

TREE CANOPY CHART



Adopted by the City of Richmond Planning Commission

November 2002

TREE CANOPY CHART

| Botanical/Common Name | Projected 10-Year Tree Cover Area in Square Footage Based on Tree Height at Planting | | | Minimum Planting Area Square Feet |
|---|---|------------|------------|--|
| | 8' | 10' | 12' | |
| <u>SMALL DECIDUOUS TREES</u> | | | | |
| Acer palmatum/Japanese Maple | 40 | 50 | 75 | 30 |
| Amelanchier arborea/Downey Serviceberry | 75 | 100 | 125 | 50 |
| Amelanchier Laevis/Allegheny Serviceberry | 75 | 100 | 125 | 50 |
| Carpinus caroliniana/American Hornbeam | 75 | 100 | 125 | 50 |
| Cercis canadensis/Redbud | 75 | 100 | 125 | 50 |
| Chionanthus virginicus/Fringetree | 40 | 50 | 75 | 30 |
| Comus florida/Flowering Dogwood | 75 | 100 | 125 | 50 |
| Comus kousa/Comeliancherry Dogwood | 40 | 50 | 75 | 30 |
| Cotinus coggygria/Smoketree | 40 | 50 | 75 | 30 |
| Crateagus Spp./Hawthornes | 75 | 100 | 125 | 50 |
| Elaeagnus angustifolia/Russian Olive | 75 | 100 | 125 | 50 |
| Koelreuteria paniculata/Panicked Goldenraintree | 75 | 100 | 125 | 50 |
| Lagerstromia Indica | 40 | 50 | 75 | 30 |
| Magnolia stellata/Star Magnolia | 40 | 50 | 75 | 30 |
| Magnolia soulangiana/Saucer Magnolia | 75 | 100 | 125 | 50 |
| Oxydendrum arboreum/Sourwood | 40 | 50 | 75 | 30 |
| Prunus cerasifera/Flowering Plum | 40 | 50 | 75 | 30 |
| Prunus sargentii/Sargent Cherry | 75 | 100 | 125 | 50 |
| Prunus X incam 'Okame'/Okame Cherry | 75 | 100 | 125 | 50 |

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|--|---|------------|--|--|
| | 8' | 10' | 12' | |
| Pyrus calleryana/Callery Pear 'Chanticleer' | 75 | 100 | 125 | 50 |
| 'Whitehouse' | 75 | 100 | 125 | 50 |
| Stewartia koreana/Korean Stewartia | 40 | 50 | 75 | 30 |
| Stewartia ovata/Mountain Stewartia | 40 | 50 | 75 | 30 |
| Stewartia pseudocamellia/Japanese Stewartia | 40 | 50 | 75 | 30 |
| Styrax japonicum/Japanese Snowball | 40 | 50 | 75 | 30 |
| Syringa reticulata/Japanese Tree Lilac | 40 | 50 | 75 | 30 |
| Botanical/Common Name | Projected 10-Year Tree Cover Area in Square Footage Based on Caliper at Planting | | Minimum Planting Area Square Feet | |
| | 2½" | 3" | | |
| <u>MEDIUM DECIDUOUS TREES</u> | | | | |
| Acer campestre/Hedge Maple | 150 | 175 | 90 | |
| Acer ginnala/Amur Maple | 150 | 175 | 90 | |
| Aesculus hippocastanum/Horsechestnut | 150 | 175 | 90 | |
| Betula nigra/River Birch | 150 | 175 | 90 | |
| Carpinus betulus/European Hornbeam | 150 | 175 | 90 | |
| Carya ovata/Shagbark Hickory | 150 | 175 | 90 | |
| Castanea mollissima/Chinese Chestnut | 150 | 175 | 90 | |
| Celtis occidentalis/Hackberry | 150 | 175 | 90 | |
| Cercidiphyllum japonicum/Katsuratree | 150 | 175 | 90 | |
| Diospyros virginiana/Persimmon | 150 | 175 | 90 | |

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|---|--|-----|-----------------------------------|
| | 2½" | 3" | |
| Ginkgo biloba/Ginkgo, Maidenhair Tree Ginkgo – Male Only | 150 | 175 | 90 |
| Gymnocladus dioicus/Kentucky Coffeetree | 150 | 175 | 90 |
| Juglans nigra/Black Walnut | 150 | 175 | 90 |
| Larix decidua/European Larch | 150 | 175 | 90 |
| Liquidambar styraciflua/Sweetgum | 150 | 175 | 90 |
| Magnolia macrophylla/Bigleaf Magnolia | 150 | 175 | 90 |
| Malus Spp./Crabapples | 150 | 175 | 90 |
| Metasequoia glyptostroboides/Dawn Redwood | 150 | 175 | 90 |
| Nyssa sylvatica/Black Gum, Tupelo | 150 | 175 | 90 |
| Prunus serotina/Black Cherry | 150 | 175 | 90 |
| Prunus subhirtella 'Pendula'/Weeping Japanese Cherry | 150 | 175 | 90 |
| Prunus yedoensis/Yoshino Cherry | 150 | 175 | 90 |
| Pyrus calleryana 'Redspire'/Redspire Pear | 150 | 175 | 90 |
| Quercus alba/White Oak | 150 | 175 | 90 |
| Quercus imbricaria/Shingle Oak | 150 | 175 | 90 |
| Quercus robur 'Fastigiata'/Columnar English Oak | 150 | 175 | 90 |
| Salix nigra/Black Willow | 150 | 175 | 90 |
| Sophora japonica/Japanese Pagoda Tree | 150 | 175 | 90 |
| Tilia americana/American Linden, Basswood | 150 | 175 | 90 |
| 'Redmond' | 150 | 175 | 90 |
| 'Legend' | 150 | 175 | 90 |

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|---|---|-----------|--|
| | 2½" | 3" | |
| <u>LARGE DECIDUOUS TREES</u> | | | |
| Acer platanoides/Norway Maple | 200 | 250 | 130 |
| Acer rubrum/Red Maple | 200 | 250 | 130 |
| Acer saccharum/Sugar Maple | 200 | 250 | 130 |
| Carya illinoensis/Pecan | 200 | 250 | 130 |
| Fagus grandifolia/American Beech | 200 | 250 | 130 |
| Fagus sylvatica/European Beech | 200 | 250 | 130 |
| Fraxinus americana/White Ash | 200 | 250 | 130 |
| Fraxinus pennsylvanica/Green Ash | | | |
| 'Marshall's Seedless' | 200 | 250 | 130 |
| 'Patmore' | 200 | 250 | 130 |
| 'Summitt' | 200 | 250 | 130 |
| Gleditsia triacanthos inermis/Thornless Honeylocust | | | |
| 'Imperial' | 200 | 250 | 130 |
| 'Skyline' | 200 | 250 | 130 |
| 'Shademaster' | 200 | 250 | 130 |
| Liriodendron tulipifera/Tulip Poplar | 200 | 250 | 130 |
| Magnolia acuminata/Cucumber tree | 200 | 250 | 130 |
| Phellodendron amurense/Amur Corktree Macho | 200 | 250 | 130 |
| Platanus acerfolia/London Planetree | 200 | 250 | 130 |
| Platanus occidentalis/Sycamore | 200 | 250 | 130 |
| Prunus serrulata 'Kwanzan'/Kwanzan Cherry | 200 | 250 | 130 |

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| <u>LARGE DECIDUOUS TREES</u> | | | |
| Pyrus calleryana/Callery Pear | | | |
| 'Aristocrat' | 200 | 250 | 130 |
| 'Autumn Blaze' | 200 | 250 | 130 |
| 'Bradfordi' | 200 | 250 | 130 |
| Quercus acutissima/Sawtooth Oak | 200 | 250 | 130 |
| Quercus bicolor/Swamp White Oak | 200 | 250 | 130 |
| Quercus coccinea/Scarlet Oak | 200 | 250 | 130 |
| Quercus palustris/Pin Oak | 200 | 250 | 130 |
| Quercus phellos/Willow Oak | 200 | 250 | 130 |
| Quercus rubra/Red Oak | 200 | 250 | 130 |
| Salix babylonica/Weeping Willow | 200 | 250 | 130 |
| <u>Projected 10-Year Tree Cover Area in Square Footage Based on Caliper at Planting</u> | | | |
| Botanical/Common Name | 2½" | 3" | Minimum Planting Area Square Feet |
| Taxodium distichum/Bald Cypress | 200 | 250 | 130 |
| Talia cordata/Littleleaf Linden | 200 | 250 | 130 |
| 'Glenleven' | 200 | 250 | 130 |
| 'Grenspire' | 200 | 250 | 130 |
| Ulmus hollandica | | | |
| 'Groenveldt'/Groenveldt Elm | 200 | 250 | 130 |
| Ulmus parvifolia/Chinese Elm | 200 | 250 | 130 |
| Zelkova serrata/Zelkova | 200 | 250 | 130 |

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|---|---|-------------|--|--|
| | 5-6' | 7-8' | 9'+ | |
| <u>COMPACT EVERGREEN TREES</u> | | | | |
| Abies concolor/White Fir, Concolor Fir | 40 | 50 | 75 | 30 |
| Chamaecyparis lawsoniana/Lawson Falsecypress | 40 | 50 | 75 | 30 |
| Chamaecyparis obtusa/Hinoki False Cypress | 40 | 50 | 75 | 30 |
| Chamaecyparis pisifera 'Plumosa'/Plume Sawara False Cypress | 40 | 50 | 75 | 30 |
| Cunninghamia lancolata/China Fir | 40 | 50 | 75 | 30 |
| Ilex aquifolia/English Holly | 40 | 50 | 75 | 30 |
| Ilex X attenuata 'Fosteri'/Foster's Holly | 40 | 50 | 75 | 30 |
| Ilex opaca/American Holly | 40 | 50 | 75 | 30 |
| Botanical/Common Name | Projected 10-Year Tree Cover Area in Square Footage Based on Caliper at Planting | | Minimum Planting Area Square Feet | |
| | 2½" | 3" | | |
| Juniperus chinensis/Chinese Juniper columnar Varieties of Chinese Juniper | | | | |
| 'Denserecta' | 60 | 75 | 30 | |
| 'Hetzi columnaris' | 60 | 75 | 30 | |
| 'Keteleen' | 60 | 75 | 30 | |
| 'Robusta Green' | 60 | 75 | 30 | |
| 'Torulosa' | 60 | 75 | 30 | |
| Juniperus scopulorum/Rocky Mountain Juniper | | | | |
| 'Blue Haven' | 60 | 75 | 30 | |
| 'Cologreen' | 60 | 75 | 30 | |
| 'Columnaris' | 60 | 75 | 30 | |
| 'Grey Gleam' | 60 | 75 | 30 | |
| 'Erecta Glauca' | 60 | 75 | 30 | |
| 'Moonglow' | 60 | 75 | 30 | |

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| Juniperus virginiana/Eastern Red Cedar 'Canaert' 'Manhattan Blue' 'Princeton Sentry' | 60 60 60 | 75 75 75 | 30 30 30 |
| Libocedur decurrens/Incense Cedar | 60 | 75 | 30 |
| Thuja occidentalis 'Nigra'/ Dark Green American Arborvitae | 60 | 75 | 30 |
| Thuja orientalis (Platycladus orientalis)/ Columnar Oriental Arborvitae | 60 | 75 | 30 |
| <u>SMALL EVERGREEN TREES</u> | | | |
| Cedrus deodora/Deodar Cedar | 100 | 125 | 50 |
| Cryptomeria japonica/Japanese Cryptomeria | 100 | 125 | 50 |
| Cupressocyparis leylandi/Leyland Cypress | 100 | 125 | 50 |
| Picea glauca/White Spruce | 100 | 125 | 50 |
| Picea omorika/Siberian Spruce | 100 | 125 | 50 |
| Pseudotsuga menziesii/Douglas Fir | 100 | 125 | 50 |
| Tsuga canadensis/Canadian Hemlock | 100 | 125 | 50 |
| Tsuga caroliniana/Carolina Hemlock | 100 | 125 | 50 |
| Botanical/Common Name | Projected 10-Year Tree Cover Area in Square Footage Based on Tree Height at Planting | | Minimum Planting Area Square Feet |
| | 6' | 7' | |
| <u>MEDIUM EVERGREEN TREES</u> | | | |
| Cedrus atlantica/Atlas Cedar | 150 | 175 | 90 |
| Picea abies/Norway Spruce | 150 | 175 | 90 |
| Pinus echinata/Shortleaf Pine | 150 | 175 | 90 |

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| | 6' | 7' | | |
| <u>MEDIUM EVERGREEN TREES</u> | | | | |
| Pinus nigra/Austrian Pine | 150 | 175 | 90 | |
| Pinus thunbergiana/Japanese Black Pine | 150 | 175 | 90 | |
| Botanical/Common Name | Projected 10-Year Tree Cover Area in Square Footage Based on Tree Height at Planting | | | Minimum Planting Area Square Feet |
| | 6' | 7' | 8' | |
| <u>LARGE EVERGREEN TREES</u> | | | | |
| Magnolia grandiflora/Southern Magnolia | 150 | 200 | 250 | 130 |
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| <u>LARGE EVERGREEN TREES</u> | | | | |
| Pinus rigida/Pitch Pine | 200 | 250 | 130 | |
| Pinus strobus/White Pine | 200 | 250 | 130 | |
| Pinus sylvestris/Scotch Pine | 200 | 250 | 130 | |
| Pinus taeda/Loblolly Pine | 200 | 250 | 130 | |

Note: Size categories based on 10-year crown spread, not mature height or spread.