



Office of the Mayor

City of Columbus

Ohio

EXECUTIVE ORDER

2015-01

Michael B. Coleman, Mayor

December 8, 2015

WHEREAS, the City of Columbus is committed to combating climate change, becoming a more sustainable city, and increasing the quality of life of the Columbus community; and

WHEREAS, trees contribute to improved human health, water and air quality, temperature reduction, pollution abatement, storm water retention, carbon sequestration, energy savings, and have various other benefits; and

WHEREAS, the Mayor and the City of Columbus believe that protecting and expanding the current urban tree canopy should be a priority in the movement toward becoming a more sustainable community; and

WHEREAS, in furtherance of the "Branch Out Columbus: 300,000 Trees by 2020" initiative and the Columbus Green Community Plan - Green Memo III established goal to preserve the current tree canopy and increase the urban tree canopy by 1% annually; and

NOW, THEREFORE, I, Michael B. Coleman, Mayor of the City of Columbus, declare and institute this Executive Order implementing the following Tree Protection and Mitigation Policy:

- This policy applies to all professional service and construction contracts for projects on City property or in the City right-of-way that include a scope of work funded solely with public dollars (i.e. traditional city capital improvement projects with no private sector contributions). This policy does not apply to routine maintenance activities undertaken by the City.
- In the design phase, the design professional shall take care to design the project to minimize the number of trees disturbed or removed. In the construction phase, the contractor shall take care not to damage trees within the project boundaries. Attachments A and B include template language that shall be included in the scope of work for professional service contracts and construction contracts, respectively, that involve construction on City property and in the City right-of-way.
- If removing trees are necessary in a construction project, the project's scope shall include replacement of trees removed. Replacement shall occur on the site of the project, if practical. For projects where on-site replacement is not practical, the funding department(s) shall provide separate payment to the Department of Recreation and Parks' tree fund (058511-0819 Fund 234). Attachments C through E detail the City's Tree Protection and Mitigation Policy.

This order shall be in full force and effect on projects for which a design Notice to Proceed is issued after the date my signature is affixed to this document.



IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the Mayor of the City of Columbus Ohio to be hereto affixed this 8th day of December, 2015

Michael B. Coleman
Mayor



Attachment A

PROFESSIONAL SERVICES CONTRACT LANGUAGE FOR TREE PROTECTION AND MITIGATION DURING DESIGN

The following instructions shall be included in the scope of services for all professional service and contracts for construction projects on City property or in the City right-of-way that include a scope of work funded solely with public dollars (i.e. traditional city capital improvement projects with no private sector contributions) and the City's Tree Protection and Mitigation Policy shall be included in the executed professional service contract.

TREE PROTECTION DURING DESIGN

It is the policy of the City of Columbus to preserve trees. Development of heavily wooded sites should be avoided when possible. In the site survey work performed pursuant to this contract, the Consultant shall also include the species, location, and size of trees within the construction limits of the project. The preliminary and final design plans shall minimize the removal of the trees identified in the site survey. If removal is necessary, the Consultant or the Contracting Department shall prepare a tree replacement plan that is consistent with the City's Tree Protection and Mitigation Policy. The tree replacement plan shall be reviewed and approved by the City Forester or designee prior to final construction plan approval.



Attachment B

CONSTRUCTION CONTRACT LANGUAGE FOR TREE PROTECTION AND MITIGATION DURING CONSTRUCTION

The following instructions shall be included in the construction documents for all construction contracts for construction projects on City property or in City the right-of-way that include a scope of work funded solely with public dollars (i.e. traditional city capital improvement projects with no private sector contributions) and the City's Tree Protection and Mitigation Policy shall be included in the executed construction contract:

TREE PROTECTION DURING CONSTRUCTION

Trees, tree roots and limbs included within the construction limits of the project shall be protected against injury or damage during the course of Work. Special attention shall be paid to branches, trunks, and roots during construction.

The contractor shall follow the most recent edition of the "American National Standards Institute" (ANSI) A300 standards in effect at the time the contract is executed, which are the generally accepted industry standards for tree care practices. Any work involving tree care shall be supervised by an "International Society of Arboriculture" (ISA) certified arborist.

Any trees damaged or destroyed due to contractor negligence shall be treated or removed at the contractor's expense. The contractor shall, at the contractor's expense, replace the destroyed trees per the City's Tree Protection and Mitigation Policy as part of the Work.

The standards can be found for reference at the Department of Recreation and Parks Forestry Section office at:

Department of Recreation and Parks, Forestry Section
1533 Alum Industrial Dr. W
Columbus, Ohio 43209
614-645-6640

Or can be purchased online.



Attachment C

CITY OF COLUMBUS TREE PROTECTION AND MITIGATION POLICY

In the design and construction of all projects on City property or in the City right-of-way that include a scope of work funded solely with public dollars (i.e. traditional city capital improvement projects with no private sector contributions), the City of Columbus will endeavor to avoid removing trees, including street trees.

If it is not practical to avoid tree removal, the funding department shall provide separate payment to the Department of Recreation and Parks' tree fund (058511-0819 Fund 234).

Prior to commencement of any tree removal or plantings on City property or in the City right-of-way, the scope of work and/or plan needs to be approved by the Department of Recreation and Parks.

All plant material guidelines shall be in accordance with the most recent "American Standard for Nursery Stock (ANSI Z60.1)" standard in effect at the time the professional services contract is executed.

1. All replacement trees shall have a minimum trunk diameter of two and one-half inches (measured at 4 feet up from the base of the tree).
 - a. Impacted trees having a trunk diameter up to twelve inches are to be replaced on a one-for-one basis;
 - b. Impacted trees having a trunk diameter of greater than twelve inches up to eighteen inches are to be replaced on a two-for-one basis;
 - c. Impacted trees having a trunk diameter of greater than eighteen inches up to twenty-four inches are to be replaced on a three-for-one basis;
 - d. Impacted trees having a trunk diameter of greater than twenty-four inches up to thirty inches are to be replaced on a four-for-one basis; and
 - e. Impacted trees having a trunk diameter of greater than thirty inches and over are to be replaced on a five-for-one basis (meaning that if a tree greater than thirty inches is removed, it must be replaced by five trees having at least a trunk diameter of two and one-half inches).
2. Tree replacement shall occur on the project site, if practical. If it is not practical to replace the trees on site, the funding department(s) shall pay a fee per tree in accordance with the attached fee schedule (Exhibit D) to the Department of Recreation & Parks Tree Fund (058511-0819 Fund 234).
3. All replacement trees shall be from the attached list of tree species that are approved by the City Forester, or approved by a case by case basis. Diversity of tree species is critical to the future sustainability of the tree canopy. The Department of Recreation and Parks may update the approved list annually, and upon doing so, will provide the updated list to the Departments.



Attachment D

FEES FOR TREE REPLACEMENT

The fees for tree replacements is defined in the current edition in effect at the time the professional services contract is executed of the *Guide for Plant Appraisal* authored by the Council of Tree and Landscape Appraisers, which is the professional plant appraiser's how-to manual for determining size, species, condition, and location factors that influence the value of plants.

The guide can be found for reference at the Department of Recreation and Parks Forestry Section office at:

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Columbus, Ohio 43209
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Or can be purchased online.



Attachment E

LIST OF APPROVED TREE SPECIES FOR REPLACEMENT

The table below is a list of suggested species for tree replacement planting on City property and in the City right-of-way. Under the authority of Columbus City Code Chapter 912, the City of Columbus Tree Sub Commission is charged with guiding tree plantings within the City's right of ways. The Department of Recreation and Parks' Forestry Section is interested in nurturing a well-diversified urban tree canopy and encourage selecting a variety of tree species listed below. Alternative suggestions to those listed below shall be considered on a case by case basis and shall be approved by the City Forester prior to final construction plan approval.

Shade Trees - Large Class	-	-	-
Common Name	Botanical Name	Shape	Size
Sienna Glen Freeman Maple	<i>Acer x freemanii</i> "Sienna"	L, O/P	50' x 35'
Commemoration Sugar Maple	<i>Acer saccharum</i> "Commemoration"	L, O/R	50' x 35'
Armstrong Red Maple	<i>Acer rubrum</i> "Armstrong"	L, N	40' x 15'
Black Maple	<i>Acer nigrum</i>		40' x 15'
Yellow Buckeye	<i>Aesculus flava</i>	UO	80'
Ohio Buckeye	<i>Aesculus glabra</i>	R	60'
American Chestnut	<i>Castanea dentata</i>	B, R	60' x 80'
Magnifica Hackberry	<i>Celtus occidentalis</i> "Magnifica"	L, O	50' x 40'
Persimmon	<i>Diospyros virginiana</i>	O/R	30' x 50'
Black Locust, Honeylocust	<i>Robinia pseudoacacia</i> , <i>Gleditsia triacanthos</i>	U/S	25' x 50'
American Beech	<i>Fagus grandifolia</i>	R-S	45'+
Imperial Honeylocust	<i>Gleditsia triacanthos</i> var. <i>inermis</i> "Impcole" (avoid fruitless male cultivars)	L, R	35' x 35'
Espresso Kentucky Coffeetree	<i>Gymnocladus dioicus</i> "Espresso"	L, B	50' x 35'
Bitternut Hickory	<i>Carya cordiformis</i>	Slender	35' x 70'
Pignut Hickory	<i>Carya glabra</i>		(80 to 90 ft) tall
Mockernut Hickory	<i>Carya tomentosa</i>	R'	60' x 40'
Butternut	<i>Juglans cinerea</i>	R	60'



Black Walnut	<i>Juglans nigra</i>	U, R	70' x 70'
Sweetgum	<i>Liquidambar styraciflua</i>	P	45'+
Tulip Tree	<i>Liriodendron tulipifera</i>	L, R	60' x 30'
Cucumbertree	<i>Magnolia acuminata</i>	R	70' x 30'
American Sycamore	<i>Platanus occidentalis</i>	Open, massive crown	75' x 75'
White Oak	<i>Quercus alba</i>	S	45'+
Swamp White Oak	<i>Quercus bicolor</i>	L, O	45' x 45'
Scarlet Oak	<i>Quercus coccinea</i>		50' x 40'
Red Oak	<i>Quercus rubra</i>	L, R	50' x 40'
Overcup Oak	<i>Quercus lyrata</i>	L/M, O/R	50' x 45'
Shingle Oak	<i>Quercus imbricaria</i>	L, O	50' x 40'
Bur Oak	<i>Quercus macrocarpa</i>	L, B/S	55' x 45'
Chinkapin Oak	<i>Quercus muehlenbergii</i>	Open, globular	40' x 50'
Pin Oak	<i>Quercus palustris</i>	P	45'+
Willow Oak	<i>Quercus phellos</i>		45'+
Northern Red Oak	<i>Quercus rubra</i>	R	45'+
Shumard Oak	<i>Quercus shumardi</i>	P, S	45'+
Post Oak	<i>Quercus stellata</i>	R	40' x 40'
Black Oak	<i>Quercus velutina</i>	Globular, S	55' x 55'
Sassafras	<i>Sassafras albidum</i>	I	45'+
Baldcypress	<i>Taxodium distichum</i>	P	60' x 25'
Evergreen tree/shrub (Arborvitae)	<i>Thuja occidentalis</i>	U	30'
Boulevard American Linden (American basswood)	<i>Tilia americana "Boulevard"</i>	L, N/P	50' x 25'
Sterling Silver Linden	<i>Tilia tomentosa "Sterling"</i>	L, O	45' x 35'
Jefferson American Elm	<i>Ulmus americana "Jefferson"</i>	L, B/V	70' x 50'
Slippery Elm	<i>Ulmus rubra</i>	Vase	
Shade Trees - Medium Class	-	-	-



<u>Common Name</u>	<u>Botanical Name</u>	<u>Shape</u>	<u>Size</u>
Red Pointe Red Maple	Acer rubrum "Frank Jr."	M, O/P	45' x 35'
Sun Valley Red Maple	Acer rubrum "Sun Valley"	M, O	40' x 35'
Grey alder or speckled alder	Alnus incana	R/I	(49-66 ft tall)
River, Black, Yellow, Sweet, Gray Birch	Betula nigra, lenta, alleghaniensis, lenta, populifolia	P/O, P/R, R	30' x 45'
Prarie Sentinel Hackberry (common hackberry)	Celtus occidentalis "Prairie Sentinel"	M, N	45' x 12'
Yellowwood	Cladrastis kentukea	M, R	30' x 40'
Street Keeper Honeylocust	Gleditsia triacanthos var. inermis "Draves"	M, N	45' x 20'
Red cedar	Juniperus virginiana		30' x 8'
Black Gum/Black Tupelo	Nyssa sylvatica	U, O	30' x 45'
American Hop Hornbeam/ Ironwood	Ostrya virginiana	M, U/O	40' x 25'
Crimson Spire Hybrid Oak	Quercus robur x Q. alba "Crimschmidt"	M, N	45' x 15'
<u>Flowering or Ornamental Trees</u>	-	-	-
<u>Common Name</u>	<u>Botanical Name</u>	<u>Shape</u>	<u>Size</u>
Downy Serviceberry, smooth Serviceberry	Amelanchier arborea, laevis	U	15' x 30'
Moonglow Sweetbay Magnolia	Magnolia virginiana "Jim Wilson"	M, U/S	30' x 15'
American Crabapple	Malus coronaria	S	25' x 35'
Lustre Serviceberry	Amelanchier laevis "Lustre"	S, U	20' x 15'
Franz Fontain European Hornbeam	Carpinus betulus "Franz Fontaine"	S, N, P	35' x 15'
Eastern Redbud	Cercis canadensis	S, S	25' x 30'
Flowering dogwood	Cornus florida	B, P	15' x 30'
Cockspur Hawthorn	Crataegus crus-galli	R	15' x 30'
<u>Small Trees</u>			
American Hornbeam (blue beech) (ironwood)	Carpinus caroliniana	Globular	20' x 20'
Fringe tree	Chionanthus virginicus		12' x 12'
Eastern Red Cedar	Juniperus virginiana	Conical	30' x 8'



Common Hoptree	<i>Ptelea trifoliata</i>	R	15' x 15'
Common pricklyash	<i>Zanthoxylum americanum</i>	R	15' x 10'
<u>Fruit and Nut Trees*</u>			
<u>Common Name</u>	<u>Botanical Name</u>	<u>Shape</u>	<u>Size</u>
Paw-Paw	<i>Asimina triloba</i>	S, U/P	25' x 25'
American Elderberry	<i>Sambucus canadensis</i>	S, R	12' x 12'
Apple; numerous cultivars	<i>Malus domestica</i>		12' -15'
Shag Bark Hickory	<i>Carya ovata</i>	L, O	70' x 50'
Shellbark Hickory; Kingnut Hickory	<i>Carya laciniosa</i>	L, N/O	80' x 40'

Size descriptions:

S – Small

O - Oval

M – Medium

P - Pyramidal

L – Large

U - Upright

B – Broad

S - Spreading

N – Narrow

V - Vase Shaped R- Round

***Fruit and Nut Trees are not to be planted in the city right of way.**