



Village of Northbrook Tree Replacement List



It is the goal of the Village of Northbrook to promote species diversity throughout the Village. With the help of our residents and quality service providers we hope to establish and sustain a healthy and long lived urban forest that will benefit both the residents and visitors to the Village of Northbrook.

Large Trees (Mature Height Over 45 feet)

Plant 30 to 50 feet apart and no closer than 15 to 20 feet from a building (Spacing may vary depending on tree choice)

Species	Preferred Cultivar
American Linden (<i>Tilia americana</i>)	Redmond, Boulevard, Wandell, American Sentry
Bald Cypress (<i>Taxodium distichum</i>)	Common, Shawnee Brave (narrow variety)
Bitternut Hickory (<i>Carya cordiformis</i>)	
Black Locust (<i>Robinia pseudoacacia</i>)	Chicago Blues
Black Tupelo (<i>Nyssa sylvatica</i>)	
Bur Oak (<i>Quercus macrocarpa</i>)	
Chinquapin Oak (<i>Quercus muehlenbergii</i>)	
Crimson Spire Oak (<i>Quercus alba</i> x <i>robur</i>)	Crimschmidt
London Planetree (<i>Platanus x acerifolia</i>)	Exclamation 'Morton Circle', Ovation
Hackberry (<i>Celtis occidentalis</i>)	Chicagoland, Windy City
Dawn Redwood (<i>Metasequoia glyptostroboides</i>)	
European Larch (<i>Larix decidua</i>)	
Ginkgo (<i>Ginkgo biloba</i>)	Princeton Sentry, Autumn Gold, Magyar
Heritage Oak (<i>Quercus</i> x <i>macdanielii</i>)	Clemons
Hill's Oak (<i>Quercus ellipsoidalis</i>)	
Hybrid Elm (<i>Ulmus</i> species)	Accolade TM , Commendation, Danada Charm, Emerald Sunshine, Frontier, Homestead, Pioneer, Triumph, Princeton
Jordan Street Oak (<i>Q. alba</i> x <i>macrocarpa</i> 'Atwood')	
Katsura Tree (<i>Cercidiphyllum japonicum</i>)	
Kentucky Coffeetree (<i>Gymnocladus dioica</i>)	
Lacebark Elm (<i>Ulmus parvifolia</i>)	
Northern Catalpa (<i>Catalpa speciosa</i>)	
Shantung Maple (<i>Acer truncatum</i>)	Norwegian Sunset, Pacific Sunset
Shagbark Hickory (<i>Carya ovata</i>)	
Shingle Oak (<i>Quercus imbricaria</i>)	
Shumard Oak (<i>Quercus shumardii</i>)	
Silver Linden (<i>Tilia tomentosa</i>)	
Sugar Maple (<i>Acer saccharum</i>) ²	Morton, Crescendo
Swamp Bur Oak (<i>Quercus</i> x <i>schuettii</i>)	
Swamp White Oak (<i>Quercus bicolor</i>)	
Sweetgum (<i>Liquidambar styraciflua</i>)	Common, Slender Silhouette
Tulip Tree (<i>Liriodendron tulipifera</i>)	
Turkish Filbert (<i>Corylus colurna</i>)	
White Oak (<i>Quercus alba</i>)	
Wilson's Elm (<i>Ulmus wisoniana</i>)	Prospector
Yellow Buckeye (<i>Aesculus flava</i>)	
Zelkova (<i>Zelkova serrata</i>)	Green Vase, Village Green

Medium Trees (Mature Height 30 feet to 45 feet)

Plant 20 to 30 feet apart and no closer than 12 to 15 feet from a building (Spacing may vary depending on tree choice)

Species	Preferred Cultivar
American Hornbeam (<i>Carpinus caroliniana</i>)	
American Yellowwood (<i>Cladrastis kentukea</i>)	
Amur Corktree (<i>Phellodendron amurense</i>)	Shademaster, Macho
Black Locust (<i>Robinia pseudoacacia</i>)	Purple Robe
Crimson Sunset Maple (<i>A. truncatum</i> X <i>platanoides</i>)	
Cucumbertree Magnolia (<i>Magnolia acuminata</i>)	
European Hornbeam (<i>Carpinus betulus</i>)	Fastigiata
Hedge Maple (<i>Acer campestre</i>)	
Ironwood (<i>Ostrya virginiana</i>)	
State Street [®] Miyabe Maple (<i>Acer miyabe</i>)	Morton
Ohio Buckeye (<i>Aesculus glabra</i>)	
Persimmon (<i>Diospyros virginiana</i>)	
Red Horsechestnut (<i>Aesculus x carnea</i>)	Briotii, Fort McNair
River Birch (<i>Betula nigra</i>)	Heritage
Witchhazel (<i>Hamamelis virginiana</i>)	Fall blooming (not a cultivar name)
Witchhazel (<i>Hamamelis vernalis</i>)	Spring blooming (not a cultivar name)

Small Trees (Mature Height Under 30 feet)

Plant 10 to 15 feet apart and no closer than 8 to 10 feet from a building (Spacing may vary depending on tree choice)

Species	Preferred Cultivar
Allegheny Serviceberry (<i>Amelanchier laevis</i>)	
Apple Serviceberry (<i>Amelanchier x grandiflora</i>)	
Amur Maple (<i>Acer ginnala</i>)	
China Snow [®] Peking Lilac (<i>Syringa pekinensis</i>)	Morton
Cockspur Hawthorn (<i>Crataegus crus-galli</i>)	
Crabapple (<i>Malus</i> species)	Beverly, Indian Magic, May's Delight [®] , Prairie Fire, Profusion, Purple Prince, Red Jewel, Royal Raindrops, Snowdrift, Spring Sensation [™] , Spring Snow
Eastern Wahoo (<i>Euonymus atropurpureus</i>)	
Fox Valley [®] River Birch (<i>Betula nigra</i>)	Little King
Japanese Tree Lilac (<i>Syringa reticulata</i>)	Ivory Silk, Summer Snow
Kobus Magnolia (<i>Magnolia kobus</i>)	Elizabeth
Paw Paw (<i>Asimina triloba</i>)	
Redbud (<i>Cercis canadensis</i>)	Common, alba (Royal White)
Saucer Magnolia (<i>Magnolia x soulangeana</i>)	
Shadblow Serviceberry (<i>Amelanchier arborea</i>)	
Star Magnolia (<i>Magnolia stellata</i>)	Royal Star
Tatarian Maple (<i>Acer tataricum</i>)	
Three Flower Maple (<i>Acer triflorum</i>)	

Conifers

Plant 10 to 20 feet apart and no closer than 8 to 15 feet from a building (Spacing may vary depending on tree choice)

Species	Preferred Cultivar
Balsam Fir (<i>Abies balsamea</i>)	
Black Spruce (<i>Picea mariana</i>)	
Concolor Fir (<i>Abies concolor</i>)	
Douglas Fir (<i>Pseudotsuga menziesii</i>)	
Eastern Hemlock (<i>Tsuga canadensis</i>)	
Eastern Red Cedar (<i>Juniperus virginiana</i>)	
Korean Pine (<i>Pinus koraiensis</i>)	
Serbian Spruce (<i>Picea omorika</i>)	
White Fir (<i>Abies concolor</i>)	
White Pine (<i>Pinus strobus</i>)	
White Spruce (<i>Abies glauca</i>)	

Limited Use (Overplanted)

These species have been overplanted and are prone to both pests and diseases that will ultimately shorten their life span in the landscape. These trees may be specified in a landscape plan but their use should be limited to only one tree in the plan off the entire list below.

Species	Cultivar
Arborvitae (<i>Thuja occidentalis</i>)	
Austrian Pine (<i>Pinus nigra</i>)	
Callery Pear (<i>Pyrus calleryana</i>) ²	Chanticleer, Redspire, Aristocrat, Jack, Silver Ball
Colorado Spruce (<i>Picea pungens</i>)	Common, Hoopsii, Thompsenii
Freeman Maple (<i>Acer x freemanii</i>)	Armstrong, Autumn Blaze, Marmo, Morgan, Redpointe
Honey Locust (<i>Gleditsia triacanthos</i>)	Shademaster, Skyline, Moraine
Juniper (<i>Juniperus spp</i>)	
Littleleaf Linden (<i>Tilia cordata</i>)	Greenspire
Northern Red Oak (<i>Quercus rubra</i>)	
Norway Spruce (<i>Picea abies</i>)	
Norway Maple (<i>Acer platanoides</i>) ²	Emerald Lustre, Crimson King
Red Maple (<i>Acer rubrum</i>)	Northwood, Red Sunset
Scotch Pine (<i>Pinus sylvestris</i>)	

*Trees listed as limited use will **not** count towards any required replacement inches.*

Nuisance Trees (Should not be planted)

Species	Comments
Ash (all Species)	Emerald ash borer insect
Boxelder (Acer negundo)	Brittle wood, decay, insects
Buckthorn (Rhamnus cathartica)	Very aggressive invasive species
Cottonwood <u>Female Only</u> (Populus deltoides)	Brittle wood, decay, seeds
Ginkgo <u>Female Only</u> (Ginkgo biloba)	Fowl smelling fruit
Mountain Ash (Sorbus spp)	Short lived, disease prone
Russian Olive (Elaeagnus augustifolia)	Disease prone, poor form
Siberian Elm (Ulmus pumila)	Brittle Wood, insects
Tree of Heaven (Ailanthus altissima)	Weak wood, very aggressive species
White Mulberry (Morus alba)	Fruit, shallow roots
Willow (Salix species)	Weak wood, decay

²These trees when planted near natural areas have a tendency to “escape” from their intended landscapes and become invasive.

Tree Size Requirements

Trees should be at least 2^{1/2} inches in caliper. Conifers and multi-stemmed ornamentals that measure 8-10 feet tall will count as 2^{1/2} caliper inches, 10-12 feet tall as 3 caliper inches, 12-14 feet tall as 3.5 caliper inches.

Soils

Soil type in the Northbrook area consists largely of an urban complex with an average pH from 5.6 to 7.4 based on a soil survey performed by the USDA Soil Conservation Service in 1979. To verify your specific soil type and pH we recommend having it tested by a qualified individual.

Landscape Design Recommendations

Please make allowances for the type of land area you are reforesting. Example: an oak hickory woodland should be replanted with more local varieties of trees and shrubs like oaks, hickories, serviceberries, and redbuds and fewer varieties of conifers and ornamental trees that may become invasive like pears (Pyrus spp.) and Burning bush (Euonymus alatus).

No one species of tree should be used for more than 10% of your replanting commitment

We encourage all reforestation questions to be made prior to procurement and planting of landscape materials. In many cases we will require approval of your landscape plan in order to return escrow monies put down as your tree replacement guarantee per your tree replacement agreement with the Village.

This Replacement List is not all inclusive and does not include all available cultivars. If you would like to plant a tree not shown on the above list please contact the Village Forester or Tree Preservation Officer at 847-272-4711 to discuss your options.

For additional information regarding trees within the Village please reference Chapter 25 of the Northbrook Municipal Code.

Tree Examples:

Large

Black Tupelo (*Nyssa sylvatica*)



Crown: Round

Growth Rate: Medium

Summer Foliage: Glossy, dark green

Fruit: Small blue eaten by birds before drop

Height: 35' Width: 20'

Size: Medium

Fall Foliage: Red, yellow, orange

Chinquapin Oak (*Quercus muehlenbergii*)



Crown: Round

Growth Rate: Medium to Fast

Summer Foliage: Dark Green

Fruit: Acorns on mature trees

Height: 50' Width: 45'

Size: Large

Fall Foliage: Orange-yellow

London Planetree “Exclamation”



Crown: Moderately pyramidal

Growth Rate: Fast

Summer Foliage: Large, bright-green

Bark: Attractive exfoliating creamy white large plates

Height: 60' Width: 45'

Size: Large

Fall Foliage: Yellow brown

Accolade elm (hybrid-to resist Dutch Elm Disease)



Crown: Vase shaped

Growth Rate: Fast

Summer Foliage: Glossy, dark green

Fruit: Seedless

Height: 60' Width: 40'

Size: Large

Fall Foliage: Yellow

Bald Cypress (*Taxodium distichum*) “Shawnee Brave”



Crown: Narrow pyramidal

Growth Rate: Medium

Summer Foliage: Bright green needles

Bark: Attractive reddish brown fibrous

Height: 50' Width: 20'

Size: Medium

Fall Foliage: Russet, soft brown

Fruit: Small cones persisting on mature trees

Medium

Red Horsechestnut (*Aesculus x carnea*) “Briotti” or “Fort McNair”



Crown: Round

Growth Rate: Slow

Summer Foliage: Palmate and compound.

Flowers: Pink or red

Height: 35' Width: 20'

Size: Small-Medium

Fall foliage: early September –yellow or orange

Fruits barely persist into fall

Hedge Maple (*Acer campestre*)



Crown: Oval

Growth Rate: Slow

Summer Foliage: 2-4" rounded lobes

Flowers: No showy flowers present

Height: 35' Width: 30'

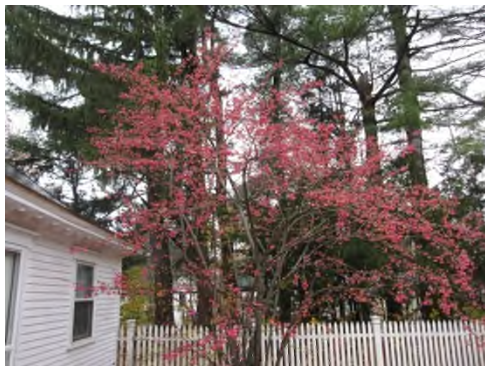
Size: Medium

Fall foliage: Subdued yellow

Fruits: 1" Samara

Small

Eastern Wahoo (*Euonymus atropurpureus*)



Crown: Globular

Growth Rate: Slow

Summer Foliage: Light/grass green

Flowers: bright red/purplish red

Height: 25' Width: 20'

Size: Small

Fall foliage: pink to bright red

Fruits: small, fuchsia pink in color

Paw Paw (*Asimina triloba*)



Crown: Irregular

Growth Rate: Slow

Summer Foliage: Light green

Flowers: red/brown in color

Height: 25' Width: 20'

Size: Small

Fall foliage: pale yellow

Fruits: cylindric yellowish orange berry

Conifer/Evergreen

Concolor Fir (*Abies concolor*)



Crown: Pyramidal

Growth Rate: Slow to Medium

Summer Foliage: silver blue-green needles

Bark: light-colored

Height: 50' Width: 20'

Size: Large

Fall Foliage: silver blue-green needles

Fruit: Elongated cone, 3 to 6 inches

White Pine (*Pinus strobus*)



Crown: Oval

Growth Rate: Fast

Summer Foliage: Clustered soft blue-green needles

Fruit: Elongated cone, 6 to 8 inches long.

Height: 50'-80' Width: 20'-40'

Size: Large

Fall Foliage: Clustered soft blue-green needles

Black Spruce (*Picea mariana*)



Crown: Narrow conical or spire-like

Growth Rate: slow

Summer Foliage: blue-green needles

Fruit: oval shaped cone, length 1/2" to 1-1/2"

Height: 30'-70' Width: 20'-40'

Size: Medium to Large

Fall Foliage: blue-green needles

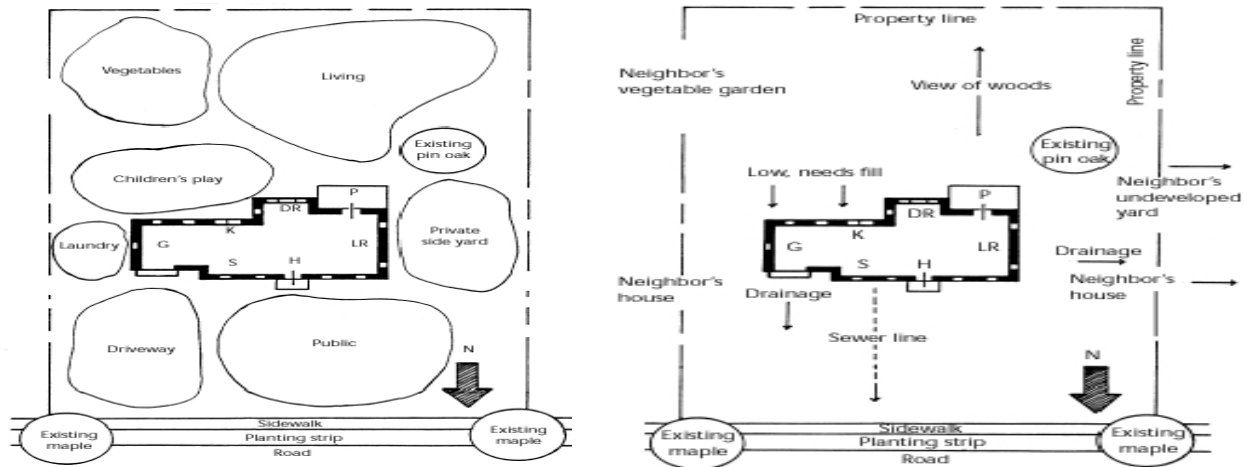
Landscape Planting Guidelines

These guidelines are suggestions for you to consider when planting your new landscape trees and shrubs. Your replanting is an investment in your new home. Whether you do it yourself or hire someone to do your planting, these guidelines will give you the information you need to make good choices to ensure your landscape is properly planted.

10 MOST COMMON PLANTING MISTAKES

1. Failure to Have a Landscape Plan

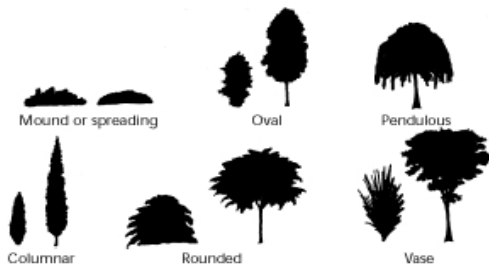
Many home landscapes are designed helter-skelter. A plant or tree is planted somewhere in the yard because there is room at the time. It is better to draw a plan for the whole yard and stick to it.



Examples of General Concept Plans

2. Planting Trees or Shrubs Too Close to Structures or to Each Other

- Consider the trees **MATURE** height and width. An example of an incorrect planting is planting a Riverbirch (Mature Height 40'xWidth 15') or Blue Spruce (Mature Height 50'xWidth 25') three feet away from your house or 3' away from each other.
- Consider the form of the plant. How will it occupy space?
- Different forms of trees and shrubs.





Example of plants improperly spaced. Notice how you can hardly see the home or entry.

3. Improper Planting Practices

- **Planting too deep or too high.** The soil of the planting container should be in direct line with the natural soil level. Be sure the hole dug for planting is deep and wide enough to leave a space around the root ball to adequately tamp soil down around the plant into the planting hole.
- **Remove the top portion of the ball and burlap container to be sure the basal flare (the area where the trunk flares out) shows.** If it doesn't show, remove soil until you find this flare. Container plants need to have roots scored before placing the root ball into the planting hole.
- **Planting at the wrong time** can create a situation where your new tree or shrub falters and cannot properly establish. Avoid planting in mid-summer, during drought or at the wrong time of year. An example is planting an oak or pear in the fall when they are better established if planted in spring. The only exception to this is oaks grown in Gro-Bags which establish better if planted in August.
- **Planting too many of the same plant.** An example is to plant all of your shade trees as Pears or Maples and have all of your evergreens planted as rows of Arborvitae or White pines. Monocultures spell trouble for a landscape if a pest or disease that specifically affects a particular plant comes into an area. Plant diverse species of trees or shrubs.

4. Not Considering the Primary View of the Landscape

View your proposed planting from your most used living areas. Who will be viewing the landscape? Do you want "curb appeal" or the best view from your kitchen window or deck? Where will you enjoy the landscape? Will you be seated outdoors or view the landscape from your most used indoor areas?

5. Lack of Attention to Soil Preparation and Care

- Most new building sites have poor soil due to compaction and changed soil profiles that happen during excavation and other construction impacts.
- If you do have a new construction site, it is best to aerate your soil and incorporate 2 inches of new pulverized soil and compost to the top layer of soil before planting. You may want to add gypsum or perlite to improve heavy clay soil. Use mulch as a top dressing on all of your beds after planting to further improve your soil. Be sure not to pile too much mulch around the trunk of the tree!
- Be sure that you don't till or dig in wet soil since that will alter the soil structure permanently and you will have difficulty restoring the porosity to the soil.
- It is not necessary to add soil amendments to your planting holes unless the soil you are planting into is heavy, clay soil that is not responding to your previous treatment. Keep in mind that the plant will not grow into a very clay-filled, water-logged soil, even if you have put in an amendment into the planting hole.

6. Not Working with What you Have

- Preserved trees may require extra attention the first 3-5 years after construction. Maintaining a mulch ring around the tree and aerating the soil with radial trenches may be the most important maintenance that you do for the mature trees on the property after the construction is completed or you have purchased a new construction home.
- Your yard may have a lot of shade or scorching sun. It may be wetter in some areas due to the terrain of your landscape. There are plants more suited for these micro-environments. Be sure you know the growing requirements of the plants you have in your yard and the conditions required by the plants you intend to add to your landscape.

7. Failure to Irrigate or Irrigating too Much

We enjoy our landscapes but we don't have the time to water as required. You may need to consider an automatic irrigation system that allows you to set the timing individually for your lawn and your planting beds.

- New woody landscape plants or stressed plants require 1 inch of water per week
 - New herbaceous plants (perennials and annuals) require 2 inches of water per week
- If you want to establish or maintain a green lawn for the summer, be sure that the same every day watering schedule is not followed for your woody or herbaceous plants in your planting beds.

If you water your woody or herbaceous plants the same as your lawn, you will overwater and drown your trees, shrubs and perennials. Trees are especially sensitive to overwatering. Drain tiles may need to be placed around your trees to move excess irrigation water away.

8. Improper Pruning Practices

- Pruning tree limbs flush with the trunk
- Allowing shade trees to be headed back (topped) for size control
- Removing leaves from flowering bulbs before the leaves have yellowed
- Pruning spring-blooming plants after July. (Buds set on shrubs like lilacs, forsythia in August or September for next year's bloom).

9. Poorly Timed Programs

- Pruning and fertilizing woody plants between mid-July and mid-October. This can stimulate new growth that will not harden off by fall.
- Lawn seeding in mid-summer or late fall. Late August/early September (best) or late winter/early spring are much more effective times of year to seed large areas of the lawn.
- Pruning on trees like American elms and Oaks is prohibited by ordinance between April 1st and October 31st to prevent disease. Ash trees will require special handling, too.

10. Not Consulting Information Sources

- The Chicago Botanic Garden (www.chicagobotanic.org) and The Morton Arboretum (www.mortonarbo.org) have professional plant experts to help you with questions about your landscape and tree care.
- Your local extension service may also be helpful because they have a staff of Master Gardeners that can assist you with questions. (www.extension.uiuc.edu)
- The Northbrook Garden Club also has many experienced gardeners who can help.
- For tree questions or concerns, contact Northbrook Public Works at 847-272-4711.

SUMMARY

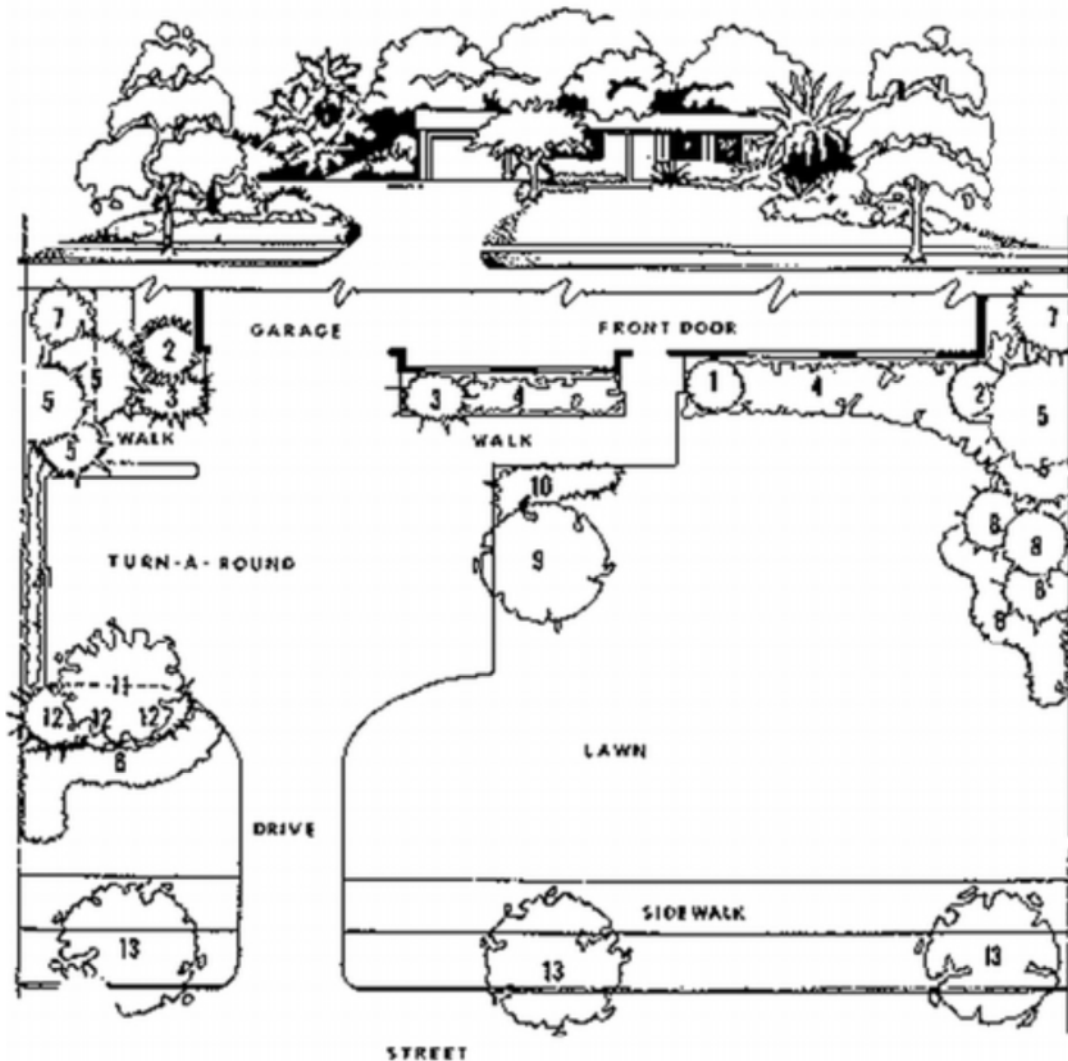
Primary considerations for selecting your landscape plants:

- Height and width-mature size
- Form-shape and how it will occupy the space
- Texture of the plants. Plants with finer textures should be used in greater numbers than plants with coarse textures.
- Seasonal interest and color. Foliage, fruit, flowers, winter features, changing colors.

Secondary considerations for selection:

- Insect and disease resistance
- Sun or shade
- Moisture tolerance
- Drought resistance
- Soil type

Plant in groups of 3's, 5's, and 7's, etc. to give a sense of intentional design, balance and unity.



A well-balanced landscape design