# **Planning Commission**

Staff Report

July 24, 2019



Case No: 19AMEND1003

**Project Name:** Tree Canopy LDC Amendments

Applicant: Louisville Metro
Jurisdiction: Louisville Metro
Council District: All Council Districts

Case Manager: Julia Williams, AICP, Planning Supervisor

## REQUEST(S)

Amend the Land Development Code as it relates to trees and tree canopy

## CASE SUMMARY/BACKGROUND

Louisville Metro Council passed a resolution directing the Planning Commission to review the Land Development Code regulations with regard to the preservation and planting of trees.

The Planning Committee conducted several meetings to discuss this text amendment on January 29, 2019, February 25, 2019, March 11, 2019, April 8, 2019, and May 28, 2019. Prior to the Planning Committee meetings, Planning and Design Services staff held a series of community meetings to gather information and ideas regarding the resolution. The Committee made suggestions in relation to street trees and making the canopy requirements less complicated. Through majority vote the Committee forwarded the text amendment to the Planning Commission for a public hearing.

Highlights of the proposed amendments include:

- 1. Not permitting an application to be filed for a development where tree removal has occurred within two years prior to the application.
- 2. Sites that are 50% to 100% covered in existing tree canopy are required to preserve 20% of that canopy.
- 3. Existing tree canopy preserved receives twice the credit
- 4. Tree canopy provided for suburban form districts only
- 5. Planted trees receive full canopy credit for each tree.
- 6. Reduction in the minimum caliper tree required to be planted to 1 ½" caliper (does not apply to street trees).
- 7. Tree removal permit for non-residential and multi-family sites where a landscape plan was/is required.
- 8. Street trees required for all uses.

#### STAFF FINDING

Staff finds that the proposal meets the guidelines of the Comprehensive Plan as outlined in the attached staff findings.

#### **TECHNICAL REVIEW**

This amendment to the LDC text is consistent with the following policies of Plan 2040: Community Form 3.7 - Encourage natural features to be integrated within the prescribed pattern of development.

Community Form 3.8 - Conserve, restore and protect vital natural resource systems such as mature trees, steep slopes, streams and wetlands. Open spaces should be integrated with other design decisions to shape the pattern of development. Encourage the use of greenways as a way to connect neighborhoods. Encourage use of conservation subdivisions, conservation easements, transfer of development rights and other innovative methods to permanently protect open space.

Community Form 3.9 - Encourage development that respects the natural features of the site through sensitive site design, avoids substantial changes to the topography, and minimizes property damage and environmental degradation resulting from disturbance of natural systems.

Livability 1.2 - To encourage preservation of certain natural features, develop indices to aid in determining value of environmental features and identify appropriate measures to offset impacts of development.

Livability 1.5 - Encourage development that recognizes and incorporates the unique characteristics of identified general landscape types and native plant communities (e.g., upland hardwood forest) throughout Louisville Metro.

Livability 1.7 - Ensure appropriate landscape design standards for different land uses within urbanized, suburban, and rural areas.

Livability 1.41 - Require tree preservation Best Management Practices during land development and construction activities. Increase the Metro-wide tree canopy coverage toward 45% that is equitably distributed either by planting new trees or preserving existing trees.

### INTERESTED PARTY COMMENTS

Please see attached citizen letters.

## **REQUIRED ACTIONS:**

 RECOMMEND that the Louisville Metro Council and other jurisdictions with zoning authority APPROVE or DENY the Amendments to the LDC

#### NOTIFICATION

Date	Purpose of Notice	Recipients
5/29/19	Hearing before Planning Commission on June 20, 2019	1 <sup>st</sup> and 2 <sup>nd</sup> tier adjoining property owners Registered Neighborhood Groups in all Council Districts
5/29/19	Hearing before PC on 6/6/19	Legal Advertisement in the Courier-Journal
6/12/19	Hearing before PC on June 20, 2019	Legal Advertisement in the Courier-Journal

#### **ATTACHMENTS**

- 1. Staff Plan 2040 Findings
- 2. Proposed LDC Text Amendments

## 1. Staff Plan 2040 Findings

Staff makes these LDC text amendment recommendations in consideration of the following:

WHEREAS, the Planning Commission finds that the proposed amendments to the LDC comply with the applicable policies of Plan 2040; and.

**WHEREAS**, the Planning Commission further finds that the proposed LDC text amendments comply with Community Form 3.7 - Encourage natural features to be integrated within the prescribed pattern of development.

**WHEREAS**, the Planning Commission further finds that the proposed LDC text amendments comply with Community Form 3.8 - Conserve, restore and protect vital natural resource systems such as mature trees, steep slopes, streams and wetlands. Open spaces should be integrated with other design decisions to shape the pattern of development. Encourage the use of greenways as a way to connect neighborhoods. Encourage use of conservation subdivisions, conservation easements, transfer of development rights and other innovative methods to permanently protect open space.

**WHEREAS**, the Planning Commission further finds that the proposed LDC text amendments comply with Community Form 3.9 - Encourage development that respects the natural features of the site through sensitive site design, avoids substantial changes to the topography, and minimizes property damage and environmental degradation resulting from disturbance of natural systems.

**WHEREAS**, the Planning Commission further finds that the proposed LDC text amendments comply with Livability 1.2 - To encourage preservation of certain natural features, develop indices to aid in determining value of environmental features and identify appropriate measures to offset impacts of development.

**WHEREAS,** the Planning Commission further finds that the proposed LDC text amendments comply with Livability 1.5 - Encourage development that recognizes and incorporates the unique characteristics of identified general landscape types and native plant communities (e.g., upland hardwood forest) throughout Louisville Metro.

**WHEREAS**, the Planning Commission further finds that the proposed LDC text amendments comply with Livability 1.7 - Ensure appropriate landscape design standards for different land uses within urbanized, suburban, and rural areas.

**WHEREAS**, the Planning Commission further finds that the proposed LDC text amendments comply with Livability 1.41 - Require tree preservation Best Management Practices during land development and construction activities. Increase the Metro-wide tree canopy coverage toward 45% that is equitably distributed either by planting new trees or preserving existing trees.

## 2. Proposed LDC Text Amendments

Added Text Deleted text

			LOUISVILLE METRO LAND DEVELOPMENT CODE
1.2.2	Defir	nitior	าร
*	*	*	*
Clear-o			arvesting, clearing, or removal of 20% or more of the existing trees located on a lot or
Tree C	anop	y -Tł	ne area directly beneath the branches of a tree and within its dripline.
			etection Credit Area (TCPCA) – An area of tree canopy preserved to meet the requirements art 1 Tree Canopy.
to be le	eft und nent p	distur rese	Preservation Protection Areas (TTPAs) – represent those portions of the development site rbed during development of roadways, utilities and similar infrastructure. TTPAs are not ervation areas; clearing, grading and/or removal of trees in TTPAs is allowed at the time of g or home construction.
5.8.3	Stree	etsca	аре
* C. Dov	* vntow	* n Fo	rm District
1.	envir impro the E to the	onmovem Oown Oose s	tipe standards have been established to create an attractive and animated sidewalk ent and to permit safe and efficient pedestrian movement. Planning and installation of ments shall be coordinated to ensure a well-designed and unified streetscape treatment within atown Form District. Streetscape elements provided as part of the development shall conform specified in the master plan along those corridors for which a plan has been adopted. All other pe elements shall conform to the following standards:
	a. S	Street	t Trees
*	i. *	wi fo in:	treet trees shall be selected and placed with the approval of <u>Planning and Design Services</u> ith consultation from the <u>Director of Public Works or designee</u> the <u>Works Department urban</u> restry staff. If the sidewalk width, utility locations or similar conditions make it impractical to stall street trees, the <u>Director of Works or designee</u> may waive the requirement for street tree anting or unobstructed sidewalk width.
Apper	ıdix 5	A G	reen Development Design Criteria
Site Ci	riteria: *	:	*
1	Main	tain '	20% of the site areas as vegetated open space or tree canony credit area (TCCA) using

Maintain 20% of the site areas as vegetated open space or tree canopy credit area (TCCA) using existing trees. A green roof shall count as vegetated open space.

## 7.2.20 Preliminary Plan Approval Process

## A. Formal Application and Submission

- 1. The subdivider shall file an application for preliminary plan approval on a form supplied by the Division, signed by the property owner or his/her agent, and shall submit therewith a preliminary plan prepared in conformance with the requirements of Part 5 hereof.
- 2. No application shall be accepted unless it is complete and accompanied by the appropriate review fee.
- 3. A site shall be ineligible for filing an application for a major subdivision if 20% or more of a site has been clear-cut at any time within twenty-four (24) months prior to application submittal without consultation and approval of the Planning Director or designee. In addition, no such tree removal shall take place in the time between application submittal and final approval. This requirement shall not prohibit tree removal per Chapter 102.02 of the Metro Code of Ordinances, for safety reasons, routine maintenance, for required geotechnical work, utility work, or anything protected by state statute. Existing and on-going tree farms and nurseries are exempt.
- 4. An affidavit by the land owner shall be filed at time of major subdivision application submittal indicating that 20% or less tree removal took place two (2) years prior to development submittal.
- 5. Applications shall be accompanied by supporting material determined appropriate by the Planning Director. The list of required supporting materials shall be available from the offices of the Commission. In addition, technical studies required by other applicable sections of this Land Development Code, including traffic, air quality, and hydro-geologic analyses shall be submitted. Failure to submit all required material may result in delay of the application review. Staff of the Division may require submission of information, material and documents beyond that required Procedures for Major Subdivisions in this section as necessary to determine compliance with these regulations.

## 7.11.4 Applicability

D. Tree Removal Prior to Application. A site shall be ineligible for filing an application for a conservation subdivision if 20% or more of a site has been clear-cut at any time within twenty-four (24) months prior to application submittal without consultation and approval of the Planning Director or designee. In addition, no such tree removal shall take place in the time between pre-application submittal and final approval. This requirement shall not prohibit tree removal per Chapter 102.02 of the Metro Code of Ordinances, for safety reasons (including dead tree removal), routine maintenance (including removal of invasive species), for required geotechnical work, utility work, or anything protected by state statute. Existing and on-going tree farms and nurseries are exempt.

A site shall be ineligible for development as a conservation subdivision if any tree removal has taken place on the site at any time within twenty-four months prior to preapplication submittal without consultation and approval of the Urban Forrester. In addition, no such tree removal shall take place in the time between pre-application submittal and final approval of the conservation subdivision. This requirement shall not prohibit tree removal for safety reasons, routine maintenance, or required geotechnical work.

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9.1.3	Cai	Cuia	aung r	arking Requirements/Anowances
*	*		*	*
F.				rking Reductions (see Table 9.1.1 for applicable reductions by form district/planned districts)
*	*		*	*
	9.	any	venty ( develoof the	20) percent reduction in the minimum number of parking spaces required shall apply to opment that meets two of the design criteria listed under Site Design Criteria in Appendix LDC.
	<u>10.</u>	any pres	develoserved	20) percent reduction in the minimum number of parking spaces required shall apply to opment in the traditional form districts where any existing healthy, non-invasive tree is . A twenty (20) percent reduction in the minimum number of parking spaces required shall my development in suburban form districts that exceeds the minimum tree canopy by (5) percent.
*	*		*	*
10.1.3	Ме	tho	ds of (	Compliance
A.	The	e tre	e cano	ppy requirements of this Part may be satisfied in the following order of preference:
*	*		*	*
	3.	plai	nting o	opment site cannot meet the tree canopy requirements through preservation or the f new trees, then the applicant may come into compliance by planting new trees on an e site under the following requirements:
*	*		*	*
		C.		lanning Director or designee may determine an alternative site for the planting of an alent number/amount of trees that meets any one of the following criteria:
*	*		*	*
				If one of the above methods of compliance cannot be met for the development site then the applicant may pay a fee in lieu in an amount as determined by the Planning Director or designee and Urban Forestry Coordinator (or comparable position), to a designated tree account per 1 3/4" caliper tree required to meet a sites tree canopy requirement. These tree funds will be administered and tracked by the Urban Forestry Coordinator for the planting and maintenance of trees pursuant to the City's most recent tree canopy study or at sites determined by the Planning Director or designee and the Urban Forestry Coordinator.

#### 10.1.4 Tree Canopy Standards

A. The tree canopy on a development site shall meet the applicable standards according to the site's form district, and proposed land use and the amount of tree preservation, as set forth in Tables 10.1.1 and 10.1.2, below. (Percentages refer to the relation of tree canopy to gross site area in square feet.) Section 10.1.2, paragraph C (10.1.2, C) allows residential subdivisions and multi-lot commercial developments to group trees in clusters throughout the development rather than meeting the canopy requirements on a lot-by-lot basis. In addition to the standards referenced above, development sites that have 50 percent to 100 percent existing tree canopy coverage shall be required to preserve 20 percent of that existing tree canopy coverage.

The 20% preservation requirement does not apply to General Development Plans and Preliminary Subdivision Plans approved prior to the date of adoption of this regulation

A reduction in the required preserved tree canopy to 15% or 10% (Percentage needs to be determined by the Planning Commission) is permitted if approved by the Planning Director or designee under the following conditions:

- 1. The applicant may pay a fee in lieu in an amount as determined by the Planning Director or designee, to a designated tree account for the amount at a ratio of 1.5 trees per lost tree equivalency.
- 2. The applicant submits a justification statement outlining why the site cannot meet the 20% requirement.

	Table	10.1.1 Tree C	anopy	
	Form			
Land Use	Downtow n, Traditiona I Marketpla ce Corridor,	Traditional Neighborhoo d	Regional Center, Suburban Marketplace Corridor, Neighborhoo d, Suburban	Village
Single- Family Residentia	Class A	Class B	Class C*	Class D
Multi- Family and	Class A	Class B	Class C	Class D
Institutional	Class A	Class B	Class C	Class D
Commercial	Class A	Class A	Class C	Class C
Industrial	Class A	Class A	Class C	Class C
* Docket	No. 9-26-03; s	ee website for a	<del>doption status ou</del>	<del>tside</del>

fable 10.1.1 Tree Canopy		
Land Use	Suburban Form Districts	
Single- Family Residential	40%	
Multi-Family and Office	<u>35%</u>	
Institutional	<u>35%</u>	
Commercial	<u>35%</u>	
Industrial *	<u>30%</u>	

\*Industrial land uses are eligible for a 5% reduction in required tree canopy when a heat island green technology is used on the site (green roofs or cool roofs on all new buildings, cool pavement for all vehicle use areas, or other heat island reducing technology as approved by the Planning Director or designee)

Class Canopy Requirement per Table 10.1.1	Preserved Tree Canopy Coverage Area	New Tree Canopy Coverage Area	Total Tree Canopy Coverage Area
	5%	0%	5%
	4%	2%	6%
2.00	3%	4%	7%
Class A	2%	6%	8%
	1%	8%	9%
	0%	10%	10%
	10%	0%`	<del>10%</del>
	8%	3%	11%
	6%	6%	12%
Class B	4%	9%	<del>13%</del>
	2%	12%	14%
	0%	<del>15%</del>	<del>15%</del>
Class	<del>15%</del>	0%	<del>15%</del>
C If site is	<del>12%</del>	6%	<del>18%</del>
<del>76%-</del>	9%	12%	<del>21%</del>
100% covered	<del>6%</del>	18%	24%
in existing tree	3%	24%	<del>27%</del>
canopy	0%	30%	30%
Class C	<del>15%</del>	0%	<del>15%</del>
	<del>12%</del>	<del>5%</del>	<del>17%</del>
If site is 41%-	9%	<del>10%</del>	<del>19%</del>
75% covered in	<del>6%</del>	<del>15%</del>	21%
existing tree	3%	<del>20%</del>	<del>23%</del>
canopy	0%	<del>25%</del>	<del>25%</del>
Class C	<del>15%</del>	0%	<del>15%</del>
If site is 0%-40%	<del>12%</del>	4%	<del>16%</del>
ACCORDING TO THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER,	9%	8%	<del>17%</del>
covered in	<del>6%</del>	<del>12%</del>	<del>18%</del>
existing tree	3%	<del>16%</del>	<del>19%</del>
<u>canopy</u>	0%	<del>20%</del>	<del>20%</del>
	<del>20%</del>	0%	<del>20%</del>
	<del>15%</del>	<del>6%</del>	21%
Class D	<del>10%</del>	<del>12%</del>	<del>22%</del>
	5%	<del>18%</del>	<del>23%</del>
	0%	24%	24%

- B. Tree Canopy Credit Areas (TCCA) and Woodland Preserved Areas (Wr A) can be used to satisfy tree canopy requirements while Temporary Tree Protection Areas (TTPA) may not be used to satisfy tree canopy requirements. Developments shall be entitled to a reduction in the tree canopy requirement prescribed in Tables 10.1.1 and 10.1.2 as follows:
  - 1. Any residential subdivision receiving at least 3.5 points for the provision of diversity housing in accordance with Chapter 4 Part 5 (Alternative Development Incentives) of the Land Development Code shall receive a 33% reduction.
  - 2. Any development located in the Downtown, Traditional Marketplace Corridor, Traditional Workplace and Traditional Neighborhood Form Districts shall receive reductions as follows:
    - a. Tree Canopy Reduction for Nonresidential Development:

Development Floor Area Ratio (FAR) Total Tree Canopy Reduction

FAR 0.29 or Less No Reduction FAR 0.30 to 0.49 33% Reduction

FAR 0.50 and Greater 66% Reduction

FAR 1.0 and Greater in Downtown Form District 100% Reduction

only

NOTE: All reductions shall be based on the total square feet of tree canopy needed on a site to meet the requirements of Tables 10.1.1 and 10.1.2. Total Tree Canopy

b. Tree Canopy Reduction for Multi-Family Residential Development

Development Density (Dwelling Units per Acre) Total Tree Canopy Reduction

12.00 Du/Acre or Less No Reduction
12.01 to 16.00 Du/Acre 33% Reduction

16.01 Du/Acre and Greater 66% Reduction

22.01 Du/Acre and Greater in Downtown Form District 100% Reduction Only

**NOTE:** These reductions in the tree canopy requirements have been created in an effort to support a more compact and efficient urban form and to support infill development opportunities

c. Tree Canopy Reductions for Single Family Residential Developments:

Development Density (Dwelling Units per Acre) Total Tree Canopy Reduction

4.4 Du/Acre or Less A.41 to 5.5 Du/Acre 33% Reduction 5.51 Du/Acre and Greater 66% Reduction

F. When trees are planted off-site or on private property to meet the requirements of this Part, the applicant shall provide the Planning Director with documentation that sufficient measures have been taken to ensure the preservation and, when necessary, the replacement of said trees. Examples of such measures would include, but not be limited to, including preservation and replacement provisions in a subdivision's deed of restrictions or within a development's binding elements or by placing all of the required trees within a conservation easement or a Woodland Protection Preserved Area (WPA).

#### 10.1.5 Calculation

- A. Any development site greater than two acres in size shall be permitted to determine the area of existing tree canopy coverage to be preserved by ground checking, aerial analysis, or any other method determined to be accurate by DPDS staff. If ground checking is utilized, credit for existing trees intended to be retained may be calculated in either of two ways:
  - 1. Measurement of the trunk of each individual tree (i.e. a tree not grouped with other trees or a part of a tree stand) to determine its caliper and the credit given for that tree shall be in accordance with Table 10.1.3, below; or
  - 2. The dripline may be plotted on the site plan and given two (2) times the tree canopy credit given for the square footage of the site within the dripline.
- D. Street trees planted in accordance with Section 10.2.8 shall qualify for a 25% bonus in the amount of credit listed in Table 10.1.3. This credit shall apply to street trees that are mandated as well as those planted on a voluntary basis.
- E. D. All approved WPAs shall qualify for a 10% bonus in the amount of credit listed in Table 10.1.3. as indicated above in 10.1.5.A and B.

**NOTE:** Street tree bonus: for example a development that provides three Type A trees two inches in caliper shall receive credit for 2 250 sq ft of tree canopy.

F. E. In calculating the required number of trees, fractions less than .5 shall be dropped and greater than or equal to .5 shall be rounded up. Table 10.1.3 Deciduous Tree Canopy Credit

**NOTE:** "Caliper" The diameter of a tree trunk, measured 6 inches above the ground for newly installed trees and at 4 feet 6 inches above the ground (breast height) for existing trees.

Table 10.1.3 Deciduous Tree Canopy Credit				
Tree Type**	Amount of Credit (per tree)			
Type A Type B Type C	1,200 sq. ft. (100% mature canopy 720 sq. ft. (100% mature canopy 177 sq. ft. (100% mature canopy			
Type A Type B Type C	960 sq. ft. (80% mature canopy 576 sq. ft. (80% mature canopy 142 sq. ft. (80% mature canopy			
Type A Type B Type C	720 sq. ft. (60% mature canopy 432 sq. ft. (60% mature canopy 106 sq. ft. (60% mature canopy size)			
Type A Type B Type C	600 sq. ft. (50% mature canopy 360 sq. ft. (50% mature canopy 89 sq. ft. (50% mature canopy			
	Tree Type** Type A Type B Type C Type B Type B Type B Type B			

for species that fall within each category.

\*\* Trees are categorized as A, B and C-Large, Medium and Small; refer to Appendix 10A

NOTE: Table 10.1.3 gives creuit for 50% of the mature canopy size when a 1 3/4" – 3" caliper tree is planted.

NOTE: Upon approval by the Planning Director, or designee, other reputable tree information sources, such as the Manual of Wood Landscape by Michael Dirr, may be used in lieu of or in addition to Table 10.1.3.

NOTE: For particularly mature trees, ground checking may yield larger credits than those based on this table.

NOTE: Canopy credit for evergreen trees to be determined by the Planning Director, or designee, in working with the applicant, using a reputable tree information such as the Manual of Woody Landscape Plants by Michael Dirr or other similar publication.

Table 10.1.3 Deciduous Tree Canopy Credit				
Caliper	Tree Type**	Amount of Credit (per tree)		
1 ½ " to less than 6" caliper	Type A	1,200 sq. ft.		
6" to less than 12"	Type A	1,500 sq. ft.		
12" to less than 24"	Type A	1,800 sq. ft.		
24" and over	Type A	2,100 sq. ft.		
1 ½ " to less than 6" caliper	Type B	720 sq. ft.		
1 ½ " to less than 6" caliper	Type C	240 sq. ft.		

<sup>\*</sup> See Chapter 10, Part 4 for criteria to plant trees less than 1 ¾ inch caliper.

NOTE: Upon approval by the Planning Director, or designee, other reputable tree information sources, such as the Manual of Wood Landscape by Michael Dirr, may be used in lieu of or in addition to Table 10.1.3.

NOTE: Canopy credit for evergreen trees to be determined by the Planning Director, or designee, in working with the applicant, using a reputable tree information such as the Manual of Woody Landscape Plants by Michael Dirr or other similar publication.

## 10.1.6Tree Preservation Plan Requirement

A. All Temporary Tree Protection, Tree Canopy Credit, and Woodland Preserved areas shall be identified, protected, and/or preserved in accordance with Chapter 10 Part 4 and the Tree Preservation Politices

Policies of Louisville Metro Planning and Design Services (Appendix 10D). All applicants for development proposals which seek credit for existing tree canopy to attain the minimum canopy coverage specified in this Part shall submit a Tree protection preservation plan.

#### NOTE:

Example of an area inventory:

4-9' ht Cedar @ 576 sf of credit each =2,304 sf

3-4" caliper Hackberry @ 960 sf of credit each =2,880 sf

3-24" caliper Maple @1,200 sf of credit each =3,600 sf

5-10" caliper Hackberry/Maple @ 1,200 sf of credit each =6,000 sf

1-8" caliper Oak @ 960 sf of credit each = 960 sf

<sup>\*\*</sup> Trees are categorized as A, B and C—Large, Medium and Small; refer to Appendix 10A for species that fall within each category.

Total square footage =15,744 sf
TCPA on plan is 2.68 acres or 116,957 sf
116,957 sf - 2,500 sf (sample area) = 114,457 sf
114,457 sf + 15,744 sf (total sample area credit) =130,201 sf
Total preserved tree canopy =130,201 sf
The tree canopy calculations could appear as follows: Gross site area: 1,085,008 sf
Total tree canopy preserved: 130,201 sf (12% of total site)
Total tree canopy required: 173,601 sf (16% of total site on a site that has 0-40% existing canopy coverage)
Total required new canopy: 43,400 sf (4% of total site)
Total canopy provided: 174,121 sf (16%)
If preserved trees are removed from the TCPA, the total number of trees to be replaced would be 58 minimum 3" caliper trees.

Tree Canopy Calculation Example

Total site area: 251,785 SF

Existing tree canopy area: 24,477 (10%)
Total tree canopy required: 88,125 (35%)
Existing tree canopy to be preserved: (0%)

Proposed tree canopy to be planted: 88,800 (35%)

- B. Standards for Tree Canopy Credit Areas
- 3. No clearing, grading, construction or other land disturbing activity shall take place within the TCCA/WPA beyond pruning to improve the general health of the tree or to remove dead or declining trees that may pose a public health and safety threat. As trees are lost through natural causes, new trees shall be planted in order to maintain minimum tree canopy as specified in this part. Underbriush and invasives are is permitted to be removed in the TCCA.

\* \* \*

6. Modification of Woodland Preserved Areas shown on approved development plans shall require the approval of the Planning Commission or <u>authorized committee</u> <u>designee</u> after the notification requirements as listed for detailed district development plans in Section 11.4.7.F.1 have been fulfilled.

\* \* \* \*

10.1.7 Landscape/Buffer Credit

\* \* \* \*

#### 10.1.8 Tree Removal Permit

A tree removal permit is required for the removal of existing trees on non-residential and multi-family development sites where landscaping and tree canopy were/are required. (see Appendix 10E)

10.1.89 Waivers

D. Required Findings; in granting a waiver from 10.1.4 (20% Tree Preservation Requirement), The Planning Commission or designee must find that:

1. The waiver is in compliance with the Comprehensive Plan.

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- 2. The applicant made a good faith effort to preserve as many trees as possible on the site, and within the adjacent right of way; and
- 3. There are other mitigating circumstances affecting this site which do not generally apply to sites developed for the same use and in the same form district.

## 10.2.4 Property Perimeter Landscape Buffer Areas

- B. Explanatory Text and Exceptions
  - 1. Sites with a Conditional Use Permit that are located in a residential zoning district shall be considered the same as a C-1 Commercial use for the purposes of application of Chapter 10, sites located in nonresidential districts will follow the landscaping requirements for the zoning district that they are in, unless the Board of Zoning Adjustment deems a different classification is appropriate. <u>Exception:</u> <u>Private schools and churches shall follow paragraph 5 above.</u>

### 10.2.8 Street Trees

A. Mandatory: Street trees are required for all land uses along all public rights of way (excluding alleys)Street trees are required for residentially zoned property along collector and arterial level roadways. Street trees shall be provided in the public right-of-way, with permission of the agency having jurisdiction over the right-of-way. Street trees are required along all streets and for all uses within the Downtown Form District. Street trees shall be selected and placed with the approval of Planning and Design Services with consultation from the Director of Public Works or designee. If the sidewalk width, utility locations or similar conditions make it impractical to install street trees, the Director of Works or designee may waive the requirement for street tree planting or unobstructed sidewalk width. If the Public Works Department or Kentucky Transportation Cabinet refuses to allow plantings in the right-of way, street trees shall be provided adjacent to the right-of-way, in a minimum 6 foot wide planting area (Suburban Forms only). All street trees shall conform to the minimum requirements of the Streetscape Master Plan Manual. If a streetscape master plan has been approved for a specific street, all street trees shall be planted in accordance with the approved master plan. Street trees shall be planted at a 1 3/4" minimum caliper. Street trees, for all uses except commercial, shall be regularly spaced and planted at a ratio of no less than 1 Large (Type A) tree per 50 30 lineal feet of right- of-way, or 1 Medium (Type B) tree per 40 20 lineal feet, or 1 Small (Type C) tree per 30 15 lineal feet. Street trees for commercial uses shall be planted at a ratio of no less than 1 large (Type A) tree per 30 lineal feet of right of way, or 1 medium (Type B) tree per 25 lineal feet, or 1 small (Type C) tree per 20 lineal feet. Small trees are permitted only where utility lines or other site constraints will not allow installation of Large or Medium trees. (EXCEPTION: Refer to Chapter 3 for Floyds Fork Overlay information). In the event that an MSD approved Green Management Practice (GMP) is being proposed within the right of way or along the edge of the property, the street tree{s} shall be chosen from Chapter 13: Native Revegetation from the MSD Design Manual (a link to document found in Appendix 10A).

NOTE: See Appendix 10A for listing of Type A, B and C trees.

- B. Voluntary: Street trees may be provided adjacent to non-residentially zoned property, as well as residential sites abutting local streets or private access easements providing the principal means of access.
- C. Tree Canopy Bonus: Street tree plantings shall qualify for a 25% bonus in calculating compliance with tree canopy requirements refer to 10.1.5.D.
- DB. Please refer to Chapter 10, Part 6, for Streetscape Master Plans.

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#### 10.2.12 Vehicular Use Area Interior Landscape Areas

Landscape areas shall be provided within all Vehicular Use Areas to break up large impervious areas and allow for a greater distribution of tree canopy coverage and to provide the opportunity: to capture parking lot stormwater runoff, thus increasing water quality: and retaining greater amounts of storm water on site through infiltration. Dimensional requirements have been established to insure that interior landscape areas serve the intended goals and provide enough ground area to support required plant material. Interior landscape areas shall not be required for enclosed VUAs that are secured from access by a fence, wall or similar barrier at least 3.5 feet in height and used for storage, loading docks or their associated maneuvering areas, or for loading, unloading, and storage areas in an industrial zone. PD (industrial uses), C-M, M-1, M-2, M-3, PEC & EZ-1 or in loading dock & truck maneuvering areas in Commercial and Office zones. These VUA areas shall still count toward the overall ILA requirement for the development site.

### 10.4.3 Plant Sizes

Size criteria for deciduous tree species shall be determined based on its Size Type as described in Chapter 1 Part 2 (Definitions) of the Land Development Code. Installation criteria for each Size Type is as follows:

Small Tree (under 25 feet in height at maturity)	6 feet high
Medium Tree (25 feet-50 feet in height at maturity)	1 ¾ ½ inch caliper*
Large Tree (over 50 feet in height at maturity)	1 ¾ ½ inch caliper*
* Medium and large street trees are required to be particular.	planted at 1 ¾ inch

## 10.4.4 Spacing

No newly planted trees may be planted closer together than 10 15 feet for small trees, 25 20 feet for medium trees, and 30 feet for large trees, unless specifically approved by the Planning Director or designee. When planting new trees near existing mature trees, leave a minimum distance of half of the new trees mature spread between the new tree and the existing trees. The Planning Director or designee can authorize a closer spacing of trees in special circumstances. When GMP planting areas are used with perimeter buffer area, the screening intent of this part should still be met.

Table 10.4.12	
TREE SPACING AGAINST BUILDIN	<del>GS</del>
Tree Height	Minimum Spacing from Building Edge
Up to 25 feet (small tree)	10 feet
25 feet-50 feet (medium tree)	15 feet
50 feet + (large tree)	<del>15 feet</del>
	ess than 3 feet in width. Only small trees shall be
planted in spaces less than 4 feet in	width.

## 10.4.12 Implementation

- A. For development sites that require a landscape architect seal in accordance with Chapter 10 (10.2.15) of the LDC the following requirements shall apply:
- 1. Prior to receiving a certificate of occupancy, a landscape architect shall inspect and certify that all required landscaping shown on the approved landscape plan has been installed.
- 2. EXCEPTION: A temporary certificate of occupancy may be received for periods outside of the planting season. The temporary certificate of occupancy shall be for a period no greater than six months. Before expiration of the temporary certificate of occupancy the required landscaping shown on the approved landscape plan shall be installed and shall be inspected and certified by a landscape architect.
- B. For Major Subdivisions the LDC the following requirements shall apply:
- 1. Prior to bond release, a landscape architect shall inspect and certify that all required landscaping shown on the approved landscape plan has been installed.
- 2. Parkway, scenic corridor, and Gene Snyder Expressway plantings shall be inspected and certified within 6 months from the issuance of the site disturbance/clearing and grading permit.
- C. On sites two (2) acres or less in size, all new trees proposed to meet the requirements of Chapter 10, parts 1, 2, 3 and 6 shall be planted within six months of the completion of the development or next planting season per PDS staff. The following further clarifies "completion of the development":
  - A. 1. Subdivisions
  - 4. <u>a.</u> Perimeter Landscaping Landscaping shall be installed prior to recording of the record plat of the particular subdivision section.
  - 2. b. Street Trees The time line of installation shall be established by condition of approval for the subdivision at time of preliminary plan approval.
  - B. 2. All Development Plans
  - 4. <u>a.</u> Installation of landscaping shall be established and a note placed on the approved landscape plan indicating installation time line.

### 11.4.4 Application

- A. A "Demonstration of Appropriateness" document which addresses as applicable:
  - 3. The anticipated time period in which implementation of the proposed uses will be initiated provided the amendment is approved.
- B. A site shall be ineligible for filing an application for a rezone if 20% or more of a site has been clear-cut at any time within twenty-four (24) months prior to pre-application submittal without consultation and approval of the Planning Director or designee. In addition, no such tree removal shall take place in the time between pre-application submittal and final approval. This requirement shall not prohibit tree removal per Chapter 102.02 of the Metro Code of Ordinances, for safety reasons, (including dead tree removal), routine maintenance (including removal of invasive species), for required geotechnical work, utility work, or anything protected by state statute. Existing and on-going tree farms and nurseries are exempt.

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- C. An affidavit by the land owner shall be filed at time of rezone pre-application submittal indicating that 20% or less tree removal took place two (2) years prior to development submittal.
- BD. A development plan of sufficient detail to demonstrate to the Planning Commission the character and objectives of the proposed development and the potential impacts of the development on the community and its environs. In instances where a general development plan is submitted, the Planning Commission may require submission of a detailed development plan prior to issuance of site disturbance and building permits. In certain instances, a preliminary subdivision plan will satisfy the requirements for a general or detailed development plan. These circumstances are identified in Part 2 of this Chapter. In addition, staff shall endeavor to assure that notice is given to all neighborhood groups who have registered to receive notice of development applications.
- CE. Technical studies or reports required by this Land Development Code including but not limited to air quality, traffic, historic and cultural resource, geologic, hydrologic, and hydro-geologic.
- DF. Upon receipt of a complete application, as determined by the Planning Director, staff of Planning and Design Services shall cause notice of the application to be given. Not less than ten (10) calendar days prior to initial consideration of an application by either the Commission or a Committee thereof, notice of the application shall be given to first and second tier adjoining property owners. In addition, staff shall endeavor to assure that notice is given to all neighborhood groups who have registered to receive notice of development applications.

## 11.5A.4 Application

- A. Applications for Conditional Use Permit shall be submitted on forms supplied by the department. Applications shall be signed by the property owner or his/her agent and filed with Planning and Design Services in accordance with these regulations and the Board of Zoning Adjustment By-Laws and Rules of Procedure. Applications shall be accompanied by supporting material determined appropriate by the Planning Director and by the appropriate fee. The list of required supporting materials shall be available from the offices of Planning and Design Services. Failure to submit all required material may result in delay of the application review. At a minimum, the following materials shall be submitted with all applications for Conditional Use Permit:
  - 2. A site shall be ineligible for filing an application for a conditional use permit if 20% or more of a site has been clear-cut at any time within twenty-four (24) months prior to preapplication submittal without consultation and approval of the Planning Director or designee. In addition, no such tree removal shall take place in the time between preapplication submittal and final approval. This requirement shall not prohibit tree removal per Chapter 102.02 of the Metro Code of Ordinances, for safety reasons (including dead tree removal), routine maintenance (including removal of invasive species), for required geotechnical work, utility work, or anything protected by state statute. Existing and ongoing tree farms and nurseries are exempt.
  - 3. An affidavit by the land owner shall be filed at time of conditional use permit preapplication submittal indicating that 20% or less tree removal took place two (2) years prior to development submittal.

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- 24. A development plan of sufficient detail to demonstrate to the Board the character and objectives of the proposed development and the potential impacts of the development on the community and its environs.
- 35. Not all Waivers, Variances and Conditional Use Permits require engineered surveys. However, where dimensional information is determined to be essential for consideration of such waivers, variances or Conditional Use Permits by staff, the applicant shall provide a survey prepared by a licensed Land Surveyor in the Commonwealth of KY. Only those property boundaries that are contiguous with the dimension(s) in question need to be provided. The cost of the required survey shall be borne by the applicant. In cases where staff determines a survey is not required the applicant shall not be responsible for the cost of any survey submitted by any party.

## **Planning Commission**

Staff Report June 20, 2019



Case No:

19AMEND1003

Project Name:

Tree Canopy LDC Amendments Louisville Metro

Applicant:
Jurisdiction:
Council District:

Louisville Metro All Council Districts

Case Manager:

Julia Williams, AICP, Planning Supervisor

## REQUEST(S)

Amend the Land Development Code as it relates to trees and tree canopy

#### CASE SUMMARY/BACKGROUND

Louisville Metro Council passed a resolution directing the Planning Commission to review the Land Development Code regulations with regard to the preservation and planting of trees.

The Planning Committee conducted several meetings to discuss this text amendment on January 29, 2019, February 25, 2019, March 11, 2019, April 8, 2019, and May 28, 2019. Prior to the Planning Committee meetings, Planning and Design Services staff held a series of community meetings to gather information and ideas regarding the resolution. The Committee made suggestions in relation to street trees and making the canopy requirements less complicated. Through majority vote the Committee forwarded the text amendment to the Planning Commission for a public hearing.

Highlights of the proposed amendments include:

- 1. Not permitting an application to be filed for a development where tree removal has occurred within two years prior to the application.
- 2. Sites that are 50% to 100% covered in existing tree canopy are required to preserve 20% of that canopy.
- 3. Tree canopy provided for suburban form districts only
- 4. Planted trees receive full canopy credit for each tree.
- 5. Reduction in the minimum caliper tree required to be planted to 1 ½" caliper (does not apply to street trees).
- 6. Tree removal permit for non-residential and multi-family sites where a landscape plan was/is required.
- 7. Street trees required for all uses.

#### STAFF FINDING

Staff finds that the proposal meets the guidelines of the Comprehensive Plan as outlined in the attached staff findings.

#### **TECHNICAL REVIEW**

This amendment to the LDC text is consistent with the following policies of Plan 2040:

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Community Form 3.7 - Encourage natural features to be integrated within the prescribed pattern of development.

Community Form 3.8 - Conserve, restore and protect vital natural resource systems such as mature trees, steep slopes, streams and wetlands. Open spaces should be integrated with other design decisions to shape the pattern of development. Encourage the use of greenways as a way to connect neighborhoods. Encourage use of conservation subdivisions, conservation easements, transfer of development rights and other innovative methods to permanently protect open space.

Community Form 3.9 - Encourage development that respects the natural features of the site through sensitive site design, avoids substantial changes to the topography, and minimizes property damage and environmental degradation resulting from disturbance of natural systems.

Livability 1.2 - To encourage preservation of certain natural features, develop indices to aid in determining value of environmental features and identify appropriate measures to offset impacts of development.

Livability 1.5 - Encourage development that recognizes and incorporates the unique characteristics of identified general landscape types and native plant communities (e.g., upland hardwood forest) throughout Louisville Metro.

Livability 1.7 - Ensure appropriate landscape design standards for different land uses within urbanized, suburban, and rural areas.

Livability 1.41 - Require tree preservation Best Management Practices during land development and construction activities. Increase the Metro-wide tree canopy coverage toward 45% that is equitably distributed either by planting new trees or preserving existing trees.

#### **INTERESTED PARTY COMMENTS**

Please see attached citizen letters.

#### **REQUIRED ACTIONS:**

 RECOMMEND that the Louisville Metro Council and other jurisdictions with zoning authority APPROVE or DENY the Amendments to the LDC

#### NOTIFICATION

Date	Purpose of Notice	Recipients
5/29/19	Hearing before Planning Commission on June 20, 2019	1 <sup>st</sup> and 2 <sup>nd</sup> tier adjoining property owners Registered Neighborhood Groups in all Council Districts
5/29/19	Hearing before PC on 6/6/19	Legal Advertisement in the Courier-Journal
6/12/19	Hearing before PC on June 20, 2019	Legal Advertisement in the Courier-Journal

#### **ATTACHMENTS**

- 1. Staff Plan 2040 Findings
- 2. Proposed LDC Text Amendments

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## 1. Staff Plan 2040 Findings

Staff makes these LDC text amendment recommendations in consideration of the following:

**WHEREAS**, the Planning Commission finds that the proposed amendments to the LDC comply with the applicable policies of Plan 2040; and.

**WHEREAS**, the Planning Commission further finds that the proposed LDC text amendments comply with Community Form 3.7 - Encourage natural features to be integrated within the prescribed pattern of development.

WHEREAS, the Planning Commission further finds that the proposed LDC text amendments comply with Community Form 3.8 - Conserve, restore and protect vital natural resource systems such as mature trees, steep slopes, streams and wetlands. Open spaces should be integrated with other design decisions to shape the pattern of development. Encourage the use of greenways as a way to connect neighborhoods. Encourage use of conservation subdivisions, conservation easements, transfer of development rights and other innovative methods to permanently protect open space.

**WHEREAS**, the Planning Commission further finds that the proposed LDC text amendments comply with Community Form 3.9 - Encourage development that respects the natural features of the site through sensitive site design, avoids substantial changes to the topography, and minimizes property damage and environmental degradation resulting from disturbance of natural systems.

**WHEREAS**, the Planning Commission further finds that the proposed LDC text amendments comply with Livability 1.2 - To encourage preservation of certain natural features, develop indices to aid in determining value of environmental features and identify appropriate measures to offset impacts of development.

**WHEREAS**, the Planning Commission further finds that the proposed LDC text amendments comply with Livability 1.5 - Encourage development that recognizes and incorporates the unique characteristics of identified general landscape types and native plant communities (e.g., upland hardwood forest) throughout Louisville Metro.

**WHEREAS**, the Planning Commission further finds that the proposed LDC text amendments comply with Livability 1.7 - Ensure appropriate landscape design standards for different land uses within urbanized, suburban, and rural areas.

**WHEREAS**, the Planning Commission further finds that the proposed LDC text amendments comply with Livability 1.41 - Require tree preservation Best Management Practices during land development and construction activities. Increase the Metro-wide tree canopy coverage toward 45% that is equitably distributed either by planting new trees or preserving existing trees.

## 2. Proposed LDC Text Amendments

Added Text Deleted text

## LOUISVILLE METRO LAND DEVELOPMENT CODE

1.2.2	Defini	tions		
*	*	*	*	
Tree C	Canopy	-The a	rea directly beneath the branches of a tree and within its dripline.	
			Credit Area (TCPCA) – An area of tree canopy preserved to meet Chapter 10, Part 1 Tree Canopy.	
develo infrast	pment ructure.	site to I TPAs	eservation Protection Areas (TTPAs) – represent those portions of the be left undisturbed during development of roadways, utilities and similar are not permanent preservation areas; clearing, grading and/or removal of wed at the time of individual building or home construction.	
5.8.3	Street	scape		
* C. Dov	* wntown	* Form [	* District	
1.	1. Streetscape standards have been established to create an attractive and animated sidewalk environment and to permit safe and efficient pedestrian movement. Planning and installation of improvements shall be coordinated to ensure a well-designed and unified streetscape treatment within the Downtown Form District. Streetscape elements provided as part of the development shall conform to those specified in the master plan along those corridors for which a plan has been adopted. All other streetscape elements shall conform to the following standards:			
	a. Sti	reet Tre	ees	
*	i. *	Desig the W or sim Works	t trees shall be selected and placed with the approval of Planning and n Services with consultation from the Director of Public Works or designee orks Department urban forestry staff. If the sidewalk width, utility locations nilar conditions make it impractical to install street trees, the Director of sor designee may waive the requirement for street tree planting or structed sidewalk width.	
Apper	ndix 5A	Green	n Development Design Criteria	
Site C	riteria:	*	*	

4. (T	CCA	Maintain 20% of the site areas as vegetated open space or tree canopy credit area using existing trees. A green roof shall count as vegetated open space.
*		* * *
7.2	.20	Preliminary Plan Approval Process
*		* * *
A.	For	rmal Application and Submission
	1.	The subdivider shall file an application for preliminary plan approval on a form supplied by the Division, signed by the property owner or his/her agent, and shall submit therewith a preliminary plan prepared in conformance with the requirements of Part 5 hereof.
	2.	No application shall be accepted unless it is complete and accompanied by the appropriate review fee.
	3.	A site shall be ineligible for filing an application for a major subdivision if any tree removal has taken place on the site at any time within twenty-four (24) months prior to application submittal without consultation and approval of the Planning Director or designee. In addition, no such tree removal shall take place in the time between application submittal and final approval. This requirement shall not prohibit tree removal per Chapter 102.02 of the Metro Code of Ordinances or for required geotechnical work.
	4.	An affidavit by the land owner shall be filed at time of major subdivision application submittal indicating no tree removal took place two (2) years prior to development submittal.
	5.	Applications shall be accompanied by supporting material determined appropriate by the Planning Director. The list of required supporting materials shall be available from the offices of the Commission. In addition, technical studies required by other applicable sections of this Land Development Code, including traffic, air quality, and hydro-geologic analyses shall be submitted. Failure to submit all required material may result in delay of the application review. Staff of the Division may require submission of information, material and documents beyond that required Procedures for Major Subdivisions in this section as necessary to determine compliance with these regulations.
*		* * *
9.	1.3	Calculating Parking Requirements/Allowances
*		* * *
F.		Off-street Parking Reductions (see Table 9.1.1 for applicable reductions by form district/planned development districts)
*		* * *

- 9. A twenty (20) percent reduction in the minimum number of parking spaces required shall apply to any development that meets two of the design criteria listed under Site Design Criteria in Appendix 5A of the LDC.
- 10. A twenty (20) percent reduction in the minimum number of parking spaces required shall apply to any development that exceeds the minimum tree canopy required by (5) percent.

#### 10.1.3 Methods of Compliance

- A. The tree canopy requirements of this Part may be satisfied in the following order of preference:
  - 3. If a development site cannot meet the tree canopy requirements through preservation or the planting of new trees, then the applicant may come into compliance by planting new trees on an alternative site under the following requirements:
    - c. The Planning Director or designee may determine an alternative site for the planting of an equivalent number/amount of trees that meets any one of the following criteria:
      - 6. If one of the above methods of compliance cannot be met for the development site then tThe applicant may pay a fee in lieu in an amount as determined by the Planning Director or designee and Urban Forestry Coordinator (or comparable position), to a designated tree account per 1 3/4" caliper tree required to meet a sites tree canopy requirement. These tree funds will be administered and tracked by the Urban Forestry Coordinator for the planting and maintenance of trees pursuant to the City's most recent tree canopy study or at sites determined by the Planning Director or designee and the Urban Forestry Coordinator.

#### 10.1.4 Tree Canopy Standards

A. The tree canopy on a development site shall meet the applicable standards according to the site's form district, and proposed land use and the amount of tree preservation, as set forth in Tables 10.1.1 and 10.1.2, below. (Percentages refer to the relation of tree canopy to gross site area in square feet.) Section 10.1.2, paragraph C (10.1.2, C) allows residential subdivisions and multi-lot commercial developments to group trees in clusters throughout the development rather than meeting the canopy requirements on a lot-by-lot basis. In addition to the standards referenced above, development sites that have 50 percent to 100

percent existing tree canopy coverage shall be required to preserve 20 percent of that existing tree canopy coverage.

	Table	10.1.1 Tree C	anopy	
Form				
Land Use	Downtow n, Traditiona I Marketpla Ge Corridor,	Traditional Neighborhoo d	Regional Center, Suburban Marketplace Corridor, Neighborhoo d, Suburban	Village
Single- Family Residentia	Class A	Class B	Class C*	Class D
Multi- Family and	Class A	Class B	Class C	Class D
Institutional	Class A	Class B	Class C	Class D
Commercial	Class A	Class A	Class C	Class C
Industrial	Class A	Class A	Class C	Class C
	No. 9-26-03; s	ee website for a	doption status ou	<del>itside</del>

	Table 10.1.1 Tree Canopy
Land Use	Suburban Form Districts
Single- Family Residential	40%
Multi-Family and Office	<u>35%</u>
Institutional	35%
Commercial	35%
Industrial *	35%

\*Industrial land uses are eligible for a 5% reduction in required tree canopy when a reduced heat island green technology is used on the site (green roofs or cool roofs on all buildings, cool pavement for all vehicle use areas, or other heat island reducing technology as approved by the Planning Director or designee)

Class Canopy Requirement per Table 10.1.1	Preserved Tree Canopy Coverage Area	New Tree Canopy Coverage Area	Total Tree Canopy Coverage Area
	5%	0%	5%
Class A	4%	2%	6%
	3%	4%	<del>7%</del>
	2%	6%	8%
	1%	8%	9%
	0%	10%	10%
Class B	<del>10%</del>	0%`	10%
	8%	3%	11%

Class Canopy	Preserved Tree Canopy Coverage Area	New Tree	Total Tree
Requirement		Canopy	Ganopy
per Table		Coverage	Coverage
10.1.1		Area	Area
	6%	6%	<del>12%</del>
	4%	9%	<del>13%</del>
	2%	<del>12%</del>	14%
	0%	<del>15%</del>	15%
Class	<del>15%</del>	<del>0%</del>	<del>15%</del>
C If site is	<del>12%</del>	<del>6%</del>	<del>18%</del>
76%-	9%	<del>12%</del>	21%
100% covered	6%	<del>18%</del>	24%
in existing tree canopy	3%	24%	27%
	0%	30%	30%
Class C If site is 41%- 75% covered in	15%	0%	45%
	12%	5%	47%
	9%	10%	49%
existing tree canopy	6% 3% 0%	15% 20% 25%	21% 23% 25%
Class C	15%	0%	15%
If site is 0%-40%	12%	4%	16%
covered in	9%	8%	17%
existing tree	6%	12%	18%
	3%	16%	19%
	0%	20%	20%
Class D	20% 15% 10% 5%	0% 6% 12% 18%	20% 21% 22%
	<del>5%</del>	<del>18%</del>	23%
	<del>0%</del>	<del>24%</del>	24%

- Tree Canopy Credit Areas (TCCA) and Woodland Preserved Areas (WPA) can be used to satisfy tree canopy requirements while Temporary Tree Protection Areas (TTPA) may not be used to satisfy tree canopy requirements. Developments shall be entitled to a reduction in the tree canopy requirement prescribed in Tables 10.1.1 and 10.1.2 as follows:
  - 1. Any residential subdivision receiving at least 3.5 points for the provision of diversity housing in accordance with Chapter 4 Part 5 (Alternative Development Incentives) of the Land Development Code shall receive a 33% reduction.
  - 2. Any development located in the Downtown, Traditional Marketplace Corridor, Traditional Workplace and Traditional Neighborhood Form Districts shall receive reductions as follows:
    - a. Tree Canopy Reduction for Nonresidential Development:

Development Floor Area Ratio (FAR) Total Tree Canopy Reduction

FAR 0.29 or Less No Reduction FAR 0.30 to 0.49 33% Reduction

FAR 0.50 and Greater 66% Reduction

FAR 1.0 and Greater in Downtown Form 100% Reduction District only

NOTE: All reductions shall be based on the total square feet of tree canopy needed on a site to meet the requirements of Tables 10.1.1 and 10.1.2. Total Tree Canopy

b. Tree Canopy Reduction for Multi-Family Residential Development

Development Density (Dwelling Units per Acre) Total Tree Canopy Reduction

12.00 Du/Acre or Less No Reduction

33% Reduction

12.01 to 16.00 Du/Acre

16.01 Du/Acre and Greater 66% Reduction

22.01 Du/Acre and Greater in Downtown Form District 100% Reduction

Only

NOTE: These reductions in the tree canopy requirements have been created in an effort to support a more compact and efficient urban form and to support infill development opportunities

c. Tree Canopy Reductions for Single Family Residential Developments:

Development Density (Dwelling Units per Total Tree Canopy Reduction

4.4 Du/Acre or Less No Reduction

4.41 to 5.5 Du/Acre 33% Reduction

5.51 Du/Acre and Greater 66% Reduction

F. When trees are planted off-site or on private property to meet the requirements of this Part, the applicant shall provide the Planning Director with documentation that sufficient measures have been taken to ensure the preservation and, when necessary, the replacement of said trees. Examples of such measures would include, but not be limited to. including preservation and replacement provisions in a subdivision's deed of restrictions or within a development's binding elements or by placing all of the required trees within a conservation easement or a Woodland Protection Preserved Area (WPA).

#### 10.1.5 Calculation

- D. Street trees planted in accordance with Section 10.2.8 shall qualify for a 25% bonus in the amount of credit listed in Table 10.1.3. This credit shall apply to street trees that are mandated as well as those planted on a voluntary basis.
- E. D. All approved WPAs shall qualify for a 10% bonus in the amount of credit listed in Table 10.1.3.

Published Date: June 14, 2019 Page 9 of 18 19amend1003 **NOTE:** Street tree bonus: for example a development that provides three Type A trees two inches in caliper shall receive credit for 2 250 sq ft of tree canopy.

F. E. In calculating the required number of trees, fractions less than .5 shall be dropped and greater than or equal to .5 shall be rounded up. Table 10.1.3 Deciduous Tree Canopy Credit

**NOTE:** "Caliper" The diameter of a tree trunk, measured 6 inches above the ground for newly installed trees and at 4 feet 6 inches above the ground (breast height) for existing trees.

Table 10.1.3 Deciduous Tree Canopy Credit		
Caliper	Tree Type**	Amount of Credit (per tree)
10 inches or greater	Type A Type B Type C	1,200 sq. ft. (100% mature canopy 720 sq. ft. (100% mature canopy 177 sq. ft. (100% mature canopy
Greater than or equal to 3 inches and less than 10 inches	Type A Type B Type C	960 sq. ft. (80% mature canopy 576 sq. ft. (80% mature canopy 142 sq. ft. (80% mature canopy size)
Greater than or equal to 1 3/4 inches and less than 3 inches	Type A Type B Type C	720 sq. ft. (60% mature canopy 432 sq. ft. (60% mature canopy 106 sq. ft. (60% mature canopy
Greater than or equal to 1 inch and less than 1 3/4 inches*	Type A Type B Type C	600 sq. ft. (50% mature canopy 360 sq. ft. (50% mature canopy 89 sq. ft. (50% mature canopy

<sup>\*</sup> See Chapter 10, Part 4 for criteria to plant trees less than 1 3/4 inch caliper.

NOTE: Table 10.1.3 gives credit for 50% of the mature canopy size when a 1 3/4" - 3" caliper tree is planted.

NOTE: Upon approval by the Planning Director, or designee, other reputable tree information sources, such as the Manual of Wood Landscape by Michael Dirr, may be used in lieu of or in addition to Table 10.1.3.

NOTE: For particularly mature trees, ground checking may yield larger credits than those based on this table.

NOTE: Canopy credit for evergreen trees to be determined by the Planning Director, or designee, in working with the applicant, using a reputable tree information such as the Manual of Woody Landscape Plants by Michael Dirr or other similar publication.

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<sup>\*\*</sup> Trees are categorized as A, B and C—Large, Medium and Small; refer to Appendix 10A for species that fall within each category.

Table 10.1.3 Deciduous Tree Canopy Credit			
Caliper	Tree Type**	Amount of Credit (per tree)	
1 ½ " to less than 6" caliper	Type A	1,200 sq. ft.	
6" to less than 12"	Type A	1,500 sq. ft.	
12" to less than 24"	Type A	1,800 sq. ft.	
24" and over	Type A	2,100 sq. ft.	
1 1/2 " to less than 6" caliper	Type B	720 sq. ft.	
1 ½ " to less than 6" caliper	Type C	<u>177 sq. ft.</u>	

<sup>\*</sup> See Chapter 10, Part 4 for criteria to plant trees less than 1 ¾ inch caliper.

NOTE: Upon approval by the Planning Director, or designee, other reputable tree information sources, such as the Manual of Wood Landscape by Michael Dirr, may be used in lieu of or in addition to Table 10.1.3.

NOTE: Canopy credit for evergreen trees to be determined by the Planning Director, or designee, in working with the applicant, using a reputable tree information such as the Manual of Woody Landscape Plants by Michael Dirr or other similar publication.

## 10.1.6 Tree Preservation Plan Requirement

A. All Temporary Tree Protection, Tree Canopy Credit, and Woodland Preserved areas shall be identified, protected, and/or preserved in accordance with Chapter 10 Part 4 and the Tree Preservation Politices Policies of Louisville Metro Planning and Design Services (Appendix 10D). All applicants for development proposals which seek credit for existing tree canopy to attain the minimum canopy coverage specified in this Part shall submit a Tree protection preservation plan.

#### NOTE:

Example of an area inventory:

4-9' ht Cedar @ 576 sf of credit each =2,304 sf

3-4" caliper Hackberry @ 960 sf of credit each =2,880 sf

3-24" caliper Maple @1,200 sf of credit each =3,600 sf

5-10" caliper Hackberry/Maple @ 1,200 sf of credit each =6,000 sf

1-8" caliper Oak @ 960 sf of credit each = 960 sf

Total square footage =15,744 sf

TCPA on plan is 2.68 acres or 116,957 sf

116,957 sf - 2,500 sf (sample area) = 114,457 sf

<sup>\*\*</sup> Trees are categorized as A, B and C—Large, Medium and Small; refer to Appendix 10A for species that fall within each category.

114.457 sf + 15.744 sf (total sample area credit) =130.201 sf

Total preserved tree canopy =130,201 sf

The tree canopy calculations could appear as follows: Gross site area: 1,085,008 sf

Total tree canopy preserved: 130,201 sf (12% of total site)

Total tree canopy required: 173,601 sf (16% of total site on a site that has 0-40% existing canopy coverage)

Total required new canopy: 43,400 sf (4% of total site)

Total canopy provided: 174,121 sf (16%)

If preserved trees are removed from the TCPA, the total number of trees to be replaced would be 58 minimum 3" caliper trees.

#### Tree Canopy Calculation Example

Total site area: 251,785 SF

Existing tree canopy area: 24,477 (10%)
Total tree canopy required: 88,125 (35%)
Existing tree canopy to be preserved: (0%)

Proposed tree canopy to be planted: 88,800 (35%)

B. Standards for Tree Canopy Credit Areas

3. No clearing, grading, construction or other land disturbing activity shall take place within the TCCA/WPA beyond pruning to improve the general health of the tree or to remove dead or declining trees that may pose a public health and safety threat. As trees are lost through natural causes, new trees shall be planted in order to maintain minimum tree canopy as specified in this part. Underbriush is permitted to be removed in the TCCA. Invasives are required to be removed.

 Modification of Woodland Preserved Areas shown on approved development plans shall require the approval of the Planning Commission or <u>authorized committee</u> <u>designee</u> after the notification requirements as listed for detailed district development plans in Section 11.4.7.F.1 have been fulfilled.

10.1.7 Landscape/Buffer Credit

#### 10.1.8 Tree Removal Permit

A tree removal permit is required for the removal of existing trees on non-residential and multi-family development sites where landscaping and tree canopy were/are required. (see Appendix 10E)

\* \* \* \*

10.1.89	Waivers
10.1.00	TTUITOIC

\* \* \* \* \*

#### 10.2.4 Property Perimeter Landscape Buffer Areas

\* \* \* \*

B. Explanatory Text and Exceptions

\* \* \* \* \*

6. Sites with a Conditional Use Permit that are located in a residential zoning district shall be considered the same as a C-1 Commercial use for the purposes of application of Chapter 10, sites located in non-residential districts will follow the landscaping requirements for the zoning district that they are in, unless the Board of Zoning Adjustment deems a different classification is appropriate. <a href="Exception: Private schools and churches shall follow paragraph 5 above">Exception: Private schools and churches shall follow paragraph 5 above</a>.

10.2.8 Street Trees

A. Mandatory: Street trees are required for all land uses along all public rights of way (excluding alleys)Street trees are required for residentially zoned property along collector and arterial level readways. Street trees shall be provided in the public right-of-way, with permission of the agency having jurisdiction over the right-of-way. Street trees are required along all streets and for all uses within the Downtown Form District. Street trees shall be selected and placed with the approval of Planning and Design Services with consultation from the Director of Public Works or designee. If the sidewalk width, utility locations or similar conditions make it impractical to install street trees, the Director of Works or designee may waive the requirement for street tree planting or unobstructed sidewalk width. If the Public Works Department or Kentucky Transportation Cabinet refuses to allow plantings in the right-of way, street trees shall be provided adjacent to the right-of-way, in a minimum 6 foot wide planting area (Suburban Forms only). All street trees shall conform to the minimum requirements of the Streetscape Master Plan Manual. If a streetscape master plan has been approved for a specific street, all street trees shall be planted in accordance with the approved master plan. Street trees shall be planted at a 1 3/4" minimum caliper. Street trees, for all uses except commercial, shall be regularly spaced and planted at a ratio of no less than 1 Large (Type A) tree per 50 25 lineal feet of right- of-way, or 1 Medium (Type B) tree per 40 20 lineal feet, or 1 Small (Type C) tree per 30 15 lineal feet. Street trees for commercial uses shall be regularly spaced and planted at a ratio of no less than 1 large (Type A) tree per 30 lineal feet of right of way, or 1 medium (Type B) tree per 25 lineal feet, or 1 small (Type C) tree per 20 lineal feet. Small trees are permitted only where utility lines or other site constraints will not allow installation of Large or Medium trees. (EXCEPTION: Refer to Chapter 3 for Floyds Fork Overlay information). In the event that an MSD approved Green Management Practice (GMP) is being proposed within the right of way or along the edge of the property, the street tree(s) shall be chosen from Chapter 13: Native Revegetation from the MSD Design Manual (a link to document found in Appendix 10A).

**NOTE:** See Appendix 10A for listing of Type A, B and C trees.

B. Voluntary: Street trees may be provided adjacent to non-residentially zoned property, as well as residential sites abutting local streets or private access easements providing the principal means of access.

C.

Tree Canopy Bonus: Street tree plantings shall qualify for a 25% bonus in calculating compliance with tree-canopy requirements refer to 10.1.5.D.

□B. Please refer to Chapter 10, Part 6, for Streetscape Master Plans.

#### 10.2.12 Vehicular Use Area Interior Landscape Areas

Landscape areas shall be provided within all Vehicular Use Areas to break up large impervious areas and allow for a greater distribution of tree canopy coverage and to provide the opportunity: to capture parking lot stormwater runoff, thus increasing water quality: and retaining greater amounts of storm water on site through infiltration. Dimensional requirements have been established to insure that interior landscape areas serve the intended goals and provide enough ground area to support required plant material. Interior landscape areas shall not be required for enclosed VUAs that are secured from access by a fence, wall or similar barrier at least 3.5 feet in height and used for storage, loading docks or their associated maneuvering areas, or for loading, unloading, and storage areas in an industrial zone, PD (industrial uses), C-M, M-1, M-2, M-3, PEC & EZ-1 or in loading dock & truck maneuvering areas in Commercial and Office zones. These VUA areas shall still count toward the overall ILA requirement for the development site.

## 10.4.3 Plant Sizes

Size criteria for deciduous tree species shall be determined based on its Size Type as described in Chapter 1 Part 2 (Definitions) of the Land Development Code. Installation criteria for each Size Type is as follows:

Small Tree (under 25 feet in height at maturity)	6 feet high	
Medium Tree (25 feet-50 feet in height at maturity)	1 ¾ ½ inch caliper*	
Large Tree (over 50 feet in height at maturity)	1 ¾ ½ inch caliper*	
* Medium and large street trees are required to be planted at 1 ¾ inch caliper		

## 10.4.4 Spacing

No newly planted trees may be planted closer together than 10 feet for small trees, 25 15 feet for medium trees, and 30 20 feet for large trees. unless specifically approved by the Planning Director or designee. When planting new trees near existing mature trees,

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leave a minimum distance of half of the new trees mature spread between the new tree and the existing trees. The Planning Director or designee can authorize a closer spacing of trees in special circumstances. When GMP planting areas are used with perimeter buffer area, the screening intent of this part should still be met.

Table 10.4.12		
TREE SPACING AGAINST BUILDIN	GS	
Tree Height	Minimum Spacing from Building Edge	
Up to 25 feet (small tree)	<del>10 feet</del>	
25 feet-50 feet (medium tree)	<del>15 feet</del>	
50 feet + (large tree)	15 feet	
No tree shall be planted in a space le	ss than 3 feet in width. Only small trees shall be	
planted in spaces less than 4 feet in width.		

## 11.4.4 Application

A. A "Demonstration of Appropriateness" document which addresses as applicable:

- 3. The anticipated time period in which implementation of the proposed uses will be initiated provided the amendment is approved.
- B. A site shall be ineligible for filing an application for a rezone if any tree removal has taken place on the site at any time within twenty-four (24) months prior to application submittal without consultation and approval of the Planning Director or designee. In addition, no such tree removal shall take place in the time between application submittal and final approval. This requirement shall not prohibit tree removal per Chapter 102.02 of the Metro Code of Ordinances or for required geotechnical work.
- C. An affidavit by the land owner shall be filed at time of rezone application submittal indicating no tree removal took place two (2) years prior to application submittal.
- BD. A development plan of sufficient detail to demonstrate to the Planning Commission the character and objectives of the proposed development and the potential impacts of the development on the community and its environs. In instances where a general development plan is submitted, the Planning Commission may require submission of a detailed development plan prior to issuance of site disturbance and building permits. In certain instances, a preliminary subdivision plan will satisfy the requirements for a general or detailed development plan. These circumstances are identified in Part 2 of this Chapter. In addition, staff shall endeavor to assure that notice is given to all neighborhood groups who have registered to receive notice of development applications.
- CE. Technical studies or reports required by this Land Development Code including but not limited to air quality, traffic, historic and cultural resource, geologic, hydrologic, and hydro-geologic.
- DF. Upon receipt of a complete application, as determined by the Planning Director, staff of Planning and Design Services shall cause notice of the application to be given. Not less than ten (10) calendar days prior to initial consideration of an application by either the Commission or a

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Committee thereof, notice of the application shall be given to first and second tier adjoining property owners. In addition, staff shall endeavor to assure that notice is given to all neighborhood groups who have registered to receive notice of development applications.

## 11.5A.4 Application

- A. Applications for Conditional Use Permit shall be submitted on forms supplied by the department. Applications shall be signed by the property owner or his/her agent and filed with Planning and Design Services in accordance with these regulations and the Board of Zoning Adjustment By-Laws and Rules of Procedure. Applications shall be accompanied by supporting material determined appropriate by the Planning Director and by the appropriate fee. The list of required supporting materials shall be available from the offices of Planning and Design Services. Failure to submit all required material may result in delay of the application review. At a minimum, the following materials shall be submitted with all applications for Conditional Use Permit:
  - 2. A site shall be ineligible for filing an application for a conditional use permit if any tree removal has taken place on the site at any time within twenty-four (24) months prior to application submittal without consultation and approval of the Planning Director or designee. In addition, no such tree removal shall take place in the time between application submittal and final approval. This requirement shall not prohibit tree removal per Chapter 102.02 of the Metro Code of Ordinances or for required geotechnical work.
  - 3. An affidavit by the land owner shall be filed at time of major subdivision application submittal indicating no tree removal took place two (2) years prior to development submittal.
  - 24. A development plan of sufficient detail to demonstrate to the Board the character and objectives of the proposed development and the potential impacts of the development on the community and its environs.
  - 35. Not all Waivers, Variances and Conditional Use Permits require engineered surveys. However, where dimensional information is determined to be essential for consideration of such waivers, variances or Conditional Use Permits by staff, the applicant shall provide a survey prepared by a licensed Land Surveyor in the Commonwealth of KY. Only those property boundaries that are contiguous with the dimension(s) in question need to be provided. The cost of the required survey shall be borne by the applicant. In cases where staff determines a survey is not required the applicant shall not be responsible for the cost of any survey submitted by any party.

### 11.6.3 Category 2 Review Procedure

- A. Application for Planning Director Approval
  - Applications for Category 2 development approval shall be submitted on forms supplied by the department. Applications shall be signed by the property owner or his/her agent and filed with Planning and Design Services.
  - 2. A site shall be ineligible for filing an application for a Category 2 review for approval by the Planning Director or designee if any tree removal has taken place on the site at any time within twenty-four (24) months prior to application submittal without consultation and approval of the Planning Director or designee. In addition, no such tree removal shall take place in the time between application submittal and final approval. This requirement shall not prohibit tree

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removal per Chapter 102.02 of the Metro Code of Ordinances or for required geotechnical work.

- 3. An affidavit by the land owner shall be filed at time of major subdivision application submittal indicating no tree removal took place two (2) years prior to development submittal.
- 4. Applications shall be accompanied by supporting material determined appropriate by the Planning Director and by the appropriate fee. The list of required supporting materials shall be available from the offices of Planning and Design Services. Failure to submit all required material may result in delay of the application review.
- <u>5.</u> At a minimum, the application shall be accompanied by a development plan of sufficient detail to demonstrate to the Planning Director that the proposed development is in compliance with the applicable requirements of these regulations and any applicable binding elements or conditions of approval.
- 6. The Planning Director shall approve the proposed development if it complies with the requirements of this code; associated binding elements, if any; and other applicable law. In cases in which the Planning Director has reason to question the development plan's compliance with any provision of the Land Development Code, applicable binding elements and conditions of approval, the Director may forward the development plan to the Planning Commission, or designated committee thereof, for review and action on the plan.

## 11.6.4 Category 3 Review Procedure

- B. Community Design Review Process
  - 1. Application Required Applications for development plan approval shall be submitted on forms supplied by the department. Applications shall be signed by the property owner or his/her agent and filed with Planning and Design Services in accordance with these regulations and the Planning Commission By-Laws and Rules of Procedure. Applications shall be accompanied by supporting material determined appropriate by the Planning Director and by the appropriate fee. The list of required supporting materials shall be available from the offices of the Commission. Failure to submit all required material may result in delay of the application review.
  - 2. A site shall be ineligible for filing an application for a Category 3 review for approval by the Planning Director or designee if any tree removal has taken place on the site at any time within twenty-four (24) months prior to application submittal without consultation and approval of the Planning Director or designee. In addition, no such tree removal shall take place in the time between application submittal and final approval. This requirement shall not prohibit tree removal per Chapter 102.02 of the Metro Code of Ordinances or for required geotechnical work.
  - 3. An affidavit by the land owner shall be filed at time of major subdivision application submittal indicating no tree removal took place two (2) years prior to development submittal.
  - 24. Notice Not less than 10 calendar days prior to the proposed review session, notice of the proposed development and its scheduled review shall be given to adjoining property owners. In addition, staff shall endeavor to assure that notice is given to all neighborhood groups who have registered to receive notice of development applications.
  - 35. Review Session Review of and action on the proposal shall take place in a public meeting before the Planning Commission or Committee thereof. No less than ten (10) calendar days prior to an original or continued review session date, the applicant shall submit original or revised development plans, studies, reports, etc. which have been prepared in response to

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comments received during the review process. This section does not preclude the applicant from presenting, at the review session, changes to the plan in response to concerns of the neighbors, agency review staff or the Planning Commission.

The Planning Commission or designated Committee shall approve the proposed development if it complies with the requirements of this code; associated binding elements, if any; and other applicable law.