

LANDSCAPING GUIDELINES

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PURPOSE

The significance of landscaping in a residential community can not be overestimated. The memory of unique and special communities brings to mind images of magnificent arching canopies of trees covering the streets, and of homes partially hidden yet linked by a mature undergrowth of shrubs and ornamental trees.

Landscaping should serve not only the aesthetic purpose in a community's design, but also functional purposes such as architectural, engineering and climate control. Architecturally, landscaping can articulate spatial relationships, provide privacy, screen an unpleasant view or reveal and frame a unique vistas. Landscaping for engineering purposes can reduce the glare of lights, define circulation, attenuate noise and control erosion.

In addition, landscaping for climate control can decrease wind velocities and alter directions, reduce the impact of precipitation, reduce the head absorption of paving and through the use of deciduous trees, screen the hot summer sun while in winter permitting the sun to penetrate through.

The most important landscape element when building a new community proves to be the street trees. Traditionally, the street in land planning has been an important organizing element. In the city, the street wall is formed by the architecture, however in the suburban context, the street tree becomes the tool to structure and articulate circulation in the third dimension. The street tree in the suburbs provides continuity or unity to a street where architectural types may vary and helps to define the sense of orientation and direction. A rhythm or pattern is created quite independent of the housing forms and landscaping.

In general, landscaping serves many purposes in a community ranging from the aesthetic to the functional, but its greatest contribution aids to create a unique and special "sense of place", and a community which beautifies as it matures.

SUBMISSION AND APPROVALS

Prior to planting, all front yard landscaping plans, and side yard landscaping plans for corner lots and lots adjacent to common areas, must be approved by Woodlea Manor conservancy. Plans shall be prepared at a scale of not less than 1" = 50' and include all base data and constructed improvements on site. Submissions in duplicate are requested; and should be forwarded to the Conservancy's Management Firm.

Plantings in the rear yards and side yards not adjacent to roadways or common areas (behind the front line of a house) do <u>not</u> require submission of a plan. Annual flowers planted in existing plant beds do not require submission of a plan, however, all plantings are subject to the <u>Landscaping Guidelines</u>. Consideration must be given to the plantings' effect, if any, on adjoining properties.

STREET TREE PLANTING GUIDELINES

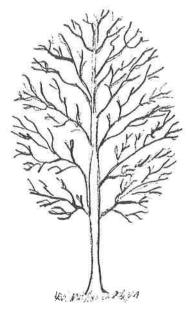
- 1. No tree shall be planted within the public right-of-way, or within the utility easements adjacent to the roadway.
- 2. Trees which are to be planted continuously along streets, should be of the type which provide a large canopy at maturity.

*Canopy trees should not be planted opposite each other, but should alternate allowing a greater development of the crowns.

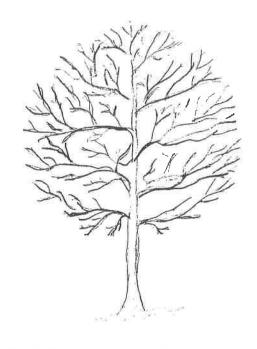
*Tree spacing should be no less than 30 feet and no greater than 75 feet.

- 3. Evergreen/coniferous trees should be placed to screen rear and side yards that are exposed to the street.
- 4. Ornamental flowering trees (dogwoods, crabapples, etc.) should not be used as continuous street trees, but rather used as accents to define entrances and transitions in circulation.
- 5. Several types of trees should be used for the entirety of a single roadway. This principal aids in creating distinct and varying streetscapes.
- 6. Tree planting around cul-de-sacs, even though physical constraints may be numerous, must be symmetrically organized and structured.
- 7. A minimum of 1.5 canopy trees per log shall be provided; ornamental and evergreen trees are in addition and shall be provided as required to fulfill the aforementioned objectives.
- 8. Distinct tree forms such as columnar and weeping trees may be used for visual accent, but shall not represent the majority or emphasis of the planting design.
- 9. Landscaping shall not impede vehicular site viewing distance nor create any situation which may pose an unsafe or hazardous condition.

STREET TREE TYPES



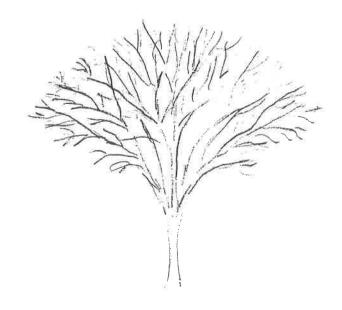
BROAD OVAL TREES with usually ascending branches.



GLOBE-SHAPED TREES with ascending branches, but not prominent leader.



SPREADING BRANCHED TREES whose leader is not well developed.



VASE SHAPED TREES in which the trunk fails to form a single leader.

STREET TREE RECOMMENDATIONS

BROAD OVAL TREES

Autumn Flame Red Maple, Acer rubrum "Autumn Flame" (Plant Patent #2377). Moderate growth rate. Small foliage turns red early in the fall, leaves fall over short period. Low maintenance. Tolerates moist planting sites. Moderate rate of recovery after planting.

October Glory Red Maple, Acer rubrum "October Glory". Moderate growth rate. Medium shade. Shallow-rooted. Flowers red. Early in leaf, very late to fall. Consistently red autumn foliage. Tolerates moist sites. Moderate rate of recovery after transplanting.

Sugar Maple, Acer saccharum. Moderate growth rate. Medium shade. Deep-rooted. Attractive flowers. Orange autumn foliage, leaves fall over short period. Requires fertile soil. Leaf scorch on dry sites. Moderate rate of recovery after transplanting.

Green Mountain Sugar Maple, Acer saccharum "Green Mountain" (Plant Patent # 2339). Moderate rate of recovery. Rapid rate of growth. No conspicuous flowers. Mid season leafing. Foliage dark green, leathery, not subject to physiological leaf scorch. Orange autumn foliage color. Short defoliation period. No conspicuous fruit. Litter not a problem.

Shademaster Thornless Honeylocust, Gleditsia triacanthos "Shademaster". (Plant Patent #1515). Rapid growth. Light shade. Deep rooted. Late in leaf, forming medium dense crown. Yellow autumn foliage. No litter. No fruits. Webworm. Drought resistent. Rapid recovery after transplanting. Young trees require corrective pruning.

Sweet Gum, Liquidambar styraciflua. Moderate growth rate. Medium shade. Deep-rooted. Late in leaf. Excellent red autumn foliage. Leaves fall over short period. Fruits litter in winter. Tolerates moist sites, requires acid soil. Moderate rate of recovery after transplanting (B&B).

Willow Oak, Quercus phellos. Rapid growth. Medium shade. Shallow-rooted. Late in leaf. Medium dense crown. No litter. Tolerates moist sites, requires acid soil. Moderate rate of recovery after transplanting (B&B).

Silver Linden, Tilia tomentosa. Rapid growth. Dense shade. Shallow-rooted. Leaves silvery underneath, falling over short period. Dense symmetrical crown. Fragrant flowers in June. Low maintenance. Moderate rate of recovery after transplanting (B&B).

Redmond Linden, Tilia americana "Redmond". Rapid growth, dense shade. Dense oval crown. Large leaves, falling in a short period. Fragrant flowers in June. Rapid rate of recovery after planting.

Sawtooth Oak, Quercus acutissima. Rapid growth, medium shade. Glossy narrow leaves like a chestnut, retained late in the winter in young trees. No fall color. Resistent to drought and pavement glare. Rapid growth rate. Rapid recovery after planting.

GLOBE SHAPED TREES

Red Maple, Acer rubrum (clonal selection). Rapid growth. Medium shade. Shallow-rooted. Silvery bark. Flowers among the most attractive of maples. Early in leaf, bright but variable autumn foliage according to season. Leaves fall during short period. Tolerates moist sites. Rapid recovery after transplanting.

Hackberry, Celtis occidentalis. Clonal plants recommended. Moderate growth rate. Light shade. Shallow-rooted. Warty bark. Late in leaf, open canopy, leaves fall over short period. Witches'-broom. Among most tolerant of trees to dry, adverse conditions. Low maintenance. For extreme city conditions. Rapid recovery after transplanting.

SPREADING BRANCHED TREES

Maidenhair-tree, Ginkgo biloba (male only). Slow growth. Light shade. Deep rooted. Open crown, late in leaf, yellow autumn color. Leaves drop in short period. No fruits. Thrives under extreme city conditions; for wide streets. Requires fertile soil. Drought resistant. Low maintenance. Moderate rate of recovery after transplanting.

Red Oak, Quercus rubra (Q. borealis). Moderate growth rate. Dense shade. Deep-rooted. Late in leaf, red autumn foliage. Leaves fall over prolonged period. Large acorns. Slow recovery after transplanting.

Scarlet Oak, Quercus coccinea. Moderate growth rate. Dense shade. Deep-rooted. Most vivid autumn foliage of the oaks. Requires fertile soil. Slow recovery after transplanting (B&B).

Regent Scholartree, Sophora japonica "Regent" (Plant Patent #2338). Slow recovery after transplanting (B&B). Rapid rate of growth. Yellowish mid-summer flowers. Compound foliage, leaflets small. Short defoliation period. Yellow green, attractive fruit. No leaf litter. Fallen blossoms and fruit may be troublesome. Requires dolomitic limestone dressing.

London Plane-tree, Platanus acerifolia. Rapid growth rate. Dense shade. Deep-rooted. Late in leaf, dense crown, leaves fall over prolonged period especially in dry seasons. Fuzzy leaves in May and June. Canker stain, anthracnose, lacebug and aphids. Drought resistant yet tolerates moist sites. Rapid recovery after transplanting.

VASE-SHAPED TREES

Groenveldt Elm, Ulmus hollandica "Groenveldt. Rapid growth rate. Medium shade. No autumn color. Thrives in city locations. Excellent resistance to Dutch elm disease. Rapid recovery after planting.

Village Green Zelkova, Zelkova serrata, "Village Green" (Plant Patent #2337). Rapid recovery. Rapid rate of growth. Inconspicuous flowers. Midseason leafing. Elm-like foliage. Bronze red autumn foliage. Short defoliation period. Inconspicuous fruit. Litter not a problem.

ORNAMENTAL TREES

Bradford's Callery Pear, Pyrus calleryana "Bradford". Thornless clone. Moderate growth rate. Requires special nursery training. Medium shade. Deep-rooted. Attractive flowers. Deep red autumn foliage late in season, leaves fall over short period. No litter. Drought resistant. Low maintenance. Rapid recovery after transplanting. Spring planting only when bare rooted.

Higan Cherry, Prunus subhirtella. Moderate growth rate. Requires special nursery training. Light shade. Deep-rooted. Attractive flowers. Leaves fall over short period. Moderate rate of recovery after transplanting.

Kwanzan Japanese Flowering Cherry, Prumus serrulata "Kwanzan. 20-25 ft. Moderate growth rate. Requires special nursery training. Light shade. Deep-rooted. Attractive double pink flowers. Late in leaf, dense crown, orange autumn foliage, leaves fall over short period. Low maintenance. Rapid recovery after transplanting.

Goldenrain-tree, Koelreuteria paniculata. Rapid growth while young. Requires special nursery training. Dense shade. Shallow-rooted. Attractive yellow flowers in summer and tawny fruits. Late in leaf, yellow autumn foliage, leaves fall over short period. Low maintenance. Moderate rate of recovery after transplanting. Spring planting preferred.

Flowering Dogwood, Cornus florida. 15-20 ft. Very slow growth rate. Light shade. Shallow-rooted. Requires special nursery training. Attractive white flowers and red fruits. Late in leaf, red autumn foliage, leaves fall over short period. Requires fertile acid soil. Slow recovery after transplanting (B&B). Susceptible to dogwood borer.

Sargent Cherry, Prunus sargentii. Slow growth. Requires special nursery training. Medium shade. Shallow-rooted. Requires well-drained, fertile soil. Attractive pink flowers. Early in leaf, red autumn foliage, leaves fall over short period. Smooth, red bark. Low maintenance. Slow recovery after transplanting.

EVERGREEN/CONIFEROUS_TREES

Norway Spruce, Picea abies. Moderate growth rate. 40-60 feet high, 25 to 30 feet wide. Most effective uses are for windbreaks, screens, mass plantings or groupings.

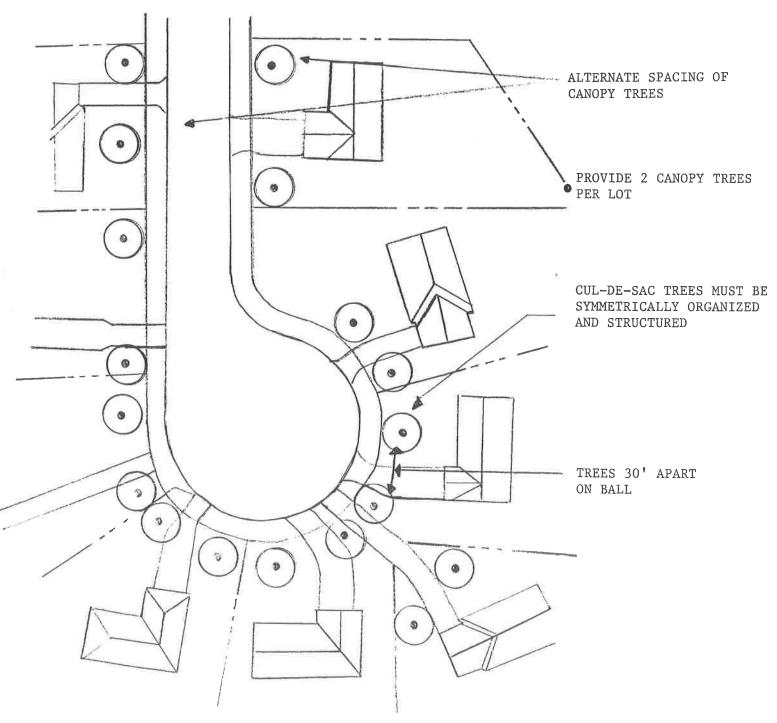
White Pine, Pinus strobus. Moderate to fast growth rate. 50 to 80 feet high, 20 to 40 feet wide. Tolerant of many kinds of soils. Graceful, dignified appearance. Presently in the Mid-Atlantic Region, the White Pine is affected by a pest which is killing a vast majority of the trees. Should be used in limited quantities.

Scotch Pine, Pinus sylvestris. Moderate growth rate. 30 to 60 feet high, 30 to 40 feet wide. Easily transplanted and adaptable to a variety of soils. Form is open and wide spreading with a flat or round top.

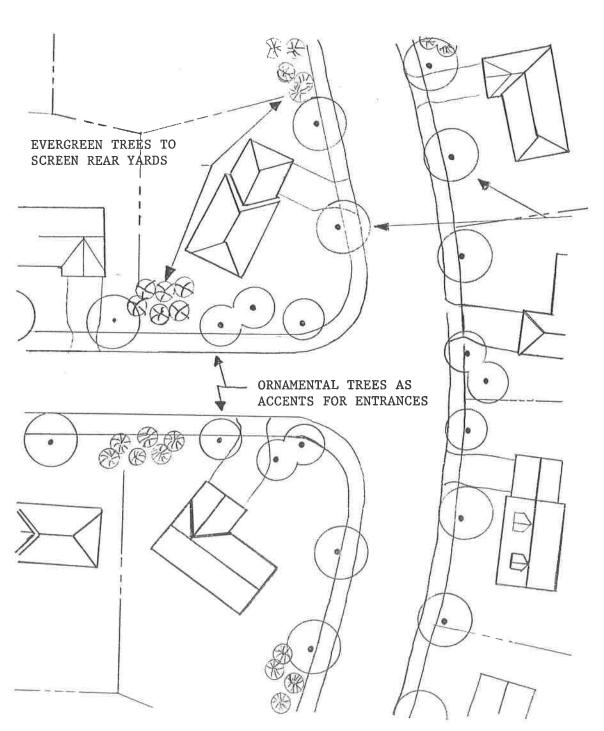
Austrian Pine, Pinus nigra. Moderately fast growth rate. 35 to 50 feet high, 15 to 25 feet wide. Tolerant of drought, salt, urban environments and a variety of soil conditions. Open and irregular with age.

Canadian Hemlock, Tsuga canadensis. Moderate growth rate, 40 to 70 feet high, 25 to 35 feet wide. Requires moist, acid, well drained soils. Not tolerant of city conditions or salt pollution. Becomes pendulously pyramidal with age.

TYPICAL STREETSCAPE PLANTING DESIGN



TYPICAL STREETSCAPE PLANTING DESIGN



ALTERNATE SPACING OF CANOPY TREES

CANOPY TREES SPACED NO LESS THAN 30 FT. APART AND NO GREATER THAN 70 FT.

PLANT MATERIAL SIZE AND QUALITY

SIZE

1. DECIDUOUS CANOPY TREES SHALL BE

Minimum of 2-2 1/2" caliper, with an average height of 12-14 feet.

2. DECIDUOUS ORNAMENTAL TREES SHALL BE

Minimum of 1 - 1 - 1/4" caliper, with an average height of 8 to 10 feet.

3. EVERGREEN/CONIFEROUS TREES SHALL BE

Minimum of 7-8 feet in height.

OUALITY

Plant materials. the following reference standard shall govern, <u>American Association of Nurserymen, Inc.</u> (American Association of Nurserymen, Inc. (American National Standard Institute) Nursery Stock (Z60.1)

Plants shall be typical of their species and variety; have normal growth habits; well-developed branches, densely foliated; with healthy, vigorous, fibrous root systems. Plants shall be free from diseases, insect infestations, defects and injuries. Quality, size and grading of plants and shrubs, spread of roots and measurement of the balls shall be in accordance with Z60.1, American Standard for Nursery Stock. Plants shall be freshly dug and nursery grown. Nursery grown plants shall have been transplanted or root pruned at least once in the past three years.

Each bundle of plants and all separate plants shall be properly identified by weatherproof labels securely attached thereto before delivery to project site. Label shall identify plant by name and provide any specific data as to location and arrangement.

Trees shall be of symmetrical growth, and free of insect pests and disease. The trunk shall be measured at a height of six inches above the finished ground level. Trees shall have

straight trunks and be well branched with a single leader intact. Bark shall be free of abrasion. All cuts over 1 1/4 inch shall be calloused over. Trees shall be free of branches up to six feet from the ground, except if planned for planting in open areas with no vehicular or pedestrian circulation conflict.

Balled and burlapped plant material (B&B) shall be dug with firm natural balls and securely burlapped separately. Balled and burlapped plants shall come from soil which will hold a firm ball.

PLANTING SPECIFICATIONS

A. MATERIALS FOR PLANTING:

- 1. Stakes for guying trees shall be sound oak or other approved hardwood. Three stakes spread 120° apart shall be used near tree.
- 2. Wrapping materials for tree trunks: Clean burlap of 8-oz. weight cut in 8"- to 10"- wide strips of water resistant kraft paper or tape for this purpose. Twine for tying shall be medium jute twine.
- 3. Tree guys: Provide wire ties and guys of 2-strand, twisted, pliable galvanized steel wire not lighter than 12-gauge with zinc coated turnbuckles. Provide 2-ply garden hose not less than 1/2 inch hose size, cut to lengths to protect tree trunks from damage by wires.
- 4. Deadman (for guying trees 4" CAL. and larger) shall be sound oak or other approved hardwood, at least 8" DIA. and 2'-0" long.
- 5. Mulching: shall consist of evergreen pine needles, or shredded hardwood (Medium).

B. Planting Schedule:

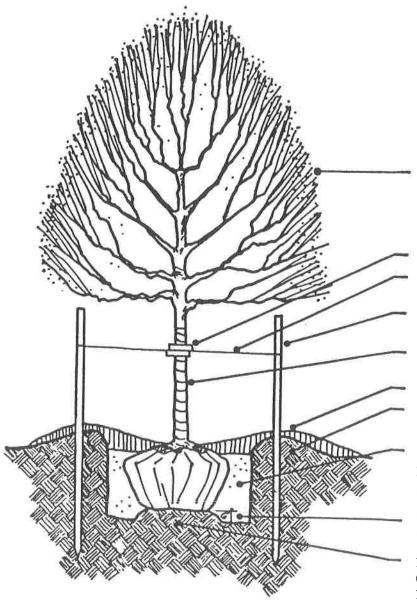
- 1. Planting operations shall be during the proper season for the materials as specified. Planting shall not be performed during unfavorable weather conditions or in frozen soil.
 - a. Deciduous material (plant from October 15th to April 30)

C. Planting Execution:

- 1. Circular pits, with vertical side shall be excavated for all plants, and generally be at least 12 inches greater than the diameter of the ball.
- 2. The depth of pits for trees shall be 6 inches deeper than the ball or container depth.
- 3. Obstructions encountered in excavated or planted areas shall be removed or plants relocated as approved.
- 4. Plants shall be planted plumb, at the same grade as in the nursery (in relation to finish grade); tamp topsoil under and around base of ball to fill all voids. Remove all burlap, ropes, and wires from sides and tops of balls, but do not remove burlap from under ball. Thoroughly water when hole is two-thirds full of topsoil. After watering, the filling shall be completed and the soil applied over a 4" earth berm to create a shallow watering basin around the tree.
- 5. Each tree (evergreen or deciduous) shall be immediately staked or guyed.
 - a. Trees under 4" CAL. shall be staked with three 2" x 2" hardwood stakes per tree, spread 120° apart. Double strand 12 Gauge galvanized wire twisted shall be thread through garden 1/2" hose to protect tree, and connected to stake.
 - b. Trees 4" CAL. and larger shall be guyed with three hardwood deadman placed not less than 18" below the surface, attached to the tree with double strand of 12 gauge pliable galvanized wire twisted, with zinc coated turn-buckles.
- 6. Wrap all deciduous trees. Wrapping shall extend from ground line to second branch. Binder twine loops shall be placed at top and bottom of material, spaced maximum one foot apart. Overlap tree wrap by 50%.
- 7. Pruning shall be by experienced landscape contractors. Remove broken or damaged branches and roots. Cut back and thin deciduous material to retain 2/3 of initial branches. Cut back evergreens to give compact uniform appearance. Damaged or pruning tree leaders shall be cause for rejection.
- 8. If foliage is present on deciduous plant material, they shall be sprayed with an anti-desiccant which slows

- down the transpiration process, thus reducing the danger of dehydration.
- 9. All trees are to be planted a minimum of 5 feet from any and all curb lines.

TYPICAL PLANTING DETAIL



PRUNE AND THIN DECIDUOUS TREES APPROXIMATELY 1/3 OF INITIAL BRANCHES

GARDEN HOSE 1/2" DIA. MINIMUM

DOUBLE STRAND -12 GAUGE
GALVANIZED WIRE, TWISTED

3-2x2" HARDWOOD STAKES PER
TREE, SPREAD 120° APART

TREE WRAP FROM GROUND TO
FIRST BRANCHES - 50% OVERLAP

3" MULCH OVER BERM

4" EARTH BERM TO FORM SAUCER

TAMP OR WATER TOPSOIL MIXTURE AT 6" INTERVALS - THOROUGHLY WATER WHEN HOLE IS TWO - THIRDS FULL

6" MINIMUM BETWEEN BALL AND BOTTOM OF EXCAVATION

LOOSEN SUBSOIL AT BOTTOM OF EXCAVATION TO 6" MINIMUM DEPTH - TAMP

TREE PRESERVATION STANDARDS

The preservation of trees in a newly established residential community can prove to be a valuable asset as a marketing and sales tool. Existing trees create a feeling of permanence and maturity, add privacy to individual lots, while also providing relief to the visual density of the overall community.

Precaution and planning must be exercised at the outset of construction to ensure maximum tree preservation. Efforts spent in the beginning will be of great benefit in the end to the individual homeowner and to the community at large. The following outlines the precautions, issues and steps necessary in tree preservation.

THE CRITERIA TO EVALUATE TREES TO BE PRESERVED SHALL CONSIST OF;

- 1. Grading and the proximity of proposed elevations to trees and vegetation retained. Grading shall generally not take place within the drip line of trees, unless other measures of preservation are ensured.
- 2. Tolerance to sudden exposure should be considered for trees and vegetation in the new environmental conditions, such as increased direct sunlight, increased radiant heat from buildings and pavement, and increased wind. Trees with a strong tap or fibrous root system and increased wind. Trees with a strong tap or fibrous root system should be given priority over those with a weak or shallow root system.
- Water table and the effect grading will have on trees and vegetation in the new environmental conditions, such as increased direct sunlight, increased radiant heat from buildings and pavement, and increased wind. Trees with a strong tap or fibrous root system should be given priority over those with a weak or shallow root system.
- 4. Outstanding specimens, trees of impressive size or shape and of historical significance, or rare species shall be preserved if possible.
- 5. Appearance and well developed crowns should generally be given preference over misshapen crowns or trunks, those with small crowns at the top of tall trunks, or those with a narrow V-shaped form.
- 6. Wildlife value should be considered and trees plus vegetation providing a source of food, cover, or nesting should be preserved.

7. Health and disease susceptibility shall be considered. Trees should be checked for scarring caused by fire or lightning, insect or disease or damage, and rotted or broken trunks or limbs.

GUIDELINES FOR TREE PRESERVATION

TREE PROTECTION

Individual mature trees near heavy construction traffic in which the tree cannot be fenced at the outer perimeter of the spread of branches, shall be wrapped with burlap and 2 in. x 6 in. wooden planks wired vertically as armor around trunks and spaced no more than 2 in. apart to a height of 5 ft. above ground.

All other existing trees, individual or in groups, shall be protected by fencing in the following manner: fences shall have posts equivalent to 4 in. x 4 in. x 7 ft., set minimum of 3 ft. into the ground, set at intervals not to exceed 8 ft. Top and bottom rails shall be equivalent to 2 in. x 6 in.; vertical 1 in. x4 in. boards shall be nailed to top and bottom rail, not greater than 6 in. apart.

Fences shall be placed at the outer perimeter of the spread of branches (drip line) and shall be a minimum of 4 ft. above grade.

Heavy equipment, vehicular traffic, stockpiling of any materials, or deposition of sediment, shall not be permitted within the drip line of trees to be preserved.

No toxic materials shall be stored within 100 ft. of vegetative areas to be preserved.

Trees being removed shall not be felled, pushed or pulled into trees being retained.

No protective devices, signs, utility boxes or other objects shall be nailed to trees which are to be preserved.

Preservation measures shall be maintained until all work in the vicinity has been completed.

TRENCHING AND TUNNELLING

Trenching shall be done outside the drip line of trees where possible, so as to reduce the amount of root area damaged or killed. However, minimum distance of trenching from the face of any tree shall be in accordance with the following:

THE DIAMETER MEASURED AT 4 1/2 FT. MINIMUM DISTANCE OF TRENCH ABOVE GROUND FACE OF TREE

210 0212							
2	in.				1	FT.	
2	1/4	_	4	in.	2	FT.	
4	1/4	_	9	in.	5	FT	
14	1/4	_	19	in.	10	FT.	
19	1/4	in		and over	12	FT.	

Where trenching is not possible, tunnelling under the root zone of existing trees shall be at a minimum depth of 24 in. below the soil surface.

Trenches and tunnels shall be filled as soon as possible. Air spaces in the soil shall be avoided by careful filling.

If a large amount of the root system has been damaged and killed, the crown leaf surface shall be proportionately reduced to balance the reduced root system. This may be accomplished by pruning 20 to 30 percent of the crown foliage. If roots are cut during the winter, pruning shall be accomplished before the next growing season. If roots are cut during the growing season, pruning shall be done immediately.

Pruning cuts shall be made properly to prevent additional bark from being torn from the tree. All final cuts shall be made sufficiently close to the trunk or parent limb without cutting into the branch collar or leaving a protruding stub. All jagged bark wounds shall be cut clean immediately by making all edges smooth and rounding the wounds at the top and bottom.

RAISING GRADES

When fill of 6 in. or more is necessary within the drip line of a tree to be retained, a tree well will be required and shall be installed prior to any filling. The following method shall be used to insure survival of the tree:

- 1. Before making a fill, remove the green vegetation, sod, leaf litter and other organic matter from beneath the tree or trees and loosen the surface soil without damaging the roots.
- 2. The dry well shall be constructed so as to allow for tree trunk diameter growth. Clearance for a younger tree shall be greater than that for an older tree.
- 3. The well shall be built high enough to bring the top just above the level of the proposed fill.

- 4. The well shall be constructed of large stones, brick, building tile, or concrete blocks, with care being taken to insure that ample openings are left through the wall of the well to allow for free movement of air and water. Mortar shall be used only near the top of the well and only above the porous fill.
- 5. One or more drain lines shall begin at the lowest point inside the well, extend down and outward from the tree trunk, and drain to the surface at the lowest existing grade surrounding the tree. For aeration purposes, additional drain lines shall also radiate out from the well wall with vertical tiles and/or pipes being used in fills over 2 ft.
- 6. Geotextile filter fabric shall be placed over the tile and/or pipe joints to prevent clogging and large stones shall be placed around and over the drain tiles and/or pipes for protection.
- 7. A layer of stone (to 6 in.) shall be placed over the entire area under the tree from the well out at least as far as the drip line. For fills up to 2 ft. deep, a layer of stone 8-12 in. thick is usually adequate. A thicker layer of stone not to exceed a maximum of 30 in. will be needed for deeper fills.
- 8. A layer of small 1/4 to 1 in. stone covered by Geotextile filter fabric mat shall be used to prevent soil sifting through the stone.
- 9. Filling shall be completed with porous soil such as top soil until the desired grade is reached.
- 10. To prevent clogging of the drain lines, crushed stone shall be placed inside the dry well over the openings of the radial tiles. Vertical tiles shall also be filled with crushed rock and may also be covered with a screen.
- 11. To prevent anyone from falling into the dry well and the accumulation of leaves and debris, the area between the trunk and the well wall may either be covered by an iron grate or filled with a 50-50 mixture of crushed charcoal and sand. (The latter measure also will prevent rodent infestation and mosquito breeding).

LOWERING GRADES

Trees marked for preservation that are located more than 6 in. above proposed grades shall stand on graded broad rounded mounds

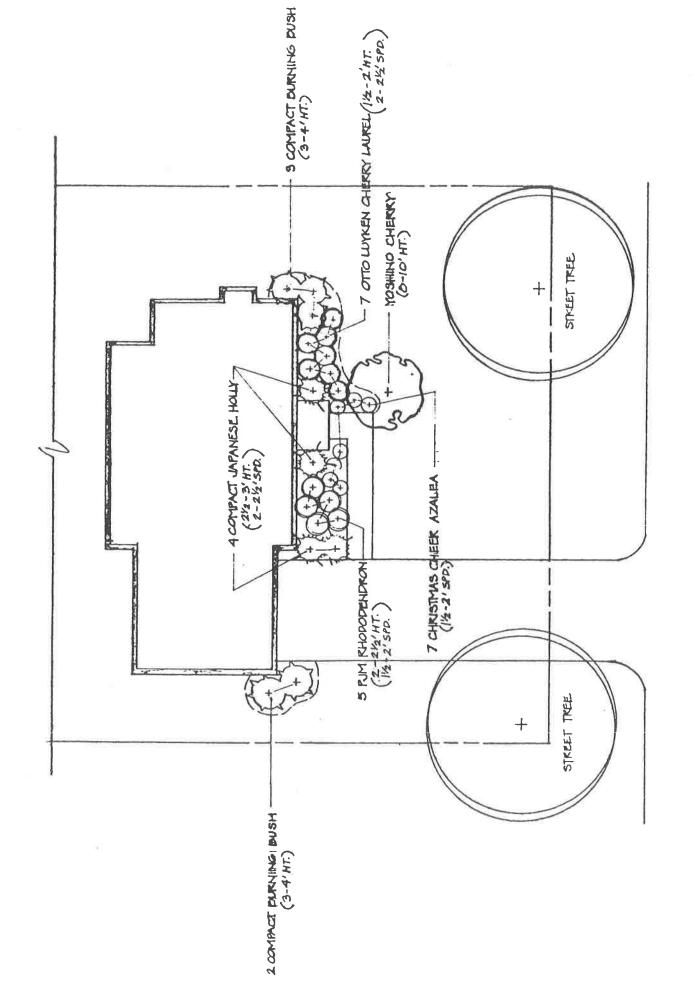
and be graded smoothly into the lower level. Exposed or broken roots shall be cut clean and covered with topsoil.

Grade changes shall not permit water to flow toward bases of trees.

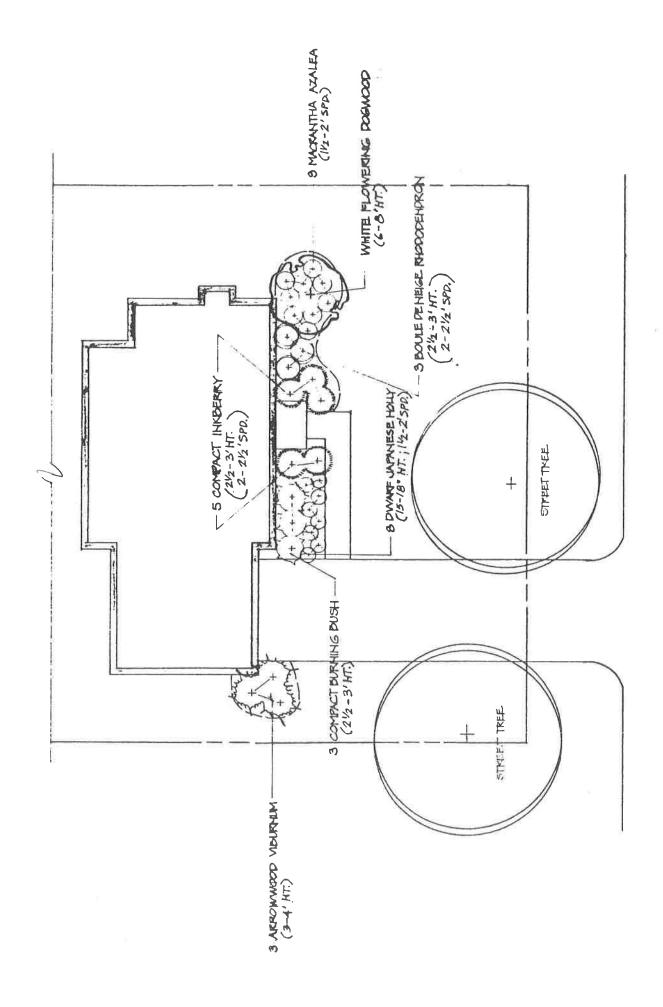
Any damage to existing tree crown or root systems shall be repaired immediately. Roots exposed and/or damaged during grading operations shall be cut off cleanly inside the exposed or damaged area, and topsoil spread over the exposed root area.

After construction activities are completed, a qualified tree surgeon shall selectively prune existing trees which encountered root disturbance. Pruning shall approximately equal the amount of root disturbance, in order to maintain the balance between evapotranspiration and root intake.

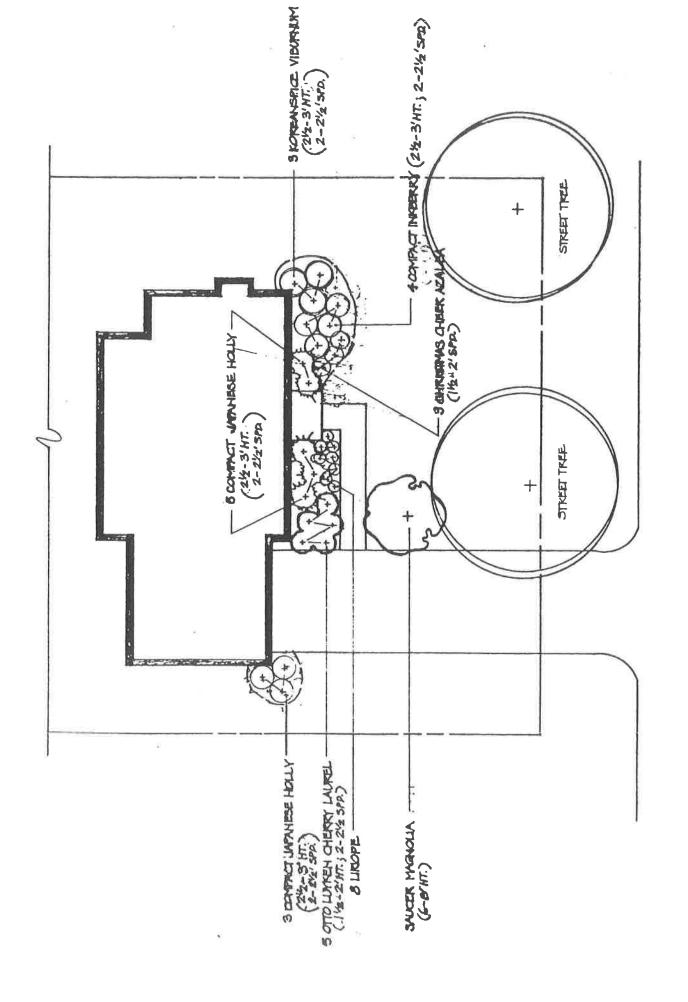
Apply 5-10-5 fertilizer evenly over root area of the tree affected at a rate of 4 lbs. per 1 in. diameter at breast height for trees greater than 6 in. diameter. For trees less than 6 in. diameter apply at a rate of 2 lbs. per 1 in. diameter. Mulch root area with a minimum 3 in. cover.



LANDSCAPE PLAN NO.1



LANDSCAPE PLAN NO.2



LANDSCAPE PLAN NO.3