

## Memorandum

**TO**: Knoxville-Knox County Planning Commission **FROM**: Amy Brooks, AICP, Planning Services Manager

**DATE**: April 1, 2020 **SUBJECT**: 4-A-20-OA

#### **STAFF RECOMMENDATION:**

Approve the requested minor amendments to the following Articles of the City of Knoxville Zoning Ordinance to correct drafting errors and provide additional clarity.

Article 1.4.H.3

• Article 8.7.4

Article 8.10.A

Article 9.3.F

• Article 9.3.H.3

Article 9.3.J

• Article 10.1.E

Article 10.2.B.6

Article 10.2.D.4

Article 11.4

Article 11.5

Article 11.7

Article 12.1.E

Article 12.2.B.2 and 5

Article 12.3.B.4

Article 13.2.F

#### **ATTACHMENTS**

Attachment A: City of Knoxville Plans Review & Building Inspections memo

Attachment B: Proposed language for Articles 1.4, 8.7, 8.10, 9.3, 10.1, 10.2. 11.4, 11.5, 11.7, 12.1, 12.2,

12.3 and 13.2

### CITY OF KNOXVILLE



**Plans Review & Inspections Division** 

#### **MEMORANDUM**

**DATE:** April 2, 2020

**TO:** Planning Staff

FROM: Peter Ahrens

**Director of Plans Review & Building Inspections** 

**RE:** Minor Zoning Code Amendments

Articles 1 and 8 thru 13

**Background** The Plans Review and Inspections Department requests an amendment to the newly-adopted Zoning Code of the City of Knoxville. The following are a list of minor amendments that correct drafting errors and provide additional clarity to the code.

- Article 1.4.H.3 is under *Requests for Prior Zoning Equivalent*. This amendment is specifically to section 1.4.H.3 (*Initiation*) and includes/clarifies all the provisions referenced in Section 16.1 that outline the process of a zoning text and map amendment.
- Article 8.7.E is under *Infill Housing Overlay Zoning District*. This amendment clarifies what building permit activities within the Infill Housing Zoning District require a certificate of appropriateness as noted in Article 16.6.B.
- Article 8.10.A is under *Floodplain Overlay Zoning District*. This amendment fixes a drafting error by removing the word 'to' in section 8.10.A so the sentence reads, "...requirements have been created **to** for the protection of the public health..."
- Article 9.3.F is under *Principal Use Standards*. These amendments are specifically to section 9.3.F.2.a that increase the width of a drive-through stacking space from a minimum of nine feet to ten feet. In section 9.3.F.2.b replacing the word 'aisle' with 'lane' since aisle is a term used with drive aisle dimensions for parking lots. In section 9.3.F.7 replacing the existing graphic with proposed one, that clearly identifies a bail out lane and when needed.
- Article 9.3.H.3 is under *Principal Use Standards*. This amendment corrects the reference to Article 17 on Nonconformities and adds language referring to Chapter 25 *Trailers and Portable Buildings*, Section 6 *Location of Trailers; Nonconforming Uses* of the City of Knoxville Code of Ordinances.
- Article 9.3.J is under *Principal Use Standards*. This amendment replaces the term 'structure' with 'dwelling' to match the definition of Two-Family Dwelling. In section

Attachment A Agenda Item # 38

9.3.J.5, correct 'façade building line' to read 'building façade line' to match the definition Building Façade Line.

- Article 10.1.E is under *General Development Requirements*. This amendment removes stormwater facilities, retaining walls, fences and decks from structures prohibited within utility and drainage easements. Add sentence stating these may be installed at the property owner's risk. This is historically consistent with City policy.
- Article 10.2.B.6 is under *Exterior Lighting*. This amendment removes language requiring no direct light from an outdoor luminaire can fall outside the lot onto public right of way. The proposed language states all outdoor lighting fixtures must be adequately shielded.
- Article 10.2.D.4 is under *Exterior Lighting*. This amendment specifically refers to 10.2.D.4 by adding 'is prohibited' to the end of the sentence for consistency with the prior three sentences and the prohibited language found in each.
- Article 11.4; Table 11-2 is under Required Off-Street Parking Spaces. This amendment
  adds the use 'Dwelling Accessory Dwelling Unit (ADU)' and one minimum vehicle
  parking required to be consistent with section 10.3.B.11 on Accessory Dwelling Unit
  requirements.
- Article 11.5.A is under *Dimensions of Off-Street Parking Facilities*. This amendment adds a section 11.5.A.3 and language requiring pedestrian access aisles must be hatched and include a painted "No Parking" designation. This is at the request of the City's ADA Coordinator.
- Article 11.7.A is under *Access and Driveway Design*. The amendment is to change Table 11-7 to Table 11-4. This cleans up the jump from table 11-3 to 11-7 in the Code.
- Article 11.7.B is under *Access and Driveway Design*. The amendment is to change Table 11-8 to Table 11-5. This cleans up the jump from table 11-3 to 11-7 in the Code.
- Article 11.7.C is under *Access and Driveway Design*. The amendment is to change Table 11-9 to Table 11-6. This cleans up the jump from table 11-3 to 11-7 in the Code.
- Article 11.9.A is under *Bicycle Parking Provisions*. This amendment is to change Table 11-10 to Table 11-7. This cleans up the jump from table 11-3 to 11-7 in the Code.
- Article 11.10 is under *Required Off-Street Loading Spaces*. This amendment is to change Table 11-12 to Table 11-8. This cleans up the jump from table 11-3 to 11-7 in the Code.
- Article 12.1.E is under *Purpose*. This amendment is revise the existing language from encouraging non-invasive species native to Tennessee to prohibit the use of invasive plant material.
- Article 12.2.B.2 is under *Landscape Plan*. This amendment changes/clarifies the 21/2 to '2.5' inches in caliper.
- Article 12.2.B.5 is under *Landscape Plan*. This amendment requires existing elevations of all fences, stairs, and retaining walls be required and not just proposed.
- Article 12.3.B.4 is under *Selection, Installation, and Maintenance*. This amendment removes language that no landscape should be located within any utility easement, with the exception of lawn grass or other resilient groundcover. This is historically consistent

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with City policy.

• Article 13.2.F is under *Prohibited Signs*. This amendment replaces City Engineer with 'the Department of Engineering'.

The Department of Plans Review and Building Inspections recommends the adoption of the minor amendments to Articles 1 and 8 thru 13 of the new Zoning Code, as indicated in the attachments.

#### **Attachments**

1) Proposed Language for Articles 1 and 8 thru 13

Sincerely,

Peter Ahrens Director of Plans Review & Building Inspections 865-215-3938

## ARTICLE 1. TITLE, PURPOSE, AND APPLICABILITY Section 1.4 – Transition Rules

#### 1.4 TRANSITION RULES

[...]

#### H. Requests for Prior Zoning Equivalent

#### 1. Requests for Prior Zoning Equivalent

Any person or entity aggrieved by this Code's application of a new or substantially different zoning district to real property may submit to the Knoxville-Knox County Planning Commission a written "request for prior zoning equivalent." There are no fees associated with such requests made within one year after this Code is adopted.

#### 2 Limitation on Requests for Prior Zoning Equivalent

All requests for prior zoning equivalent:

- **a.** Must seek City Council's approval to assign to the property a zoning district that is substantially similar to the prior zoning district which applied immediately before the adoption of this Code,
- **b.** May not seek City Council's approval to rezone property in a way that is inconsistent with or substantially different from the prior zoning district which applied immediately before the adoption of this Code.

#### 3. Initiation

The provisions of Section 16.1 items B through **F G** govern the initiation, authorization, procedure, standards, **time limit for City Council action**, and appeals for requests for prior zoning equivalent.

#### 4. Timing

Requests for prior zoning equivalent under this Section must be made within one year after the adoption of this Code. After one year, persons or entities may, in accordance with Articles 15 and 16 of this Code, submit to the Knoxville-Knox County Planning Commission an application for a zoning text or map amendment.

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# ARTICLE 8. SPECIAL PURPOSE & OVERLAY DISTRICTS Section 8.7 – IH Infill Housing Overlay Zoning District Section 8.10 – F Floodplain Overlay Zoning District

#### 8.7 IH INFILL HOUSING OVERLAY ZONING DISTRICT

[...]

#### E. Certificate of Appropriateness

A certificate of appropriateness is required for any building permit <u>as noted in 16.6.B</u> or request for subdivision approval within the IH Overlay District.

[...]

#### 8.10 F FLOODPLAIN OVERLAY ZONING DISTRICT

#### A. Purpose

The F Floodplain Overlay Zoning District is established to indicate locations near streams where floodplains have been identified by the Federal Emergency Management Agency. Due to the high flood potential in these areas, requirements have been created to for the protection of the public health and safety and to reduce the burdens imposed on the community.

#### **ARTICLE 9. USES**

#### Section 9.3 - Principal Use Standards

[...]

#### 9.3 PRINCIPAL USE STANDARDS

Where applicable, principal uses are required to comply with all use standards of this section, whether a permitted or special use, in addition to all other regulations of this Code.

[...]

#### F. Drive-Through Facility

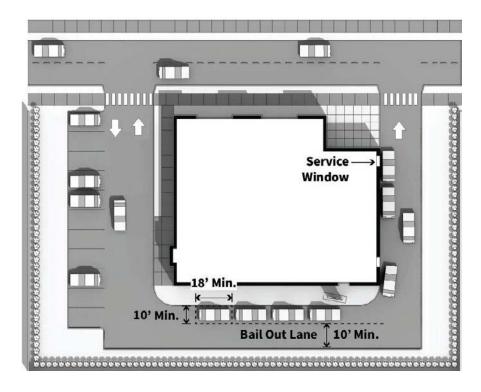
- 1. All drive-through facilities must provide a minimum of three stacking spaces per lane or bay, unless additional stacking spaces are specifically required by this Code. Restaurants must provide a minimum of four stacking spaces per lane or bay. Further, the City of Knoxville Department of Engineering may require additional internal queuing and stacking spaces and other access points to prevent disruption of traffic flow on adjacent streets.
- 2. Stacking spaces provided for drive-through uses must be:
  - **a.** A minimum of nine ten feet in width, as measured from the outermost point of any service window or bay entrance, to the edge of the driveway/drive aisle, and 18 feet in length. In the case of a recessed service window, the measurement is taken from the building wall.
  - **b.** Stacking spaces must begin behind the vehicle parked at a final point of service exiting the drive through aisle lane, such as a service window or car wash bay (this does not include a menuboard). Spaces must be placed in a single line behind each lane or bay.
- **3.** All drive-through lanes must be located and designed to ensure that they do not adversely affect traffic circulation on adjoining streets. Drive-through lanes on corner lots must not route exiting traffic into adjacent residential neighborhoods.
- 4. The minimum width for a drive through lane is ten feet.
- 5. When a drive-through facility abuts a residential district, a public park, a community or market garden, a place of worship, a primary or secondary educational facility, or day care center, a Class B buffer yard per Section 12.8 and a solid wall or fence, a minimum of six feet and a maximum of eight feet in height, is required.
- 6. All drive-through facilities, including but not limited to menuboards, stacking lanes, trash receptacles, ordering box, drive up windows, and other objects associated with the drive-through facility, must be located to the side or rear of the building. Drive-through windows and lanes may not be placed between the street and the associated building.
- 7. If a bail out lane is provided, it must be a minimum width of ten feet in width and run parallel to the drive through lane. If such bail out lane is also an interior access drive providing access to parking spaces, the bail out lane is limited to a one-way traffic pattern following the direction of the drive through lane.

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City of Knoxville

(To be removed and not codified: note change to image below, which reflects the proposed requirements)

#### **DRIVE-THROUGH FACILITY**



[...]

#### H. Dwelling - Manufactured Home

Multi-sectional manufactured homes may be used as single-family detached dwellings provided the following development criteria are met:

#### 1. General Standards

- i. Such dwellings meet all applicable building, safety and fire codes.
- ii. Such dwellings have the same general appearance as required for site builthomes.

#### 2. Specific Standards

- i.All wheels, axles, hitches, and other parts used for transport of the dwelling must be removed prior to issuance of a certificate of occupancy.
- ii.A perimeter wall of solid masonry, concrete, or other material approved by the Building Official must be installed around the base of the dwelling.
- iii.All roofing, siding, veneers, and other exterior materials are limited to materials permitted for site built housing.
- iv. Roof pitch must be the same as required for site built housing.

#### 3. Nonconforming Manufactured Homes

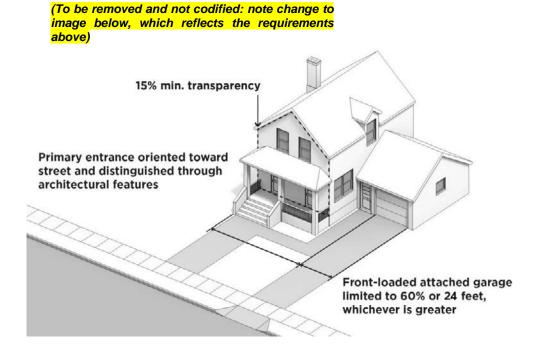
See Article 46 17 for regulations regarding nonconformities and Chapter 25 Section 6 of the City of Knoxville Code of Ordinances nonconforming manufactured homes, including single-wide manufactured homes.

#### [...]

#### J. Dwelling - Two-Family

The following standards apply only to new construction. If a two-family structure dwelling is located within a NC or IH Overlay District, the following standards do not apply.

- a. On lots less than one acre in lot area, a dwelling must have a primary entrance from a façade facing the street. The front entry must be a dominant feature on the front elevation of a home and an integral part of the structure, using features such as porches, raised steps and stoops, and/or roof overhangs.
- b. Windows, entrances, porches, or other architectural features are required on all street-facing facades to avoid the appearance of blank walls.
- c. A 15% minimum transparency requirement applies to all street-facing façades and is calculated on the basis of the entire area of the façade.
- d. Front-loaded attached garages are limited to 60% of the width of the front building <u>façade</u> line or 24 feet, whichever is greater. Garage width is measured as the width of a garage door; in the case of garages designed with multiple garage doors, the distance is measured between the edge of the outmost doors.
- e. Front-loaded attached garages must be set back a minimum of five feet from the front building façade line. This <u>building</u> façade <u>building</u> line does not include architectural features, such as bay windows or porches.



# ARTICLE 10. SITE DEVELOPMENT STANDARDS Section 10.1 – General Development Requirements Section 10.2 – Exterior Lighting

#### 10.1 GENERAL DEVELOPMENT REQUIREMENTS

[...]

#### E. Utility and Drainage Easements

Permanent structures, stormwater facilities, retaining walls, fences, decks, and accessory structures are prohibited within utility and drainage easements. Stormwater facilities, retaining walls, fences, and decks may be installed at the property owner's risk.

[...]

#### **10.2 EXTERIOR LIGHTING**

[...]

#### **B.** Lighting Standards

- 1. For townhouse and multi-family dwellings and non-residential developments, the maximum allowable footcandle at any lot line is one footcandle.
- 2 All luminaires must be of the cut off luminaire design.
- **3.** To be considered a cut off luminaire, the cut off angle must be 75 degrees or less. A cut off luminaire must be designed to completely shield the light source from an observer 3.5 feet above the ground at any point along an abutting lot line.
- 4. Any freestanding cut off luminaire must be located at least 15 feet from any residential district lot line.
- 5. The maximum total height of a freestanding cut off luminaire is 20 feet in a nonresidential district, and 15 feet in a residential district.
- 6. All outdoor luminaires must be located, adequately shielded, and directed such that no direct light falls outside the lot or onto the public right-of-way.
- 7. Outdoor lighting fixtures closer to the lot line than the mounting height of the fixture, measured perpendicular to the lot line, adjacent to residential areas, must have internal house-side shields.
- **8.** Flood or spot lamps must be aimed down no higher than 45 degrees to the horizontal (halfway between straight down and straight to the side) when the source is visible from any adjacent residential property.

[...]

#### D. Prohibited Lighting

- 1. Flickering or flashing lights are prohibited.
- 2. Searchlights, laser source lights, or any similar high intensity lights are prohibited.
- 3. Neon or LED lighting to outline doors, windows, architectural features, and building facades is prohibited.
- 4. Any light fixture that can be confused with or construed as a traffic control device is prohibited.

ARTICLE 11. OFF-STREET PARKING
Section 11.4 – Required Off-Street Parking Spaces
Section 11.5 – Dimensions of Off-Street Parking Facilities

#### [...]

#### 11.4 REQUIRED OFF-STREET PARKING SPACES

#### A. General Application

- 1. The minimum and maximum number of off-street vehicle parking spaces shall be determined in accordance with Table 11-2: Required Off-Street Parking, unless otherwise specified in the zoning district.
- 2. In determining the number of parking spaces, when the result contains a fraction, any fraction less than one-half is disregarded and any fraction of one-half or more is counted as one parking space.
- 3. Structured parking is not subject to the maximum number of parking spaces set forth in Table 11-2.
- **4.** All parking lot elements required by the Americans with Disabilities Act (ADA) must be accessible. All offstreet parking lots must have a number of accessible parking spaces as required by Table 11-3: Required Accessible Parking Spaces, or as amended by ADA:

Table 11-2: Required Off-Street Parking			
Use	Minimum Vehicle Parking Required	Maximum Vehicle Parking Allowed	
[]	[]	[]	
Dwelling - ADU	1		
[]	[]	[]	
Owelling - Single-Family	2 per du + <del>1 per ADU</del>	No limit	
[]	[]	[]	

#### B. Exemptions and Flexibilities

- 1. The DK District is exempt from required parking. If parking is provided, then the maximum number of spaces applies in all subdistricts.
- 2. Minimum vehicle parking reductions apply in the following districts. Bicycle parking requirements may not be reduced.
  - a. Required minimum vehicle parking may be reduced by 40% in the C-N District.
  - b. Required minimum vehicle parking may be reduced by 20% in the C-G-2 and C-G-3 District.
- **3.** Off-street parking requirements in any district may be reduced up to 30% from the minimum requirements in Table 11-2, provided the development is located within one-fourth of a mile of a transit route. A Knoxville Area Transit approved shelter may be required on or within one-fourth of a mile of the development site. Bicycle parking requirements may not be reduced. This reduction cannot be coupled with any other parking reduction, such as the reductions offered in items 1 and 2 above.
- 4. Parking lots may exceed the maximum number of spaces in Table 11-2 by up to 20% provided that the spaces exceeding the maximum number and the access aisles accessing those spaces are constructed of pervious materials approved by the Department of Engineering. Parking spaces exceeding the identified maximum may be

approved by the Department of Engineering upon submittal of a parking study justifying the need for additional spaces, and the approval of the parking study by Department of Engineering. All excess spaces and their access ways must be constructed of pervious materials. Pervious paving materials may not be required for excess parking on sites with brownfield agreements upon approval by the Department of Engineering.

- **5.** Upon approval by the Department of Engineering of a parking study for the proposed use(s), the minimum number of parking spaces in Table 11-2 may be reduced.
- 6. <u>For uses not specifically mentioned herein, off-street parking requirements shall be interpreted by the director of plans review and inspections.</u>

[...]

#### 11.5 DIMENSIONS OF OFF-STREET PARKING FACILITIES

Off-street parking facilities must be laid out in accordance with the following regulations:

#### A. Accessible Spaces

- 1. Accessible vehicle spaces must be at least eight feet wide with an adjacent pedestrian access aisle of at least five feet in width.
- 2. Van accessible spaces must be either:
  - a. At least 11 feet wide with an adjacent pedestrian access aisle of at least five feet in width.
  - b. At least eight feet wide with an adjacent pedestrian access aisle of at least eight feet in width.
- 3. Pedestrian access aisles must be hatched and include a painted "No Parking" designation.

#### B. Stall and Aisle Dimensions

1. The minimum dimensions for parking stalls and aisles is specified in Table 11-6: Minimum Stall and Aisle Dimensions. Maximum dimensions are the minimum value plus fourfeet.

Parking Angle	Minimum Depth to Wall	Minimum Depth to Curb	Minimum Stall Width	Minimum Aisle Width (feet)	
Tarking Angle	or Interlock (feet)	(feet)	(feet)	One-Way	Two-Way
45 degrees	16.5	15.0	9.0	15	26
60 degrees	18.0	16.5	9.0	18	26
75 degrees	18.5	17.5	9.0	22	26
90 degrees	17.5	15.5	9.0	26	26
Parallel	22.5	20.5	9.0	15	25

- 2. Up to 20% of the total number of parking spaces provided may be designed for compact vehicles. Where possible, these spaces must be clustered together and marked with signs restricting their use to compact vehicles. Compact spaces with a parking angle of 90 degrees must have the following minimum dimensions: eight feet in width, 13.5 feet in depth to curb, and 15.5 feet in depth to a wall or interlock. Other angles will be reviewed on a case by case basis and are subject to the approval of the Department of Engineering.
- Stall lengths, stall depths, and aisle widths for parking angles, other than those indicated in Table 11-6, shall be consistent with the above values and are subject to the approval of the Department of Engineering.

#### C. Pedestrian Access Aisles

Pedestrian access aisles shall be clearly marked (or indicated). must be hatched and include a painted "No Parking" designation identified.

#### D. Encroachments

Columns, light poles, and/or other protrusions may encroach into a parking module up to a maximum of one foot for modules with parking on one side or a maximum of two feet for modules with parking on two sides, one-foot protrusion into each parking row. The protrusions cannot affect more **that than** 25% of the spaces.

#### E. Structured Parking

Structured parking must comply with the following requirements:

#### (NOTE TO BE REMOVED AND NOT CODIFIED: SECTIONS BELOW WILL NEED TO BE REDESIGNATED)

- a. Parking spaces must comply with Table 11-6. The City of Knoxville Department of Engineering may approve adjustments to the dimensions while maintaining safety and function.
- b. Stairways, elevators, or other provisions must separate vehicular and pedestrian movements between the various levels of parking structures.
- c. The maximum approach, departure, and ramp angles are subject to the review and approval of the Department of Engineering.
- d. A minimum nine-foot clearance must be maintained on all levels containing accessible spaces and on all levels providing ingress to and egress from the accessible spaces. A minimum seven-foot clearance must be maintained throughout the remainder of the structured parking.

#### [...]

#### 11.7 ACCESS AND DRIVEWAY DESIGN

These regulations are applicable in zoning districts without access and driveway requirements specific to the zoning district. If the district specifically requires access and driveway design, those requirements control. The Department of Engineering is authorized to develop and implement such policies and procedures as may be necessary and desirable to control the design and construction of driveways that are consistent with this Code.

- A. The number of driveways on a given street or access easement is based on the following:
  - 1. Typical developments per Table 11-7 4: Maximum Number of Driveways for Lot Frontages:

### (NOTE TO BE REMOVED LATER AND NOT CODIFIED: ALL REMAINING TABLES IN ARTICLE 11 TO BE RENUMBERED)

Table 11-4: Maximum Number of Driveways for Lot Frontages		
Lot Frontage	Maximum Number of Driveways	
Less than 150 feet	1 For single-family dwellings with lot frontages of 100' or more, a circular driveway is allowed	
150 feet – 450 feet	2	
Greater than 450 feet – 600 feet	3	
Greater than 600 feet – 750 feet	4	
Greater than 750 feet	Determined by Department of Engineering	

- 2. Gas stations and establishments where services are normally provided to customers without leaving their vehicles may have two driveways.
- **3.** Projects required to prepare a Traffic Impact Study are considered individually based on the recommendation of the study and the approval of the Department of Engineering.
- **4.** Boulevard driveways (with raised median separation), one way driveways, and right-in/right-out driveway pairs will be considered one driveway
- **5.** The Department of Engineering may impose other access and driveway requirements as necessary based on specific site conditions.
- **B.** The minimum distance between a driveway and the intersecting street is described in Table 11-85: Corner Clearance Requirements.

Table 11-5: Corner Clearance Requirements			
Classification of	Classification of Street to be Accessed		
Intersecting Street	Arterial	Collector	Local
Arterial	200′	150′	100′
Collector	150′	100′	50'

Local	100′	50'	50'

[...]

**C.** Table 11-96: Driveway Width and Curb Cut Length Standards provides minimum and maximum driveway widths and curb cut lengths.

Table 11-6: Driveway Width and Curb Cut Length Standards				
	Driveway Dimensions		Length of Curb Cut	
Lot Frontage (feet)	Min.	Max.	Min.	Max.
Single-Family, Two-Family, & Townhouse: By Lot	Width			
50 feet or less	10'	18'	15'	24'
> 50 - 74	10'	20'	15′	26'
Greater than 74	10'	25'	15′	32'
A circular driveway can be no wider than 18'				
Other Development				
Land Use: Uses serving a substantial number of	20'	40′	60'	90'
large trucks (5/day or 25/week)	20	40	UU	70
Land Use: All other	20'	30'	25′	60'

[...]

#### 11.9 BICYCLE PARKING PROVISIONS

**A** Bicycle parking must be provided for all uses where vehicular off-street parking is required and/or provided, with the exception of single-family and two-family dwellings. Bicycle parking must be provided for uses in the amount indicated in Table 11-107: Required Bicycle Parking. In determining the number of bicycle spaces, when the result contains a fraction, any fraction less than one-half is disregarded and any fraction of one-half or more is counted as one space.

Table 11-7: Required Bicycle Parking			
Land Use Category	Total Required Motor Vehicle Parking Spaces (Minimum)	Required Number of Bicycle Parking Spaces	
Non-Residential	Less than 50	4	
Shopping centers and mixed-use	51 - 100	8	
multi-tenant structures are to be	101 - 500	12	
considered as a whole, not as	501 – 1,000	16	
individual tenants; bike racks must be spaced throughout the shopping center	1,001 or more	16 for the first 1,000 + 8 for every 500 thereafter of vehicle parking spaces over 1,000	
Land Use Category	Residential Dwelling Type	Required Number of Bicycle Parking Spaces	
	Single-family or two-family dwellings	0	
Residential	Multi-family or townhouse	0.25 per unit, or none if interior storage space is provided for each unit	

#### 11.10 REQUIRED OFF-STREET LOADING SPACES

#### [...]

Table 11-8: Off-Street Loading Requirements		
Use Type	Number of Spaces Required	
Multi-Family Dwelling		
Total of 50 dwelling units or more	1 loading space	
Commercial & Institutional Use		
20,000 - 100,000sf GFA	1 loading space	
100,001 - 200,000sf GFA	2 loading spaces	
Each additional 50,000sf of floor area (This applies only for each additional full 50,000sf over 200,000sf)	1 additional loading space	
Industrial Use		
10,000 - 40,000sf GFA	1 loading space	
40,001 - 100,000sf GFA	2 loading spaces	
Each additional 50,000sf of floor area (This applies only for each additional full 50,000sf over 100,000sf)	1 additional loading space	

**ARTICLE 12. LANDSCAPE** 

Section 12.1 – Purpose

Section 12.2 - Landscape Plan

Section 12.3 - Selection, Installation, and Maintenance

Section 12.4 – Landscape Design Standards

Section 12.5 - Parking Lot Perimeter Landscape Yard

Section 12.8 - Buffer Yards

#### 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 **non-**invasive species **native to Tennessee** is **encouraged 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.

#### 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 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.

#### 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 21/2 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.
- **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.

[...]

#### 12.3 SELECTION, INSTALLATION AND MAINTENANCE

[...]

#### 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 69kv sub-transmission lines.
  - **b.** Utility poles: Trees should not be planted within ten feet of primary distribution poles and 25 feet within 69kV sub-transmission poles.
  - c. Support wires: Trees should not be planted within five feet of supporting guywires.
  - **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. No landscape should be located within any utility easement, with the exception of lawn grass or other resilient groundcover. 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.

[...]

#### 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 a minimum height of 18 inches in height.

#### **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.

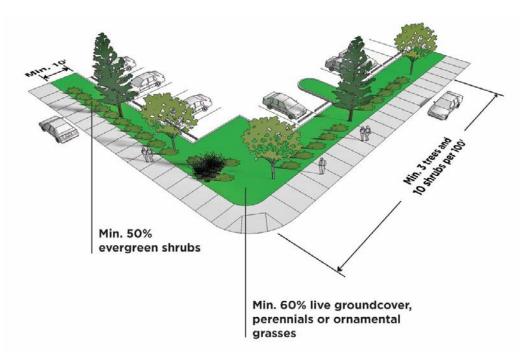
Table 12-1: Plant Diversity Requirements			
Total Number of Plants per Plant Type	Maximum Number of One Species	Minimum Number of Species	
1-4	100%	1	
5-10	60%	2	
12-15	45%	3	
16-75	40%	5	
76-500	25%	8	
<u>501-</u> 1,000	30%	10	
1,000+	15%	15	

#### 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 or improvements of existing parking lots when required by Section 11.1.C 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. When an existing parking area is expanded, only the area of expansion shall be required to comply with these landscaping standards. The landscaped area must be improved as follows:

- A For parking lots of 10,000 square feet or more in area, a perimeter yard must be at least ten feet wide, as measured from the edge of the parking lot to the right-of-way or, if utilities exist, to the utility maintenance zone. The parking lot perimeter landscape yard is established between the parking area and the right-of-way of adjoining streets. 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. For parking lots, including vehicular use areas, of less than 20,000 square feet in area, the width of the perimeter screening area may be reduced to six feet.
- **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



[...]

#### 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.
- 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.
- . 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

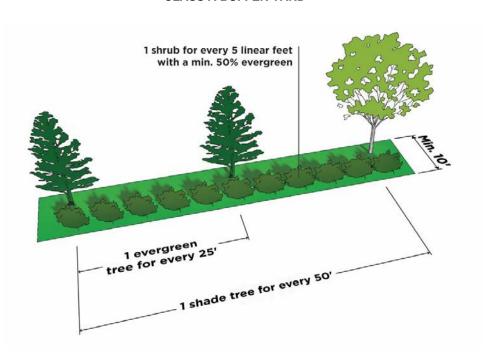
a. Minimum Width: Twenty feet.

#### Attachment B

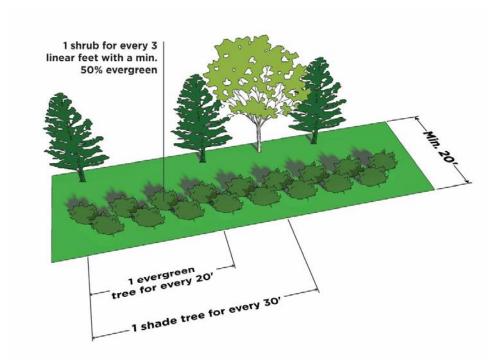
- **b.** Minimum Required Shrubs: One shrub every three feet. A minimum of 50% of the shrubs must be evergreen.
- c. Minimum Required Trees: One evergreen tree for every 20 feet and one shade tree for every 30 feet.
- **d.** Planting locations may be varied, but the total number of trees must be no less 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%.
- **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 the 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 district abuts a residential district	Class B Buffer	
Parking lot of a multi-family dwelling abutting a RN-3, RN-2, RN-1	Class A Buffer	
or EN residential district within a residential district		
Per use standards (Article 9)	As determined in the standards of Article 9	

#### **CLASS A BUFFER YARD**



#### **CLASS B BUFFER YARD**



**ARTICLE 13. SIGNS** 

Section 13.2 – Prohibited Signs

Section 13.3 – Signs Exempt from Sign Regulations

Section 13.8 - Signs Permitted in All Districts

[...]

#### 13.2 PROHIBITED SIGNS

The following signs are prohibited in all zoning districts:

[...]

**F.** Signs within the public right-of-way, except publicly owned signs, such as wayfinding signs and regulatory signs, and those signs approved by the City Engineer Department of Engineering.

[...]

#### 13.3 SIGNS EXEMPT FROM SIGN REGULATIONS

The following signs, unless prohibited elsewhere in these regulations, are exempt from the regulations of this Article, but may be subject to other applicable laws and regulations:

- A. Signs conforming to the "Manual of Uniform Traffic Control Devices" and bearing no commercial message.
- B. Signs required by federal, state, or local statute.
- **C.** Signs installed by the City, Knox County, a state or federal agency, or employees and officials of these entities in the course of their governmental duties and bearing no commercial message.
- **D.** Signs necessary to promote health, safety, and welfare, and other regulatory, statutory, traffic control, or directional signs erected on public property with permission as appropriate from the City, Knox County, State of Tennessee, or the United States of America.
- **E.** Signs required by an order of a court of competent jurisdiction.
- F. Legal notices and official instruments.
- **G.** Signs installed by public utilities in their rights-of-way or on their facilities and bearing no commercial message other than such message as necessary to identify the public utility and the use.
- **H.** Signs installed by a transit company with a franchise or other right to operate in the city, where such signs are installed along its routes and relate to schedules or other information about the transit route.
- I. Signs approved as part of the City's adopted wayfinding program.
- J. Signs carried by a person.
- K. Signs incorporated into machinery or equipment by a manufacturer or distributor.
- L. Signs located within a building or enclosed space that are not visible or legible from the public right-of-way or from private property or public property other than the property on which it is located.
- M. Memorial signs with a maximum sign area of six square feet.

#### Attachment B

- N. Works of art bearing no advertising.
- O. Holiday lights and decorations with no advertising.
- P. Scoreboards and off-premise signs located on athletic fields if oriented toward the field of play.
- **Q.** Restaurant menuboards located on the premises of the restaurant when oriented toward a drive-through lane, with a maximum sign area of 60 square feet and maximum height of tenfeet.
- **R.** Restaurant menu displays located within ten feet of a primary restaurant entrance provided the display area does not exceed four square feet.
- **S.** Official fraternal, religious, or civic flags when mounted on permanent poles attached to the ground or building when located on the same site as the fraternal, religious or civic organization, institution, or building.
- **T.** Official governmental flags, of which the following governmental entities are the only official governmental flags recognized as such by the City:
  - 1. The United States of America
  - 2. Any state, territory, or possession of the United States of America
  - 3. Any official flag adopted as such by the City and the County
  - 4. Any official flag adopted by a member state of the United Nations
- **U.** Decorative flags and bunting for a celebration, convention or commemoration, subject to installation no sooner than 14 days before the event and removal within seven days following the event.
- V. In residential districts, any sign of a type described below which does not exceed two square feet in area:
  - 1. A sign giving a property identification name or number or name(s) of occupant, one sign per dwelling.
  - A mailbox sign (one sign per dwelling unit)
  - **3.** A sign(s) posted on property relating to private parking, trespassing or dangerous animals, which are limited to four signs per lot if the lot is less than one acre in size, and limited to two additional signs per each additional acre for lots larger than one acre in size.
- **W.** Temporary signs for political purposes; provided that each sign cannot exceed 32 square feet in area, cannot be displayed for more than 30 days prior to the start of the earliest voting period for the candidate or issue, and must be removed within five days following the end of the final voting period for the candidate or issue.
- **X.** Temporary merchandise displays and signs behind storefront windows which are not affixed permanently to the class, nor intended for permanent display.
- Y. Temporary or permanent signs identifying traffic-control measures on private property, such as "stop," "yield," and similar signs, the face of which meet the standards of the "Manual for Uniform Traffic Control Devices" and which contain no logo or commercial message of any sort and which do not exceed six square feet in area per sign.
- **Z.** Temporary signs for announcements by public or nonprofit organizations of special events or activities of interest to the general public, provided such signs are less than 32 square feet in area, are limited to one sign per site of such events, are erected no sooner than 14 days before the event, and are removed within three days after the event.
- AA. Temporary signs on vehicles displaying terms of sale.
- BB. Umbrella signs.
- **CC.** Signs contained on or affixed to vendor push carts.
- DD. Window signs.

#### Attachment B

#### 13.8 SIGNS PERMITTED IN ALL DISTRICTS

The following signs are allowable in all districts:

- **A.** One nameplate per building with a maximum sign area of two square feet for any residential building and six square feet for any nonresidential building.
- **B.** One bulletin board or identification sign for public recreation uses, community facilities, hospitals, and clinics with a maximum sign area of 32 square feet and a maximum height of eight feet. These signs may be allowed in addition to the maximum sign area as calculated by the controlling zone district.
- **C.** Directional signs within a parking lot to designate entrances and exits with a maximum sign area of nine square feet and a maximum sign height of 42 inches. One sign may be located at each entrance and exit.
- **D.** One informational sign within a parking lot identifying or designating the conditions of uses of such parking area with a maximum sign area of 12 square feet and a maximum height of eightfeet.