

LAND DEVELOPMENT CODE AMENDMENT

PETITION PL20180002632 ORIGIN Board of County Commissioners	SUMMARY This Board directed amendment places new restrictions on the replacement and removal of required landscaping trees at commercial shopping centers. The amendment seeks to maintain mature canopy trees at shopping centers and their value to the surrounding neighborhood.					
HEARING DATESBCCTBDCCPCTBDDSACTBDDSAC-LDR10/16/2018	 LDC SECTIONS TO BE AMENDED 4.06.02 Buffer Requirements 4.06.05 General Landscaping Requirements 					
ADVISORY BOARD RECOMMENDATIONS						
DSAC-LDR	DSAC	ССРС				

BACKGROUND

TBD

On January 23, 2018, the Board directed staff to draft LDC standards that maintain the ability to change existing landscaping plans while also ensuring those changes would retain mature canopy trees and maintain an aesthetically pleasing community appearance.

TBD

This amendment makes four modifications to the landscaping requirements for shopping centers to minimize the impact of mature landscaping being replaced with minimum sized trees:

- 1. Allows additional spacing in Type D buffers for improved visibility into shopping centers.
- 2. Prohibits slash pine and bald cypress in new landscaping plans or existing landscaping plans that are removing trees from the Vehicle Use Area (VUA) or Type D buffer.
- 3. Limits the large-scale removal or replacement of required trees in the VUA and Type D Buffer to 50 percent of the required trees within a period of 15 years.
- 4. Provides an exemption for trees removed through a cultivated tree removal permit, or to replace diseased or dead trees.

See Exhibit A for additional background, justification, and other considerations.

FISCAL & OPERATIONAL IMPACTS

The amendment will increase costs for shopping center owners when proposing to replace or remove more than 50 percent of the required trees and may result in unexpected costs when proposals trigger the limitation. There are no anticipated fiscal or operational impacts to Collier County.

GMP CONSISTENCY

Based upon the attached analysis, the proposed LDC amendment may be deemed consistent with the GMP (See Exhibit B).

TBD

EXHIBITS: A) Additional Background and Justification B) GMP Consistency Review

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Amend the LDC as follows:

4.06.02 Buffer Requirements

- C. Types of buffers. Within a required buffer strip, the following types of buffers shall be used based on the matrix in table 2.4. (See Figure 4.06.02.C-1)
- * * * * * * * * * * * *
- 4. *Type D Buffer:* A landscape buffer shall be required adjacent to any road right-ofway external to the development project and adjacent to any primary access roads internal to a commercial development. Said landscape buffer shall be consistent with the provisions of the Collier County Streetscape Master Plan, which is incorporated by reference herein. The minimum width of the perimeter landscape buffer shall vary according to the ultimate width of the abutting right-of-way. Where the ultimate width of the right-of-way is zero to 99 feet, the corresponding landscape buffer shall measure at least ten feet in width. Where the ultimate width of the right-of-way is 100 or more feet, the corresponding landscape buffer shall measure at least 15 feet in width. Developments of 15 acres or more and developments within an activity center shall provide a perimeter landscape buffer of at least 20 feet in width regardless of the width of the right-of-way. Activity center right-of-way buffer width requirements shall not be applicable to roadways internal to the development.
 - a. Trees shall be spaced no more than 30 feet on center in the landscape buffer abutting a right-of-way or primary access road internal to a commercial development. As an alternative for shopping centers, the following tree spacing may be allowed through a landscaping plan change to provide additional visibility into shopping centers:
 - i. Trees may be spaced no more than 60 feet on center, and
 - ii. There shall be at least three consecutive trees on both sides of the 60-foot spacing. Said trees shall be spaced no more than 30 feet on center with at least a 30-foot crown spread per tree at the time of the alternative spacing approval.

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4.06.05 – General Landscaping Requirements

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- 45average mature spread or crown of greater than 20 feet in the Collier County area46and having trunk(s) which can be maintained in a clean condition over five feet of47clear wood. Trees adjacent to walkways, bike paths and rights-of-way shall be48maintained in a clean condition over eight feet of clear wood. Trees having an49average mature spread or crown less than 20 feet may be substituted by grouping

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1			the same so as to create the equivalent of 20-foot crown spread. For code-required			
2			trees, the trees at the time of installation shall be a minimum of 25 gallon, ten feet			
3			in height, have a 1 ³ / ₄ -inch caliper (at 12 inches above the ground) and a four-foot			
4			spread.			
5						
6 7			a. A grouping of three palm trees will be the equivalent of one canopy tree.			
8			Exceptions will be made for Roystonea spp. and Phoenix spp. (not including roebelenii) which shall count one palm for one canopy tree. Palms			
9			may be substituted for up to 30 percent of required canopy trees with the			
10			following exceptions. No more than 30% percent of canopy trees may be			
11			substituted by palms (or palm equivalent) within the interior of a vehicular			
12			use area and within each individual Type D road right-of-way landscape			
13			buffer. Palms must have a minimum of 10 feet of clear trunk at planting.			
14 15			b. All new trees, including palms, shall be of a species having an average			
16			mature height of 15 feet or greater.			
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18			c. As of {Effective date of this Ordinance}, new landscaping plans shall not			
19			<u>include slash pine (Pinus elliottii) or bald cypress (Taxodium distichum)</u>			
20			within the vehicular use areas or Type D buffers.			
21 22	*	*	* * * * * * * * * *			
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25		<u>1.</u>	Purpose and intent. This section is intended to apply to the removal or replacement			
26			of existing, mature, canopy trees within Type D buffers and vehicular use areas at			
27 28			shopping centers. Extensive changes to mature landscaping have the potential to impact aesthetic appearance, native plant preservation, buffering, and shade. This			
28 29			section is not intended to prohibit other activities related to the development,			
30			redevelopment, or maintenance of shopping centers.			
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32		<u>2.</u>	Standards for tree replacement or removal within Type D buffers and vehicular use			
33 34			areas at shopping centers.			
35			a. A maximum of 50 percent of the required trees per 15-year period may be			
36			replaced or removed through a landscaping plan change.			
37						
38			b. Replacement trees within Type D buffers and vehicular use areas at			
39 40			shopping centers shall not include slash pine (Pinus elliottii) or bald cypress			
40 41			(Taxodium distichum).			
42			c. Replaced or removed trees shall not be located entirely within one			
43			contiguous area and shall be evenly dispersed throughout the Type D			
44			buffers and vehicular use areas.			
45						
46		<u>3.</u>	Exemption. These standards shall not apply to removal of trees through a			
47 48			cultivated tree removal permit or to replace diseased or dead trees.			
48 49		4.	Applicants may request a PUD deviation or variance, as applicable, to the limitation			
50			on replacement or removal of required trees.			
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		mendment	3			

Amendment History

Over several years, residents have petitioned the Board regarding perceived aesthetic impacts on surrounding residential neighborhoods when mature canopy trees are removed from shopping centers and replaced with the LDC's minimum tree planting requirements.

On January 23, 2018, Zoning Division staff presented background information to the Board regarding landscaping changes in shopping centers, and potential LDC changes that could mitigate the perceived impacts on the surrounding community from the loss of mature canopy trees. The Board directed staff to draft LDC standards that maintain the ability to change existing landscaping plans while also ensuring any changes would retain mature canopy trees and maintain an aesthetically pleasing community appearance.

A previous version of this amendment which proposed a requirement for larger replacement trees was reviewed by the Development Services Advisory Committee (DSAC) and the Collier County Planning Commission (CCPC). On June 21, 2018, staff presented price and availability data for trees with a five to six-inch caliper to the CCPC. In response to the increased costs and limited availability, the CCPC unanimously recommended not to adopt the proposed amendment, and to direct staff to review a new LDC amendment to be further refined with the following elements:

- 1. A limitation on the percentage of trees that may be removed or replaced within a given period of time.
 - a. The trees removed should not be clustered in one area but should be spread throughout the project.
 - b. The period of time established should be based on the expected life and canopy growth rates of removed and replaced tree species.
- 2. A limitation on the use of Slash pine and Bald Cypress trees within the Type D buffer for:
 - a. New landscaping plans, and
 - b. Existing landscaping plans when replacing or removing required trees from the Type D buffer or VUA.
- 3. An allowance for additional spacing between buffer trees in certain instances to allow for improved visibility into shopping centers.

Existing Standards

For many types of development, when trees are replaced in the VUAs or Type D buffers, the replacement trees are required to meet the same minimum standards for landscaping material required for new developments. The minimum tree height, caliper, and canopy spread required at the time of installation are:

- Height: 10 feet,
- Caliper: 1 ³/₄ inches, and
- Canopy spread: four feet.

However, when trees are replaced in the VUAs or Type D buffers at shopping centers, the replacement trees are required to meet the minimum standards in LDC section 4.06.03 B.9:

• Height: 14 to 16 feet,

- Caliper: three to four inches,
- Canopy spread: six to eight feet, and
- Clear trunk height: six feet high.

These larger trees are only required at shopping centers, which are defined in LDC Section 1.08.02:

"A group of unified commercial establishments built on a site which is planned, developed, owned or managed as an operating unit and related in its location, size, and type of shops to the trade area that the unit serves. It consists of eight or more retail business or service establishments containing a minimum total of 20,000 square feet of floor area. No more than 20 percent of a shopping center's floor area can be composed of restaurants without providing additional parking for the area over 20 percent. A marina, hotel, or motel with accessory retail shops is not considered a shopping center."

Additionally, trees within Type D buffers are required to be spaced no more than 30 feet on center. This amendment does not propose any changes to the minimum height, caliper, canopy spread, or clear trunk height of trees planted at shopping centers.

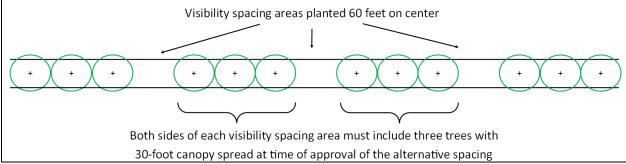
Proposed Standards

The proposed standards are intended to balance the value of mature canopy trees to the surrounding neighborhoods and property owners with the need to redesign and update the appearance of shopping centers. The standards are intended to allow for regular updates to shopping centers while maintaining existing mature trees.

Proposed Changes to LDC Section 4.06.05 C.4.a.i:

Changes to this section establish new tree spacing standards within Type D buffers to provide better visibility to shopping center buildings and wall signage. This new standard would allow increased tree spacing from 30 feet on-center to 60 feet on-center when at least three trees on both sides of the 60 feet on-center spacing have a minimum of a 30-foot crown spread per tree. This arrangement is depicted in Figure 1.





Proposed Changes to LDC Section 4.06.02 D.2.c:

Changes to this section prohibit slash pine and bald cypress trees within the VUA and Type D buffer area in new landscape plans because they do not provide adequate canopy or flourish in irrigated areas of a site. The inadequate canopy and visual buffer are shown in Figures 2 and 3.



Figure 2: Bald cypress trees do not provide adequate canopy when leaves fall.

Figure 3: Slash pine trees do not provide an adequate visual buffer.



Proposed New LDC Section 4.06.05 O.:

This new section limits the large-scale removal or replacement of mature canopy trees through a restriction on removing or replacing more than 50 percent of required trees within the VUA or Type D buffer within each 15-year period. For example, Figure 1 demonstrates one potential distribution of replaced or removed trees throughout the site. The limitation is based on public input during the amendment vetting process and a review of tree growth rates described in the Tree Growth Analysis section below.

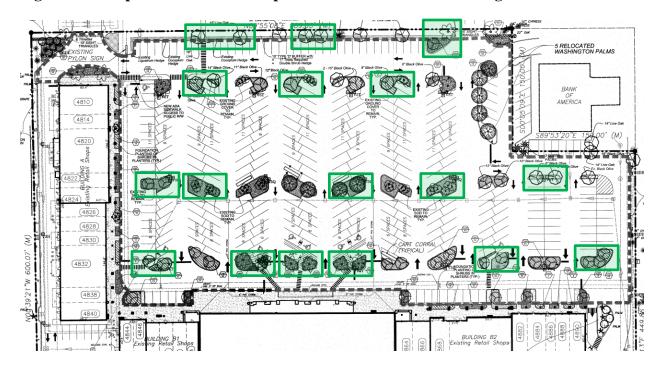


Figure 1. Example Distribution of Replaced or Removed Trees Throughout the Site

This section also prohibits the use of slash pine or bald cypress trees as replacement trees within VUAs or Type D buffers and requires removal and replacement of trees to be evenly dispersed throughout the VUA and Type D buffers.

Additionally, an exemption is provided for the trees removed through a cultivated tree removal permit, or to replace diseased or dead trees.

Since the applicability of the proposed standards is limited to VUAs and Type D buffers, this section would not apply to building foundation plantings or any other required landscaping.

Implementation

The proposed changes will be implemented through the existing Landscaping Plan review process.

Landscaping plans for commercial shopping centers are approved through a Site Development Plan (SDP) and changes to an SDP (SDPA or SDPI).

SDPs are administratively approved by the Growth Management Department and do not require public notice or a public hearing.

Proposals to replace or remove trees within the Vehicle Use Area (VUA) or Type D buffer would require the landscaping plan to include a calculation of the percentage of required trees proposed to be removed or replaced.

The determination whether trees may be removed or replaced through a landscaping plan change will function similar to the cultivated tree removal permit review. When a landscape plan change is submitted, landscape plan review staff will review the percentage of trees removed or replaced within the past 15 years. The landscaping plan change would only be approved if all landscaping plan changes within the past 15 years do not exceed 50 percent of required trees.

Shopping centers may request relief from the 50 percent limitation through the PUD Deviation or Variance processes, as applicable. Both processes provide for public notice and public hearings.

Tree Growth Analysis

On June 21, 2018, the CCPC recommended that the limitations in the proposed amendment should be based on growth rates of canopy trees. To satisfy this request, staff consulted the *Native Trees for South Florida*¹ published by the University of Florida's Institute of Food and Agricultural Sciences (IFAS), which includes growth rate information for a variety of tree species. Growth rates are reproduced in the following table for those species that currently qualify as canopy trees in Collier County.

Common Name	Natural Height (ft)	Growth Rate	Growth per year (ft)
Red maple	35-50	Fast	>2
Gumbo limbo, tourist tree	40 - 60	Medium	1 to 2
Fiddlewood	25 - 30	Slow	<1
Sea grape	15 - 30	Medium	1 to 2
Willow-leaved bustic	30 - 50	Medium	1 to 2
Wild tamarind	40 - 50	Fast	>2
Sweetbay	40 - 60	Medium	1 to 2
False mastic	45 - 70	Slow	<1
South Florida slash	80 - 100	Fast	>2
Jamaican dogwood, fish-poison tree	35 - 50	Fast	>2
Sycamore	70 - 110	Fast	>2
West Indian cherry	15 - 40	Medium	1 to 2
Laurel oak	60 - 100	Fast	>2
Live oak	50 - 80	Medium	1 to 2
Royal palm	60 - 125	Medium	1 to 2

Table 1. Tree Growth Rates from UF IFAS Extension

¹ Meerow, A.W., Broschat, T.K, and Donselman, H.M. (2017). Native Trees for South Florida. *University of Florida IFAS Extension*. Document EES-57.

Soapberry	35 - 45	Medium	1 to 2
Paradise tree	35 - 50	Slow	<1
Mahogany	35 - 60	Fast	>2
Bald cypress	60 - 100	Medium	1 to 2
Wild lime	20 - 30	Medium	1 to 2

It is important to note that growth rates may be influenced by a variety of factors such as soil, drainage, water, fertility, light, exposure. These conditions may vary from site to site and year to year.

The IFAS growth rates were used to determine the potential time required for newly planted trees to grow from the code minimum canopy spread of 6 to 8 feet, to the code "mature" canopy spread of 20 feet. For the purposes of this amendment, growth rates of tree height were assumed to be the same as growth rates of canopy spread. Using this methodology, the canopy trees listed above require a minimum of 6 and a maximum of 14 years to reach a "mature" canopy spread. Given that trees in parking lots may not represent ideal growing conditions, this amendment establishes a limitation of 15 years before additional trees can be removed or replaced to ensure adequate time for canopy growth.

Exhibit B – GMP Consistency Analysis



Growth Management Department Zoning Division

Memorandum

To: Jeremy Frantz, AICP, Manager, Land Development Code Section

From: David Weeks, AICP, Growth Management Manager, Comprehensive Planning Section

Date: September 14, 2018

Subject: Growth Management Plan (GMP) Consistency Review

PETITION NUMBER: LDCA-PL20180002769 REV:1

PETITION NAME: LDC Sec. 4.06.02 & 4.06.05, Commercial Landscaping

REQUEST: Amend LDC Sections 4.06.02 & 4.06.05, Commercial Landscaping, by making three modifications to the landscaping requirements for shopping centers to minimize the impact of mature landscaping being replaced with minimum sized trees:

- 1. Allows additional spacing in Type D buffers for improved visibility into shopping centers.
- 2. Prohibits slash pine and bald cypress in new landscaping plans or existing landscaping plans that are removing trees from the Vehicle Use Area (VUA) or Type D buffer.
- 3. Limits the large-scale removal or replacement of required trees in the VUA and Type D Buffer to 50 percent of the required trees within a period of 15 years.
- 4. Provides an exemption for trees removed through a cultivated tree removal permit, or to replace diseased or dead trees.

COMPREHENSIVE PLANNING COMMENTS: In the limited areas where the Growth Management Plan's (GMP) land use elements (Future Land Use Element, Golden Gate Area Master Plan, Immokalee Area Master Plan) address landscaping, there is no specificity provided that would conflict with the proposed Land Development Code (LDC) amendment. In the Conservation and Coastal Management Element (CCME), Policy 6.1.7 states, in relevant part: "The County shall require native vegetation to be incorporated into landscape designs in order to promote the preservation of native plant communities and to encourage water conservation. This shall be accomplished by: (1) Providing incentives for retaining existing native vegetation in landscaped areas; (2) Establishing minimum native vegetation requirements for new landscaping." The proposed changes in this LDC amendment are not in conflict with this policy.

CONCLUSION:

Based upon the above analysis, the proposed LDC amendment may be deemed consistent with the GMP.

IN CITYVIEW

cc: Michael Bosi, AICP, Zoning Director LDCA-PL20180002769 Sec. 4.06.02 & 4.06.05 Coml Landscaping R1