

**CHARLESTOWN TOWNSHIP
CHESTER COUNTY**

ORDINANCE NO. 22 2-2022

**AN ORDINANCE OF CHARLESTOWN TOWNSHIP,
CHESTER COUNTY, COMMONWEALTH OF
PENNSYLVANIA AMENDING THE CHARLESTOWN
TOWNSHIP CODE OF ORDINANCES TO AMEND
CERTAIN PROVISIONS OF CHAPTER 22, SUBDIVISION
AND LAND DEVELOPMENT, PART 2, DEFINITIONS, AND
PART 5 DESIGN STANDARDS RELATED TO TREES AND
LANDSCAPING; CHAPTER 23, STORMWATER
MANAGEMENT, PART 3, PERFORMANCE STANDARDS;
CHAPTER 27 ZONING, PART 2 DEFINITIONS AND PART
16 WETLANDS AND RIPARIAN FOREST BUFFERS.**

BE IT ENACTED AND ORDAINED by the Board of Supervisors of Charlestown Township that the Charlestown Township Code of Ordinances, are hereby amended as follows:

Section 1. Chapter 22, Part 2, Section 202 of the Charlestown Township Code of Ordinances is hereby amended to add and amend the following define terms as follows:

CALIPER See NURSEY STOCK CALIPER

CLEAR CUTTING The removal of seventy-five percent (75%) or more of the trees and understory plants with the intention of preparing real property for non-agricultural development purposes.

CRITICAL ROOT ZONE The distance of radius from the tree trunk equal to a distance 12 times the diameter at breast height of the trunk.

DIAMETER AT BREAST HEIGHT (DBH) The diameter of an existing tree at four and one-half feet above the average grade of the surrounding ground surface. For multi-trunked trees, the DBH is of the trunk with the larger or largest measured diameter.

INVASIVE SPECIES An introduced plant that becomes overpopulated and harms the environment due to adverse habitat affects. (Refer to the List of Invasive Species of the Pennsylvania Department of Environmental Protection.
<https://www.dcnr.pa.gov/Conservation/WildPlants/InvasivePlants/InvasivePlantFactSheets/Pages/default.aspx>)

NURSEY STOCK CALIPER The diameter of a tree trunk measured at a point six (6) inches above the ground, as used to identify the size of nursery stock.

PNDI – PENNSYLVANIA NATURAL DIVERSITY INVENTORY SITE A site identified by the Pennsylvania Department of Conservation and Natural Resources under the Pennsylvania Natural Heritage Program containing rare, threatened and endangered plant species.

SPECIMEN VEGETATION Individual trees equal to or exceeding 24 inches DBH.

TREE A woody perennial plant, typically having a single stem or trunk bearing lateral branches above the ground.

TREE DRIPLINE The outermost circumference of the canopy of the tree from which water drips onto the ground, including the soils and roots that lie within the circumference.

VEGETATION Trees and understory plants such as shrubs and groundcovers.

Section 2. Chapter 22, Part 5, Section 512 of the Charlestown Township Code of Ordinances is hereby amended to read as follows:

§22-512. Trees and Landscaping.

1. Standards for the planting of trees as part of screening requirements are set forth in the Zoning Ordinance [Chapter 27] in Part 9 relative to the NC-1 District, in Part 9A relative to the NC-2 District, in Part 10 relative to the I/O/B Districts, and in Part 13 relative to Off-Street Parking and Loading.
2. The Design Standards for Trees and Landscaping are enacted for the following purposes:
 - A. To be in support of the Charlestown Township Zoning Ordinance and Section 603(c)(7) of the Pennsylvania Municipalities Planning Code (PA MPC) relative to the preservation of environmentally sensitive areas.
 - B. To be in support of the Charlestown Township Zoning Ordinance and Section 603.(g)(1) of the PA MPC relative to the protection of natural features and resources.
 - C. To be in support of the Charlestown Township Zoning Ordinance and Section 604.(1) of the PA MPC relative to the preservation of natural values in the environment, and the preservation of forests.
 - D. To comply with Section 509.(a) of the PA MPC relative to the completion of improvements and street trees, and buffer or screen plantings.
3. Street Trees
 - A. Street trees shall be planted within the street right-of-way, two (2) feet from the edge of the street right-of-way.

- B. A List of Recommended Street Trees for planting in Charlestown Township is included in Appendix 6 according to their botanical name, common name and spacing requirements.
- C. All street trees shall be a minimum of ~~four~~ three (3) inches in caliper at the time of planting.
- D. Container grown trees shall have all circling or kinked root systems loosened, and unwrapped in order to prevent girdling. Balled and burlapped trees shall have all ties, baskets, and burlap removed before backfilling around the tree.

4. Tree and Associated Native Vegetation Protection

- A. Applicants shall make all reasonable efforts to harmonize their plans with the protection of existing trees. Woodland disturbance, including alteration or removal of any hedgerows shall be minimized. No portions of tree masses, treeline, hedgerow, or individual freestanding trees with six (6) inch or greater DBH shall be removed unless clearly necessary to effectuate the proposed development.
- B. The design of any subdivision or land development should be located in manner to minimize the necessity for disturbance of trees and associated native and specimen vegetation.
- C. See also the tree and other vegetation protection requirements set forth in the Zoning Ordinance Part 12, relative to the Steep Slope Conservation District, and Part 16, relative to Wetland and Riparian Forest Buffers, for additional standards pertaining to vegetation protection and removal.
- D. See also the tree and other vegetation protection requirements set forth in the Stormwater Management Ordinance Parts 2 and 3 for additional standards pertaining to vegetation protection and removal, including as it pertains to Riparian Buffers, Wetlands, and Agriculture and Logging/Woodcutting.
- E. No Trees, Specimen Vegetation, and rare, threatened and endangered plant species shall be removed from an area identified as a PNDI – Pennsylvania Natural Diversity Inventory Site.

5. Tree Replacement

- A. The landowner ~~of~~ or developer ~~to~~ shall plant one (1) tree of not less than three (3) inches in Nursery Stock Caliper for each tree to be destroyed of twelve diameter at breast height.
- B. In lieu of actual onsite tree replacement, the Board of Supervisors may request any applicant for subdivision or land development approval to place the equivalent cash value as agreed upon by the Township and the applicant, as determined by current wholesale

costs, of some or all of the required three-inch Nursery Stock Caliper replacement trees into the Township Park and Recreation Fund for the purchase, installation and/or maintenance of vegetation elsewhere in the Township. See Appendix 20 for the Schedule of Tree Replacement Values, and see the Charlestown Township Fee Schedule for additional details.

5. Vegetation Protection

A. Purpose. To require and set minimum standards for vegetation protection to:

- (1) Provide consistency with the enabling provisions of the Pennsylvania Municipalities Planning Code (PA MPC).
- (2) Provide consistency with the Township Comprehensive Plan, and the Township Parks, Recreation, Open Space & Trails Plan.
- (3) Minimize potential public safety hazards associated with land use activity.
- (4) Protect and conserve the natural features, landscapes and habitats of the Township.
- (5) Encourage the growth of native vegetation along streams and water bodies to filter particulates and nutrients and to retard the flow of stormwater runoff.
- (6) Protect and conserve the existing tree canopy and encourage its expansion due to the ecological functions that a tree canopy provides such as reducing stormwater runoff, holding soil in place, limiting soil erosion, producing oxygen, acting as a carbon sink, moderating temperature, cleaning the soil, and supporting biodiversity.

B. The developer shall protect remaining trees from damage during construction. The following procedures shall be followed in order to so protect remaining trees:

- (1) Where existing trees are to remain, no change in existing grade shall be permitted within the dripline of the trees or their critical root zone, whichever is greater. The critical root zone is defined as one foot of radius from the tree trunk for each one inch of diameter at breast height of the tree.
- (2) Prior to any land disturbance, appropriate fencing four (4) feet in height, such as orange construction fencing, shall be placed at the dripline of trees or their critical root zone, wherever is greater, adjacent to proposed construction. Such fencing shall be maintained in place throughout the duration of construction activity and shall be inspected by the Township prior to initial land disturbance. See also Appendix 16 Tree Protection Details of this Chapter, for additional details.
- (3) Trees within 25 feet of a building or bordering entrances or exits to building sites shall be protected by a temporary barrier to be maintained in place throughout the duration of construction activity.

- (4) No boards or other materials shall be nailed or otherwise attached to trees during construction, except for "No Trespassing" signs.
- (5) Construction materials, equipment, soil and/or debris shall not be stored nor disposed of within the driplines of trees to remain, or their critical root zones, whichever is greater, except for biodegradable mulch used to minimize soil compaction. Work-related pathways that are created during construction and land disturbance shall avoid tree driplines and critical root zones to the maximum extent possible in order to minimize soil compaction.
- (6) Tree trunks, limbs and exposed roots damaged during construction shall be protected from further damage by being cut cleanly and covered or treated immediately in accordance with accepted professional landscape procedures.
- (7) Tree protection information shall be included with Erosion & Sediment Control Plans and Demolition Plans, including the graphic location of tree protection fencing at the dripline or root protection zone, details and notes.

Section 3. Appendices 6 and 20 referenced in Section 2 attached hereto are enacted as part this Ordinance as if fully set forth herein.

Section 4. Chapter 23, Part 3 Performance Standards, Section 301 of the Charlestown Township Code of Ordinances is hereby amended to add a new subsection B with all subsequent subsections renumbered as C through P.

- B. The Board of Supervisors may require an Applicant to mitigate vegetation removal that results in unacceptable measurements of offsite impacts from stormwater runoff or soil erosion. The extent of impacts, and the type, extent and quantified results of required mitigation shall be determined by the Township Engineer.

Section 5. Chapter 27, Part 16, Section 1618 of the Charlestown Township Code of Ordinances is hereby amended to add and amend the following define term as follows:

RIPARIAN BUFFER AREA Any area comprised of one (1) or more of the following:

1. Any area within 50 feet of the bank, of any stream, lake or pond.
2. Any wetlands and any area within 50 feet of any wetland
3. Any area of hydric soil.

Section 6. Chapter 27, Part 16, Section 1618 of the Charlestown Township Code of Ordinances is hereby amended to read as follows:

§27-1618 Wetlands and Riparian Forest Buffers.

1. Except as required otherwise under the Stream Valley restriction regulations of § 27-1612, no building shall be erected within 50 feet of any wetland to enable the regeneration of vegetation in order to enhance or create wetland and riparian forest buffers.
2. The following uses or activities shall be prohibited in Riparian Buffer Areas:
 - A. Removal or disturbance of vegetation in a manner that is inconsistent with soil erosion and sedimentation control and riparian buffer protection.
 - B. Storage or discharge of any hazardous or noxious materials.
 - C. Use of fertilizers, pesticides, herbicides, and/or other chemicals.
3. Riparian buffer restoration and planting requirements.
 - A. All riparian buffer areas shall be continually maintained with a diverse mix of locally adapted native species of canopy trees, understory trees, shrubs, and herbaceous plants so as to constitute a forested riparian buffer. In addition:
 - (1) An applicant shall restore any impacted riparian buffer area through invasive plant removal and planting of a diverse mix of native tree and shrub species.
 - (2) Restoration plantings shall be planted at initial densities sufficient enough to provide a minimum of 200 trees per acre at canopy closure.
 - (3) The following tree planting and spacing standards shall apply at installation:
 - (a) Seedlings: ten-foot spacing (approximately 435 seedlings/acre) protected by five-foot tree shelters.
 - (b) Bare root trees or container trees (at least six feet in height for both): twelve-foot spacing (approximately 300 trees/acre). Tree shelters, wraps, or other proven methods shall be required to prevent damage from antler rubbing.
 - (4) Applicants shall submit a planting and maintenance plan for the impacted riparian buffer. The Plan shall be prepared by a Registered Landscape Architect or professional plant ecologist. The Plan shall identify the number, density and species of locally adapted native trees appropriate to the site conditions that will achieve a minimum of 60% uniform canopy coverage within 10 years. The Plan shall describe the maintenance program to be conducted by the buffer owner for a minimum of five (5) years, including measures to remove, and subsequently control, invasive plant species, limit deer and rodent damage, and replace dead trees and shrubs for the first four (4) years.
 - (5) Restoration to a forested riparian buffer shall not be required for issuance of a building permit for a single-family dwelling on a pre-existing undeveloped lot, addition thereto, or

for the construction of an accessory structure disturbing less than 10,000 square feet of land on an existing lot.

B. The Board of Supervisors shall approve all Landscape Plans for proposed plantings along all watercourses to ensure that species selection is appropriate and does not involve the use of invasive plants.

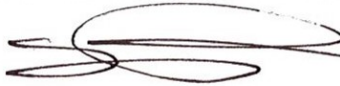
Section 7. Severability. Should any section or provision of this Ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of any other section or provision of this Ordinance than the one so declared.

Section 8. Repealer. All Ordinances and parts of Ordinances inconsistent herewith are hereby repealed to the extent of the said inconsistency.

Section 9. Effective Date. This Ordinance shall be effective five (5) days from the date of enactment.

ENACTED and **ORDAINED** this 7th day of November, 2022 by the Board of Supervisors of Charlestown Township.

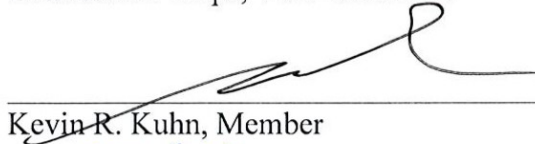
**CHARLESTOWN TOWNSHIP
BOARD OF SUPERVISORS**



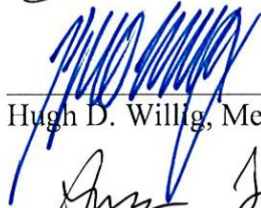
Frank A. Piliero, Chairman



Charles A. Philips, Vice-Chairman



Kevin R. Kuhn, Member

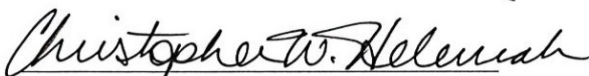


Hugh D. Willig, Member



Susan Bednar, Member

ATTEST:


Christopher W. Heleniak, Secretary

Appendix – Item 6

A. LIST OF RECOMMENDED STREET TREES

CHARLESTOWN TOWNSHIP
CHESTER COUNTY

<u>Genus and Species</u>	<u>Common Name</u>	<u>Spacing in Feet per Street side</u>
<i>Acer rubrum</i> *	Red Maple	50-40
<i>Acer saccharum</i> <i>saccharum</i> *	Sugar Maple	50-40
<i>Carya ovata</i>	Shagbark Hickory	40
<i>Celtis occidentalis</i>	Common Hackberry	40
<i>Fagus grandifolia</i>	American Beech	45
<i>Gleditsia triacanthos</i> var. <i>intermis</i> *	Honeylocust	40
<i>Liquidambar styraciflua</i> 'Rotundiloba'	Fruitless Sweet Gum	40
<i>Liriodendron tulipifera</i>	Tulip Tree	50-40
<i>Nyssa sylvatica</i> *	Black Tupelo/Black Gum	40
<i>Platanus occidentalis</i>	American Sycamore	45
<i>Quercus alba</i>	White Oak	40
<i>Quercus bicolor</i>	Swamp White Oak	40
<i>Quercus borealis/rubra</i>	Red Oak	50-40
<i>Quercus imbricaria</i>	Shingle Oak	50-40
<i>Quercus montana</i>	Chestnut Oak	40
<i>Quercus palustris</i>	Pin Oak	45
<i>Quercus phellos</i>	Willow Oak	40
<i>Taxodium distichum</i>	Baldcypress	35
<i>Tilia americana</i>	Basswood	35
<i>Tilia cordata</i>	Littleleaf Linden	50-40

* includes cultivars with similar mature sizes

Note:

If an Applicant proposes other species, they will be considered if the plants are native species, and hardy in Zones 6A and 6B as shown on the USDA Zone of Hardiness Map.

B. LIST OF RECOMMENDED TREES FOR BUFFER AREAS
AND ALONG PROPERTY LINES

CHARLESTOWN TOWNSHIP
CHESTER COUNTY

<u>Genus and Species</u>	<u>Common Name</u>
Acer pensylvanicum	Striped maple
Acer saccharinum	Silver maple
Amelanchier canadensis	Shadblow serviceberry
Betula alleghaniensis	Yellow birch
Carpinus caroliniana	American hornbeam
Cercis canadensis	Redbud
Cladrastris lutea	Yellow wood
Cornus alternifolia	Pagoda dogwood
Cornus florida	Flowering dogwood
Cornus mas	Corenlian cherry
Crataegus phaenopyrum	Washingtown hawthorn
Crataegus viridus cv.	Winter king hawthorn
Metasequoia glyptostroboides	Dawn redwood
Ostrya viginiana	Hop-hornbeam
Oxydendron arboretum	Sourwood
Prunus nigra	Canadian plum
Prunus serotina	Black cherry
Quercus coccinea	Scarlet Oak
Sorbus americana	American mountain ash

Note:

If an Applicant proposes other species, they will be considered if the plants are native species, and hardy in Zones 6A and 6B as shown on the USDA Zone of Hardiness Map.

C. LIST OF RECOMMENDED EVERGREEN TREES

CHARLESTOWN TOWNSHIP
CHESTER COUNTY

<u>Genus and Species</u>	<u>Common Name</u>
Abies concolor	White fir
Abies fraseri	Fraser fir
Chamaecyparis thyoides	Atlantic white cedar
Illex opaca	American holly
Juniperus communis (upright)	Common juniper
Juniperus virginiana (upright)	Eastern red cedar
Picea abies	Norway spruce
Picea glauca	White spruce
Pinus resinosa	Red pine
Pinus virginiana	Virginian pine
Pseudotsuga menziesii	Douglas fir

Note:

If an Applicant proposes other species, they will be considered if the plants are native species, and hardy in Zones 6A and 6B as shown on the USDA Zone of Hardiness Map.

D. LIST OF RECOMMENDED SHRUBS

CHARLESTOWN TOWNSHIP CHESTER COUNTY

<u>Genus and Species</u>	<u>Common Name</u>
Abelia (species)	Abelia
Aesculus parviflora	Bottlebrush buckeye
Amelanchier canadensis	Serviceberry
Aronia arbutifolia	Red chokeberry
Clethra acuminata	Mountain summersweet
Cornus racemosa	Grey dogwood
Corylus americana	American hazelnut
Cotoneaster horizontalis	Rock spray cotoneaster
Hamamelis virginiana	Common withchazel
Ilex (upright species)	Holly
Ilex glabra	Inkberry
Kalmia latifolia	Mountain laurel
Myrica pensylvanica	Northern bayberry
Potentilla fruticosa	Bush cinquefoil
Viburnum (species)	Viburnum

Note:

If an Applicant proposes other species, they will be considered if the plants are native species, and hardy in Zones 6A and 6B as shown on the USDA Zone of Hardiness Map.

E. LIST OF RECOMMENDED WETLAND TREES, AND BASIN, BIOSWALE,
AND DRAINAGE SWALE SHRUBS

CHARLESTOWN TOWNSHIP
CHESTER COUNTY

Wetland trees

<u>Genus and Species</u>	<u>Common Name</u>
<i>Acer rubrum</i>	Red maple
<i>Alnus glutinosa</i>	Black alder
<i>Betula nigra</i>	River birch
<i>Liquidambar styraciflua</i>	American sweetgum
<i>Magnolia virginiana</i>	Sweetbay magnolia
<i>Metasequoia glyptostroboides</i>	Dawn redwood
<i>Nyssa sylvatica</i>	Black gum
<i>Plantanus occidentalis</i>	American sycamore
<i>Quercus bicolor</i>	Swamp white oak
<i>Quercus phellos</i>	Willow oak
<i>Salix nigra</i>	Black willow
<i>Taxodium distichum</i>	Baldcypress

Basin, bioswale, drainage swale shrubs

<u>Genus and Species</u>	<u>Common Name</u>
<i>Amelanchier canadensis</i>	Serviceberry
<i>Aronia arbutifolia</i>	Red chokeberry
<i>Cephalanthus occidentalis</i>	Buttonbush
<i>Clethra alnifolia</i>	Summersweet
<i>Cornus amomum</i>	Silky dogwood
<i>Cornus sericea</i>	Redosier dogwood
<i>Ilex verticillata</i>	Winterberry
<i>Itea virginica</i>	Virginia sweetspire
<i>Lindera benzoin</i>	Spicebush
<i>Salix purpurea</i>	Purpleosier willow
<i>Sambucus canadensis</i>	Elderberry
<i>Viburnum dentatum</i>	Arrow wood
<i>Viburnum trilobum</i>	Cranberrybush viburnum

Note:

If an Applicant proposes other species, they will be considered if the plants are native species, and hardy in Zones 6A and 6B as shown on the USDA Zone of Hardiness Map.

Appendix- Item 20

SCHEDULE OF TREE REPLACEMENT VALUES
CHARLESTOWN TOWNSHIP
CHESTER COUNTY

The following Schedule will be updated or amended based on the current Wholesale Cost of one (1) three-inch (3") Nursery Stock Caliper replacement tree, installed, as determined by the Board of Supervisors in 2023 to 2026.

+ 2022	\$425.00 (wholesale cost x 2.2 for guarantee/maintenance) =	\$935.00
+ 2023	\$435.00	= \$957.00
+ 2024	\$445.00	= \$979.00
+ 2025	\$455.00	= \$1,001.00
+ 2026	\$465.00	= \$1,023.00