

VILLAGE OF FRANKFORT LANDSCAPE ORDINANCE

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December 2006

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CHAPTER 158: LANDSCAPING REGULATIONS

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GENERAL PROVISIONS

§158.01 PURPOSE

- A. The purpose of this chapter is to preserve and promote the health, safety, and general welfare of the public, and as part of the general welfare, establish landscape requirements and guidelines for review of landscape proposals for purposes of providing screening or transition buffer areas which will promote compatibility among land uses, the planting of street trees and stormwater detention / retention areas and other areas required by village ordinance. These guidelines are established to promote consistent review of landscape proposals resulting in higher quality design for the village.
- B. These regulations are intended to minimize the harmful or nuisance effects resulting from noise, heat, glare, and accumulation of dust and provide shade, air purification, oxygen regeneration, ground water recharge, storm water runoff retardation and privacy from noise and visual intrusion of objectionable sights and activities. This chapter also establishes a Village Tree Board for purposes of enforcing these guidelines. This chapter supersedes any language on landscaping contained in Ordinance No. 919, Frankfort Bicentennial Zoning Ordinance, Ordinance No. 921, the Land Subdivision Regulations.

§158.02 DEFINITIONS

For the purposes of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

BEST MANAGEMENT PRACTICE (BMP) – A design or practice employed with the primary objective to minimize adverse water quality impacts, preserve beneficial features on-site, avoid downstream erosion and habitat loss, maintain natural base flows and groundwater recharge, prevent increases to downstream flooding, provide multiple uses of drainage and storm water drainage facilities, and/or provide for the economical, safe and aesthetically pleasing drainage system for development.

BMP methods have been published by the Northeastern Illinois Planning Commission (NIPC) under the following titles: “Designing Stormwater BMP in Northeastern Illinois,” “Urban Stormwater BMP for Northeastern Illinois,” “Restoring and Managing Stream Greenways: A Landowners Handbook,” Chicago Wilderness “Biodiversity Recovery Plan,” and Village of Frankfort “Water Resource Management Plan.” These, as well as other sources, are recognized BMP which should be considered in the design of a stormwater management system.

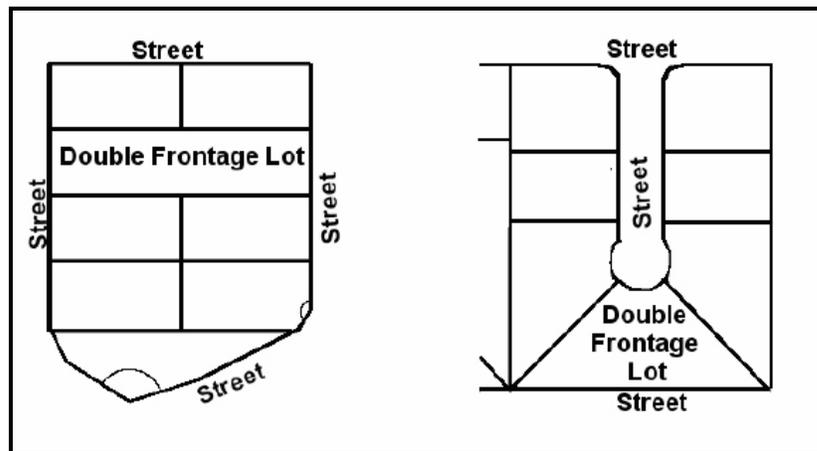
BERM- An earthen mound designed to provide visual interest, screen undesirable views, and/or decrease noise

BUFFER- A combination of physical space and vertical elements, such as plants, berms, fences, or walls, the purpose of which is to separate and screen incompatible land uses from each other.

CALIPER- A circumferential measurement of a tree's trunk recorded six inches above grade for those trees having a caliper of four inches or less, and twelve inches above grade for those trees with a caliper of above four inches.

DECIDUOUS- A plant with foliage that is shed annually.

DOUBLE FRONTAGE LOT- A lot abutting two (2) parallel streets, or two (2) streets which do not intersect at the boundaries of the lot.



EVERGREEN- A plant with foliage that persists and remains green year-round.

LANDSCAPED AREA- An area which consists of living landscape material.

LIVING LANDSCAPE- Low growing woody or herbaceous ground cover, turf, shrubs, and trees.

NATURALIZED LANDSCAPE –Ecologically sensitive landscaping that uses regionally native plant species to create, improve or restore specialized and self-sustaining plant communities (prairie, woodland, etc.)

OVERSTORY TREE- A self-supporting woody plant having at least one well-defined stem or trunk and normally attaining a mature height and spread of at least 30 feet, and having a trunk that may at maturity, be kept clear of leaves and branches at least eight feet above grade.

PARKWAY- That portion of village owned property between the curb line, shoulder line, traveled portion of the roadway or alley and the private property line.

SCREEN- An area of planting which provides an effective visual barrier.

TRANSITION YARD- That portion of yard that separates two incompatible uses.

UNDERSTORY TREE- A self supporting woody plant having at least one well-defined stem or trunk and normally attaining a mature height and spread of less than 30 feet with branching less than eight feet above grade.

VEHICULAR USE AREAS- All areas subject to vehicular traffic including, but not limited to, access ways, driveways, loading areas, service areas, and parking stalls for all types of vehicles. This definition shall not apply to covered parking structures or underground parking lots.

§158.03 SCOPE

- A. The provisions of this chapter shall apply to all development occurring after the effective date of this chapter and any development which has not yet received final plat approval.
- B. Whenever an existing use or structure on a lot is expanded, the development shall be subject to the provisions of this chapter provided that the expansion exceeds 25% of either the gross floor area or lot area of the existing development or where the cost of improvements exceeds the value of existing structure by 50%. Existing value shall be determined by the value of the building as stated in the most recent tax bill as provided by the owner. The owner shall also provide the estimated costs of improvement.
- C. For any conforming or legally nonconforming building or use which is in existence on the effective date of this chapter which subsequent thereto is damaged or destroyed by fire, collapse, explosion or other cause, and which is reconstructed, reestablished or repaired at a cost that exceeds 50% of the value of the building or use, landscaping shall be provided as required by this chapter for equivalent new use or construction.
- D. All landscaping as required in this chapter shall supersede all other landscaping requirements contained within the village code.
- E. All requirements in this chapter are minimum requirements. Provision of landscaping in excess of these requirements is encouraged and may be required when necessary to achieve the purpose of these regulations.

§158.04 REQUIRMENTS OF A LANDSCAPE PLAN

A. *Landscape Plans.* Landscape plans shall be required as part of each of the following development scenarios:

1. Single family detached residential developments of seven or more units (single family detached residential developments of six or less units are not required to submit landscape plans, however they must still comply with all regulations as described herein. This exemption does not apply to required landscape plans for detention ponds, as outlined in Chapter 158.29);
2. Single-family attached residential developments;
3. Commercial, industrial or public purpose development;
4. Any modification to existing structures (except single-family detached structures) that either increase the footprint by 25%, or where the cost of improvements exceed the value of the existing structure by 50%. Existing value shall be determined by the value of the building or stated in most recent tax bill as provided by the owner. The owner shall provide the estimated costs of improvements.
5. Double frontage lots.

B. *Components of a landscape plan.* Landscape plans shall include the following:

1. North point and scale
2. Topographic information and proposed grades
3. Proposed structures and pavement
4. Existing utilities, above and or below ground.
5. Location, type, size, quantity and planting condition (balled and burlapped, bare root, etc.) of all proposed landscape materials.
6. Common and botanical scientific names of all proposed plant material.
7. Location, size and common/botanical names of existing vegetation that is to remain. (As required under §158.07)
8. Identification of vegetation proposed to be removed. (As required under §158.07)
9. Symbols representing proposed plant material shall be drawn to scale showing two thirds of full mature size and labeled as to quantity and type.

10. Location of underground irrigation system, if any.
11. Location of drain tiles, downspouts and sump pump discharge.
12. Planting schedule.
13. Stormwater Retention/Detention pond improvement plan(s) (refer to section §158.29)

C. Revisions.

1. Once a landscape plan has been approved and a building permit issued, the village staff may authorize minor revisions to the approved landscape plan including the substitution of equivalent plantings and ground covers where such revisions do not diminish the benefits of the approved landscape plan.
2. A revision shall be considered minor where there is no reduction in the quality of plant material, no significant change in size or location of plant material, and new plants are of the same general category (overstory, ornamental, evergreen etc.) and have the same general design characteristics (mature size, spread, density) as the materials being replaced. Penalty see §158.99

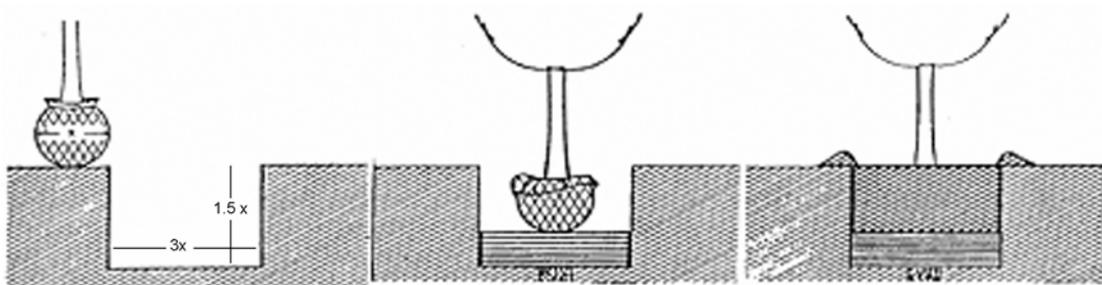
§158.05 LANDSCAPE MATERIAL STANDARDS.

- A. All plant material shall comply with the provisions set forth by the American Standard for Nursery Stock, ANSI (most recent edition) (<http://www.anla.org/>).
- B. Plant material used in conformance with the provisions of this chapter shall be selected to provide:
 1. Climate hardiness of plant material.
 2. High disease resistance and stress tolerance.
 3. Adaptability of proposed plant material to the particular microclimate (sun, shade, dry or wet soils, etc.) in which it is to be located.
 4. Inclusion of native plant material where appropriate.
 5. Select plants for drought tolerance
 6. Overall year round ornamental effect.
 7. Conformance with Best Management Practices (BMPs)

- C. Plant material shall be healthy, free of insects and diseases, physical damage (bark bruises, cracked branches, scrapes etc.), and exhibit a straight central leader when applicable.
- D. Unless otherwise specified, minimum size requirements for plant materials at time of planting are as follows:
1. Overstory trees: 2.5" caliper and 6' clear of branches.
 2. Understory and ornamental trees:
Single trunk – 2" caliper;
Multi trunk – 6' height.
 3. Evergreen trees: 6' height.
 4. Large shrubs: 36" height
 5. Small shrubs: 18" – 24" height.
- E. The caliper of the trunk shall be measured six inches above the ground for plants with calipers of four inch or less and twelve inches above the ground for larger sizes. Penalty see §158.99
- F. The use of stone, rock, or gravel as a ground cover is discouraged unless used as a decorative accent or as part of an appropriate landscape concept.

§158.06 PLANTING SPECIFICATIONS.

- A. Planting pits shall be one and one-half times as deep and three times as wide as the root ball. Planting procedures should follow the most current Northern Illinois Tree Specification. Native soil should be used for backfill whenever possible.



- B. Trees and shrubs located in a planting bed shall be mulched with a minimum of three inches (3”) of shredded hardwood bark, wood chips or other organic mulch. All flower and groundcover beds shall be mulched with a minimum one and one-half (1.5”) to two inch (2”) depth shredded hardwood bark, wood chips or other organic mulch.
- C. The lower trunk of new trees shall be wrapped with burlap or paper to prevent evaporation and sunscald. The wrapping should remain on the tree for at least one year. Newly planted trees should be sprayed with an antidesiccant prior to site delivery and immediately after installation to prevent excessive moisture loss. Penalty see §158.99
- D. Soil used in planter boxes, urban tree grates or similar areas should have a soil composition of 45-77 percent silt, 0-25 percent clay, 25-33 percent sand, a soil acidity of pH 6.0 to 7.0, no more than (3) three to (5) five percent organic material, and a minimum depth of three feet (3’).
- E. Local ecotypes should be preserved. Therefore, all native seed and plant stock should be obtained from sources within a 150-mile radius of the Village. Vendors from beyond that radius may supply the native seed and/or plants, but they must demonstrate the materials come from local genetic stock.
- F. Planting of garlic mustard, reed canarygrass, purple loosestrife, common reed, and buckthorn is prohibited, as is installation of any noxious weed as defined by the Illinois Administrative Code or by the Village of Frankfort.

§158.07 TREE PRESERVATION

A. INTENT

It is the intent of this section to establish regulations limiting the removal and ensuring the replacement of trees from public and private property within the village and, in doing so, safeguard the ecological and aesthetic environment of the community. These regulations are further intended to dissuade the unnecessary clearing and disturbance of land so as to preserve, insofar as practical, the existing natural vegetation with plant material indigenous to the region, and preserve landscape buffers to minimize the impact of adjoining conflicting land uses, enhance and protect the integrity of roadway corridors, and reduce the surface heat and negative visual impact of vehicular use areas.

B. SCOPE

Tree Preservation requirements shall apply to all development as outlined in §158.03.

C. TREE SURVEY

1. For the properties with existing vegetation in areas proposed for development, a tree survey shall be submitted prior to issuance of building permit indicating deciduous plant material that is greater than (20) feet in height, or five (5) inches in diameter measured six (6) inches above the ground (hereafter referred to as “Surveyed Deciduous Trees”) or evergreen trees measuring five (5) feet or more in vertical height (hereafter referred to as “Surveyed Evergreen Trees”).
2. The tree survey shall indicate the location, size, and species (both scientific and common) of all Surveyed Deciduous and Evergreen Trees measuring twenty (20) feet in height or having a caliper of five (5) inches measured six (6) inches above the ground, or all evergreen trees measuring five (5) feet or more in vertical height.

D. REMOVAL AND REPLACEMENT CRITERIA

1. No existing Surveyed Deciduous or Evergreen Tree which has been identified on the “Tree Preservation List” (Appendix E) shall be removed without approval of village staff.
2. Existing trees removed (with village approval) shall be replaced according to the following schedule:
 - a. Deciduous Trees
 1. In the event a deciduous tree designated for preservation is destroyed or removed, such trees shall be replaced with new trees at a rate of one inch (1”) in caliper of replacement tree to each one inch (1”) in caliper of removed tree.
 2. In the event of a fraction of an inch, if the fraction is less than one half inch (1/2”), it may be disregarded. If the fraction is one half inch (1/2”) or greater, it shall be counted as one inch (1”).
 - b. Evergreen Trees- In the event an evergreen tree designated for preservation is destroyed or removed, such tree shall be replaced with new trees at a rate of one (1) vertical foot for each one vertical foot of removed tree.
3. Trees normally required by this ordinance may not be counted towards the required caliper inches to mitigate preservation trees.

4. Village staff shall approve the type of replacement tree to be planted as selected from the approved “Overstory Tree List” (Appendix A). The following minimum sizes are required for replacement trees:
 - a. Deciduous Trees- All replacement trees for deciduous trees shall have a minimum caliper of two and one half inches (2.5”) in diameter, as measured at diameter breast height (DBH) above the ground. Any combination of tree sizes equaling two and one half inches (2.5”) in diameter or larger, may be used for tree replacement; i.e., One (1) twenty four inch (24”) tree equals two (2) six inch (6”) and four (4) three inch (3”) tree replacements or eight (8) three inch (3”) replacements.
 - b. Evergreen Trees- All replacement trees for evergreen trees shall be a minimum height of six vertical feet (6’). Any combination of tree sizes six feet (6’) in height or greater may be used as tree replacements.
5. Village staff may vary the number of replacement trees required depending on the desirability of the existing trees.
6. For those areas of significant vegetation (50% or greater contiguous lot coverage by existing vegetation and/or identified by Village personnel), lots shall be reviewed on an individual basis. Impact on existing vegetation will be minimized on a cost effective basis. Emphasis will be placed on maintaining contiguous plantings, and keeping disruption confined to the perimeter as much as possible.
7. All required replacement trees shall be planted on the site from which the trees were removed. Relief from any portion or all of the on-site tree replacement requirement may be granted by the code official. Relief shall be based upon practical physical difficulties and/or undue hardships related to conditions of the site.
 - a. Where specific unique site conditions render complete replacement impractical, cash-in-lieu of replacement trees may be accepted by the Village. The contribution in lieu of planting replacement trees shall be one hundred dollars (\$100) for each caliper inch of deciduous tree or fifty dollars (\$50) for each vertical foot of evergreen tree and shall be paid to the Village prior to the issuance of any building permits.

E. PRESERVATION TECHNIQUES

1. Prior to the development of any project, temporary barriers shall be installed to protect and preserve the existing vegetation.
 - a. Wooden lath snow fencing, brightly colored plastic construction fencing, chain link fencing, or an alternative barrier, shall be installed at the periphery of the drip line of the tree or beyond to prevent storage of materials or vehicles. Said fence or barrier shall be a minimum of forty-eight inches (48") in height securely anchored to fence posts a minimum distance of five feet on center.
2. Wherever a change of grade is planned, the trees to be preserved shall be protected by a wall so as to preserve the existing grade for the roots.
3. Wherever a change of grade is planned, the topsoil shall be preserved for the new landscaping to be installed, unless imported topsoil is used which meets planting specifications as outlined in §158.06.
4. All grading and construction equipment shall be forbidden from encroaching upon the drip line of any tree.
5. Crushed limestone or any other material which may be detrimental to trees shall not be dumped within the drip line of any tree(s) nor shall be located at any higher location where drainage toward the tree(s) could adversely affect the health of said tree(s).
6. No materials or vehicles shall be stored, driven, or parked within the drip line of any trees.
7. In the event that an underground utility line is to be located within five feet (5') of the trunk of a tree designated for preservation, said utility line shall be augured to prevent damage to the trees root system.
8. All trees to be preserved which have been subjected to the construction activity within the drip line should be reviewed by a qualified arborist and appropriate actions performed per the recommendation of the arborist. None of the trees shall be topped, headed-back, skinned (removal of interior branches), or climbed with spikes. All dead wood shall be removed to reduce hazard.

F. ENFORCEMENT

1. In the event that trees are destroyed / removed, leaving no physical evidence for measurement, tree size in caliper inches will be measured at the stump diameter.
2. In the event that a tree designated for preservation is destroyed or razed during the construction process or has been removed without the approval of Village staff, each tree shall be replaced in accordance with the applicable exchange rates. A minimum of \$500.00 per tree penalty shall be assessed upon the owner of the property on which the trees were removed. A temporary work stoppage shall commence until such time that the Village has determined the number and size of tree (s) destroyed. In addition to the fines, destroyed trees must be replaced in accordance to replacement ratios as mentioned above, by the next growing season. Penalty see §158.99

LANDSCAPE CARE

§158.15 LANDSCAPE CARE GUIDELINES

- A. *General Maintenance.* The owner, tenant or their agent, if any, shall be responsible for the maintenance of all landscaping located on the site required by the provisions of this Ordinance or by any approved development plan for the site. Landscaping shall be maintained in good condition so as to present a healthy, neat and orderly appearance and shall be kept free from refuse and debris. Any dead, or severely damaged or diseased plant shall be replaced by the owner, tenant, or their agent during the next planting season for the particular plant or plants in question.
- B. *Pruning.* The owner of trees overhanging public streets or right-of-way shall prune the branches so that such branches shall not obstruct the light from any street lamp or obstruct the view of any street intersection and so that there shall be a clear space of eight feet (8') above the surface of the street or sidewalk. Said owners shall remove all dead, diseased, or dangerous trees, or broken or decayed limbs which constitute a menace to the safety of the public.

The Village shall have the right to prune any tree or shrub on private property when it interferes with the proper spread of light or interferes with the visibility of any traffic control device or sign. The property owner will be charged the cost of such service that the Village initiates for public safety.

- C. *Tree topping.* It shall be unlawful for any person to top any street tree, park tree, or other tree on public property. Topping is defined as the severe cutting back of limbs to stubs larger than three inches in diameter within the tree's crown to such a degree so as to remove the normal canopy and disfigure the tree. Trees severely damaged by storms or other causes, or certain trees under utility wires or other obstructions where other pruning practices are impractical may be exempted from the ordinance at the determination of the Village Tree Board.
- D. *Dead or diseased tree removal on private property.* The Village shall have the right to cause the removal of any dead or diseased trees on private property within the Village, when such trees constitute a hazard to life and property, or harbor insects or disease which constitute a potential threat to other trees within the Village. The Village Tree Board will notify in writing the owners of such trees. Removal shall be done by said owners at their own expense within sixty days (60) after the date of the service of notice. In the event of failure of the owners to comply with such provisions, the Village shall have the authority to remove such trees and charge the cost of removal to the property owner.
- E. *Public tree care.* The Village shall have the right to plant, prune, maintain and remove trees, plants and shrubs, within the right-of-ways of all streets, alleys, avenues, lanes, squares, and public grounds, as may be necessary to

ensure public safety or to preserve or enhance the symmetry and beauty of such public grounds. The Village Tree Board may remove any tree or part thereof, which is in an unsafe condition or by reason of its own nature, is injurious to sewers, electric power lines, gas lines, water lines, or other public improvements, or is infected with any injurious fungus, insect or other pest.

- F. The branches of deciduous trees and shrubs may be selectively thinned by up to one-third (1/3) in accordance with good horticultural practice; however, in no case shall trimming result in reducing the overall size of the plant below that specified on the approved landscape plan.
- G. Based upon the recommendations of the Village Tree Board, certain types of trees will not be acceptable in parkway areas for reasons pertaining to potential damage of public utilities, sidewalks, or potential hazards to pedestrians and traffic safety.
- H. Failure to maintain required landscapes in good health and neat appearance is subject to the penalties enumerated in this Ordinance and subject to other penalties as may be provided by law. Penalty see §158.99

DESIGN METHODOLOGY

§158.25 PLANT UNITS

A. Plant units shall be calculated as follows:

- | | | | |
|----|---|---|----------------|
| 1. | One overstory tree
(2.5" caliper) | = | 10 plant units |
| 2. | One understory or ornamental tree
(2" caliper) | = | 5 plant units |
| 3. | One evergreen tree
(10' or greater in vertical height) | = | 8 plant units |
| 4. | One evergreen tree
(6'-9' in vertical height) | = | 5 plant units |
| 5. | One large shrub
(36" inches in height) | = | 2 plant units |
| 6. | One small shrub
(24" inches in height) | = | 1 plant unit |

In calculating the required number of plants any fraction shall be rounded to the next whole unit.

B. To ensure plant diversity a minimum number of species of trees and a minimum number of species of shrubs shall be required on each parcel as follows:

SIZE OF PARCEL (ACRES)	QUANTITY OF (TREE SPECIES)	QUANTITY OF (SHRUB SPECIES)
Less than 5 Acres	3	3
Greater than 5 Acres but less than 15 Acres	5	5
Greater than 15 Acres But less than 30 Acres	7	7
30 or more Acres	7	7

- C. *Existing vegetation.* Credit against the landscape requirements of this Ordinance shall be allowed for existing vegetation and other landscape features on an equal basis to the quality and size of plant material as required by this Ordinance for plant material that the applicant proposes to preserve. Site inspection and approval by Village staff is required in order to receive credit for existing vegetation. Penalty see §158.99

§158.26 SINGLE FAMILY RESIDENTIAL

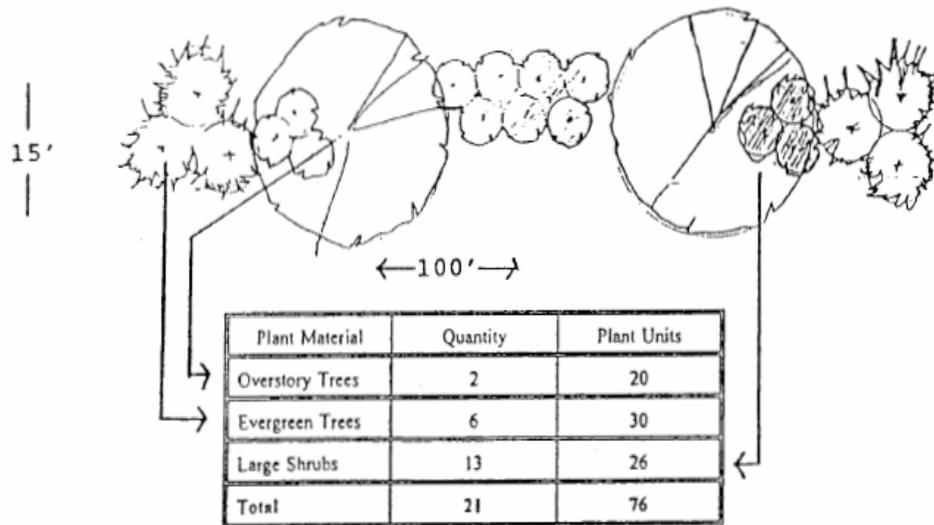
A. PARKWAY PLANTINGS

Parkway plantings will be required in accordance with §158.31. For single-family detached residential developments of seven (7) or more units, a street tree master plan (“Master Plan”) must be submitted for approval. The Master Plan should attempt to provide groupings of similar tree species along opposite street faces. Selection must be made from more than one plant family/ species per block face to prohibit single species plantings. Plant material selection must be made from the approved street tree list (see appendix C).

B. DOUBLE FRONTAGE

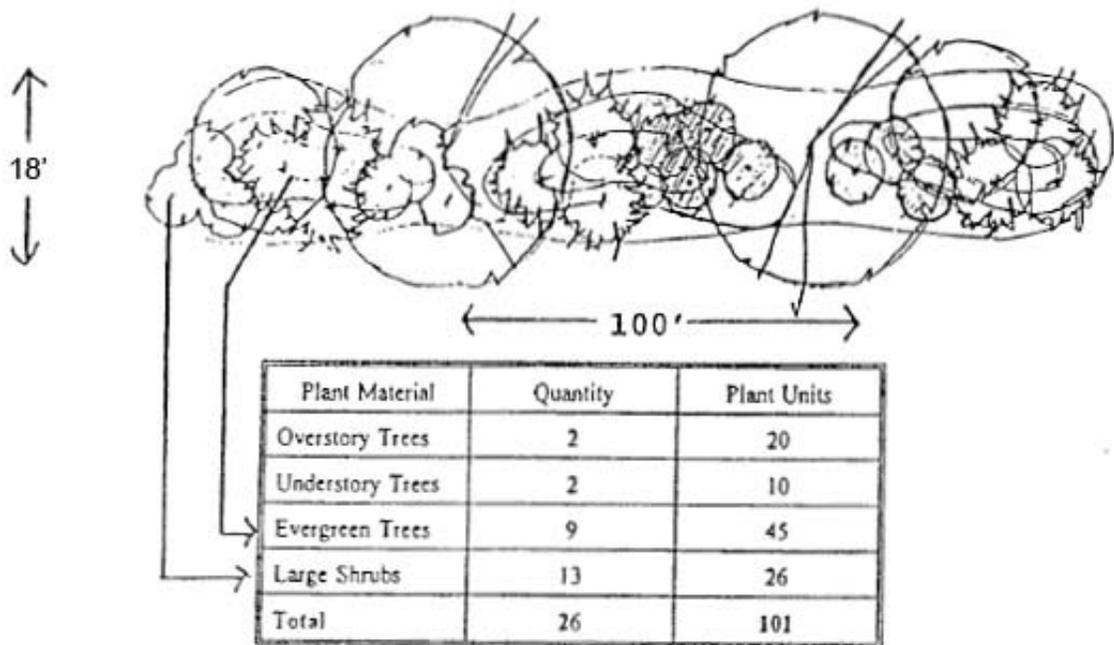
Landscaping shall be provided on each double frontage lot, along the frontage which does not have access to the public right-of-way. The landscaping shall provide a buffer to the traffic and noise associated with the right-of-way. The landscaping shall be located parallel to the lot line and shall extend along the entire frontage of the lot immediately adjacent to the property line. The required landscaping shall be comprised exclusively of plant material in accordance with the following schedule depending on the classification of the adjacent ROW.

Figure A. Landscape Area Adjacent to Residential ROW – Typical



Residential: A minimum of a 15 foot wide landscaped area consisting of a minimum of 75 plant units per 100 linear feet of frontage. Twenty five percent (25%) of the plant material by unit count must be evergreen.

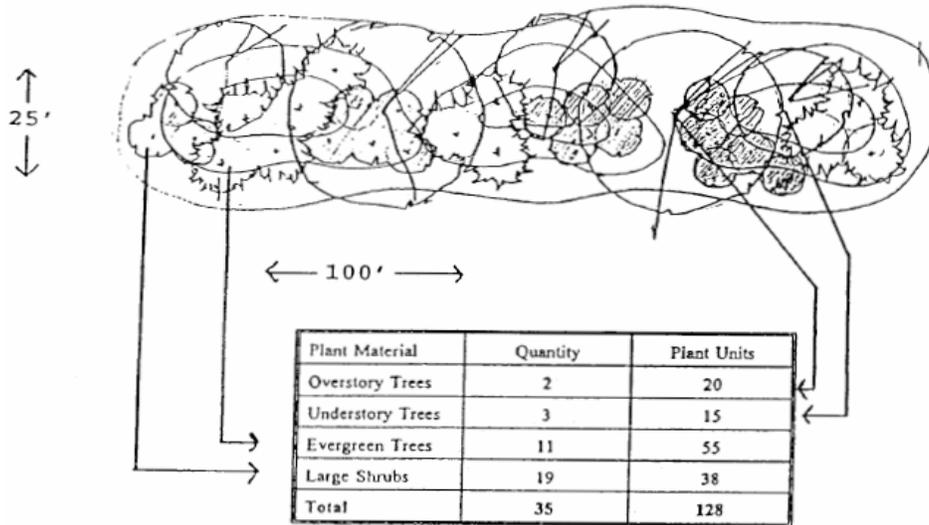
Figure B. Landscape Area Adjacent to a Collector ROW – Typical



Collector: A minimum of an 18-foot wide landscaped area consisting of a minimum of 100 plant units per 100 linear feet of frontage. Thirty percent

(30%) of the plant material by unit count must be evergreen. The landscape plan shall include a berm no less than two and one-half (2.5') in height to be located in a landscape, no fence and no access easement. Exceptions to this requirement will be considered if the berm conflicts with the natural or proposed drainage ways.

Figure C. Landscape Area Adjacent to an Arterial ROW – Typical



Arterial: A minimum of a 25 foot wide landscaped area consisting of a minimum of 125 plant units per 100 linear feet of frontage. Forty percent (40%) of the plant material by unit count must be evergreen. The landscape plan shall include a landscape berm no less than three feet (3') in height to be located in a landscape, no fence and no access easement. Exceptions to this requirement will be considered if the berm conflicts with the natural or proposed drainage ways.

Penalty see 158.99

§158.27 ATTACHED SINGLE FAMILY HOUSING

A. PARKWAY PLANTINGS

1. Parkway plantings will be required in accordance with Article II, Section 7, Parkway Planting Standards. For single-family attached residential developments of seven (7) or more units, a street tree Master Plan must be submitted for approval. The Master Plan should attempt to provide groupings of similar trees along opposite street faces. Selection must be made from more than one plant family/species per block face to prohibit single specie plantings. Plant material selection must be made from the approved street tree list. (see appendix C)

B. FRONT AND SIDE YARDS

1. All front and side yards shall be sodded and landscaped with trees and shrubs. A minimum ratio of ten (10) plant units shall be provided for each 1,500 square feet of yard area. At least seventy-five percent (75%) of the plant material must include overstory trees by unit count.

C. REAR YARDS

1. A minimum of five (5) plant units shall be provided for each 1,500 square feet of yard area.

D. DOUBLE FRONTAGE

1. Double frontage lots comply with requirements as outlined under §158.26 (B)

E. FOUNDATIONS

1. Foundation landscaping shall be provided on those sides of the building which face a public right-of-way.
2. The foundation landscaping shall be located in a planting bed a minimum of ten feet (10') in width adjacent to the building.
3. The required foundation landscaping area shall remain open and free of all paving except where sidewalks and driveways lead directly into the building. In no case shall the foundation landscaping area be reduced to extend across less than fifty percent (50%) of the building face due to said sidewalks and driveways.
4. Foundation landscaping shall consist of a minimum ratio of thirty (30) plant units for every 1,000 square foot area of planting bed which is

within ten feet (10') of the foundation. Flowers, ornamental grasses, and groundcover may also be used.

5. The required foundation landscaping may be relocated elsewhere on site provided in an alternate manner, such as through the use of above ground planting containers or boxes per staff approval.
Penalty see §158.99

§158.28 COMMERCIAL, OFFICE, AND INDUSTRIAL USES

A. PARKWAY PLANTINGS

1. Parkway plantings will be required in accordance with §158.31.

B. TRANSITION YARDS

1. The required landscaping in transitional yards shall be comprised of a combination of overstory trees, evergreen trees, ornamental trees, and large shrubs. If shrubs are used, they shall be installed at a minimum height of five feet (5'). Additional small shrubs may be used, but shall not count towards meeting the landscape requirements.
2. A minimum of a twenty five foot (25') wide landscaped screen consisting of a minimum of 125 plant units per 100 linear feet (100') of frontage measured along the length of a common boundary between two units. Forty percent (40%) of the plant material (by unit count) must be evergreen. The landscape plan shall include a landscape berm of no less than three feet (3') in height to be located in a landscape easement. Exceptions will be considered if the berm is determined to conflict with the natural or proposed drainage ways. (see §158.26, Figure C for typical illustration)
3. At the direction of Village staff the required number of plant units may be reduced in the following percentages:
 - a. Up to a seventy five percent (75%) reduction in plant material (by unit count) for a solid fence structure with a minimum height of six feet (6') , constructed of solid masonry or brick material, a combination of wood with masonry structural supports, or materials as approved by Village staff.
 - b. Up to a fifty percent (50%) reduction in plant material for an earthen berm, a minimum of six feet (6') high, with a maximum slope of 3:1.
4. If existing woodlands are located within the transition yard, preservation of those woodlands may substitute for part or all of the

required landscaping. If the existing woodlands are located in only a part of the transitional yard, the required number of plant units may be proportionally reduced. The substitution of existing woodlands for transition yard landscaping is at the discretion of staff and shall be indicated on the approved landscape plan.

5. The area of the transitional yard not planted with trees, shrubs, or existing woodlands shall be planted with sod, live groundcover, flowers, ornamental grasses or some combination thereof.

C. SERVICE YARDS AND EXTERIOR WORK AREAS

1. Service yards and exterior work areas shall be screened from view from residential and commercial areas and public rights-of-way. The screening shall be consistent of that required for Transition Yards, Section 4, B, "Transition Yards". (see §158.28 (B))

D. REQUIREMENTS FOR OPEN STORAGE YARDS IN INDUSTRIAL DISTRICTS WHEN ADJACENT TO COMMERCIAL OR RESIDENTIAL USES OR PUBLIC RIGHT OF WAY.

1. Open storage yards shall be screened on all sides by solid walls or fences (including solid doors or gates) no more than eight feet (8') high, but in no case lower in height than the materials to be stored. If stored materials exceed eight feet (8') in height, then landscaping shall be provided along the outside perimeter of that portion of the fence or wall visible from the public right-of-way or adjacent commercial or residential land uses. The landscaping shall be in addition to the fence or wall. The installed height of the landscaping shall be equal to or greater than one-half (1/2) the height of the fence or wall.
2. Landscaping shall consist of 50 plant units per 100 linear feet of fence. Twenty-five percent (25%) of plant material must be evergreen. Penalty, see §158.99

§158.29 STORMWATER RETENTION / DETENTION FACILITIES

Where naturalized landscape areas are installed around stormwater retention/detention facilities, the areas must remain as naturalistic as possible, resemble natural water features, provide habitat and stormwater management benefits, and improve water quality.

- A. *Stormwater Retention/Detention pond improvement plan.* Landscape improvement plans must be provided for all stormwater retention/detention facilities. The plan must demonstrate the ability of the proposed plant material to survive expected periods of inundation, based upon hydrologic studies.
- B. *Components of a Stormwater Retention/Detention pond improvement plan.* Stormwater Retention/Detention pond improvement plans shall include the following:
 1. North Point and Scale
 2. Topographic information and proposed grades
 3. Location of existing and/or proposed inlets/outlets
 4. Identification of all plant zones by elevation range (ie. 721 - 723.5, HWL – 719, etc)
 5. Identification all seed mixes and planting rates per plant zone (ie. Prairie, Wet Prairie, Emergent Wetland, Riparian Woods, Forested Wetland, Turf Grass, etc.)
 6. Hydrograph data for the 2- and 100-year rainfall events on a time vs. stage graph. Data for 5- and 10- year events may also be required if determined necessary by the Code Official.
 7. Herbivory protection netting for emergent planting zones or as deemed necessary by the Code Official.
 8. Perimeter landscaping comprised of a minimum of twenty (20) plant units for every one hundred (100) linear feet of perimeter, or part thereof as measured at high water level. Penalty, see §158.99
 9. Location, type, size, quantity, and planting condition (balled and burlapped, bare root, ect.) of all proposed landscape materials.
 10. Common and botanical names of all proposed plant material
 11. Location, size and common/botanical name of existing vegetation to remain

12. Symbols representing proposed plant material shall be drawn to scale showing two thirds of full mature size and labeled as to quantity and type
13. Location of underground irrigation system, if any.
14. Planting schedule.
15. Near Term Monitoring and Maintenance Plan including the following:
 - a. Site location
 - b. Names, addresses and telephone numbers of the party or parties responsible for near-term monitoring and management
 - c. Schedule of expected near-term management and monitoring activities
16. Long Term Operation and Maintenance Plan including the following:
 - a. Names, addresses and telephone numbers of the property owner(s) of the stormwater facility
 - b. Names, addresses and telephone numbers of the party or parties legally responsible for operations and management of the stormwater facility
 - c. Written documentation of acceptance by public agencies, as applicable; including associated capital expenses.
 - d. A copy of the terms demonstrating that the long-term management agreement is recorded against all lots in the project.
 - e. Location map identifying all permanent access (public and private), boundaries between traditional turfgrass areas and the naturalized areas covered by the plan, overland flow paths, and control structures.
 - f. Educational pamphlet to be distributed at closing for all lots in the development that the stormwater retention/detention facility serves.
 - g. Schedule of expected long-term management activities.

h. Cost estimate for routine and non-routine expenses and dedicated source(s) of funding for continued inspection, operation and maintenance.

§158.295 NATURALIZED LANDSCAPE REPORTING, MONITORING & ACCEPTANCE STANDARDS

A. *Naturalized Landscape Letter of Credit.* A letter of credit is required to cover naturalized landscape improvements and shall include:

1. Estimated cost of natural landscape installation, monitoring and establishment management. The approved estimate shall be included in the letter of credit (LOC) for the development, which will cover costs associated with earthwork, planting, inspections, and maintenance to achieve Village acceptance requirements. The acceptance period is expected to last a minimum of three years.

B. *Naturalized Landscape Security Bond.*

1. A security bond may be provided to cover the expected monitoring and management activities following substantial completion of the installation of an approved landscape improvement plan. The security bond will be held until the landscape is accepted by the Village.
2. Substantial completion means installation of all naturalized landscaped materials, protection netting, and verification of critical grades identified on the approved plan.

C. *Natural Landscape Specialist Prequalification.*

1. Naturalized landscapes are to be installed and managed by individuals/companies with qualifications and/or experience with such landscapes. Qualifications are to be provided to the Village of Frankfort through submittal of references, photographs, resumes, and/or other means that demonstrate the ability to install and/or manage naturalized landscapes.

D. *Near-Term Reporting.*

1. The developer is to notify the Village a minimum of 24-hours prior to the start of plant installation.
2. Following substantial completion, the developer is to submit documentation that natural area landscape installation or revegetation has been completed. Nursery packing lists indicating the species and quantities of materials installed are to accompany this notice.

3. The developer (or a designated representative) is to submit an annual monitoring report to the Village of Frankfort by February 28th of the following year evaluating the progress of the naturalized landscape toward design goals. The report shall include the following:
 - a. A location map;
 - b. Summary of annual monitoring observations; including 5 to 10 photographs representative of at least 20% of each vegetative community to identify the following:
 1. The limits of all vegetation areas by general community type and dominant species within each planting zone (e.g., wetland and prairie zones),
 2. All plant species (native and non-native) in each planting zone,
 3. The five most dominant species within each planting zone,
 4. The percent survival of planted species,
 5. The approximate percent ground cover by native species within each planting zone,
 6. The percent ground cover by non-native or invasive species in each planting zone,
 7. Erosion and sedimentation problems,
 8. Water level or drainage problems,
 9. Areas of bare soil larger than 3 square-feet, and
 10. Observations on specific management strategies necessary to achieve acceptance requirements.
 - c. Description of management performed during the year;
 - d. Tabular summary of annual progress relative to acceptance standards;
 - e. List of recommendations for management during the upcoming year;
 - f. Quarterly observations/inspections of earthen dam embankments, control structures/spillways.

F. *Long-Term Reporting*

1. Every five years following Village acceptance of the naturalized landscape plantings, the owner of the property shall submit a report to the Village on the condition of naturalized landscapes, recommended management actions to correct deficiencies, and a proposed schedule for implementing the recommended actions. Following implementation of corrective actions, documentation is to be provided to the Village demonstrating that deficiencies have been corrected.

G. *Naturalized Landscape Acceptance*

1. Satisfactory landscape development associated with naturalized vegetation in stormwater facilities or other naturalized areas will be based on the following:
 - a) Within three months of seed installation (or three months after the start of the growing season following dormant seeding), at least 90 percent of the seeded area, as measured by aerial cover, will be vegetated or otherwise stabilized against erosion.
 - b) Naturalized landscapes shall not have single areas of more than 3 square-feet devoid of vegetation, as measured by aerial coverage
 - c) Seeded areas shall have no rills or gullies and basin shorelines shall be adequately protected against erosion.
 - d) Areas seeded to turfgrass or low-maintenance turf shall have 95 percent ground cover.
 - e) Emergent areas shall have minimum of 35 percent ground cover (avg. 50 percent) and other wetland and prairie areas shall have a minimum of 35 percent ground cover (avg. 60 percent) by species in the approved plant list and/or native species with native coefficient of conservation (C-) values ≥ 2 (per Swink and Wilhelm 1994 or more current version).
 - f) Naturalized landscapes shall have a minimum of 30 percent presence by species seeded or planted for the permanent matrix and/or native species with C-value ≥ 2 (per Swink and Wilhelm 1994 or more current version).
 - g) Installed woody materials shall be alive, in healthy condition, and representative of the species.
 - h) No specific plant community, individual or collective, shall have more than 25% cover of non-native or weedy species.
 - i) None of the three-most dominant species may be non-native or weedy, including but not limited to Barnyard grass (*Echinochloa crus-galli*), Canada thistle (*Cirsium arvense*), Common reed (*Phragmites australis*), Kentucky bluegrass (*Poa pratensis*), Purple loosestrife (*Lythrum salicaria*), Reed canarygrass (*Phalaris arundinacea*), Sandbar willow (*Salix interior*), or Sweetclover (*Melilotus* spp.) unless otherwise indicated on the approved planting plan.

- j) Cattails (*Typha* spp.) do not count towards the 25 percent weed criterion provided they represent no more than 20 percent cover.

§158.296 PROHIBITED ACTIVITIES WITHIN NATURALIZED LANDSCAPE AREAS

A. *Prohibited Activities.* The following activities are prohibited within areas of naturalized landscaping except as needed to achieve and maintain a naturalized landscape consistent with an approved plan and as directed by a Village approved landscape restoration specialist:

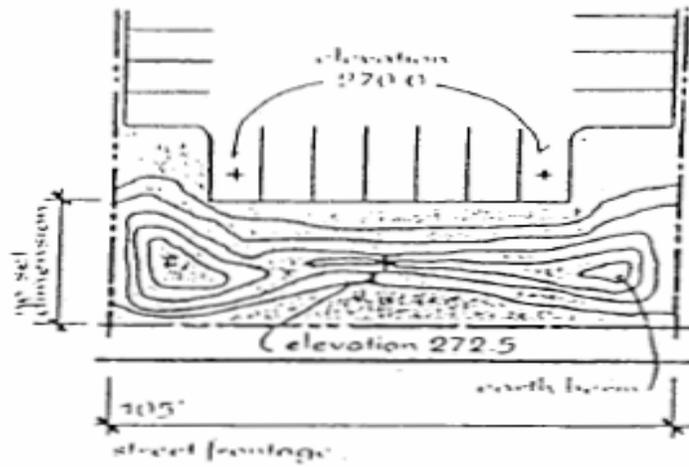
1. Dumping of yard waste, fill material or debris
2. Replacement of approved vegetation with non-approved materials
3. Construction or placement of structures
4. Application of pesticides, fertilizer, or herbicides
5. Mowing
6. Commercial, industrial, agricultural, residential developments, buildings, or structures, including but not limited to signs, billboards, other advertising material, or other structures
7. Removal or destruction of trees or plants, draining, plowing, mining, removal of topsoil, sand, rock, gravel, minerals or other material
8. Operation of snowmobiles, dune buggies, motorcycles, all-terrain vehicles or any other types of motorized vehicles.

§158.30 PARKING LOTS AND VEHICULAR USE AREAS

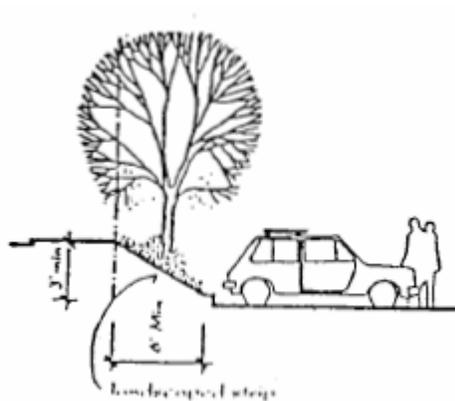
A. Vehicular Use Areas Adjacent to residential uses and public right-of-way.

1. Off street parking lots for three (3) or more cars or other vehicular use areas shall provide an effectively solid landscape screen of the parking area from adjacent residential uses and public ROW. The landscaping shall consist of one of the following options:
 - a. A minimum ten foot wide vegetative screen along the perimeter of the parkway area. This may be located in the 25-foot green space required in commercial and industrial districts. This screen shall consist of 150 plant units per one hundred (100) linear feet and at least seventy-five percent (75%) of plant material must be evergreen.

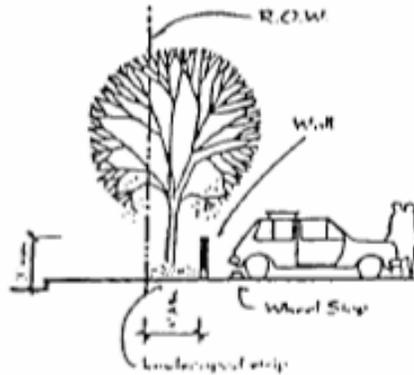
- b. A berm that is at least two and one half feet (2 ½') higher than the finished elevation of the parking lot (at the nearest point) and landscaping that includes 125 plant units per one-hundred (100) linear feet. A minimum of fifty percent (50%) of the plant material must be evergreen. Plantings should be designed in a natural grouping; a linear design is discouraged. The berm shall be graded in an undulating manner to appear more natural.



- c. A minimum six foot (6') wide vegetative screen along a minimum three foot (3') grade drop from the adjacent green area to the parking lot, with landscaping that includes 100 plant units per one-hundred (100) linear feet. A minimum of fifty percent (50%) of the plant material must be evergreen. Slope should not exceed a 4:1 ratio.



- d. A three foot (3') high fence of brick or stone with a minimum six-foot wide planting strip planted with fifty (50) plant units per one-hundred (100) linear feet . A minimum of seventy-five percent (75%) of the plant material must be overstory or evergreen trees.

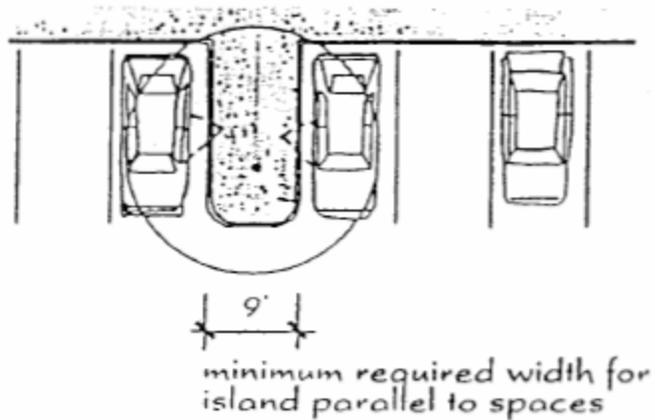


B. Drive-Thru Lanes Adjacent to Other Vehicular Use Areas.

- 1. Drive-thru lanes shall be separated from adjacent driveways, parking lot aisles and other vehicular uses areas by a curbed planting bed along the entire length of the lane. The planting bed shall be a minimum of five feet (5') wide (excluding the curb) and shall contain a minimum of one-hundred (100) plant units per one-hundred (100) linear feet.

C. Interior Parking Lot Landscaping

- 1. The interior of a parking lot with more than twenty (20) cars shall include landscape islands planted with overstory trees at a ratio of one (1) landscape island for every ten (10) parking spaces or fraction thereof. They shall be evenly dispersed throughout the parking area. The planting beds shall meet the following requirements:
 - a. The minimum area of a planting bed for each tree shall be one-hundred-sixty-two (162) square feet with a minimum dimension of nine feet (9') in any direction. These planting beds shall be curbed with a barrier curb. Planting beds may be combined to create larger planting islands within the parking lot. (See graphic, next page)



- b. Planting beds shall not be used for snow storage. Rather, separate snow storage areas shall be designated on the landscape plan.
 - c. Small shrubs, flowers and groundcovers other than turf grass may be planted in the tree planting beds, in addition to the required overstory trees.
 - d. Plant materials other than groundcover shall be set back a minimum of three feet (3') from the curb to avoid damage from overhanging car bumpers and doors
 - e. Plant materials other than overstory trees shall be limited to a mature height of no more than two feet (2') within ten feet (10') of any curb at a driveway intersection.
2. Curbed planting islands shall be placed at the ends of each row of parking. These islands shall be a minimum of nine feet (9') wide and shall extend the length of the parking stalls. They shall be landscaped with trees, shrubs, flowers or groundcover. (see graphic above)
Penalty, see §158.99

§158.31 PARKWAY PLANTING STANDARDS

- A. Parkways should be planted according to the following standards for all development of property, including any modifications of existing structures which increases the footprint of the existing structure by twenty-five percent (25%) or in those cases where the cost of improvements exceeds the value of the existing structure by fifty percent (50%). Existing values shall be determined by the value of the building as stated on the most recent tax bill as provided by the owner. The owner shall also provide estimated costs of improvements.
1. Street trees shall be planted along all public or privately dedicated streets within a development at a rate of one overstory tree per thirty-five (35) linear feet, (excluding driveways) or fraction thereof.
 2. Selection of tree species for street tree planting shall be made from the approved street tree plant list available from the village (see Appendix C). This list shall be updated by the Village as needed to ensure quality, disease resistance and hardiness.
 3. No street tree shall be planted closer than thirty feet (30') from the right-of-way line at an intersection or closer than eight feet (8') from any drive or alley way.
 4. Landscape materials shall be selected and located so as not to obstruct visual or physical access to fire hydrants. Trees and shrubs shall not be located closer than six feet (6') to fire hydrants, transformers or above ground utilities, and fifteen feet (15') from any street light.
 5. The parkways shall be planted in grass or low ground cover, except where covered by pavement, trees, or shrubs, or up to two feet (2') of paving which is allowed along the curb.
 6. The use of stone, rock, or gravel is prohibited on public parkways.
 7. Plantings under utility wires is discouraged. If overhead utilities exist, plant selection shall be made from the approved understory plant list (see Appendix B) and spacing requirement shall be reduced to one (1) tree per twenty-five (25) linear feet.
 8. Parkways less than four feet in width do not require tree plantings. Penalty, see §158.99

LEGAL APPLICATIONS

§158.45 VILLAGE TREE BOARD

- A. *Creation.* There is hereby created and established a Village Tree Board which shall consist of five members, residents of this village, who shall be appointed by the Mayor and approved by the Village Trustees.
- B. *Term of office.* The term of the five members of the Board, to be appointed by the Mayor, shall be three years except that the term of the two members appointed to the first Board shall be two years. In the event that a vacancy shall occur during the term of any member, his successor shall be appointed for the unexpired portion of the term.
- C. *Removal.* Any Board member who misses more than two consecutive meetings may be recommended for removal by the Chair to the Mayor.
- D. *Compensation.* Members of the Board shall serve without compensation.
- E. *Duties and responsibilities.* It shall be the responsibility of the Board to study, investigate, counsel, develop and/or periodically update, and administer a written plan for the care, preservation, pruning, planting, replanting, removal, or disposition of trees and shrubs in parks, along streets, and in other public areas. Such plan will be presented annually to the Village Board and upon their acceptance and approval shall constitute the official Comprehensive Village Tree Plan. The Village Tree Board, when requested by the village, shall consider, investigate, make findings, report and recommend upon any special matter of question coming within the scope of its work.
- F. *Operation.* The Village Tree Board shall choose its own officers, make its own rules and regulations and keep a journal of its proceedings. A majority of the members shall be a quorum for the transaction of business.

§158.46 ARBORIST LICENSE AND BOND

- A. *License.* It shall be unlawful for any person or firm to engage in the business or occupation of pruning, treating, or removing any parkway trees within the village without first applying for and procuring a license. The license fee shall be \$75 annually in advance; provided, however, that no license shall be required of any public service company or village employee doing such work in the pursuit of their public service endeavors. Before any license shall be issued each applicant shall first file evidence of possession of liability insurance in the minimum amounts of \$500,000 for bodily injury and \$1,000,000 property damage indemnifying the village or any person injured or damaged resulting from the pursuit of such endeavors as herein described.
- B. *Bond.* The property owner/developer shall provide a non-revocable letter of credit payable to the village to ensure that the landscaping as approved will be installed. The letter of credit shall reflect 115% of the cost of required landscaping as approved to ensure that such landscaping will be installed. The owner must also grant the village the right to enter upon the land for the purposes of installing the required landscaping in the event that such landscaping is not installed. The letter of credit shall be released when landscape installation is approved by the village, with 15% retained by the village for a one-year guarantee period. Penalty see §158.99

§158.99 PENALTY

Violation of any provisions of this chapter or any of the codes adopted herein as codes established for the village shall be punished by a fine of not less than \$50 nor more than \$500 for each offense and that each day the violation of this chapter exists shall be considered a separate offense. In addition to the proceeding, the village shall have all other remedies available to it either at law or in equity.

APPENDIX A: OVERSTORY TREES

RECOMMENDED PLANT MATERIALS FOR OVERSTORY TREES*

<i>Botanical Name</i>	<i>Common Name</i>
Acer nigrum var.	Black Maple
Acer rubrum var.	Red Maple
Acer saccharum var.	Sugar Maple
Aesculus glabra	Ohio Buckeye
Carya Ovata	Shagbark Hickory
Celtis Occidentalis	Hackberry
Corylus colurna	Turkish Filbert
Ginko Biloba (male only)	Maidenhair Tree
Gleditsia triancanthos inermis var.	Thornless Honeylocust
Gymnocladus dioicus	Kentucky Coffetree
Juglans nigra	Walnut
Liridenron tuilpfera	Tuliptree
Ostrya/ Vrginiana	Ironwood
Plantanus acerifolia	London Planetree
Plantanus ocidentalis	Sycamore
Pyrus calleryana	Callery Pear
Quercus Alba	White Oak
Quercus bicolor	Swamp White Oak
Quercus ellipsoldalis	Hill's Oak
Quercus Imbricaria	Shingle Oak
Quercus macrocarpa	Bur Oak
Quercus muehlenbergii	Chickapin Oak
Quercus palustris	Pin Oak (high maintenance Chlorosis)
Quercus robur	English Oak
Quercus rubra	Red Oak
Quercus velutina	Black Oak
Syringa Reticulate	Japanese Tree Lilac
Taxodium Distichum	Bald Cypress
Tilia Americana	American Linden
Tilia cordata var.	Littleleaf Linden
Tilia euchlora "Redmond"	Redmond Linden
Tilia Vulgaris	European Linden
Tilia Tomentosa	Sterling Silver Linden
Ulmus var.	Elm (newer hybrids)

***Certain species may not be recommended from time to time due to current biological threats or other recognized industry practices.**

APPENDIX B: UNDERSTORY TREES

RECOMMENDED PLANT MATERIAL FOR UNDERSTORY TREES*

<i>Botanical Name</i>	<i>Common Name</i>
<i>Alnus glutinosa</i>	European Black Alder
<i>Amelanchier canadensis</i>	Shadblow Serviceberry
<i>Amelanchier grandiflora</i>	Apple Serviceberry
<i>Amelanchier laevis</i>	Allegheny Serviceberry
<i>Amelanchier sanguinea</i>	Juneberry
<i>Betula nigra</i> var.	River Birch
<i>Betula platyphyllis japonicum</i>	Whitespire Birch
<i>Carpinus Carolina</i>	American Hornbeam
<i>Corylus Cornuta</i>	Hazelnut
<i>Crataegus crus-galli inermis</i>	Thornless Cockspur Hawthorn
<i>Crataegus phaenopyrum</i>	Washington Hawthorne
<i>Crataegus viridis</i>	Winter King Hawthorn
<i>Magnolia x lobneri</i> “Merrill”	Merrill Loebner Magnolia
<i>Magnolia soulangeana</i>	Saucer Magnolia
<i>Magnolia stellata</i>	Star Magnolia
<i>Malus</i> ‘prairiefire’	Prairiefire Crab
<i>Malus</i> ‘red jewel’	Red Jewel Crab
<i>Pyrus calleryana</i> “Chanticleer”	Chanticleer Pear
<i>Syringa reticulata</i>	Japanese tree Lilac

***Certain species may not be recommended from time to time due to current biological threats or other recognized industry practices.**

APPENDIX C: STREET TREES

RECOMMENDED PLANT MATERIALS FOR STREET TREES*

<i>Botanical Name</i>	<i>Common Name</i>
Acer x freemanii	Autumn Blaze or Marmo
Acer nigrum var.	Black Maple
Acer platanoides ‘Emerald Queen’	Emerald Queen Maple
Acer rubrum var.	Red Maple
Acer saccharum var.	Sugar Maple (for parkway > 10 ft.)
Carya Ovata	Shagbark Hickory
Celtis Occidentalis	Hackberry
Corylus colurna	Turkish Filbert
Ginko Biloba (male only)	Maidenhair Tree
Gleditsia triancanthos inermis var.	Thornless Honeylocust
Gymnocladus dioicus	Kentucky Coffetree
Ostrya/ Virginiana	Ironwood
Plantanus acerifolia or occidentalis	London Planetree, Sycamore
Pyrus calleryana “Chanticleer“	Chanticleer Pear
Quercus Alba	White Oak
Quercus bicolor	Swamp White Oak
Quercus ellipsoidalis	Hill’s Oak
Quercus Imbricaria	Shingle Oak
Quercus rubra	Red Oak
Quercus velutina	Black Oak
Syringa reticulate	Japanese Tree Lilac
Tilia Americana	American Linden
Tilia cordata var.	Littleleaf Linden
Tilia euchlora “Redmond”	Redmond Linden
Tilia tomentosa	Sterling Silver Linden
Ulmus var	Elm (newer hybrids)

***Certain species may not be recommended from time to time due to current biological threats or other recognized industry practices.**

APPENDIX D: EVERGREEN TREES

RECOMMENDED PLANT MATERIALS FOR EVERGREEN TREES*

<i>Botanical Name</i>	<i>Common Name</i>
Abies Concolor	White Fir
Juniperus Virginiana	Eastern Red Cedar
Picea Abies	Norway Spruce
Picea Glauca	White Spruce
Picea Glauca Densata	Black Hills Spruce
Picea Omorika	Serbian Spruce
Picea Pungens	Colorado Green Spruce
Picea P. 'Gluaca'	Colorado Blue Spruce
Pinus Flexilis	Limber Pine
Pinus Ponderosa	Ponderosa Pine
Pinus Strobus	Eastern White Pine
Pseudotsuga Meniesii	Douglas Fir
Pinus Sylvestris	Scotch Pine
Taxodium Distichum	Bald Cypress
Tsuga Canadensis	Canadian Hemlock

***Certain species may not be recommended from time to time due to current biological threats or other recognized industry practices.**

APPENDIX E: PRESERVATION TREES

RECOMMENDED PLANT MATERIALS FOR PRESERVATION TREES*

<i>Botanical Name</i>	<i>Common Name</i>
Aesculus species	Buckeye/Horse Chestnut
Acer rubrum	Red Maple
Acer saccharum	Sugar Maple
Carpinus caroliniana	Blue Beech
Carya var.	Hickory
Celtis Occidentalis	Hackberry
Fraxinus americana var.	White Ash
Gymnocladus dioicus	Kentucky Coffetree
Juglansnigra	Walnut
Ostrya Virginiana	Ironwood
Platanus occidentalis	Sycamore
Quercus (all except palustris)	Oaks (all except Pin Oak)
Taxodium Distchum	Bald Cyprus
Tilia Americana	American Linden

***Certain species may not be recommended from time to time due to current biological threats or other recognized industry practices.**

APPENDIX F: STORMWATER DETENTION / RETENTION TREES

RECOMMENDED PLANT MATERIALS FOR DETENTION TREES*

<i>Botanical Name</i>	<i>Common Name</i>
Acer rubrum	Red Maple
Acer saccharum	Sugar Maple
Alnus glutinosa	European Alder
Alnus rugosa	Speckled Alder (native)
Betula nigra	River Birch
Carpinus caroliniana	Blue Beech
Carya ovata	Shagbark Hickory
Crataegus crus-galli inermis	Thornless Hawthorne
Gymnocladus Dioicus	Kentucky Coffeetree
Juglans nigra	Black Walnut
Platanus occidentalis	Sycamore
Quercus bicolor	Swamp White Oak
Quercus rubra	Red Oak
Taxodium distichum	Bald Cypress

***Certain species may not be recommended from time to time due to current biological threats or other recognized industry practices.**

APPENDIX G: UNACCEPTABLE TREES

PLANT MATERIAL LIST FOR UNACCEPTABLE TREES

<i>Botanical Name</i>	<i>Common Name</i>
Acer ginnala	Amur Maple
Acer negundo	Box Elder
Acer platanoides	Norway Maple
Acer pseudoplatanus	Sycamore Maple
Acer saccharinum	Silver Maple
Ailanthus altissima	Tree-of-Heaven
Betula papyrifera	Paper/white Birch
Cercidiphyllum japonicum	Katsura
Elaeagnus angustifolia	Russian Olive
Frangula alnus	Glossy Buckthorn
Fraxinus Var.	Ash
Ginkgo Biloba (female)	Female Ginkgo
Maclura Pomifera	Osage Orange, Hedge Apple
Malus spp.	Apples, Crabapples (unless otherwise noted)
Morus alba	White Mulberry
Pinus nigra	Austrian Pine
Populus spp.	Poplars, Cottonwoods, Aspen
Prunus spp.	Cherries, Plums
Rhamnus spp.	Buckthorn
Salix spp.	Willows
Ulmus	Elms (other than newer hybrids)