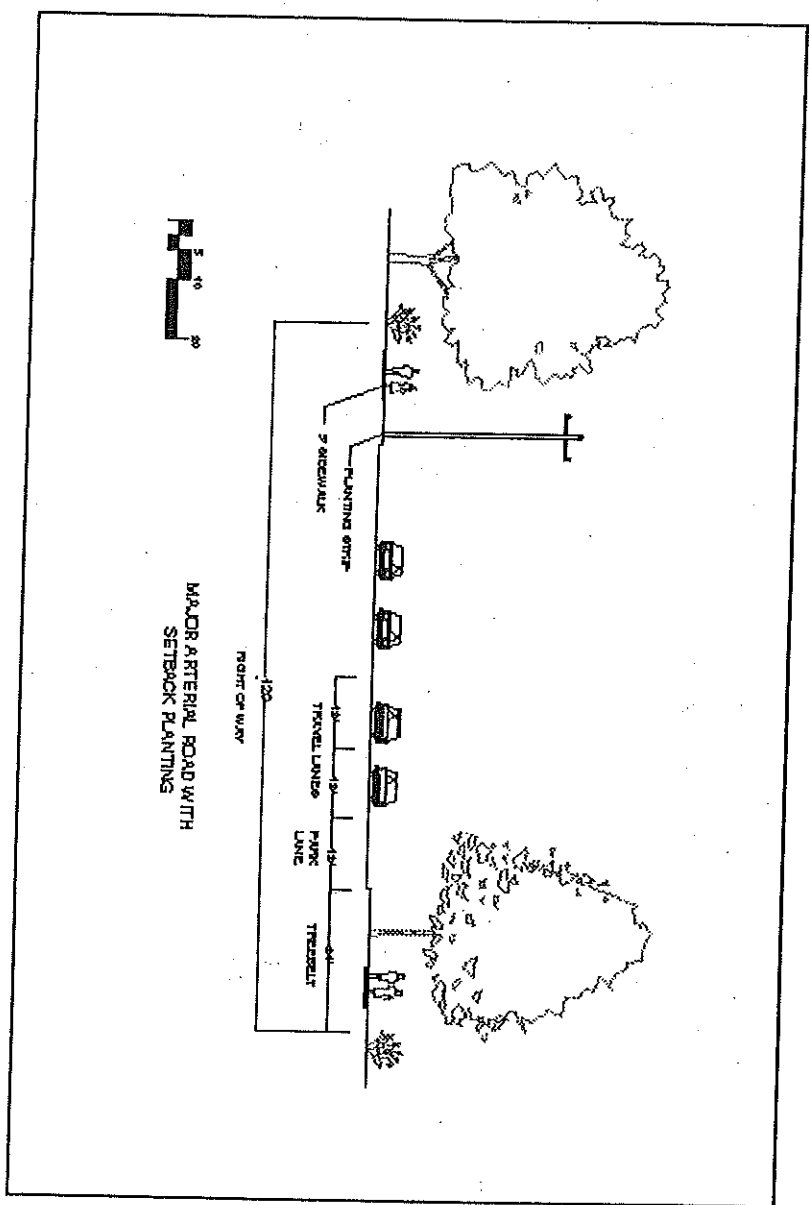


MINIMUM SETBACK PLANTING DISTANCES FOR NORTHEAST STREET TREES



United States
Department of Agriculture
Forest Service
Northeastern
Area



www.umass.edu/urban/tree
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MINIMUM SETBACK PLANTING DISTANCES FOR NORTHEAST STREET TREES

Background

The following pages provide information and guidelines for the planting of street trees in the proximity of overhead electric distribution systems. Included are a listing of appropriate trees for streetscape conditions, as well as details on the Width, Height, Shape and Hardiness Zone. The trees listed here have been selected from : "Urban Trees: Site Assessment Selection for Street Tolerant Planting" by Nina Bassuk, Cornell University, Ithaca, NY and from "Street Tree Fact Sheets" by Henry Gerhold, Pennsylvania State University, University Park, PA.

Local Utility Clearance Distance

The minimum distances listed on the following pages do not reflect the minimum distances from electric lines, as required by individual utility providers. Each utility systems requires a minimum distance from vegetation to the electric wires, and this distance varies considerably based on each particular electric provider. Please confirm your local utility provider's minimum clearance distance and add that distance to the minimum setback distances listed in this document.

Example:

Quercus Rubra - Minimum Distance from wires as listed = 35 feet

Utility Clearance Requirement for Meadowbrook Electric Company, Atwater County, New York = 8 feet

Total Set Back Distance for Quercus Rubra if planted in Meadowbrook Electric Company's Service area = 43 feet

Minimum Planting Distance From Overhead Wires, in feet

Common name	Latin name	Minimum Distance Away	Width	Height	Shape	Zone
Accolade Flowering Cherry	<i>Prunus 'Accolade'</i>	20	25 - 35	30 - 40	broad spreading	5
American hophornbeam	<i>Ostrya virginiana</i>	15	20 - 30	30 - 40	broad oval	4
American Hornbeam, Fastigiata	<i>Carpinus betulus 'Fastigiata'</i>	15	20 - 30	35 - 40	conical	5
Amur Corktree, Macho	<i>Phellodendron amurense 'Macho'</i>	20	30 - 40	35 - 45	broad oval	4
Amur Maple	<i>Acer ginnala</i>	10	15 - 20	15 - 20	broad oval	3
Baldcypress	<i>Taxodium distichum</i>	25	20 - 45	60 - 80	columnar	5
Basswood	<i>Tilia americana 'Redmond'</i>	25	30 - 45	50 - 70	conical	3
Bur Oak	<i>Quercus macrocarpa</i>	45	60 - 90	70 - 90	broad oval	3
Gallery Pear, Autumn Blaze	<i>Pyrus calleryana 'Autumn Blaze'</i>	20	25 - 35	35 - 45	broad upright	5
Gallery Pear, Chanticleer	<i>Pyrus calleryana 'Chanticleer'</i>	10	15 - 20	35 - 40	conical	5
Canada Red Cherry	<i>Prunus virginiana 'Canada Red'</i>	10	15 - 20	20 - 30	broad oval	3
Chinese Elm	<i>Ulmus parvifolia</i>	40	30 - 75	50 - 75	vase shaped	5
Cockspur Hawthorn	<i>Crataegus crus-galli inermis</i>	15	20 - 25	15 - 20	broad oval	4
Columnar Oakleaf Mountain Ash	<i>Sorbus thuringiaca (fastigiata)</i>	15	20 - 30	?	broad upright	3
Crabapple, Adams	<i>Malus 'Adams'</i>	15	20 - 24	18 - 22	broad oval	4
Crabapple, baccata Jackii	<i>Malus 'baccata Jackii'</i>	15	20 - 24	18 - 22	broad oval	3
Crabapple, Centurion	<i>Malus 'Centurion'</i>	10	15 - 20	20 - 25	broad upright	4
Crabapple, Liset	<i>Malus Liset'</i>	5	8 - 12	15 - 20	columnar	4
Crabapple, Madonna	<i>Malus 'Madonna'</i>	5	8 - 12	15 - 20	columnar	4
Crabapple, Sentinel	<i>Malus 'Sentinal'</i>	10	12 - 15	15 - 18	broad upright	4
Dawn Redwood	<i>Metasequoia glyptostroboides</i>	20	25 - 40	65 - 85	conical	5
Delaware #2 Elm	<i>Ulmus 'Delaware #2'</i>	40	30 - 80	50 - 80	broad spreading	3
Eastern Redbud	<i>Cercis canadensis</i>	20	25 - 35	25 - 30	broad oval	4
English Oak	<i>Quercus robur</i>	35	50 - 70	60 - 80	broad oval	5

Minimum Planting Distance From Overhead Wires, in feet

Common name	Latin name	Minimum Distance Away	Width	Height	Shape	Zone
English Oak, Attention!	<i>Quercus robur</i> 'Attention!'	10	14 - 17	50 - 60	columnar	4
English Oak, Skymaster	<i>Quercus robur</i> 'Skymaster'	15	25 - 30	50 - 60	broad oval	4
Ginkgo	<i>Ginkgo biloba</i>	40	40 - 80	50 - 80	conical	4
Ginkgo, Lakeview	<i>Ginkgo biloba</i> 'Lakeview'	20	25 - 35	45 - 55	columnar	4
Ginkgo, Princeton Sentry	<i>Ginkgo biloba</i> 'Princeton Sentry'	15	25 - 30	55 - 65	columnar	4
Green Ash	<i>Fraxinus pennsylvanica</i>	30	35 - 55	40 - 65	broad spreading	2
Green Ash, Pamore and Summit	<i>Fraxinus pennsylvanica</i> 'Pamore' and 'Summit'	30	40 - 55	50 - 60	broad spreading	3
Hackberry	<i>Celtis occidentalis</i>	25	40 - 50	40 - 50	broad spreading	4
Hardy Rubber Tree	<i>Bucconia ulmioides</i>	30	40 - 60	40 - 60	broad spreading	5
Hedge Maple	<i>Acer campestre</i>	20	25 - 40	25 - 40	broad oval	5
Honeylocust (thornless)	<i>Gleditsia triacanthos inermis</i>	35	40 - 70	40 - 80	broad spreading	4
Honeylocust, Shademaster	<i>Gleditsia triacanthos inermis</i> 'Shademaster'	30	50 - 60	60 - 70	vase shaped	4
Honeylocust, Skyline	<i>Gleditsia triacanthos inermis</i> 'Skyline'	35	55 - 65	65 - 75	broad spreading	4
Ivory Silk Japanese Tree Lilac	<i>Syringa reticulata</i> 'Ivory Silk'	10	15 - 20	20 - 30	broad oval	3
Japanese Zelkova, Green Vase	<i>Zelkova serrata</i> 'Green Vase'	30	50 - 55	60 - 70	vase shaped	5
Japanese Zelkova, Halka	<i>Zelkova serrata</i> 'Halka'	25	35 - 45	60 - 70	vase shaped	6
Japanese Zelkova, Village Green	<i>Zelkova serrata</i> 'Village Green'	30	50 - 60	50 - 60	vase shaped	5
Katsura Tree	<i>Cercidiphyllum japonicum</i>	30	25 - 60	40 - 60	broad upright	5
Kentucky Coffeetree	<i>Gymnocladus dioica</i>	35	45 - 65	55 - 75	broad spreading	4
Kousa Dogwood	<i>Cornus kousa</i>	15	20 - 30	20 - 30	vase shaped	4
Littleleaf Linden	<i>Tilia cordata</i>	30	35 - 55	60 - 80	conical	5
Littleleaf Linden Chancellor	<i>Tilia cordata</i> 'Chancellor'	30	20 - 30	50 - 70	conical	3
Littleleaf Linden, Glenleven	<i>Tilia cordata</i> 'Glenleven'	15	20 - 30	50 - 70	broad upright	3
Littleleaf Linden, Greenspire	<i>Tilia cordata</i> 'Greenspire'	25	35 - 50	50 - 70	conical	3
London Planetree, Bloodgood	<i>Platanus x acerifolia</i> 'Bloodgood'	35	55 - 65	70 - 80	broad spreading	5
Northern Red Oak	<i>Quercus rubra</i>	35	45 - 65	60 - 80	broad oval	5

Minimum Planting Distance From Overhead Wires, in feet

Common name	Latin name	Minimum Distance Away	Width	Height	Shape	Zone
Norway Maple	<i>Acer platanoides</i>	30	30 - 60	40 - 75	broad spreading	4
Norway Maple, Columnare	<i>Acer platanoides</i> 'Columnare'	10	15 - 20	50 - 60	columnar	4
Norway Maple, Crimson King	<i>Acer platanoides</i> 'Crimson King'	20	25 - 35	35 - 45	broad oval	4
Ohio Pioneer Hawthorn	<i>Crataegus punctata</i> inermis 'Ohio Pioneer'	15	20 - 25	20 - 25	broad oval	5
Panicled Goldenraintree	<i>Koeleruteria paniculata</i>	20	25 - 40	25 - 40	broad oval	5
Paperbark Maple	<i>Acer griseum</i>	15	15 - 30	25 - 35	broad oval	5
Patriot Elm and Prospector Elm	<i>Ulmus</i> 'Patriot' and 'Prospector'	25	40 - 50	40 - 50	broad spreading	4
Pin Oak	<i>Quercus palustris</i>	30	40 - 55	55 - 75	conical	5
Pioneer Elm and Urban Elm	<i>Ulmus</i> 'Pioneer' and 'Urban'	30	50 - 60	50 - 60	broad spreading	5
Princeton Upright Scholartree	<i>Sophora japonica</i> 'Princeton Upright'	20	25 - 35	40 - 50	broad oval	6
Red Maple	<i>Acer rubrum</i>	35	30 - 70	50 - 75	broad spreading	3
Red Maple, Bowhall	<i>Acer rubrum</i> 'Bowhall'	15	20 - 30	40 - 50	conical to columnar	4
Regent Scholartree	<i>Sophora japonica</i> 'Regent'	20	30 - 40	40 - 50	broad spreading	5
River Birch, Heritage	<i>Betula nigra</i> 'Heritage'	20	30 - 35	40 - 50	broad oval	4
Sargent Cherry, Columnaris	<i>Prunus sargentii</i> 'Columnaris'	10	12 - 18	30 - 40	columnar	4
Sawtooth Oak	<i>Quercus acutissima</i>	30	35 - 55	40 - 50	broad spreading	5
Scholartree or Pagodatree	<i>Sophora japonica</i>	35	40 - 70	40 - 70	broad spreading	5
Serviceberry	<i>Amelanchier</i> spp.	15	15 - 25	15 - 30	broad spreading	3
Shanard Oak	<i>Quercus schumardii</i>	35	45 - 65	60 - 80	broad oval	5
Shingle Oak	<i>Quercus imbricaria</i>	35	40 - 70	40 - 65	broad oval	4
Silver Linden	<i>Tilia tomentosa</i>	30	45 - 55	60 - 70	conical	5
Sugar Maple	<i>Acer saccharum</i>	35	40 - 70	60 - 80	broad spreading	4
Sugar Maple, Goldspire	<i>Acer saccharum</i> 'Goldspire'	10	12 - 15	40 - 50	columnar	4
Summer Silk Japanese Tree Lilac	<i>Syringa reticulata</i> 'Summer Silk'	10	15 - 20	15 - 20	broad oval	3
Swamp White Oak	<i>Quercus bicolor</i>	40	50 - 80	60 - 80	broad spreading	4
Sweetgum	<i>Liquidambar styraciflua</i>	35	40 - 65	50 - 75	broad oval	5

Minimum Planting Distance From Overhead Wires, in feet

Common name	Latin name	Minimum Distance Away		Width	Height	Shape	Zone
Tatarian Maple	<i>Acer tataricum</i>	15	15 - 25	15 - 25	15 - 25	broad oval	3
Tuliptree	<i>Liriodendron tulipifera</i>	25	35 - 50	35 - 50	70 - 90	conical	4
Tupelo	<i>Nyssa sylvatica</i>	25	30 - 45	30 - 45	40 - 70	conical	5
Turkish Filbert	<i>Corylus colurna</i>	20	25 - 35	25 - 35	45 - 60	conical	5
Washington Hawthorn	<i>Crataegus phaenopyrum</i>	15	20 - 30	20 - 30	20 - 30	broad oval	4
White Ash	<i>Fraxinus americana</i>	35	40 - 70	40 - 70	50 - 80	broad spreading	3
Willow Oak	<i>Quercus phellos</i>	30	45 - 60	45 - 60	55 - 75	conical	6
Winter King Hawthorn	<i>Crataegus viridis 'Winter King'</i>	15	25 - 30	25 - 30	25 - 30	broad upright	4
Yellowwood	<i>Cladrastis kentuckia</i>	30	40 - 55	40 - 55	35 - 50	broad oval	4

Minimum Planting Distance From Overhead Wires, 0 to 10 feet

Common name	Latin name	Minimum Distance Away		Width	Height	Shape	Zone
Amur Maple	<i>Acer ginnala</i>	10		15 - 20	15 - 20	broad oval	3
Callery Pear, Chanticleer	<i>Pyrus calleryana</i> 'Chanticleer'	10		15 - 20	35 - 40	conical	5
Canada Red Cherry	<i>Prunus virginiana</i> 'Canada Red'	10		15 - 20	20 - 30	broad oval	3
Crabapple, Centurion	<i>Malus</i> 'Centurion'	10		15 - 20	20 - 25	broad upright	4
Crabapple, Liser	<i>Malus</i> 'Liser'	5		8 - 12	15 - 20	columnar	4
Crabapple, Madonna	<i>Malus</i> 'Madonna'	5		8 - 12	15 - 20	columnar	4
Crabapple, Sentinal	<i>Malus</i> 'Sentinal'	10		12 - 15	15 - 18	broad upright	4
English Oak, Attention!	<i>Quercus robur</i> 'Attention!'	10		14 - 17	50 - 60	columnar	4
Ivory Silk Japanese Tree Lilac	<i>Syringa reticulata</i> 'Ivory Silk'	10		15 - 20	20 - 30	broad oval	3
Norway Maple Columnare	<i>Acer platanoides</i> 'Columnare'	10		15 - 20	50 - 60	columnar	4
Sargent Cherry, Columnaris	<i>Prunus sargentii</i> 'Columnaris'	10		12 - 18	30 - 40	columnar	4
Sugar Maple, Goldspire	<i>Acer saccharum</i> 'Goldspire'	10		12 - 15	40 - 50	columnar	4
Summer Silk Japanese Tree Lilac	<i>Syringa reticulata</i> 'Summer Silk'	10		15 - 20	15 - 20	broad oval	3

Minimum Planting Distance From Overhead Wires, 10 to 20 feet

Common name	Latin name	Minimum Distance Away	Width	Height	Shape	Zone
Accolade Flowering Cherry	<i>Prunus 'Accolade'</i>	20	25 - 35	30 - 40	broad spreading	5
American hophornbeam	<i>Ostrya virginiana</i>	15	20 - 30	30 - 40	broad oval	4
American Hornbeam, Fastigiata	<i>Carpinus betulus 'Fastigiata'</i>	15	20 - 30	35 - 40	conical	5
Amur Corkree, Macho	<i>Phellodendron amurense 'Macho'</i>	20	30 - 40	35 - 45	broad oval	4
Gallery Pear, Autumn Blaze	<i>Pyrus calleryana 'Autumn Blaze'</i>	20	25 - 35	35 - 45	broad upright	5
Cockspur Hawthorn	<i>Crataegus crus-galli inermis</i>	15	20 - 25	15 - 20	broad oval	4
Columnar Oakleaf Mountain Ash	<i>Sorbus thunbergiaca (fastigiata)</i>	15	20 - 30	?	broad upright	3
Crabapple, Adams	<i>Malus 'Adams'</i>	15	20 - 24	18 - 22	broad oval	4
Crabapple, baccata Jackii	<i>Malus 'baccata Jackii'</i>	15	20 - 24	18 - 22	broad oval	3
Dawn Redwood	<i>Metasequoia glyptostroboides</i>	20	25 - 40	65 - 85	conical	5
Eastern Redbud	<i>Cercis canadensis</i>	20	25 - 35	25 - 30	broad oval	4
English Oak, Skymaster	<i>Quercus robur 'Skymaster'</i>	15	25 - 30	50 - 60	broad oval	4
Ginkgo, Lakeview	<i>Ginkgo biloba 'Lakeview'</i>	20	25 - 35	45 - 55	columnar	4
Ginkgo, Princeton Sentry	<i>Ginkgo biloba 'Princeton Sentry'</i>	15	25 - 30	55 - 65	columnar	4
Hedge Maple	<i>Acer campestre</i>	20	25 - 40	25 - 40	broad oval	5
Kousa Dogwood	<i>Cornus kousa</i>	15	20 - 30	20 - 30	vase shaped	5
Littleleaf Linden Chancellor	<i>Tilia cordata 'Chancellor'</i>	15	20 - 30	50 - 70	conical	3
Norway Maple, Crimson King	<i>Acer platanoides 'Crimson King'</i>	20	25 - 35	35 - 45	broad oval	4
Ohio Pioneer Hawthorn	<i>Crataegus punctata inermis 'Ohio Pioneer'</i>	15	20 - 25	20 - 25	broad oval	5
Panicked Goldenraintree	<i>Koelreuteria paniculata</i>	20	25 - 40	25 - 40	broad oval	5
Paperbark Maple	<i>Acer griseum</i>	15	15 - 30	25 - 35	broad oval	5
Princeton Upright Scholartree	<i>Sophora japonica 'Princeton Upright'</i>	20	25 - 35	40 - 50	broad oval	6
Red Maple, Bowhall	<i>Acer rubrum 'Bowhall'</i>	15	20 - 30	40 - 50	conical to columnar	4
Regent Scholartree	<i>Sophora japonica 'Regent'</i>	20	30 - 40	40 - 50	broad spreading	5

Minimum Planting Distance From Overhead Wires, 10 to 20 feet

Common name	Latin name	Minimum Distance Away	Width	Height	Shape	Zone
River Birch, Heritage Serviceberry	<i>Betula nigra</i> 'Heritage'	20	30 - 35	40 - 50	broad oval	4
Tatarian Maple	<i>Aamelanchier</i> spp.	15	15 - 25	15 - 30	broad spreading	3
Turkish Filbert	<i>Acer tataricum</i>	15	15 - 25	15 - 25	broad oval	3
Washington Hawthorn	<i>Corylus colurna</i>	20	25 - 35	45 - 60	conical	5
Winter King Hawthorn	<i>Crataegus phaenopyrum</i>	15	20 - 30	20 - 30	broad oval	4
	<i>Crataegus viridis</i> 'Winter King'	15	25 - 30	25 - 30	broad upright	4

Minimum Planting Distance From Overhead Wires, 20 to 30 feet

Common name	Latin name	Minimum Distance Away		Width	Height	Shape	Zone
Baldcypress	<i>Taxodium distichum</i>	25	20 - 45	60 - 80	columnar	5	
Basswood	<i>Tilia americana</i> 'Redmond'	25	30 - 45	50 - 70	conical	3	
Green Ash	<i>Fraxinus pennsylvanica</i>	30	35 - 55	40 - 65	broad spreading	2	
Green Ash 'Patmore' and 'Summit'	<i>Fraxinus pennsylvanica</i> 'Patmore' and 'Summit'	30	40 - 55	50 - 60	broad spreading	3	
Hackberry	<i>Celtis occidentalis</i>	25	40 - 50	40 - 50	broad spreading	4	
Hardy Rubber Tree	<i>Bucommia ulmoides</i>	30	40 - 60	40 - 60	broad spreading	5	
Honeylocust 'Shademaster'	<i>Gleditsia triacanthos inermis</i> 'Shademaster'	30	50 - 60	60 - 70	vase shaped	4	
Japanese Zelkova, Green Vase	<i>Zelkova serrata</i> 'Green Vase'	30	50 - 55	60 - 70	vase shaped	5	
Japanese Zelkova, Halka	<i>Zelkova serrata</i> 'Halka'	25	35 - 45	60 - 70	vase shaped	6	
Japanese Zelkova, Village Green	<i>Zelkova serrata</i> 'Village Green'	30	50 - 60	50 - 60	vase shaped	5	
Katsura Tree	<i>Cercidiphyllum japonicum</i>	30	25 - 60	40 - 60	broad upright	5	
Littleleaf Linden	<i>Tilia cordata</i>	30	35 - 55	60 - 80	conical	3	
Littleleaf Linden, Glenleven	<i>Tilia cordata</i> 'Glenleven'	25	35 - 50	50 - 70	broad upright	3	
Littleleaf Linden, Greenspire	<i>Tilia cordata</i> 'Greenspire'	25	35 - 50	50 - 70	conical	3	
Norway Maple	<i>Acer platanoides</i>	30	30 - 60	40 - 75	broad spreading	4	
Patriot Elm and Prospector Elm	<i>Ulmus</i> 'Patriot' and 'Prospector'	25	40 - 50	40 - 50	broad spreading	4	
Pin Oak	<i>Quercus palustris</i>	30	40 - 55	55 - 75	conical	5	
Pioneer Elm and Urban Elm	<i>Ulmus</i> 'Pioneer' and 'Urban'	30	50 - 60	50 - 60	broad spreading	5	
Sawtooth Oak	<i>Quercus acutissima</i>	30	35 - 55	40 - 50	broad spreading	5	
Silver Linden	<i>Tilia tomentosa</i>	30	45 - 55	60 - 70	conical	5	
Tuliptree	<i>Liriodendron tulipifera</i>	25	35 - 50	70 - 90	conical	4	
Tupelo	<i>Nyssa sylvatica</i>	25	30 - 45	40 - 70	conical	5	
Willow Oak	<i>Quercus phellos</i>	30	45 - 60	55 - 75	conical	6	
Yellowwood	<i>Cladrastis kentukea</i>	30	40 - 55	35 - 50	broad oval	4	

Minimum Planting Distance From Overhead Wires, 30 to 50 feet

Common name	Latin name	Minimum Distance Away	Width	Height	Shape	Zone
Bur Oak	<i>Quercus macrocarpa</i>	45	60 - 90	70 - 90	broad oval	3
Chinese Elm	<i>Ulmus parvifolia</i>	40	30 - 75	50 - 75	vase shaped	5
Delaware #2 Elm	<i>Ulmus 'Delaware #2'</i>	40	30 - 80	50 - 80	broad spreading	3
English Oak	<i>Quercus robur</i>	35	50 - 70	60 - 80	broad oval	5
Ginkgo	<i>Ginkgo biloba</i>	40	40 - 80	50 - 80	conical	4
Honeylocust 'Skyline'	<i>Gleditsia triacanthos inermis 'Skyline'</i>	35	55 - 65	65 - 75	broad spreading	4
Honeylocust (thornless)	<i>Gleditsia triacanthos inermis</i>	35	40 - 70	40 - 80	broad spreading	4
Kentucky Coffee tree	<i>Gymnocladus dioica</i>	35	45 - 65	55 - 75	broad spreading	4
London Planetree, Bloodgood	<i>Platanus x acerifolia 'Bloodgood'</i>	35	55 - 65	70 - 80	broad spreading	5
Northern Red Oak	<i>Quercus rubra</i>	35	45 - 65	60 - 80	broad oval	5
Red Maple	<i>Acer rubrum</i>	35	30 - 70	50 - 75	broad spreading	3
Scholar tree or Pagodatree	<i>Sophora japonica</i>	35	40 - 70	40 - 70	broad spreading	5
Shanard Oak	<i>Quercus schumardii</i>	35	45 - 65	60 - 80	broad oval	5
Shingle Oak	<i>Quercus imbricaria</i>	35	40 - 70	40 - 65	broad oval	4
Sugar Maple	<i>Acer saccharum</i>	35	40 - 70	60 - 80	broad spreading	4
Swamp White Oak	<i>Quercus bicolor</i>	40	50 - 80	60 - 80	broad spreading	4
Sweetgum	<i>Liquidambar styraciflua</i>	35	40 - 65	50 - 75	broad oval	5
White Ash	<i>Fraxinus americana</i>	35	40 - 70	50 - 80	broad spreading	3