



*Department of City Planning*

## City of Norfolk CBPA Guidance Document for Additions and Accessory Structures

This guidance applies to both Resource Protection Areas (RPA) and Intensely Developed Areas (IDA) within the Chesapeake Bay Area overlay district. All trees/shrubs within the 100' CBPA buffer are protected under state law and city code. A permit is required for removal

### **To determine if your property is in the CBPA**

<https://air.norfolk.gov/#/> Go to legend on the top right of the map, select the zoning option and turn on CBPA. Red (IDA) or green (RPA) checker pattern are the CBPA boundaries. Can also be determined by selecting the planning tab center of screen within blue stripe and scrolling to CBPA reference.

### **Single Family Additions:**

Additions to single family houses shall be located to minimize encroachment into the 100' CBPA buffer and must provide restoration equal to one planting unit per every 400 square feet of impervious surfaces in the buffer, or at minimum one planting unit. No addition including attached decks shall come within 50 feet of jurisdictional wetlands unless home was built prior to 3/1992 or if existing impervious within the 50-foot CBPA buffer is to be removed. All proposed additions must minimize impact to existing protected vegetation. Where it cannot be avoided due to lot constraints, full mitigation is required per Norfolk CBPA tree mitigation guidelines standards. No impervious encroachment may be permitted within 25 feet of jurisdictional wetlands.

### **Single Family Accessory Structures:**

Accessory structures and any impervious surface (patios, detached decks, sheds, detached garages, swimming pools etc.) that extend into the IDA shall be located outside of the 50-foot seaward CBPA buffer area unless the proposed accessory structure is replacing existing impervious in the CBPA buffer area. All accessory structures shall be located in a manner to not impact any existing buffer area vegetation. Accessory structures in the RPA shall be located outside of the 100-foot CBPA buffer area. The CBPA buffer shall be re-established with vegetation equal to one planting unit or one planting unit per every 400 square feet of impervious surfaces in the CBPA buffer, whichever is greater.

Please contact Environmental Services at (757) 664-4368 with any further questions

## Water Quality Impact Assessment (WQIA) for CBPA Additions and Accessory Structures

**Land Disturbance:**

Area of site \_\_\_\_\_ft.<sup>2</sup>

Area of land disturbance \_\_\_\_\_ ft.<sup>2</sup>

**CBPA Mitigation**

# trees removed within 100' CBPA buffer \_\_\_\_\_ 1" - 12" \_\_\_\_\_ 13" - 24" \_\_\_\_\_ 25" - 35"

# shrubs removed within 100' CBPA buffer \_\_\_\_\_

Total woody vegetation disturbance within 100' CBPA buffer \_\_\_\_\_ ft.<sup>2</sup>

**CBPA Buffer Encroachment:**

Provide existing and proposed impervious (decks and patios are considered impervious) in chart. The 100' CBPA buffer encroachment will be the total, including the encroachment into the 50' CBPA buffer. Refer to CBPA guidance document for mitigation and encroachment planting requirements and species selection.

	Existing Impervious	Proposed Impervious
50' CBPA Buffer		
100' CBPA Buffer		

**Mitigation & Encroachment plantings required:**

Vegetation to be planted: Large Canopy Trees \_\_\_\_\_

Small Canopy Trees \_\_\_\_\_

Shrubs \_\_\_\_\_

Show species and numbers of proposed vegetation to be planted on the survey or landscape plan.

**Erosion and Sediment Control:**

Agreement in Lieu of an Erosion and Sediment Control Plan Provided

Yes  No

Responsible Land Disturber has been identified

Yes  No

## Tree Mitigation Guidelines

### Tree Mitigation for Single Trees ( $\leq 5$ ) Removed During Development (Chesapeake Bay Preservation Area Overlay District-RPA and IDA)

Tree mitigation is based upon the following guidelines established by Bureau of Environmental Services. Mitigation is based upon tree size class, tree species, and tree location. The construction impact zone (CIZ) is a 10 foot wide area adjacent to any structures footprint. Large canopy tree species (LCT) are those that reach at least 60 feet in height at maturity. Small canopy species (SCT) are those that reach less than 35 feet in height at maturity.

#### New Single Family

Mitigation for trees located within building footprint:

Size Class (DBH* inches)	Mitigation – Large Canopy Trees
0 – 12	1 – 1.5” caliper tree
13-24	2 – 1.5” caliper trees
25-35	3 – 1.5” caliper trees

Mitigation for trees located within construction impact zone (10 feet from foundation)

Size Class (DBH inches)	Mitigation
0 – 12	2 – 1.5” caliper trees (1 LCT + 1 SCT)
13-24	4 – 1.5” caliper trees (2 LCT + 2 SCT)
25-35	6 – 1.5” caliper trees (3 LCT + 3 SCT)

#### CBPA Violations (Trees Removed without Permit)

Tree mitigation will double the requirements shown in the charts above.

#### Significant Specimen Trees

DBH of 36” or greater is a considered a large specimen tree and mitigation is influenced by tree condition and tree risk assessment performed by an ISA Certified Arborist. (Diameter/3 = # of replacement large canopy trees).

#### Dead or Dying Trees

The tree replacement is 1:1, based upon written evaluation by an ISA Certified Arborist.

\*DBH – Diameter at Breast Height (measured at 4.5 feet above the ground)

#### Substitution Guidelines

1 LCT = 2 SCT = 10 large growing shrubs (6 – 8 ft. height and/or width @ maturity)

1/2 of mitigation planting shall be trees

Monetary Substitution: 1 LCT = \$310.00; 1 SCT = 250.00; 1 Shrub = \$45.00

## MITIGATION SPEC SHEET

**Large Canopy Tree** means a large-growing tree. WILL MATURE TO APPROX. 60+ FEET IN HEIGHT

MINIMUM PLANTING SIZES:

\*1.5 INCHES IN DIAMETER &/or 8-10 FEET IN HEIGHT,

\*MULTI-STEMMED AND EVERGREENS - 8-10 FEET IN HEIGHT; IGNORE DIAMETER-- acceptable shade trees are oak, pine, black gum, southern magnolia, eastern red cedar and similar sized trees;

**Small Canopy Tree** means a tree that can grow under or smaller than a shade tree. WILL MATURE TO APPROX. 20+ FEET IN HEIGHT

MINIMUM PLANTING SIZES:

\*1.5 INCHES IN DIAMETER &/or 8-10 FEET IN HEIGHT,

\*MULTI-STEMMED AND EVERGREENS - 8-10 FEET IN HEIGHT; IGNORE DIAMETER

—Acceptable small or under-story trees are serviceberry, yaupon holly, redbud, and similar sized trees.



**LARGE-GROWING SHRUBS** means shrubs that are woody/hardy, and permanent additions to the landscape (such as a tree). WILL MATURE TO APPROX. 8-10 FEET IN HEIGHT &/OR WIDTH

**IF SUBSTITUTION OPTION IS GIVEN: PLANTING SUBSTITUTION:**

*1 large canopy tree = 2 small canopy tree; 1 large canopy tree = 10 large-growing shrubs*

Planting must occur onsite within 100 foot CBPA buffer. Payment can substitute for required plantings due to space restrictions.

**MONETARY SUBSTITUTION:** 1 shade tree = \$310; 1 small tree = \$250; 1 shrub = \$45

**IMPORTANT: CHECK SUN/SHADE REQUIREMENTS AND SALT TOLERANCE  
PLANT TREES/SHRUBS ALLOWING PROPER GROWTH BOTH IN HEIGHT AND WIDTH  
PLANT ACCORDING TO PLANTING GUIDES PROVIDED BY NURSERY  
KEEP ID TAG(S) ON PLANT(S) &/OR KEEP CONTAINER(S) FOR INSPECTION**

## 100 Foot CBPA (RPA & IDA) Buffer Encroachment Guidelines

Any impervious surface encroachment into the 100 foot CBPA buffer for new single family homes, additions, or accessory structures will require buffer restoration equal to one planting unit per 400 square feet.

### One Planting Unit

- One (1) large canopy tree @ 1.5" – 2" caliper or large evergreen tree @ 6' height
- Two (2) small canopy trees @ 1.0" – 1.5" caliper
- Three (3) small shrubs

## 50 Foot CBPA (RPA & IDA) Buffer Encroachment Restoration Guidelines

For every 400 square-foot encroachment provide one planting unit.

### Example:

An 800 square-foot addition encroaching into 50 foot CBPA buffer.

Divide by 400 square feet (20'x20' unit) to get:

<u>Units</u>	x	<u>plant/unit</u>	<u>Number of plants</u>
2 units	x	1 large canopy tree	2 large canopy trees
		2 small canopy trees	4 small canopy trees
		3 small shrubs	<u>6 small shrubs</u>
			<b>12 plants</b>

---

## Salt-Tolerant Native Plants for Waterfront Landscapes

### Deciduous Large Canopy Trees

Hackberry (*Celtis occidentalis*)  
Sugarberry (*Celtis laevigata*)  
Sweet gum (*Liquidambar styraciflua*) – cultivar without seed pods e.g. ‘Rotundiloba’  
Black Cherry (*Prunus serotina*)  
Bald Cypress (*Taxodium distichum*)  
White oak (*Quercus alba*)  
Swamp white oak (*Quercus bicolor*)  
Willow oak (*Quercus phellos*) – cultivar with narrower canopy e.g. ‘Hightower’  
Water oak (*Quercus nigra*)  
Pin oak (*Quercus palustris*)  
Persimmon (*Diospyros virginiana*) – edible fruit  
Black tupelo (*Nyssa sylvatica*) – cultivar with narrower canopy e.g. ‘Forum’

### Evergreen Large Canopy Trees

Eastern red cedar (*Juniperus virginiana*)  
Loblolly pine (*Pinus taeda*)  
American holly (*Ilex opaca*)  
Live oak (*Quercus virginiana*) – cultivar with narrower canopy e.g. ‘Highrise’  
Southern magnolia (*Magnolia grandiflora*)

### Small Canopy Trees

Yaupon holly (*Ilex vomitoria*) – tree & weeping varieties available  
Little Gem Magnolia (*Magnolia grandiflora* ‘Little Gem’)  
Sweetbay magnolia (*Magnolia virginiana*)  
Common serviceberry (*Amelanchier arborea*)  
Eastern serviceberry (*Amelanchier canadensis*)

## Salt-Tolerant Native Plants for Waterfront Landscapes

### Shrubs

Red chokeberry (*Aronia arbutifolia*)  
 Sweet pepperbush (*Clethra alnifolia*)  
 Inkberry holly (*Ilex glabra*)  
 Yaupon holly (*Ilex vomitoria*) – dwarf cultivars available e.g. ‘Nana’ & ‘Stokes Dwarf’  
 Wax myrtle (*Morella cerifera*)  
 Southern bayberry (*Morella caroliniensis*)  
 Northern bayberry (*Morella pensylvanica*)  
 Beach plum (*Prunus maritima*) – edible fruit  
 Smooth sumac (*Rhus glabra*)  
 Elderberry (*Sambucus nigra* ssp. *canadensis*) – edible fruit  
 Highbush blueberry (*Vaccinium corymbosum*) – edible fruit  
 Arrowwood (*Viburnum dentatum*)  
 Salt bush (*Baccharis halimifolia*)  
 Marsh elder (*Iva frutescens*)

### Grasses

Switch grass (*Panicum virgatum*)  
 Salt-meadow hay (*Spartina patens*)

### Perennials

Hibiscus (*Hibiscus moscheutos*)  
 Marsh mallow (*Kosteletzkya virginica*)  
 Asters (*Aster* spp.)  
 Blanket flower (*Gaillardia* spp.)  
 Goldenrods (*Solidago* spp.)  
 Coneflower (*Echinacea* spp.)  
 Orange coneflower (*Rudbeckia fulgida*)  
 Black-eyed Susan (*Rudbeckia hirta*)  
 Blazing star (*Liatris squarrosa*)

### Tidal Marsh (regular salt water flooding)

Salt marsh cordgrass (*Spartina alterniflora*)  
 Salt-meadow hay (*Spartina patens*)