required between industrial uses and parcels that allow for housing. **A 6-foot-tall fence better mitigates nuisances from industrial uses on neighboring property.**

Page 17:

(c) All mulch within two feet of trees and 6" for shrubs, perennials, groundcovers, and bunchgrasses shall be organic, such as bark, shredded wood, wood chips, or other organic matter.

~~(d) At least 50% of the total mulch area on a parcel must be comprised of organic mulch such as bark, shredded wood, wood chips, or other organic matter. The remaining mulch area may be comprised of mineral mulch such as decorative stone, river stone, or decomposed granite.~~

- Staff did recommend reducing the area of organic mulch for shrubs to 6 inches and including perennials in the statement. See Staff Recommended Amendment #48 in the January 5th memo.
- Staff do not recommend removing the requirement that at least 50% of mulch areas be organic mulch such as bark, or woodchips. **River rock and inorganic mulch attracts heat. Limiting inorganic mulch can reduce urban heat desert effect.** The proposed 50% minimum allows for a lot of flexibility, and still allows a fair amount of river rock. Staff do not recommend lowering the bar any further.

Division 4.9.02 Landscaping

Section 4.9.02-A. General

1. Purpose

Landscaping is a fundamental part of site development that improves comfort and livability, and supports community goals related to sustainability, climate resilience, and environmental health. These standards are intended to:

- (a) Reduce visual and noise impacts from streets, parking lots, and adjacent uses.
- (b) Provide shade, reduce heat island effects, improve air quality, and manage and filter stormwater.
- (c) Mitigate the impacts from additional impervious surface and increased motorized transportation resulting from development.
- (d) Support healthy vegetation in Missoula's challenging climate conditions through proper selection, installation, spacing, and maintenance.

2. Applicability

(a) The landscaping requirements of this division apply to all land. The applicability of specific landscaping requirements varies and is addressed in each section of this division.

(b) The landscaping standards of this division do not apply to the D-C Downtown Core & D-T Transition districts.

Commented [A1]: Align with the code's purpose to provide higher density development in the D-T district.

© Unless otherwise expressly stated, there is no requirement to address existing lawful landscaping deficits. Modifications to existing sites are not permitted to increase the degree of deficit or nonconformity with the requirements of this division.

3. General Standards

- (a) All areas of a parcel that are not covered by structures, driveways, parking areas, or other paved surfaces shall be landscaped.
- (b) When five or more trees are planted on a parcel to meet the requirements of this division, a mix of species shall be provided so that no one species may comprise more than 20% of the total trees.
- (c) All landscaping requirements shall be met on-site. Landscaped areas, fences, trees, and shrubs located on abutting properties and rights-of-way do not meet the requirements of this division.
- (d) When a calculation results in a fractional number of trees or shrubs:
 - 1. any fraction of less than 0.5 is rounded down to the next lower whole number, and;

2. any fraction of 0.5 or more is rounded up the next higher whole number.
- (e) Boulevard Landscaping and street trees are required in addition to any requirements in this section. Landscaping in the right-of-way shall comply with the standards in Chapter 6 and the Manual.

Section 4.9.02-B. General Site Landscaping

1. Applicability

The general site landscaping requirements of this section apply to the following:

- (a) New ~~mixed-use and~~ non-residential buildings;
- (b) New residential development in apartment buildings and mixed-use buildings with seven or more dwelling units in a single building;
- ~~(c) Townhome Exemption Developments of seven or more dwelling units (based on a single declaration);~~
- (d) Existing residential development in apartment buildings and mixed-use buildings that is expanded to seven or more new dwelling units in a single building;
- (e) Building additions on parcels with seven or more dwelling units in a single building, mixed use development with any number of residential units, or non-residential development;

1. Applications must demonstrate compliance with the applicable percentage of general site landscaping specified in Articles 4.2, 4.3, and 4.4.

2. Building additions smaller than ~~45~~30% of the gross floor area of the existing building are exempt from coming into full compliance with general site landscaping tree and shrub requirements. In other words, the parcel is not required to be brought into full compliance with this section but cannot create or increase a landscaping deficit.

- (f) The construction or expansion of parking lots or vehicular use areas.

1. Applications must demonstrate compliance with the applicable percentage of general site landscaping specified in Articles 4.2, 4.3, and 4.4.

2. Expansions of existing parking lots and vehicular use areas that equal less than 25% of the gross paved area are exempt coming into full compliance with general site landscaping tree and shrub requirements. In other words, the parcel is not required to be brought into full compliance with this section but cannot create or increase a landscaping deficit.

- (g) There is no requirement for general site landscaping for apartment and mixed-use buildings in the U-MU4 zoning district.

Commented [A2]: Removes mixed-use building and adds them to (b) so there are a minimum number of units before general site landscaping is required.

Commented [A3]: Clarifies that regulations apply to certain building types only.

Commented [A4]: Clarifies general site landscaping requirement for Townhome Exemption Developments because only single units, duplexes, and rowhouses are allowed in a TED.

Commented [A5]: Clarifies that regulations apply to certain building types only and makes smaller infill projects viable.

Commented [A6]: Building additions should be encouraged to support infill. This could help avoid storm drainage, irrigation, and landscaping improvements that could be expensive for some properties.

Commented [A7]: Provides alignment with build-to requirements and code purpose to support flexibility in providing residential density in U-MU4 district

2. Standards

a) General site landscaping shall meet the minimum area required in each zoning district per Tables 4.9.02- 1, 4.9.02-2, and 4.9.02-3. General site landscaping must be calculated for the entire parcel.

(b) General site landscaping must consist of one ~~Class 2~~ tree per ~~1,000~~800 square feet of required general site landscaping area. Tree classes are described in Section 4.09.02-1.

~~1. Class 1 trees may be substituted at a ratio of two Class 1 trees to one Class 2 tree.
2. Class 3 trees may be substituted at a ratio of one Class 3 tree to two Class 2 trees.~~

(c) General site landscaping must consist of six shrubs per 1,000 square feet of required general site landscaping area.

1. Trees may be substituted for shrubs at a ratio of one tree to six shrubs.

2. ~~Perennials, bunchgrasses, and groundcovers~~ may be substituted for shrubs at a ratio of three perennials to one shrub.

(d) All landscape areas and plant material provided to meet any requirement in the Landscaping Division count toward satisfying the general site landscaping requirements of this section.

(e) Existing healthy trees and shrubs count toward meeting the general site landscaping requirements of this section if they comply with the plant height and size requirements of Section 4.9.02-1.

~~(f) General site landscaping on TEDs shall be calculated based on the parent tract, not individual TED Ownership Units (TOUs).~~

~~1. Landscaping in common areas shall be installed prior to filing of the TED declaration.~~

~~2. Landscaping located on individual TOUs shall be installed per the approved Zoning Compliance Permit with the construction of each associated dwelling unit.~~

Commented [A8]: This is consistent with Title 20 requirements. Tree sizes have been removed to allow more flexibility for infill projects where larger trees may not fit on the site.

Commented [A9]: Adds flexibility and clarification on allowed plant types.

Commented [A10]: Removes general landscape requirements for TEDs based on the allowed building types (single-unit, duplexes, rowhouses) in TEDS. Installing landscaping prior to a TED declaration does not align with sequencing needs for other city processes such as Stage 4 plans.

Table 4.9.02-1 General Landscaping Requirements in Residential

General Landscaping	RURAL	LIMITED URBAN		URBAN			
	R-R1	LU-R1	LU-R2	U-R1	U-R2	U-R3	U-R4
Minimum Required Landscaping							
Percent of parcel (min)	n / a	25%	25%	20%	20%	20%	20%

15% 10%

Commented [A11]: Modify U-R3 to 15%.
 Modify U-R4 to 10%
 Modify U-MU zones to 10%
 Modify D-T to NA
 Increases flexibility for infill and to meet density goals.

Table 4.9.02-2 General Landscaping Requirement in Mixed Use Districts

Site Development	URBAN				DOWNTOWN		LIMITED URBAN
	U-MU1	U-MU2	U-MU3	U-MU4	D-T	D-C	LU-MU
Minimum Required Landscaping							
Percent of parcel (min)	A	15%			10%	NA	20%

10% 0%

Figure 4.9.02-1 General Landscaping in Mixed-Use Districts

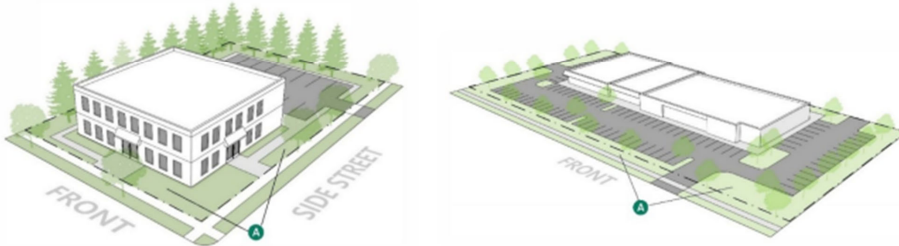


Table 4.9.01-3 General Landscaping Requirement in Special Use Districts

Site Development	TRANSITIONAL	INDUSTRIAL		OPEN SPACE		PUBLIC		
	T-MU	I-1	I-2	OP-1	OP-2	CD-1	CD-2	A
Minimum Required Landscaping								
Percent of parcel (min)	15%	-	-	-	15%	15%	15%	-

3. General Site Landscaping Reductions

(a) The required general site landscaping area may be reduced by a maximum of 30% when at least one of the following planting systems is provided:

1. Pollinator gardens incorporating native shrubs and native flowering plants meeting the following:

- a. A minimum of six different native species must be provided.
- b. Selected species must provide nectar and pollen across three seasons.
- c. A minimum six-inch topsoil depth is required.

2. Native prairie area with a minimum width and length of eight feet.

- a. The prairie area must incorporate native shrubs, forbs and grasses typical of western Montana Palouse Prairie grasslands/bunchgrass grassland.
- b. A minimum of six different native species must be provided.
- c. Plant species must be selected to provide 70% vegetation coverage within two years of planting.
- d. Grass varieties shall not include invasive rhizomatous species.
- e. A minimum six-inch topsoil depth is required.

~~(b) The required general site landscaping area may be reduced by a maximum of 50% when a green roof is provided. Green roofs must incorporate herbaceous plants and shrubs. Green roofs shall have at least a four-inch soil depth and 70% vegetation coverage.~~

(c) The reductions in 3.a and 3.b cannot be combined.

~~(d) The landscaping reductions in this section do not reduce the required number of general site landscaping trees and shrubs. Required vegetation may and should be integrated into the above planting systems.~~

Commented [A12]: Recommend future improvements to this section to address area requirements and metrics.

Commented [A13]: Remove this section until improvements can be made. This includes defining a green roof, determining how much of a roof has to be vegetated to meet this requirement, intensive vs. extensive green roof requirements, access requirements, plant type requirements, and coverage requirements.

Commented [A14]: Concern that all the required plants will not fit on the site, particularly if a extensive green roof is an option that does not support shrubs and larger plants.

Section 4.9.02-C. Tree Conservation

1. Established trees with a diameter breast height (DBH) of six inch or greater should be retained and protected whenever possible. These retained trees count towards the general site landscaping tree requirements, and shall be protected during construction by establishing a tree protection zone that does not allow for any disturbance within the inner 1/2 of the drip line of the retained tree.

~~2. Unless otherwise approved by the Urban Forester, the removal of desirable trees in good condition with a diameter breast height (DBH) of six inches or greater, single stem, must be mitigated by providing one or more replacement trees with a total combined DBH that is at least equal to the total DBH of trees that are removed.~~

~~(a) A minimum of 1 replacement tree and maximum of 6 replacement trees are required per removed tree Table 4.9.01-3 General Landscaping Requirement in Special Use Districts~~

~~(b) When landscaping is required, the total replacement trees required for the project shall not exceed 200% of the number of trees required by this article.~~

Commented [A15]: This is limiting for infill projects smaller properties. Remove section until improvements can be made.

~~(c) For projects that do not require general site landscaping, 1 replacement tree shall be required per tree removed.~~

~~(d) Replacement trees shall count towards the tree planting requirements of this article.~~

3. When it is determined that the removed trees are hazardous, diseased or of an undesirable species, the Urban Forester may waive the tree replacement requirement. Undesirable species include: Blue Spruce, Siberian Elm, Autumn Blaze Maple, non-native Willows, hybrid Poplars (including Siouland poplar), and Junipers.

4. The Urban Forester is authorized to collect a mitigation fee, not to exceed \$1,000 per replacement tree, to fund off-site tree planting when inadequate area exists on the project site for the healthy growth of replacement trees.

Section 4.9.02-D. Activity Area

1. Purpose

The purpose of activity areas is to ensure opportunities for “close to home” outdoor recreation, relaxation, and community gathering are provided with new residential developments. Activity areas address quality of life and health of residents through the installation of usable outdoor space. The activity area standards are intended to:

- (a) Ensure activity areas are appropriately sized and accessible;
- (b) Ensure activity areas include amenities that support the desired activity, whether that be outdoor recreation and relaxation spaces or indoor community spaces.

2. Applicability

(a) Activity area is required for the following:

~~1. New residential apartment buildings and mixed-use developments of seven-thirteen or more dwelling units;~~

~~2. Townhome Exemption Developments of seven or more dwelling units;~~

3. Existing residential development that is expanded to seven-thirteen or more dwelling units on a parcel.

(b) The activity area requirements of this section do not apply to the following:

~~1. Development on parcels in subdivisions approved after January 1, 1995 that were with subject to the parkland dedication requirements in effect on or after the effective date of this UDC (Article 1.1).~~

~~2. Development on parcels in the D-C Downtown Core district and D-T Downtown Transitional district.~~

Commented [A16]: Aligning units so activity area only applies for zoning districts with no maximum number of units per apartment building.

Commented [A17]: TEDs should not be required to provide activity area because only single-unit, duplex, and rowhouse building types are allowed within a TED.

Commented [A18]: Subdivisions that have already dedicated parkland should not be required to provide activity area.

Commented [A19]: Align with date when parkland dedication requirements became state law.

Commented [A20]: Aligning activity area requirements with planned development pattern in the D-T district.

3. Development on parcels within 0.5 mile of City of Missoula parkland, City of Missoula trails, City of Missoula conservation lands, Missoula County public lands, or publicly accessible open space and playgrounds. The distance is measured from a building entrance to the park along a pedestrian route or 1,000 feet measured in a straight line from the parcel edge.

Commented [A21]: The PROST plan states you should be within 10 minutes of a park which is roughly 1/2 mile.

Commented [A22]: Clarify the types of parkland and open space that can be used to meet this requirement.

3. General Standards

(a) Activity area must be provided at a rate of 150-100 square feet per dwelling unit, up to a maximum square footage equal to 20% of the parcel area.

Commented [A23]: Reduce activity area requirement per dwelling unit to meet density goals. This is consistent with Bozeman's code.

(b) All activity areas must have a minimum dimension of 15-10 feet unless otherwise stated.

Commented [A24]: Reduction in dimension to accommodate a reasonable size for balconies.

(c) Activity areas may be dispersed across multiple locations but shall be located as to be accessible and convenient to the residential units the activity area serves.

~~(d) Outdoor activity areas must be separated from buildings, vehicular use areas, and rights-of-way using one of the following options:~~

Commented [A25]: This limits good design with a 5' buffer along a building not being enough width for trees.

~~1. A minimum 5-foot wide landscaped buffer containing at least one tree for every 30 linear feet of buffer length. Shrub beds or other planting systems may be used but are not required;~~

~~2. On-site sidewalks;~~

~~3. Fencing complying with the requirements of Article 6.4 Fences.~~

~~(e) Activity areas cannot be used for snow storage.~~

Commented [A26]: This is unlikely to be enforced and activity areas are generally used during the warmer months.

(f) The required recreational space shall be usable for recreation by the residents and shall not be occupied by at-grade stormwater features, above ground utilities, stairways, or other facilities that would diminish its utility for recreation purposes.

(g) Activity area and general landscaping areas may overlap. The same area may be counted toward meeting the activity area and general landscaping requirements.

Commented [A27]: Clarification

4. Types of Activity Areas

The activity area requirements must be satisfied using one or more of the following activity area types:

(a) **Fruit and/or Vegetable Garden.** Gardens installed to meet the requirements of this section shall:

1. Provide tool storage areas for common use by residents;
2. Be enclosed with a six-foot-tall fence to exclude deer and pets. The fence may be four feet tall when required by Article 6.4 Fences. The fence must be high transparency, such as wood-framed hog panel;
3. Provide access to water, such as a hose bib, in a location accessible to all garden beds;
4. Provide topsoil at a minimum depth of one foot or raised bed gardens boxes;

5. Be located to receive adequate sunlight throughout growing season. Gardens located south, west, or southwest of the building(s) are preferred. Gardens located to the southeast of the building(s) are acceptable.

(b) **Playground.** Playgrounds installed to meet the requirements of this section shall:

1. Be a minimum area of 550 square feet. On-site sidewalks are not counted towards the minimum area;

2. Contain elements to support active play for children ages two to ~~five or five to~~ twelve such as slides, balance features, swings, and climbing features. Natural elements such as logs and boulders meet this requirement if arranged in such a manner as to create a play space for enjoyment by children. Equipment shall meet Consumer Product Safety Commission (CPSC) Public Playground and ASTM standards for playground safety and fall zone surfacing requirements.

Commented [A28]: Clarification on requirements.

(c) **Common Area Courtyard.** Courtyards installed to meet the requirements of this section shall:

1. Be surfaced with ~~ADA-A~~ accessible hardscape;

~~2. Have seasonal shade on at least 30% of the courtyard provided by trees or by structure (e.g. pergolas, shade sale);~~

Commented [A29]: This should be left to the developer to determine shade needs. The building may provide plenty of shade.

3. Include seating. Areas containing grills, tables, outdoor games, and additional landscaping count towards the courtyard space.

(d) **Active Recreation Lawn.** Active recreation lawns installed to meet the requirements of this section shall:

1. Have a minimum length and width of 40 feet;

~~2. Have a slope of 25% or less;~~

Commented [A30]: Allow more flexibility.

3. Be irrigated and planted with turf grass;

4. Have topsoil with a minimum six-inch depth;

5. Not contain above ground utilities and sidewalks other than Accessible routes.

(e) **Sports Court.** Sport courts installed to meet the requirements of this section shall:

1. Be paved with asphalt or concrete to support the proposed activity. Alternative surfaces may be approved by Parks and Recreation;

2. Be sized to support the proposed activity. For example, a basketball court must be at least half of a court;

3. Provide features required to support the proposed activity (e.g. pickleball net, basketball hoop, etc.);

4. Be physically separated from vehicles. Sports courts may be used as an emergency access or fire turn around if approved by the Fire Department. Bollards or a gate preventing regular vehicle uses must be provided.

(f) **Ornamental Garden.** Gardens installed to meet the requirements of this section shall:

1. Contain internal pathways;

~~2. Contain automated irrigation;~~

3. Have a minimum topsoil depth of one foot; or raised planters

4. Include ornamental plantings, trees, and other amenities such as benches, hammocks, and gazebos to support resident use of the space;

~~5. Provide a plan for continuous maintenance at the time of permitting;~~

Commented [A31]: This is already required for all landscaping in this chapter.

Commented [A32]: Maintenance is required as part of 4.9.02-1.

(g) **Trail Corridor.** Trail corridors installed to meet the requirements of this section shall support active transportation or recreation.

1. If supporting recreation, the trail shall be located within a natural or park-like area, create a loop and/or have a destination amenity.

2. If supporting active commuting, the trail shall connect with the broader active transportation network, be approved by Parks and Recreation, and must meet standards found in the Manual.

(h) **Shared Rooftop Deck.** Rooftop decks installed to meet the requirements of this section shall:

~~1. Be accessible to all residents;~~

2. Contain seating;

~~3. Incorporate landscaping elements such as planters or green roof areas. A minimum of 40% of the deck area shall be occupied by planters or green roof planting areas. Planters shall include 24 in. soil depth and may be grouped to allow design flexibility.~~

~~4. Provide lighting.~~

~~5. Rooftop deck area counts as 2.5x activity area.~~

Commented [A33]: This is a building code requirement.

Commented [A34]: Remove to allow design flexibility.

Commented [A35]: This is a building code requirement.

Commented [A36]: Provide additional credit for rooftop decks because of their additional expense.

(i) **Indoor Activity Area.** Indoor activity areas installed to meet the requirements of this section shall be designed for active recreation and include supporting amenities. The following may be counted as indoor activity area:

1. Community rooms with seating, tables, televisions, games, and other amenities;

2. Exercise spaces with workout equipment.

3. Office or coworking spaces do not count as indoor activity area.

(i) Patios, Plazas and Balconies. Outdoor hardscaped areas of any size that include seating and may include shading and plantings.

Commented [A37]: This provides flexibility in meeting activity area requirements. This is an important option for smaller projects that don't have the area to include options such as sports courts and activity lawns.

5. Cash-In-Lieu

(a) The activity area requirements may be met through cash-in-lieu. A combination of on-site activity area and cash-in-lieu is permitted.

Commented [A38]: Many of the activity area changes are intended to make requirements attainable, particularly for smaller projects, so that cash-in-lieu is an option rather than a requirement.

(b) Cash-in-lieu for activity areas shall be provided at an amount of ~~0.01 acres~~ 100 square feet of land per dwelling unit. City Council determines the cash value of ~~0.01 acres of land~~ for activity area by resolution.

Commented [A39]: Align with activity area requirement.

(c) Cash-in-lieu shall be dedicated to the Parks and Recreation Department to support improvements to nearby public parks that serve the residents of the development.

Commented [A40]: Recommend future changes that provide more predictability for developers or allow developers to install equipment or amenities in a nearby park in place of cash-in-lieu.

Section 4.9.02-E. Interior Parking Lot Landscaping

Commented [A41]: Match to least Title 20 standards

1. Purpose

The purpose of interior parking lot landscaping is to provide landscaped areas within parking lots that are designed to facilitate movement of traffic, break-up large areas of impervious surfaces, reduce heat island effects, and filter stormwater.

2. Applicability

The interior parking lot landscaping standards apply to the following:

(a) Any new parking lot or vehicular use area containing ten or more parking spaces or more than ~~3,000~~ 3,300 square feet of paved area;

Commented [A42]: Match area to Title 20 standards and allow more flexibility for incremental improvement.

(b) The expansion of any existing parking lot or vehicular use if the expansion would create ten or more new parking spaces or more than ~~3,000~~ 3,300 square feet of additional paved area. The requirements of this section apply only to the expanded area;

(c) The excavation and reconstruction of existing parking lots or vehicular use areas containing ten or more parking spaces or more than ~~3,000~~ 3,300 square feet of paved area if such excavation and reconstruction involve the removal of more than ~~25~~ 50% of the paved surface. The requirements of this section apply only to the portion of the parking lot or vehicular use area that is excavated and reconstructed.

(d) Interior parking lot landscaping does not apply to parking structures or drive-throughs.

3. Standards

(a) Minimum Area

1. At least 10% of the total parking lot or vehicular use area must be devoted to interior parking lot landscaping.

2. Vehicular use areas that are covered by carports, canopies or similar structures must be included when calculating the minimum 10% interior parking lot landscaping requirement, but installation of landscaping is not required beneath carports, canopies or other structures that block sunlight and rainfall.

3. At least one Class 2 deciduous tree is required per 150 square feet of required interior parking lot landscaping area.

Commented [A43]: Match to Title 20. Concern that these trees are too large for the min. required landscape island size.

(b) Location and Design

1. Parking lot landscaped islands are required. No linear grouping of parking spaces shall exceed 40-15 spaces in a row without a landscaped island.

Commented [A44]: Match to Title 20

2. Required landscaped islands must have a minimum width of eight feet, not including the width of curbs, and extend the depth of the adjacent parking space(s).

~~3. Required landscaped islands must have a minimum soil depth of three feet.~~

Commented [A45]: This is inconsistent with the soil requirements for street trees of this size.

4. Required landscaped islands must contain at least one Class 2 or Class 3 tree. Class 1 trees shall only be allowed where a larger class of tree would create conflicts with overhead utility lines or fire apparatus access.

Commented [A46]: This is inconsistent with the soil requirements for street trees of this size. Concern that these trees are too large for the min. required landscape island size.

5. For parking lots with more than 10 stall, Any parking row that ends adjacent to a paved driving surface, regardless of the aisle's length, must have a landscaped island at that end of the parking row.

Commented [A47]: Provides flexibility for small projects.

6. If the minimum ten percent interior parking lot landscaping requirement is not met by providing interior landscaped islands, then landscaping bordering paved parking and vehicular use areas may be counted to meet interior parking lot landscaping requirements. In order to be counted, the border landscaping must have a minimum depth of six feet and a maximum depth of fifteen feet from the edge of the vehicular use area or adjacent on-site sidewalk.

Section 4.9.02-F. Perimeter Parking Lot Landscaping

1. Purpose

The purpose of perimeter parking lot landscaping is to minimize the impact of automobile-dominated areas on the public right-of-way and to promote a comfortable, safe, engaging, and attractive streetscape.

2. Applicability

The perimeter parking lot landscaping requirements apply to the following:

- (a) Installation or expansion of surface parking lots, drive-throughs, or vehicular use areas within 30 feet of a street or trail.

(b) The excavation and reconstruction of existing surface parking lots, drive-throughs, or vehicular use areas if such excavation and reconstruction involves more than 25% of the paved surface or ~~3,000~~3,300 square feet of paving, whichever is less.

Commented [A48]: Match to Title 20

c) The requirements of this section do not apply to driveways.

3. Standards

(a) A minimum ten-foot-wide perimeter parking lot landscape area is required between the vehicular use area and any street or trail.

Commented [A49]: Recommend a future discussion on the depth of perimeter parking lot landscape and parking setbacks from the street. Bozeman requires 4'.

(b) Perimeter parking lot landscaping requirements shall be satisfied by providing at least one of the following options between the parking lot and street or trail:

1. Landscape Bed:

a. One Class 2 [tree](#) is required for every 30 linear feet of perimeter parking lot landscape area. The tree substitution allowance in General Site Landscaping applies.

b. Shrubs selected to reach a minimum height of three feet within three years of planting are required at a maximum spacing of three feet [on center](#), for the length of the perimeter parking lot landscape area. Figure 4.9.02-2 Interior Parking Lot Landscaping Diagram

c. Pollinator gardens may be utilized in lieu of the shrub requirement above when planted with at least six different species, spanning the length of the parking lot. Selected species must provide nectar and pollen across three seasons.

2. Landscape Wall or Fence:

a. One Class 2 tree is required for every 30 linear feet of perimeter parking lot landscape area. The tree substitution allowance in General Site Landscaping applies.

b. A minimum three-foot-tall fence or wall is required for the length of the perimeter parking lot landscape area.

c. When the fence or wall has a transparency of 25% or greater, perennials must be planted along the fence [on the street side](#) at a spacing of three feet [on center](#) for the length of the required fence.

3. Landscape Berm:

a. A landscape berm with a height between three and four feet shall be installed for the length of the perimeter parking lot landscape area.

b. The berm shall have a maximum slope of 3:1.

c. Landscape berms are only allowed to meet the requirements of this section in Rural Residential, Limited Urban Residential, Limited Urban Mixed Use, and Special Use zoning districts.

d. Landscape berms are only allowed to meet the requirements of this section in Limited Urban Mixed-Use districts when the abutting right-of-way contains a landscape boulevard.

4. The building itself.

Commented [A50]: Clarification

(c) The City Engineer is authorized to approve reductions in height to perimeter parking lot landscaping features when necessary to improve visibility at intersections. All fences must comply with the requirements of Chapter 6 Infrastructure Improvements. Figure 4.9.02-3 Perimeter Parking Lot Landscaping Diagram

Section 4.9.02-G. Buffers

1. Purpose

Buffers are intended to mitigate adverse impact of vehicular use areas, drive-throughs, and industrial uses on abutting property. Adverse impacts include but are not limited to noise, exhaust from idling cars, and lighting associated with vehicle headlights and industrial uses.

2. Applicability

a) A buffer must be provided between new or expanded vehicular use areas and abutting Residential zoned parcels, parcels used for single purpose residential, and public parks.

1. The buffer must extend the length of the vehicular use area.
2. The buffer requirement does not apply to driveways.

(b) A buffer must be provided between new or modified drive through facilities and abutting parcels zoned Residential, Mixed-Use, or T-MU.

1. The buffer must extend the length of the drive through facilities, including the service area and stacking lanes.

(c) A buffer must be provided when a new or expanded industrial use abuts a parcel zoned Mixed-Use, Residential, or T-MU.

1. The buffer shall extend the full length of the property line abutting the applicable zoning districts.
2. This buffer requirement does not apply to the following industrial uses: winery, cidery, and Microbrewery/Microdistillery. Buffering of vehicular use areas per 2.a. are still required.

(d) The requirements of this section do not apply to parking lots with less than 20 spaces.

Commented [A51]: Accounts for smaller parking lots that are less impactful allowing for more flexibility on infill projects.

3. Standards

(a) Minimum buffer widths are based on the zoning district. Buffers shall be a minimum width of ~~six feet.~~

Commented [A52]: Simplification

1. ~~Six feet in D-T, UR-4, and Urban Mixed-Use zoning districts;~~
2. ~~Eight feet in T-MU, CD-2, U-R1, U-R2, U-R3, Rural Residential, and Limited Urban Residential zoning districts; and~~
3. ~~Ten feet in LU-MU, I-1, I-2, OP-1, OP-2, and CD-1 zoning districts;~~

(b) Landscape buffers shall provide a landscaped area with a minimum ~~six~~four-foot-tall opaque fence. The fence may be four feet tall where a six-foot fence is prohibited by Article 6.4 Fences. One tree and six shrubs are required per 30 linear feet of fence or wall.

Commented [A53]: A 4' fence blocks car lights.

1. In Limited Urban Mixed Use and Special Use zoning districts, the buffer requirement may be met with a landscape berm instead of a landscape area with fence. The height of the berm must be between 4 and 6 feet. The berm shall have a maximum slope of 3:1.

Section 4.9.02-H. Screening

1. Purpose

Screening is intended to minimize the adverse impacts of mechanical equipment, utilities, and service spaces, such as trash and outdoor storage, from the street and abutting residential zoning districts and uses, while also providing protection and shelter for these elements.

2. Applicability

(a) Screening applies when any of the features to be screen, identified in Section 4.9.02-H.3, are installed or expanded.

(b) Screening does not apply to solar energy conversion systems (solar panels).

3. Features to be screened

(a) Ground-mounted Mechanical Equipment

~~1. Ground-mounted mechanical equipment may not be located within 5 feet of the property line of a parcel used or zoned for residential purposes.~~

Commented [A54]: Move to more appropriate section.

2. Ground mounted mechanical equipment within 15 feet of an interior side property line must be screened from view of abutting residential uses and abutting residential zoning districts by a dense hedge, solid wall or solid fence.

3. Ground mounted mechanical equipment shall be screened from streets by a dense hedge, solid wall, or solid fence.

(b) Structure-mounted Mechanical Equipment

When exterior mechanical equipment must be located on a building elevation it must be screened from view of streets, abutting residential uses, and abutting residential zoning districts by a dense hedge, solid wall, or solid fence.

(c) Trash Receptacles

Trash receptacle serving commercial uses, industrial uses, or three or more units must be contained and screened from streets, trails, and all abutting parcels with a solid wall or fence. Trash receptacles may not be located in the front or street side setback area.

(d) Utility Cabinets

~~Above ground utility cabinets that are 30 or more inches in height and located within 25 feet of a street and visible from the street must be screened along the street by a solid fence, solid wall, or dense hedge.~~

Commented [A55]: The screening is often more unsightly than the utility cabinet. Screening transformers can be a challenge because NWE has requirements for access and distances combustible materials need to be from transformers.

(e) Materials, Supplies and Equipment

All stored materials, supplies, merchandise, equipment, storage or shipping containers, or other similar matter not on display for direct sale, rental or lease to the ultimate consumer or user must be screened from streets, trails, parks, and parcels used or zoned for residential purposes by a fence, wall, dense hedge, or combination of such features

(f) For screening purposes, walls and fences must be tall enough to screen the applicable feature, up to the maximum height permitted in Article 6.4 Fences. Plant material used for screening must reach a minimum height of three feet within three years of planting.

Section 4.9.02-I. Landscaping Materials, Plantings, Installation, and Maintenance

1. Purpose

This section ensures that all required landscaping is functional, resilient, and contributes to Missoula's broader climate, habitat, and urban forestry goals.

2. Applicability

Landscaping installed to meet the requirements of this article shall comply with the provisions of this section.

3. Wildland-Urban Interface

For developments located in the wildland-urban interface area, as shown on the Missoula County Wildfire Risk Assessment and Wildland-Urban Interface map, landscaping must be designed and maintained according to best management practices to create a defensible space:

- (a) Landscaping shall be designed to create defensible space around buildings and structures by ensuring trees and shrubs are not located within 5 feet of a building;
- (b) Plants shall be fire-resistant;
- (c) Plants shall have low fuel volume or high moisture content; and;
- (d) Not be species that tend to accumulate excessive dead wood or debris.

4. Plant Selection

- (a) Plant materials must be adapted to Missoula's climate and site conditions.
- (b) Preference should be given to native, drought-tolerant, pollinator friendly, and climate-resilient species.
- (c) Invasive species are prohibited.
- (d) Shrubs must be at least five-gallon size at the time of planting.
- (e) Perennials shall be at least one-gallon size at the time of planting.
- (f) Native plant species grown in other industry standard container sizes than those required by Section 4.9.02-1.4.d and e are permitted.
- (g) Some incentives require native plant species. Appropriate native plant species can be found in the Montana State University Extensions Publication "Native Plants for Montana's Home Gardens".

5. Trees

All trees planted pursuant to this Section shall comply with the following standards:

- (a) Evergreen trees shall be a minimum height of 6 feet at the time of planting.
- (b) Deciduous trees must be 1.75 to 2.25-inch caliper at the time of planting.
- ~~(c) Class 1 trees are defined as trees with a mature height of less than 30 feet.~~
- ~~(d) Class 2 trees are defined as trees with a mature height between 30 and 60 feet.~~
- ~~(e) Class 3 trees are defined as trees with a mature height over 60 feet.~~

(f) Street trees required by Chapter 6 Infrastructure Improvements shall be selected from the City of Missoula Approved Tree List and comply with requirements of the Manual.

6. Mulch

When the landscaping requirements of this division are applicable to a parcel, all mulch shall meet the following requirements:

Commented [A56]: Tree class requirements have been removed. Mature tree height varies by source and depends on where the tree is planted so this is a difficult standard to determine.

(a) Mulch shall be applied at a minimum depth of three inches.

(b) Weed barrier material shall not be visible in mulched areas.

(c) All mulch within two feet of trees and 6" for shrubs, perennials, groundcovers, and bunchgrasses shall be organic, such as bark, shredded wood, wood chips, or other organic matter.

(d) At least 50% of the total mulch area on a parcel must be comprised of organic mulch such as bark, shredded wood, wood chips, or other organic matter. The remaining mulch area may be comprised of mineral mulch such as decorative stone, river stone, or decomposed granite.

Commented [A57]: This is a lot for shrubs. 6-12" is more appropriate. Clarification on plant types.

Commented [A58]: Clients often have a preference for all rock mulch which doesn't need to be replaced as often as wood mulch. Better maintained sites are desirable for the aesthetic quality of the community.

7. Fences and Walls

Chain link fences may not be used to satisfy any of the requirements of this article.

8. Installation

(a) Landscaping must be installed according to approved plans.

(b) All required landscaping and irrigation must be installed prior to issuance of a certificate of occupancy or final zoning inspection.

(c) If planting is not feasible due to weather or seasonal constraints, the Planning Administrator may grant a temporary certificate of occupancy with the requirement that full installation occur during the next planting season.

9. Irrigation

(a) All landscaping shall be served with an automatic underground irrigation system.

(b) Areas of landscaping that will not require supplemental watering after initial establishment are not required to have permanent irrigation. Examples include landscaped areas containing dryland grass and other xeric native landscaping, but does not include landscaped areas containing trees. Temporary irrigation is required to establish these plantings. A plan for providing regular irrigation during establishment must be provided with permit applications.

(c) Irrigation systems shall be designed and maintained to prevent watering of adjacent hardscaped areas and follow best practices for water conservation and efficiency.

10. Maintenance

(a) All required landscaping must be maintained in a healthy and orderly condition.

(b) Dead or dying plant materials must be replaced within the next growing season