

TO: Knoxville-Knox County Planning Commission
FROM: Jessie Hillman, AICP | Principal Planner
DATE: November 13, 2024
SUBJECT: 8-E-23-OA
Agenda Item #5

STAFF RECOMMENDATION:

Planning recommends approval of the amendment to the City of Knoxville Zoning Code, Article 12 Landscape, Table 12-2, Buffer Yard Requirements, which eliminates the requirement for a residential use in a nonresidential district to install a Class B Buffer when it abuts a residential district.

Planning recommends denial of all other proposed amendments.

BACKGROUND:

This ordinance amendment to the City of Knoxville Zoning Code, Article 12 – Landscape, was originally proposed by Mr. R. Bentley Marlow in August of 2023 (see Exhibit B). After review by the Planning Commission, a separate list of amendments was proposed by Planning Commissioner Logan Higgins to substitute Mr. Marlow’s amendments (see Exhibit C). These amendments were accepted by Mr. Marlow, who asked that they replace the original request. The final and current amendment request is reflected in Exhibit A. This item was tabled at the November 2023 Planning Commission meeting. Mr. Marlow untabled this case at the October 2024 Planning Commission meeting for consideration at the November 2024 meeting.

SUMMARY OF PROPOSED CHANGES:

- Article 12.2.A, Landscape Plan Required:
 - Adds language changing the requirement for a landscape plan so that is only required for developments that have more than 10,000 square feet of disturbed area or unless landscaping is required in another section of Article 12.
- Article 12.2.B.3, Content of Landscape Plan:
 - Removes the requirement to specify the species or name of plantings in a landscape plan for residential lots with a disturbed area less than 10,000 square feet. It adds a requirement that a list of the plants installed be maintained on site as evidence of compliance with this Article.
- Article 12.8.A, Buffer Yards:
 - Adds a provision for a walking path within a landscape buffer yard provided the buffer yard does not abut another impervious area. In a Class A buffer yard, the width of the walking path could not be more than 30% of the buffer yard width; In a Class B buffer

yard, the width of the walking path could not be more than 25% of the buffer yard width. This would only be permissible if there has been no other reduction in buffer yard width.

- **Article 12.8.C, Buffer Yards:**
 - Increases the permitted buffer yard reduction from 30% to 40% when the buffer yard incorporates a wall, solid fence, or a combination thereof.
- **Article 12.8.F; Table 12-2: Buffer Yard Requirements:**
 - Eliminates the requirement for a residential use in a nonresidential district to install a Class B buffer yard when it abuts a residential district.
 - Removes the requirement of a Class A buffer yard for multi-family parking lots abutting RN-3, RN-2, RN-1 or EN districts if the parking lot serves fewer than 5 dwelling units and a fence or solid wall is installed per Article 12.8.D.

STAFF ANALYSIS

Planning concurs with the objections to the proposed amendments submitted by the Deputy Director for Plans Review and Building Inspections (PRI). PRI's memo provides a point-by-point response to each proposed change. The following staff analysis provides additional commentary only where Planning has other considerations and/or objections not raised by PRI.

- **Article 12.2.A, removing the requirement for a landscape plan for said situations:**
 - Planning agrees with the PRI assessment and recommends denying this amendment.
- **Article 12.B.3, removing the requirement to identify plant species and plantings on a landscape plan for said situations:**
 - Planning agrees with the PRI assessment and recommends denying this amendment.
- **Article 12.8.A.1, allowing a walking path within a required buffer yard:**
 - Planning agrees with the PRI assessment and recommends denying this amendment.
- **Article 12.8.C, increasing the allowable reduction in a buffer yard width to 40% when incorporating a wall or solid fence:**
 - Increasing the incentive to build walls in place of landscaping contradicts several sections of the Landscape Purpose section described in Article 12.1. More walls and less landscaping does not create a desirable and functional open space environment (12.1.A). In fact, more walls and fences with less landscaping would likely have the opposite effect when done indiscriminately. Incentivizing more walls with the reduction of landscaping also does not accomplish any of the numerous environmental benefits described in section D. It does not utilize plant materials suitable to withstand climactic conditions (12.1.E), and it does not meet the intended landscape buffer screen as a means to minimize impacts (12.1.F).
 - In light of these contradictions with the intent of the Landscape Article, Planning recommends denial of this amendment.
- **Article 12.8.F, revising Table 12-2 Buffer Yard Requirements:**



- **Amendment 1 of this section pertaining to nonresidential uses abutting a residential district:**
 - Planning does not object to limiting a Class B Buffer requirement to only nonresidential uses in a nonresidential district when abutting a residential district. The proposed language aligns more with the primary intent of the buffer yard to shield different land uses. While the purpose statement for the buffer yard in Article 12.8 does note the intent to shield different zoning districts, Planning would not object to this being removed because zoning districts are legislative and abstract considerations whereas existing and/or proposed development relates more directly to tangible, environmental impacts requiring buffering.
- **Amendment 2 of this section, pertaining to parking lots serving fewer than 5 dwellings:**
 - Planning objects to an increased incentive for a fence or wall replacing landscaping for the same reasons cited in Article 12.8.C. It conflicts with the intent of the Landscape Article.





MEMORANDUM

DATE: October 30, 2024

TO: Planning Staff

FROM: Bryan Berry, AICP
Deputy Director of Plans Review & Building Inspections

RE: Zoning Code Landscape Amendment 8-E-23-OA

The City's Plans Review and Inspections Department provided the following comments in blue to the proposed amendments in red below.

Article 12.2.A – A landscape plan is required as part of a site plan review application for multi-family and townhouse developments **that exceed 10,000 sf of disturbed area or when landscaping is required by this article**, nonresidential (including mixed-use) development, parking lots, and planned developments. The landscape plan must be approved prior to the issuance of a building permit.

Comment – Adding the term “disturbed area” would be new and is only found in Article 8.9 regarding hillside protection overlay. Landscaping requirements relate to parking lot size and buffering of land uses. Plans Review and Inspections recommend NOT including this term in the landscape requirements.

Landscaping is already NOT REQUIRED on the first two bullets below and site specific based on the last two bullets. What does the, “or when landscaping is required by this article” language accomplish?

- Parking lot perimeter landscape yard is only required for parking lots of 10,000 square feet or more.*
- Interior parking lot landscape is only for parking lots and vehicular use area of 20,000 square feet or more.*
- Site landscape is required if development are located ten feet or more from a street lot line and no parking is located in front of the structure or development and where any façade abuts any parking area, foundation landscape must be planted.*
- Buffer yards are required for parking lot of multi-family dwelling abutting a RN-3, RN-2, RN-1 or EN residential district.*

Article 12.2.B.3.a - **When a landscape plan is required for residential lots with a disturbed area of less than 10,000 sf, the landscape plan is not required to specify the exact species or name of the plantings when the location, quantity, size, and criteria of Section 12.4 Landscape Design Standards are provided on the landscape plan. A list of the names for plants to be used and evidence of compliance with this Article is required to be kept on site for inspection approval.**

Comment – The comment seems contradictory. It states in the opening sentence the landscape plan is not required to specify the exact species of name of the plantings, but the last sentence says a list of the names for the plants to be used and evidence of compliance with this Article is required to be kept on site

for inspection approval? Plant names are provided on the landscape plan kept on site, but not needed for plan review submittal?

Article 12.8.A.1 – Exception: A walking path may be placed within a buffer yard under the following conditions: no reduction of buffer yard width is utilized, the walking path does not abut another impervious area, and the width of the path is not greater than 30% of a Class A Buffer or 25% of a Class B Buffer.

Comment – The definition for buffer yard is land area with landscape plantings and other components used to separate one use from another and to shield or block noise, lights, or other nuisances. The landscape code allows for a reduction in the buffer yard when a wall or solid fence is used. A wall or solid fence still meets the intent of separating or shielding one use from another. A walking path does not.

Article 12.8.C - Where the buffer yard incorporates a wall or solid fence, or a combination of such, the buffer yard width may be reduced by 40%.

Comment – Plans Review and Inspections does not have an opinion on increasing the reduction from 30% to 40%. It should be up to the individual who is recommending the increase to provide justification.

Article 12.8.F -

Table 12-2 Buffer Yard Requirements	
Development	Buffer Yard Class
Nonresidential use located within residential district	Class A Buffer
Nonresidential use in a nonresidential district abuts a residential district	Class B Buffer
Parking lot of a multi-family dwelling abutting a RN-3, RN-2, RN-1 or EN residential district except as follows: When a parking lot is serving fewer than 5 dwelling units and a fence or wall per 12.8.D is installed, no buffer yard is required.	Class A Buffer
Per use standards (Article 9)	As determined in the standards of Article 9

Comment – Plans Review and Inspections does not object to limiting a Class B Buffer to only nonresidential uses in a nonresidential district when abutting a residential district or the use of a fence/wall with no landscaping to screen a parking lot serving fewer than five dwelling units when abutting RN-3, RN-2, RN-1 or EN.

Sincerely,



Bryan Berry, AICP
Deputy Director of Plans Review & Building Inspections

ARTICLE 12. LANDSCAPE

12.1 PURPOSE

The landscape standards of this Article are intended to:

- A. Create a desirable and functional open space environment for all site users, including pedestrians, bicyclists, and motorists.
- B. Preserve unique natural resources, including measures to preserve and protect existing healthy plantings.
- C. Design drainage facilities to promote the use and preservation of natural watercourses and patterns of drainage.
- D. Establish a natural environment within the City that provides a variety of benefits, including absorbing carbon dioxide and producing oxygen; intercepting stormwater, reducing surface runoff, curtailing erosion, and improving water quality; providing critical wildlife habitat to promote urban biodiversity; and providing shade to aid in passive cooling and the reduction of urban heat island effect.
- E. Utilize plant materials suitable to withstand the climatic conditions of the City and microclimate of the site. The use of invasive species is prohibited.
- F. Use of screening to minimize the impact of the development on adjacent uses and impact of incompatible uses and certain site elements, and creating a logical transition to adjoining lots and developments.
- G. This Article does not apply to routine landscaping or routine maintenance of existing landscaping.

(Ord. No. O-87-2020, § 1, 5-19-20)

12.2 LANDSCAPE PLAN

A. Landscape Plan Required

A landscape plan is required as part of a site plan review application for multi-family and townhouse developments that exceed 10,000 sf of disturbed area or when landscaping is required by this article, nonresidential (including mixed-use) development, parking lots, and planned developments. The landscape plan must be approved prior to the issuance of a building permit.

B. Content of Landscape Plan

- 1. North arrow and graphic scale, the location and dimensions of all existing and proposed structures, property lines, easements, parking lots and drives, rights-of-way, refuse disposal and recycling areas, pedestrian and bicycle paths, fences, mechanical equipment, overhead utility wires, underground utilities, retention/detention facilities, and other drainage facilities, such as drainage swales. Identify lines of sight at all access points and at locations adjacent to intersections.
- 2. The location, quantity, size, name, and condition, both botanical and common, of all existing trees equal to or greater than 2.5 inches in caliper, indicating trees to be retained and to be removed.
- 3. The location, quantity, size, and name, both botanical and common, of all proposed plant material. This includes lawn and turf applications.

a. When a landscape plan is required for residential lots with a disturbed area of less than 10,000 sf, the landscape plan is not required to specify the exact species or name of the plantings when the location, quantity, size, and criteria of Section 12.4 Landscape Design Standards are provided on the landscape plan. A list of the names for plants to be used and evidence of compliance with this Article is required to be kept on site for inspection approval.

4. The existing and proposed grading of the site indicating contours at two-foot intervals. Any proposed berming, earthwork, or stormwater management basins must also be indicated using two-foot contour intervals.
5. Elevations of all existing and proposed fences, stairs, and retaining walls.
6. Existing and proposed plantings in the right-of-way.
7. Any proposed irrigation plan, if irrigation is provided.
8. Any other details as determined necessary by the review body.

C. Minor Changes to Approved Landscape Plans

Minor changes to the landscape plan that do not result in a reduction in the net amount of plant material as specified on the approved landscape plan may be approved by the Zoning Administrator. Changes that reduce the amount of plant materials contained within an approved landscape plan are a major change and must be approved by the body granting approval of the landscape plan initially.

D. Alternative Landscape Design

1. These landscape requirements are intended to set minimum standards for quality development and environmental protection. Site conditions or other reasons may justify the need to request an alternate method of compliance. Alternative landscape plans may be considered when an applicant cannot meet one or more of the specific requirements of this Article because:
 - a. Strict application of the landscaping requirements would require unreasonable or unnecessary compliance. Such situations could include water features, topography, lot configurations, utility maintenance zones, or unusual site conditions.
 - b. The applicant envisions a more creative means to meet the spirit and intent of these requirements.
 - c. A comprehensive landscaping plan involving several properties is proposed.
2. The applicant must submit an alternative landscape plan indicating proposed landscaping, that includes a list of landscaping requirements not met, a description of the alternatives proposed, and a written explanation of how the proposed plan fulfills the spirit and intent of the landscape requirements. The Alternative Landscape Plan must be submitted to and reviewed by the Administrative Review Committee. In making a recommendation regarding the alternative landscape plan, the Administrative Review Committee must find that:
 - a. The proposed alternative will not present a safety hazard.
 - b. That proposed alternative will, upon maturity, provide landscaping that is equal to or better than the standard requirements.
 - c. The proposed alternative is designed to address plant health and vigor.
 - d. The proposed alternative is reasonably compatible with the natural and topographic features of the site.

(Ord. No. O-87-2020, § 1, 5-19-20)

12.3 SELECTION, INSTALLATION AND MAINTENANCE

A. Selection

1. All plant materials must be of good quality and meet American Horticulture Industry Association (AmericanHort) or its ANSI accredited successor's standards for minimum acceptable form, quality, and size for species selected.
2. Species must be selected based on those that will survive and thrive in East Tennessee. Trees should be selected from the City of Knoxville's Tree List maintained by the City.
3. The use of native species and drought tolerant species is encouraged.
4. Invasive species are prohibited.

B. Installation

1. All landscape materials must be installed in accordance with current nursery industry standards, and must be properly supported to ensure survival. Support devices such as guy wires or stakes must not interfere with pedestrian or vehicular movement.
2. All plant materials must be free of disease and installed so that soil of sufficient volume, composition, and nutrient balance are available to sustain healthy growth. Installation of plant materials during the appropriate growing season is encouraged.
3. Landscape materials should not conflict with existing overhead and underground utility infrastructure and maintenance zones. Landscape plans should reference the City of Knoxville's Tree List for appropriate species and their respective planting distances from adjacent utility infrastructure. Landscaping should not be selected that at maturity would grow into conflict with the utility maintenance zone. Alternative landscape plans (Section 12.1.D) may be considered when an applicant demonstrates that requirements may conflict with the utility maintenance zones.
 - a. Overhead utilities: At maturity, landscaping should not grow within ten feet of primary distribution lines and 25 feet within 69 kV sub-transmission lines.
 - b. Utility poles: Trees should not be planted within ten feet of primary distribution poles and 25 feet within 69 kV sub-transmission poles.
 - c. Support wires: Trees should not be planted within five feet of supporting guy wires.
 - d. Underground utility lines: The minimum distance of tree planting from the utility center line should be a minimum of ten feet. Shrubs and other landscaping vegetation are permitted in this area.
 - e. Pad mount transformers: Landscaping should be planted a minimum of six feet away from the side with doors and three feet away from the other sides.
4. If landscape material is located within a utility easement and repair or replacement of the utility is needed, the City or utility is not responsible for the replacement of any landscape that may be damaged.

C. Curbing

1. Landscaped areas may be recessed if flush curbs are utilized. If recessed, the landscaped areas must be designed for stormwater management and to prevent erosion and tracking.
2. Landscaped areas must be protected from encroachment of vehicles through use of curbs or wheel stops where necessary.

D. Maintenance

1. Landscape materials depicted on approved landscape plans are considered a required site element in the same manner as structures, required parking, lighting, and other improvements. As such, the owner of record or the business or homeowner's association is responsible for the maintenance, repair, and replacement of all landscape materials, fences, steps, retaining walls, and similar landscape elements.
2. All landscape materials must be maintained in good condition, present a healthy appearance, and be kept free of refuse and debris. Any dead, unhealthy, or missing plants must be replaced within 30 days of notification, unless an extension is approved by the City.

(Ord. No. O-87-2020, § 1, 5-19-20)

12.4 LANDSCAPE DESIGN STANDARDS

A. Minimum Planting Sizes

Minimum planting sizes are as follows. For the purposes of determining trunk size, the caliper is measured at six inches above ground level, unless otherwise specified in current American Standard for Nursery Stock (ANSI Z60.1).

1. Evergreen trees must have a minimum height of eight feet.
2. Shade trees must have a minimum two-inch caliper.
3. Single stem ornamental trees must have a minimum trunk size of 2.5 inches in caliper. Multiple stem ornamental trees must have a minimum height of eight feet.
4. Evergreen or deciduous shrubs must have must have a minimum height of 18 inches.

B. Species Diversity

Diversity among required plant material is required for visual interest and to reduce the risk of losing a large population of plants due to disease. Table 12-1: Plant Diversity Requirements indicates the percentage of diversity required based on the total quantity of species being used. (For example, if a development requires 45 shade trees, no more than 18 trees (40%) can be of one species, and there must be a minimum of five different species within the 45 trees.) When the calculation of plant diversity requirements results in a fraction, the fraction is rounded up.

Table 12-1: Plant Diversity Requirements		
Total Number of Plants per Plant Type	Maximum Number of One Species	Minimum Number of Species
1—4	100%	1
5—10	60%	2
12—15	45%	3
16—75	40%	5
76—500	25%	8
501—1,000	30%	10
1,000+	15%	15

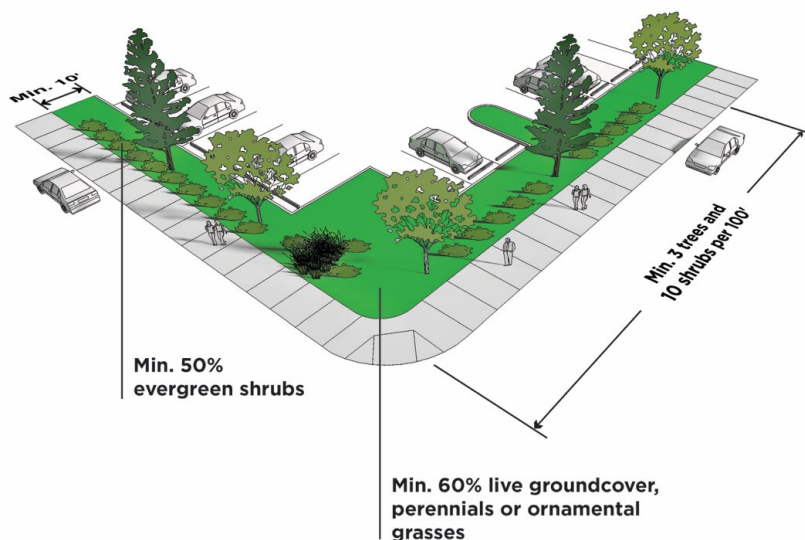
(Ord. No. O-87-2020, § 1, 5-19-20; Ord. No. O-123-2020, § 1, 8-25-20)

12.5 PARKING LOT PERIMETER LANDSCAPE YARD

A perimeter landscape yard, which is established where the parking lot abuts a street right-of-way, is required for all new parking lots of 10,000 square feet or more in area and for any expansions of existing parking lots when required by Section 11.1.B of 10,000 square feet or more in area. The perimeter landscape yard must be established along the edge of the parking lot to screen vehicle parking from the right-of-way. The landscaped area must be improved as follows:

- A. Parking lots 20,000 square feet or greater in area require a perimeter yard at least ten feet wide. The width of the perimeter yard may be reduced to six feet for parking lots, including vehicular use areas, of less than 20,000 square feet. Parking lots of less than 10,000 square feet in area are exempt from parking lot perimeter landscape yard.
- B. The perimeter yard must be planted with a minimum of three shade and/or evergreen trees and ten shrubs for every 100 linear feet. A minimum of 50% of the shrubs must be evergreen.
- C. 60% of the landscape area outside of shrub and tree masses must be planted in live groundcover, perennials, or ornamental grasses. Stone, mulch, or other permeable landscape materials may be used for any remaining area.
- D. Parking lots located on properties developed under a common or unified development plan and/or which have a shared access agreement are not required to provide the perimeter screening area along common property lines where parking areas abut.
- E. Areas of off-street parking areas that abut an alley are not required to install a perimeter landscape yard along the alley frontage.

PARKING LOT PERIMETER LANDSCAPE YARD



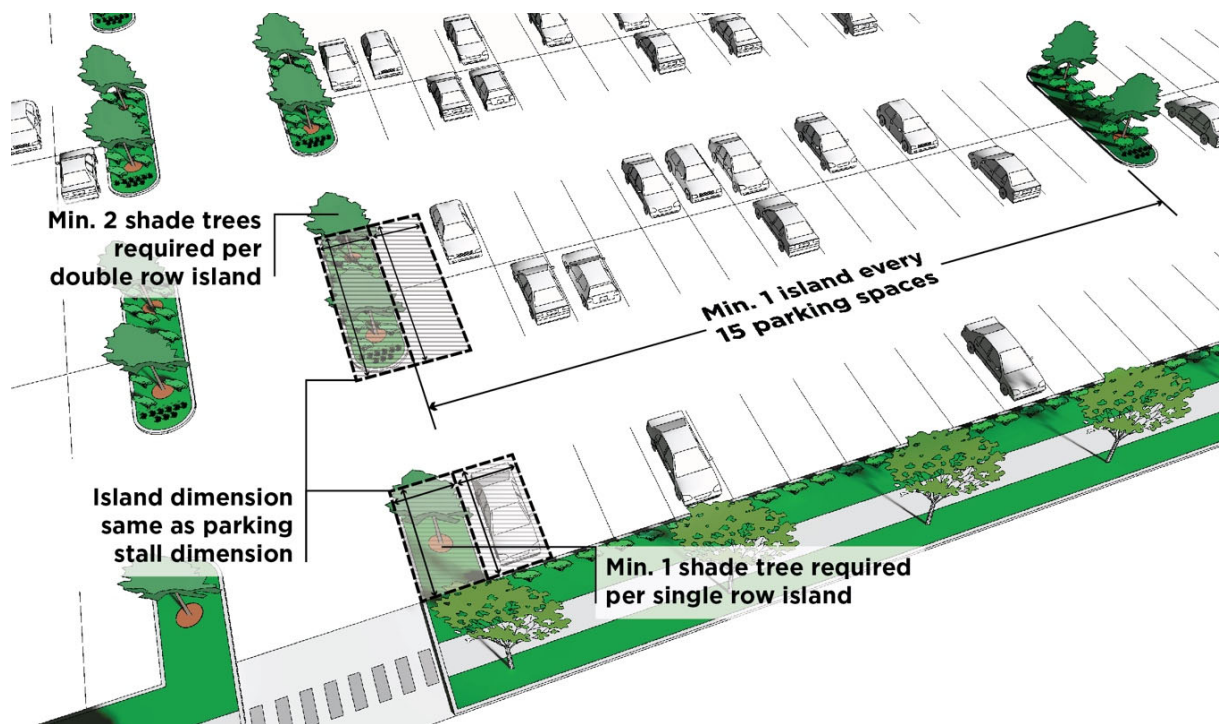
(Ord. No. O-87-2020, § 1, 5-19-20; Ord. No. O-123-2020, § 1, 8-25-20; Ord. No. O-105-2023, § 1, 7-25-23)

12.6 INTERIOR PARKING LOT LANDSCAPE

Interior parking lot landscape is required for all new parking lots and vehicular use areas of 20,000 square feet or more in area, and for any expansions of existing parking lots of 20,000 square feet or more. The landscape required is as follows:

- A. Where more than 15 parking stalls are provided in a row, one parking lot island must be provided between every 15 parking spaces. As part of the landscape plan approval, parking lot island locations may be varied based on specific site requirements or design scheme, but the total number of islands must be no less than the amount required of one island for every 15 spaces.
- B. Parking lot islands must be a minimum of 120 sf in single rows. Double rows of parking must provide parking lot islands that are a minimum of 240 sf.
- C. A minimum of one shade tree must be provided in every parking lot island or landscape area for single row parking lot islands and two shade trees for double row parking lot islands. In addition to the required shade trees, a minimum of 60% of the area of every parking lot island must be planted in shrubs, live groundcover, perennials, or ornamental grasses, unless the parking lot island or landscape area is designed to facilitate pedestrian access through the parking lot as approved in landscape plan review. Stone, mulch, or other permeable landscape materials may be used for any remaining area.

INTERIOR PARKING LOT LANDSCAPE



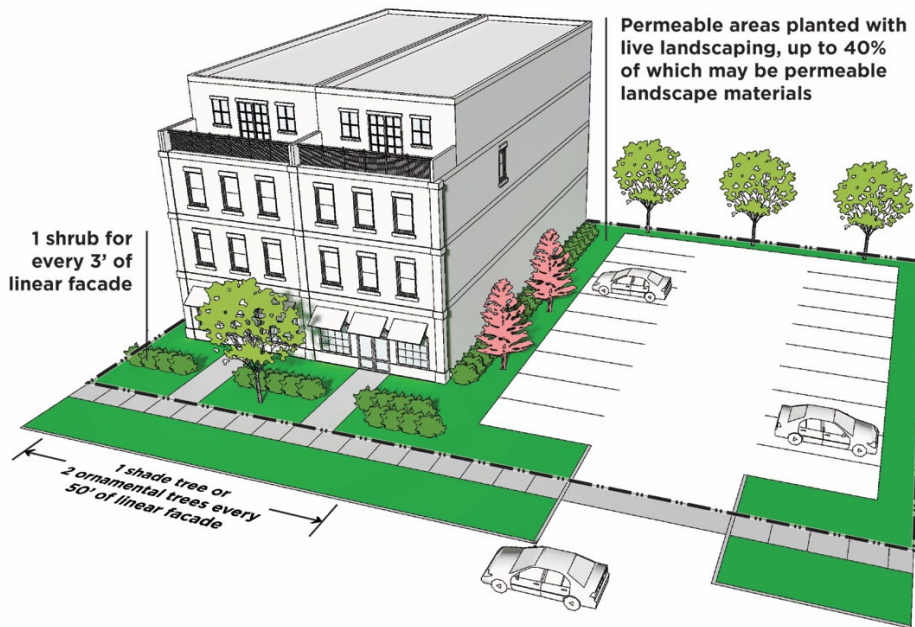
(Ord. No. O-105-2023, § 1, 7-25-23)

12.7 SITE LANDSCAPE

Site landscape requirements apply to new construction and to any additions to a structure existing as of the effective date of this Code of 30% or more in square footage.

- A. Areas of any lot that are not covered by structures, pavement, and vehicle parking areas must be planted with live landscaping. Stone, mulch, or other permeable landscape materials may be used to satisfy this requirement, but must not cover more than 40% of the landscape area.
- B. Where multi-family and nonresidential (including mixed-use) developments are located ten feet or more from a street lot line and no parking is located in front of the structure or development and where any façade abuts any parking area, foundation landscape must be planted as described below. This planting area is required along 60% of the linear façade area. This percentage may be reduced to accommodate entry design and other building functional operations during landscape plan review.
 - 1. One shrub for every three feet. Shrub locations within the planting area may be varied, but the total number of shrubs must be no less than as required in this section.
 - 2. Shade trees are required in the amount of one tree every 50 feet. Two ornamental trees may be substituted for one shade tree and must be spaced one ornamental tree every 25 feet. Tree locations within the planting area may be varied, but the total number of trees must be no less than as required in this section.
 - 3. 60% of the landscape area outside of shrub and tree masses must be planted in live groundcover, perennials, or ornamental grasses. Stone, mulch, or other permeable landscape materials may be used for the remaining area.
 - 4. Planted pots and/or planter boxes may be used to satisfy up to 30% of the total landscape area requirement.

SITE LANDSCAPE



12.8 BUFFER YARDS

This section establishes standards for the dimension and required landscape for buffer yards between land uses and/or zoning districts within the rear and/or side yards. Nothing in this section prevents the applicant's voluntary installation of buffer yards where they are not required. Buffer yard requirements apply to new construction and to any additions to a structure existing as of the effective date of this Code of 30% or more in square footage.

- A. Buffer yards may be located within required setbacks but must be reserved for the planting of material and installation of screening as required by this section. No parking, driveways, sidewalks, accessory structures, or any impervious surfaces are permitted within the buffer yard area.

1. Exception: A walking path may be placed within a buffer yard under the following conditions: no reduction of buffer yard width is utilized, the walking path does not abut another impervious area, and the width of the path is not greater than 30% of a Class A Buffer or 25% of a Class B Buffer.

- B. The two types of buffer yards are as follows:

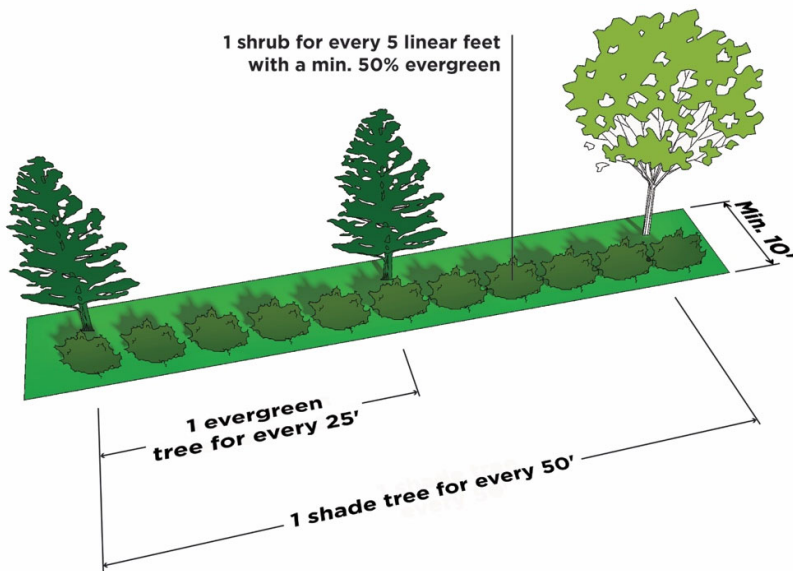
1. **Class A Buffer**

- Minimum Width: Ten feet.
- Minimum Required Shrubs: One shrub every five feet. A minimum of 50% of the shrubs must be evergreen.
- Minimum Required Trees: One evergreen tree for every 25 feet and one shade tree for every 50 feet.

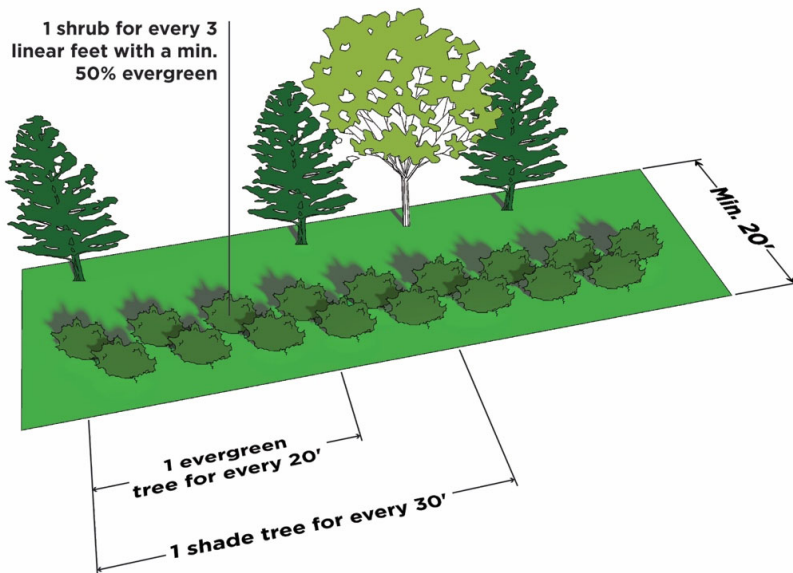
- d. Planting locations may be varied, but the total number of trees must be no less than as required in this section.
 - e. 60% of the landscape area outside of shrub and tree masses must be planted in live groundcover, perennials, or ornamental grasses. Stone, mulch, or other permeable landscape materials may be used for the remaining area.
2. **Class B Buffer**
- a. Minimum Width: Twenty feet.
 - b. Minimum Required Shrubs: One shrub every three feet. A minimum of 50% of the shrubs must be evergreen.
 - c. Minimum Required Trees: One evergreen tree for every 20 feet and one shade tree for every 30 feet.
 - d. Planting locations may be varied, but the total number of trees must be no less than as required in this section.
 - e. 60% of the landscape area outside of shrub and tree masses must be planted in live groundcover, perennials, or ornamental grasses. Stone, mulch, or other permeable landscape materials may be used for the remaining area.
- C. Where the buffer yard incorporates a wall or solid fence, or a combination of such, the buffer yard width may be reduced by ~~30%~~ 40%.
- D. When a wall or solid fence is incorporated into a buffer yard, it must be a minimum of six feet up to a maximum of eight feet. When a wall or solid fence is combined with a berm, the combined height of the wall or solid fence and any berm cannot be less than six feet or exceed eight feet.
- E. Parking lots located on properties developed under a common or unified development plan and/or which have a shared access agreement are not required to provide the buffer yard screening area along common property lines where parking areas abut.
- F. Buffer yards are required as described in Table 12-2: Buffer Yard Requirements:

Table 12-2 Buffer Yard Requirements	
Development	Buffer Yard Class
Nonresidential use located within residential district	Class A Buffer
Nonresidential <u>use in a nonresidential</u> district abuts a residential district	Class B Buffer
Parking lot of a multi-family dwelling abutting a RN-3, RN-2, RN-1 or EN residential district <u>except as follows: When a parking lot is serving fewer than 5 dwelling units and a fence or wall per 12.8.D is installed, no buffer yard is required.</u>	Class A Buffer
Per use standards (Article 9)	As determined in the standards of Article 9

CLASS A BUFFER YARD



CLASS B BUFFER YARD



(Ord. No. O-88-2020, § 1, 5-19-20)

12.9 TREE PRESERVATION

Existing healthy trees must be conserved when possible and will be credited toward landscaping requirements, when they are comparable in terms of species to new trees that would be permitted in the proposed location.

- A. Credit for conserving existing, healthy trees is subject to Urban Forester approval. The credit approved for each conserved tree is based on a tree's diameter, measured 4.5 feet above the ground, and may be up to the amount indicated below:
 - 1. Four to eight inches: Two trees credited
 - 2. Eight to twelve inches: Three trees credited
 - 3. Twelve to eighteen inches: Four trees credited
 - 4. Eighteen inches or greater: Five trees credited
- B. Existing trees may be used to fulfill some of the perimeter screening requirements, subject to approval by the Zoning Administrator. Existing trees are credited as set forth in this section. Trees to be conserved must be identified on the required landscaping plan. Conserved trees may comprise no more than 50% of the perimeter screening requirements and must be supplemented with new landscaping as required to create an effective screen.
- C. If existing trees are being used as credit toward meeting the tree planting standards, a grading permit will not be issued until the following tree preservation protections are installed. Tree preservation includes the preservation of the trees root system within the tree protection zone.
 - 1. The tree protection zone is determined by measuring one foot in radius away from the trunk of the tree for every one inch in diameter at 4.5 feet in height. No more than 10% of the tree protection zone may be disturbed with fill or grading work. Any impervious area within the existing tree protection zone does not need to be included in preservation measures.
 - 2. Within the tree protection zone of a tree, there may be no cut or fill material unless a Certified Arborist has evaluated and determined that the disturbance will not impact the health of the tree.
 - 3. Prior to and during construction, temporary barriers must be erected around all protected trees with barriers a minimum of four feet in height. There may be no storage or movement of equipment, material, debris, or fill within the fenced, tree-protection zone.
 - 4. During construction, the applicant must prevent the cleaning of equipment or material or the storage and disposal of waste material, such as paints, oils, solvents, asphalt, concrete, motor oil, or any other material, potentially harmful to the tree within the drip line of any protected tree. Nothing within this section is interpreted as an authorization to ignore or violate applicable federal or state hazardous waste laws.
 - 5. No damaging attachment, wires, signs, or permits may be fastened to any protected tree.

8-E-23-OA

ARTICLE 12.2A

A. Landscape Plan Required A landscape plan is required as part of a site plan review application for multi-family and townhouse development, nonresidential (including mixed-use) development, parking lots, and planned developments. The landscape plan must be approved prior to the issuance of ~~a building permit~~ the Certificate of Occupancy/Completion.

ARTICLE 12.8 Buffer Yards

C. Where the buffer yard incorporates a wall or solid fence, or a combination of such, the buffer yard width may be reduced by ~~30%~~ SEVENTY PERCENT (70%).

E. Buffer yards are required as described in ~~the~~ TABLE 12-2: Buffer Yard Requirements.

[ADD THE FOLLOWING LINE TO TABLE 12-2]

RESIDENTIAL USES (1F, 2F, Townhomes & Detached MF) WITHIN C-N ABUTS RESIDENTIAL DISTRICT – NO BUFFER YARD REQUIRED.

----- Forwarded message -----

From: **R Bentley Marlow** <rbentleymarlow@gmail.com>

Date: Mon, Sep 18, 2023 at 2:51 PM

Subject: 8-E-23-OA

To: Amy Brooks <amy.brooks@knoxplanning.org>

Amy,

I wish to substitute Logan Higgins' version in place of my own for consideration.

Thanks,

Bentley

--

R. Bentley Marlow, J.D., M.A.

[322 Douglas Avenue](#)

[Knoxville, Tennessee 37921-4813](#)

Cellular: (865) 607-4357

rbentleymarlow@gmail.com



Proposed modifications to the City of Knoxville's Zoning Ordinance - Article 12 (2).pdf

1159K

**Proposed changes to the City of Knoxville Zoning Code Article 12 by Knoxville
Knox County Planning case 8-E-23-OA, Modified by Planning Commissioner
Logan Higgins.**

Fellow Commissioners,

As a principal architect, I have extensive experience in planning, drafting, and reviewing landscape plans for various projects within the City of Knoxville. This experience has allowed me to become intimately acquainted with the implementation and purpose of zoning Article 12. Consequently, I am well-positioned to grasp the concerns associated with the current requirements and propose adjustments that can alleviate the compliance burden without compromising the requirement's intent.

The landscape buffer yard requirement serves as a valuable tool for delineating separations between different land uses. When required by Article 12.8, it primarily aims to establish buffers between commercial and residential uses or between parking lots and low-density residential areas.

However, I have observed instances in my practice as well as with cases brought to this body and the BZA where residential developments and development on small lots have faced an undue burden due to the incongruity or impracticality of the buffer yard requirements. Hence, I strongly advocate for minor modifications to Article 12, and willingly volunteered to refine the applicant's proposal for the consideration of the Planning Commission and City Council.

In the following pages, I have provided commentary on the applicant's requests, proposed changes to those requests, rationale for why I believe these changes are warranted and appropriate, and excerpts from the code with these changes written in.

Thank you for your consideration,

Logan Higgins, AIA

Applicable Definitions referenced in this proposal:

- From City of Knoxville Ordinance Chapter 22.5 - STORMWATER
 - Development, large residential and commercial. Any development, commercial, office, industrial, multiple single-family lots, any nonresidential use, or any development of a single residential lot with a disturbed area of ten thousand (10,000) square feet or more.
 - Development, small single-family residential. Development of a single recorded residential lot with less than ten thousand (10,000) square feet of disturbed area.

Proposed modification #1 - Landscape Plan Approval

Original proposed modification by applicant:

"ARTICLE 12.2A A. Landscape Plan Required A landscape plan is required as part of a site plan review application for multi-family and townhouse development, nonresidential (including mixeduse) development, parking lots, and planned developments. The landscape plan must be approved prior to the issuance of a building permit the Certificate of Occupancy/Completion. "

Commentary by LH:

While I am sympathetic of the additional work and potential delays from planning compliance of this Article prior to attaining a building permit, doing so after the fact would be far worse.

Specifically in regards buffer yards; it is essential that this element is planned out early to ensure there will be no conflicts with the overall. Therefore, I reject this proposed modification as it is written. However, I do have a recommendations for how this could be made more simple for smaller residential projects that may not have the resources to go through this effort.

If agreeable with the City of Knoxville's Plans Review & Inspections Division, I am proposing the following modification to Article 12.2:

12.2.A. Landscape Plan Required

A landscape plan is required as part of a site plan review application for multi-family and townhouse developments that exceed 10,000 sf of disturbed area or when landscaping is required by this article, nonresidential (including mixed-use) development, parking lots, and planned developments. The landscape plan must be approved prior to the issuance of a building permit.

12.2.B. Content of Landscape Plan

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3.The location, quantity, size, and name, both botanical and common, of all proposed plant material. This includes lawn and turf applications.

- a. When a landscape plan is required for residential lots with a disturbed area of less than 10,000 sf, the landscape plan is not required to specify the exact species or name of the plantings when the location, quantity, size, and criteria of Section 12.4 *Landscape Design Standards* are provided on the landscape plan. A list of the names for plants to be used and evidence of compliance with this Article is required to be kept on site for inspection approval.

--

Rationale:

- Both modifications use language inline with the City of Knoxville's Ordinance Chapter 25.5 - Stormwater:

A stormwater plan is required for "Any development, commercial, office, industrial, multiple single-family lots, any nonresidential use, or any development of a single residential lot with a disturbed area of ten thousand (10,000) square feet or more."

This does not require a stormwater plan for multi-family and townhouse developments when the “disturbed area” is less than 10,000 SF. Typically, developments that do not pass the stormwater threshold do not have civil engineers or landscape architects and will have a more difficult time navigating the landscape plan requirements.

- Furthermore, landscape plan review will still be required when landscaping is required by Article 12, (in instances of buffer yards and multifamily landscaping) even if the development does not exceed the disturbed area threshold.
- The modification to 12.2.B.3 creates an exception for small developments that removes the hardship of planning out the botanical makeup of the landscaping early in the process and instead allows the landscape provider to make a list that is appropriate for the site and meets the requirements.

Proposed Modification #2 - Buffer Yards: Width Reduction.

Original proposed modification by applicant:

“ARTICLE 12.8.C. Where the buffer yard incorporates a wall or solid fence, or a combination of such, the buffer yard width may be reduced by ~~30%~~ SEVENTY PERCENT (70%).”

Commentary by LH:

If the landscape buffer is meant to create a screen or buffer between uses, the application of a wall should (in theory) accomplish this entirely. However, a 6’- 8’ wall does not grow, and brings no biodiversity. Therefore, it is logical that we still require landscaping even with the implementation of a fence.

Proposed Change by LH:

The modification I am proposing to this is that a wall or fence may reduce the buffer yard width by 40% instead of 30%.

Allowing the two buffer types to be as follows:

Buffer Yard Type	Min. width	Mid. width with fence or wall
Class A	10ft	6ft
Class B	20ft	12ft

*note, this does not apply to the parking lot landscape requirements of Section 12.5, only buffer yards.

Rationale:

The elements of a buffer yard are still fully required even with a fence or wall. Typically, when a fence or wall is used to reduce the width, it is due to lot restrictions and not cost or a desire for

less landscaping (since a fence costs more than additional groundcover). This is a helpful allowance on smaller lots. However, in my opinion a reduction greater than 40% would limit the ability for the plants to grow in Class A and negate the intent of a Class B buffer.

Proposed modification #3 - Buffer Yards: When Required

Original proposed modification by applicant:

Table 12-2: Buffer Yard Requirements	
Development	Buffer Yard Class
Nonresidential use located within residential district	Class A Buffer
Nonresidential district abuts a residential district	Class B Buffer
Parking lot of a multi-family dwelling abutting a RN-3, RN-2, RN-1 or EN residential district except as follows:	Class A Buffer
<i>RESIDENTIAL USES (1F, 2F, Townhomes & Detached MF) WITHIN C-N ABUTS RESIDENTIAL DISTRICT</i>	<i>No Buffer Yard required</i>
Per use standards (Article 9)	As determined in the standards of Article 9

Commentary by LH:

This proposed modification hints to a problem in the buffer yard requirements, but does not fully resolve it.

Proposed Change by LH:

My modification to this proposal acknowledge the concerns behind the request, but with broader applicability. I have propose two modifications to Table 12-2:

Table 12-2: Buffer Yard Requirements	
Development	Buffer Yard Class
Nonresidential use located within residential district	Class A Buffer
Nonresidential <i>use in a nonresidential</i> district abuts a residential district	Class B Buffer
Parking lot of a multi-family dwelling abutting a RN-3, RN-2, RN-1 or EN residential district except as follows: <i>When a parking lot is serving fewer than 5 du and a fence or wall per 12.8.D is installed, no buffer yard is required.</i>	Class A Buffer
Per use standards (Article 9)	As determined in the standards of Article 9

Rationale:

It is important to point out that the locations where buffer yards are required *in this section* are meant to provide a separation in two instances: 1. Residential and Nonresidential. 2. Parking lots and low density residential. The intent is **not** meant to require a buffer between residential **uses** of differing density.

#1 Zoning Districts - As currently written, a 20ft wide buffer is required in any instance where **any** development in a **non-residential zoning** is adjacent to a **residential zoning**. However, there are multiple instances across the city where **residential uses** are built in **non-residential zonings**.

Case Study:

As written, if a single family house is built in a C-N zone next to an apartment complex with a RN-7 zoning, the the single family home would technically be required to install a 20' wide buffer yard to buffer **their** presence from the apartment complex in the RN district.

Although this is an extreme example, it is representative of a common occurrence.

#2 Multifamily parking - The second modification is in response to a scenario that creates a challenging requirement to the pursuit of missing middle type housing. As written, the parking for any multifamily development must have a Class A buffer if next to RN-3, RN-2, RN-1, or EN zoning. This seems appropriate when there is a high number of units, but doesn't consider that often times parking is placed adjacent to other parking.

However, the proposed modification only removes the requirement for 5 or fewer units to allow for smoother application of missing middle principles, and maintains the requirement for anything greater.

Proposed modification #4 - Walking Paths within Buffer Yards

Proposed Change by LH:

In addition to the original changes proposed by the applicant, I would like to proposed one other modification to Section 12.8 regarding impervious surface within a buffer yard as written below:

12.8 - Buffer Yards

- A. Buffer yards may be located within required setbacks but must be reserved for the planting of material and installation of screening as required by this section. No parking, driveways, sidewalks, accessory structures, or any impervious surfaces are permitted within the buffer yard area.
 - 1. Exception: A walking path may be placed within a buffer yard under the following conditions: no reduction of buffer yard width is utilized, the walking path does not abut other impervious area, and the the width of the path is not greater than 30% of a Class A buffer or 25% of a Class B buffer.

Rationale:

Rightfully so, the buffer yard is not allowed to have buildings or parking in it (not much of a landscape buffer if it does!) However, when installing landscaping on a site, allowing users to walk through the landscaped area can be of benefit to the users and the community. Therefore, I recommend that we allow for accessible pathways of up to 3 ft wide in a Class A buffer and 5 ft wide in a Class B buffer if the buffer width is not being reduced with a fence.

This modification also prohibits the walking path from abutting other impervious area so to prevent the exception from being used to essentially expand a parking lot with a sidewalk.

Article 12, Modified

12.2 - LANDSCAPE PLAN

A. Landscape Plan Required

A landscape plan is required as part of a site plan review application for multi-family and townhouse developments [that exceed 10,000 sf of disturbed area or when landscaping is required by this article](#), nonresidential (including mixed-use) development, parking lots, and planned developments. The landscape plan must be approved prior to the issuance of a building permit.

B. Content of Landscape Plan

1. North arrow and graphic scale, the location and dimensions of all existing and proposed structures, property lines, easements, parking lots and drives, rights-of-way, refuse disposal and recycling areas, pedestrian and bicycle paths, fences, mechanical equipment, overhead utility wires, underground utilities, retention/detention facilities, and other drainage facilities, such as drainage swales. Identify lines of sight at all access points and at locations adjacent to intersections.
2. The location, quantity, size, name, and condition, both botanical and common, of all existing trees equal to or greater than 2.5 inches in caliper, indicating trees to be retained and to be removed.
3. The location, quantity, size, and name, both botanical and common, of all proposed plant material. This includes lawn and turf applications.
 - a. [When a landscape plan is required for residential lots with disturbed area of less than 10,000 sf, the landscape plan is not required to specify the exact species or name of the plantings when the location, quantity, size, and criteria of Section 12.4 *Landscape Design Standards* are provided on the landscape plan. A list of the names for plants to be used and evidence of compliance with this Article is required to be kept on site for inspection approval.](#)
4. The existing and proposed grading of the site indicating contours at two-foot intervals. Any proposed berming, earthwork, or stormwater management basins must also be indicated using two-foot contour intervals.
5. Elevations of all existing and proposed fences, stairs, and retaining walls.
6. Existing and proposed plantings in the right-of-way.
7. Any proposed irrigation plan, if irrigation is provided.
8. Any other details as determined necessary by the review body.

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12.8 BUFFER YARDS

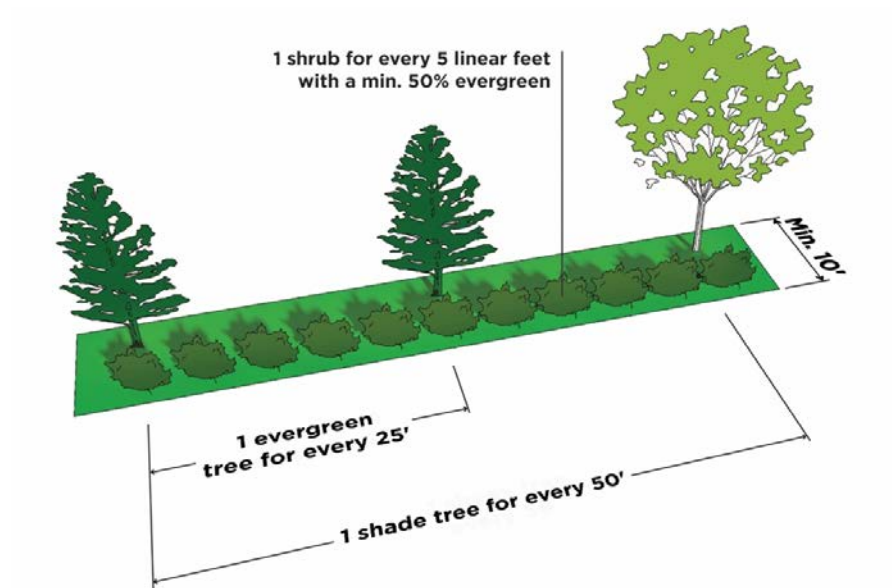
This section establishes standards for the dimension and required landscape for buffer yards between land uses and/or zoning districts within the rear and/or side yards. Nothing in this section prevents the applicant's voluntary installation of buffer yards where they are not required. Buffer yard requirements apply to new construction and to any additions to a structure existing as of the effective date of this Code of 30% or more in square footage.

- A. Buffer yards may be located within required setbacks but must be reserved for the planting of material and installation of screening as required by this section. No parking, driveways, sidewalks, accessory structures, or any impervious surfaces are permitted within the buffer yard area.

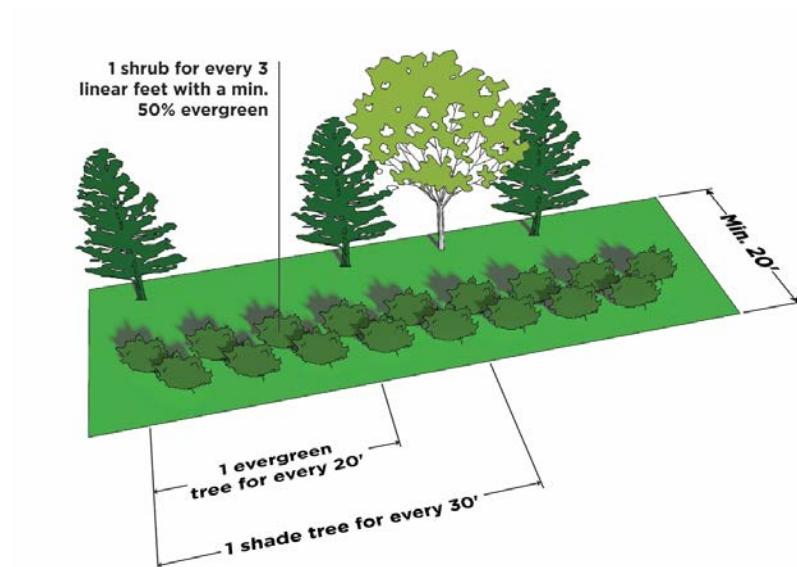
1. Exception: A walking path may be placed within a buffer yard under the following conditions: no reduction of buffer yard width is utilized, the walking path does not abut other impervious area, and the the width of the path is not greater than 30% of a Class A buffer or 25% of a Class B buffer.
- B. The two types of buffer yards are as follows:
1. **Class A Buffer**
 - a. Minimum Width: Ten feet.
 - b. Minimum Required Shrubs: One shrub every five feet. A minimum of 50% of the shrubs must be evergreen.
 - c. Minimum Required Trees: One evergreen tree for every 25 feet and one shade tree for every 50 feet.
 - d. Planting locations may be varied, but the total number of trees must be no less than as required in this section.
 - e. 60% of the landscape area outside of shrub and tree masses must be planted in live groundcover, perennials, or ornamental grasses. Stone, mulch, or other permeable landscape materials may be used for the remaining area.
 2. **Class B Buffer**
 - a. Minimum Width: Twenty feet.
 - b. Minimum Required Shrubs: One shrub every three feet. A minimum of 50% of the shrubs must be evergreen.
 - c. Minimum Required Trees: One evergreen tree for every 20 feet and one shade tree for every 30 feet.
 - d. Planting locations may be varied, but the total number of trees must be no less than as required in this section.
 - e. 60% of the landscape area outside of shrub and tree masses must be planted in live groundcover, perennials, or ornamental grasses. Stone, mulch, or other permeable landscape materials may be used for the remaining area.
- C. Where the buffer yard incorporates a wall or solid fence, or a combination of such, the buffer yard width may be reduced by ~~30%~~ 40%.
- D. When a wall or solid fence is incorporated into a buffer yard, it must be a minimum of six feet up to a maximum of eight feet. When a wall or solid fence is combined with a berm, the combined height of the wall or solid fence and any berm cannot be less than six feet or exceed eight feet.
- E. Parking lots located on properties developed under a common or unified development plan and/or which have a shared access agreement are not required to provide the buffer yard screening area along common property lines where parking areas abut.
- F. Buffer yards are required as described in Table 12-2: Buffer Yard Requirements:

Table 12-2: Buffer Yard Requirements	
Development	Buffer Yard Class
Nonresidential use located within residential district	Class A Buffer
Nonresidential use in a nonresidential district abuts a residential district	Class B Buffer
Parking lot of a multi-family dwelling abutting a RN-3, RN-2, RN-1 or EN residential district except as follows: When a parking lot is serving fewer than 5 du and a fence or wall per 12.8.D is installed, no buffer yard is required.	Class A Buffer
Per use standards (Article 9)	As determined in the standards of Article 9

CLASS A BUFFER YARD



CLASS B BUFFER YARD



(Ord. No. O-88-2020 , § 1, 5-19-20)

(Supp. No. 75)



Development Request

DEVELOPMENT

- ☐ Development Plan
☐ Planned Development
☐ Use on Review / Special Use
☐ Hillside Protection COA

SUBDIVISION

- ☐ Concept Plan
☐ Final Plat

ZONING

- ☐ Plan Amendment
☐ SP ☐ OYP
☐ Rezoning

R. Bentley Marlow

Applicant Name

Affiliation

22 June 2023

10 August 2023

Date Filed

Meeting Date (if applicable)

File Number(s)

8-A-23-OA,
8-B-23-OA,
8-C-23-OA,
8-D-23-OA,
8-E-23-OA

CORRESPONDENCE

All correspondence related to this application should be directed to the approved contact listed below.

☒ Applicant ☒ Property Owner ☐ Option Holder ☐ Project Surveyor ☐ Engineer ☐ Architect/Landscape Architect

R. Bentley Marlow

Name

Company

322 Douglas Avenue

Knoxville

Tenn.

37921

Address

City

State

ZIP

865-607-4357

rbentleymarlow@gmail.com

Phone

Email

CURRENT PROPERTY INFO

Marlow Properties, LLC

322 Douglas Avenue

865-607-4357

Property Owner Name (if different)

Property Owner Address

Property Owner Phone

Property Address

Parcel ID

KUB

KUB

N

Sewer Provider

Water Provider

Septic (Y/N)

STAFF USE ONLY

General Location

Tract Size

☒ City ☐ County

District

Zoning District

Existing Land Use

Planning Sector

Sector Plan Land Use Classification

Growth Policy Plan Designation

May 1, 2023

DEVELOPMENT REQUEST

- ☐ Development Plan ☐ Use on Review / Special Use ☐ Hillside Protection COA
☐ Residential ☐ Non-Residential

Home Occupation (specify) _____

Other (specify) _____

Related City Permit Number(s)

SUBDIVISION REQUEST

Proposed Subdivision Name _____

Unit / Phase Number _____

☐ Combine Parcels☐ Divide Parcel

Total Number of Lots Created _____

☐ Other (specify) _____☐ Attachments / Additional Requirements

Related Rezoning File Number

ZONING REQUEST☐ Zoning Change

Proposed Zoning _____

☐ Plan Amendment Change

Proposed Plan Designation(s) _____

Pending Plat File Number

Proposed Density (units/acre) _____

Previous Rezoning Requests _____

☒ Other (specify) Ordinance Amendment (change zoning text) - Proposed changes attached.**STAFF USE ONLY****PLAT TYPE**☒ Staff Review☐ Planning Commission**ATTACHMENTS**☐ Property Owners / Option Holders☐ Variance Request**ADDITIONAL REQUIREMENTS**☐ Design Plan Certification (*Final Plat*)☐ Use on Review / Special Use (*Concept Plan*)☐ Traffic Impact Study☐ COA Checklist (*Hillside Protection*)

Fee 1

1203

\$5,000.00

Total

\$5,000.00

Fee 2

Fee 3

AUTHORIZATION☒ I declare under penalty of perjury the foregoing is true and correct:

1) He/she/it is the owner of the property AND 2) The application and all associated materials are being submitted with his/her/its consent



Applicant Signature

R. Bentley Marlow

Please Print

26 June 2023

Date

865-607-4357

Phone Number

rbentleymarlow@gmail.com

Email



Property Owner Signature

R. Bentley Marlow / Marlow Properties, LLC

Please Print

SG,07/07/2023

Date Paid