

SELECTING SHADE TREES

Preferred Species

In open areas (areas where structures, driveways and light standards are generally greater than 30 feet from planting locations) Plant at 35-40 foot intervals

Aceraceae Family

Red Maple Acer rubrum

Caesalpineae Family

Thornless Honey Locust *Gleditsia triacanthos Inermis* (susceptible to mimosa webworm infestion) (1)

Euphorbiaceae Family

Hardy Rubber Tree Eucommia ulmoides

Fabaceae Family

Kentucky Coffeetree (males only) Gymnocladus diocus

Fagaceae Family

American Beech Fagus grandiflora (seeds are poisonous if ingested)

White Oak Quercus alba 1

Scarlet Oak Quercus coccinea

Shingle Oak Quercus imbricaria

English Oak Quercus robur

Northern Red Oak Quercus rubra

Ginkgoaceae Family

Gingko or Maidenhair Tree (males only) Gingko biloba (1)

Hamamelidaceae Family

Sweet Gum (seedless only) Liquidambar styraciflua

Nyssaceae Family

Black Gum or Black Tupelo Nyssa sylvatica

Platanaceae Family

London Plane Plantanus acerifolia

Tiliaceae Family

Little Leaf European Linden *Tilia cordata* (susceptible to Japanese Beetle infestation) (1)

Crimean Linden *Tilia euchlora* ①

Silver Linden *Tilia tomentosa* ①

Ulmaceae Family

Hackberry *Celtis occidentalis* (1)
Japanese Zelkova *Zelkova Serrata*

In tight areas (areas where structures, driveways and light standards are generally less than 30 feet from planting locations) Plant at 30-35 foot intervals

Betulaceae Family

American Hornbeam *Carpinus caroliniana*Upright European Hornbeam *Carpinus betulus*

Corylaceae Family

Turkish Filbert Corylus colurna

Sapindaceae Family

Goldenraintree Koelreuteria paniculata

Columnar varieties of other preferred species

Under overhead wires Plant at 30-35 foot intervals

Aceraceae Family

Hedge Maple *Acer campestr*Paperbark Maple *Acer griseum*Tatarian Maple *Acer tataricum*

Betulaceae Family

American Hornbeam Carpinus caroliniana

Cornaceae Family

Kousa Dogwood (tree form only) Cornus kousa (1)

Fabaceae Family

Eastern Redbud (tree form only) Cercis canadensis

Oleaceae Family

Japanese Tree Lilac (tree form only) Syringa reticulate

Rosaceae Family

Serviceberry (tree form only) Amelanchier x grandiflora or Amelanchier laevis ①
Hawthorne Crataegus — (including Ohio Pioneer, Winter Green, Thornless Cockspur, Lavalle, Washington, Winter King, Crimson Cloud English) ①
Crabapple (disease resistant only) Malus
Ornamental Pear (except Bradford) Pyrus calleryana cultivar ①

Parking Lot Trees

Any preferred variety of Maple *Acer*Any preferred variety of Oak *Quercus*Japanese Zelkova *Zelkova Serrata*Thornless Honey Locust *Gleditsia Triacanthos Inermis*

Note (1): This species is resistant to Verticillium Wilt, as soil-borne disease present in the Township.

Prohibited Species

<u>Species</u>	<u>Comments</u>
Ash Fraxinus	Subject to borers
Birch, Paper Betula papyrifera	Intolerant of stress
Box Elder Acer negundo	Weak wood, weak limb attachment
Catalpa Catalpa speciosa	Messy fruit
Cottonwood Populus deltoides	Weak, messy cotton, too large
Coniferous Evergreens, such as Fir, Hemlock, Pine, Spruce	Clearance problems
Elm, American Ulmus americana	Disease
Elm, Chinese	Weak, surface rooting
Elm, Siberian Ulmus pumila	Weak wood
Horsechestnut Aesculus sp.	Messy fruit
Larch	Clearance problems
Locust, Black Robinia pseudoacacia	Insects, borers on poor sites
Maple, Norway	Surface rooting, dense shade
Maple, Silver Acer saccharinum	Weak wood, weak limb attachment
Mulberry Morus alba	Messy fruit
Pear, Bradford	Weak wood, weak limb attachment
Poplar, Lombardy & any variety or hybrid	Weak wood, short lived
Russian Olive Elaeagnus angustifolia	Disease problems, weak wood
Sycamore <i>Platanus sp</i> .	Too large, messy, disease problems
Tree-of-Heaven Ailanthus altissima	Weak wood, invasive
Willow Salix sp.	Too large, messy
Any species listed on the current Pennsylvania Department of Conservation and Natural Resources Invasive Species List	

Tree Species Diversity

To promote species diversity and minimize impact of disease on the shade tree population, use the following table to determine the number of different species to be planted:

Number of	Minimum Number of
Trees Proposed	Families
1-10	1
11-20	2
21+	3

So as to minimize the potential impact of species-specific disease or pests, developers should avoid grouping trees of the same family together.

Selecting Quality Trees

The selection of the trees is one of the most important decisions when planting shade trees. The selection of the proper species for the location and context will increase the probability that the tree will grow to maturity without conflicting with the surrounding infrastructure and without suffering from stunted growth or early death from environmental hazards. Selection of strong, healthy trees of the proper species may initially incur greater expense, but is more likely to require fewer, if any, tree replacements in the future.

South Whitehall Township Subdivision and Land Development Ordinance

Section 11.38 Shade Trees

Except as otherwise provided in Subsection 11.38(c)(4) hereof, within the right-of-way of streets or street tree easements, as applicable, adjacent to or in new subdivisions, the developer shall plant shade trees meeting the specifications found in these regulations. Site locations, land use, topography, natural and historic features shall be considered by the developer and the Township Shade Tree Commission, in selecting and approving species.

(a) SPECIES OF TREES PERMITTED. Trees within street rights-of-way or street tree easements shall be deciduous hardwood types of varieties (including hybrids thereof) indicated within the South Whitehall Township Shade Tree Policy, as established by the Board of Commissioners from time to time, or other species approved by the Shade Tree Commission.

(b) TREE SPECIFICATIONS

- (1) Trees shall be of nursery stock quality, grown under the same climatic conditions as at the location of the development.
- (2) All planting shall be done in conformance with good nursery practice and to the standards established by the Landscape and Shade Tree Commission.
- (3) Trees permitted shall be of symmetrical growth, free of insect pests and disease.
- (4) TREE SIZE. The trunk diameter measured at a height of six (6) inches above ground level shall be a minimum of 2 to 2-1/2 inches. Trees shall have a minimum of a four (4) foot single straight stem to the first lateral branches, above ground level.
- (A) Depending on good planting with reference to the particular species to be planted, the Landscape and Shade Tree Commission may modify the size requirements of trees.

(c) TREE LOCATION

(1) In all subdivisions, trees shall be planted within the street rights-of-way or street tree easements at uniform intervals between thirty (30) and forty (40) feet. The location of shade trees will be subject to the approval of the Landscape and Shade Tree Commission and the Board of Commissioners. If acceptable to the above two Boards, trees may be planted midway between the curb and sidewalk, providing the planting strip is a minimum of five (5) feet in width; or between the sidewalk and building restriction line, three (3) feet from the sidewalk. Should the latter location be chosen, additional street right-of-way shall be dedicated to the Township or a street tree easement established in lieu of. The size of the additional right-of-way or street tree easement shall be determined by the Township Engineer.