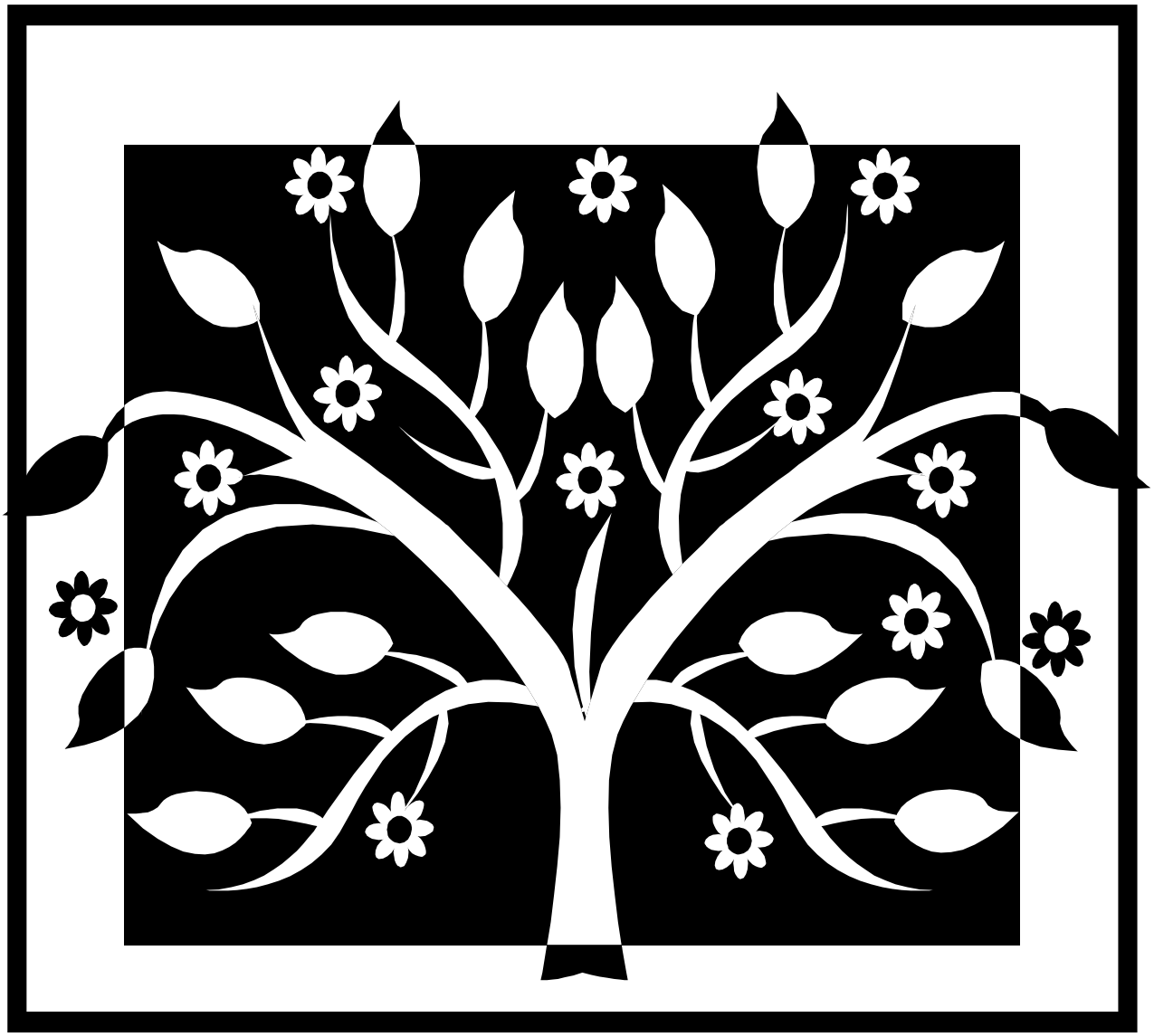
TREE MANUAL

AND GUIDE TO THE WEST LAFAYETTE LANDSCAPE ORDINANCE



CITY OF WEST LAFAYETTE

Adopted 12/31/02
Revised 03/04

TREE CITY USA®

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Dear Fellow Citizens:

I am happy to be able to share with the community of West Lafayette this newly developed *Tree Manual* and updated copy of our *West Lafayette Landscape Ordinance*. In the *Tree Manual* are helpful tips for the planting and care of trees and shrubs, lists of recommended and undesirable trees in the community and a copy of the landscape ordinance as it was adopted by the Common Council in July, 2002 with revisions to the tree lists in March, 2004.

The City of West Lafayette enacted the first Landscape Ordinance, Ord. 41-84, in 1985. The ordinance was created to enhance environmental interests and conditions for the health and comfort of the citizens in our community. The original ordinance was a product of extensive staff research, and citizen and business input. The purpose of the ordinance was to enhance parking areas and streets, by reducing glare, pavement temperatures, soil erosion, storm water runoff, etc., through the installation of shade trees and shrubs.

At the same time the City also established the West Lafayette Tree Fund, a volunteer organization, who, through donations, buys and plants shade trees along our public byways.

Since its adoption in 1985 the Landscape Ordinance has been updated three times. The end result has been an on-going effort which helps minimize the impact of the development taking place in West Lafayette.

This document represents the work of both staff and volunteers dedicated to preserving and beautifying our community. If you are interested in making a donation to the West Lafayette Tree Fund or learning more about what you can do to help, you may contact the city's Greenspace Administrator (775-5170) or the West Lafayette Tree Fund (see pull-out inside back cover).

Sincerely,

John Dennis
Mayor

Arboricultural Specifications Manual

Purpose

The Arboricultural Specifications Manual for the City of West Lafayette, commonly known as the ***Tree Manual****,* specifies the arboriculturally correct standards of practice for tree planting and the care of trees in the City. It has been reviewed by the West Lafayette Tree Fund committee and approved by the Board of Works in compliance with *West Lafayette City Code, Chapter 115* concerning trees and landscaping adopted by City Council 1 July 2002.

Policy

Any work on street trees and landscaping defined and required by *Chapter 115: Trees and Landscaping*, of *West Lafayette City Code* Ordinance No. 22-02 shall comply with said ordinance and this Arboricultural Specifications Manual. This manual is also recommended as a guide for proper tree care activities by the private sector; however, it need not be adhered to on private property **unless** the activity in question is required by *West Lafayette City Code Chapter 115*.

Tree Lists

Species information & selection

Selection of species, varieties, and cultivars:

1. “Right Tree - Right Place”. Consider the physical conditions of your planting site. Sun and wind exposure, soil type and drainage pattern are all factors that can effect the growth and performance of the tree.

2. When choosing the right tree it helps to consider varieties and cultivars. A variety or cultivar is a subgroup within a larger tree species having a distinct character or trait. Selection of a particular species and/or cultivar can help solve problems related to planting sites. By selecting a tree with a problem solving trait it is possible to: reduce the need for pesticides; reduce maintenance hours; improve tree health; predict crown size and root space needs; enhance aesthetics through more diversity of flowers; eliminate the nuisance of fruit dropping and thorns in addition to extending the life of the tree.

3. Tables 1 & 2 on pages 5 & 6 of this manual contain lists of acceptable trees, entitled *Preferred Shade Tree List & Alternate / Substitute Tree List.* The trees on these lists have been proven adaptable to and suitable for urban conditions in West Lafayette. These lists contain species by size category and common and scientific name. Trees suitable for use as street trees have been marked as such in these tables.

4. Additionally, a list of undesirable trees is provided in Table 3 on page 7. The trees on this list may not be utilized as street or parking lot trees required by the West Lafayette Landscape Ordinance. These tree species have proven undesirable characteristics such as weak woodedness, litter problems, insect and disease problems, poor form, visibility obstruction and hardiness. These trees are not suitable for use as required landscape ordinance trees but may be used if restricted to special locations on private property where they can function well due to adaptability, landscape effect, or ecosystem benefit.

Table 1
Preferred Shade Trees
Large / Medium Tree List

Trees from Table 1 will eventually reach a height of between thirty (30) to eighty (80) feet in most urban situations. Variations of plant selections not included on the *Preferred Shade Tree List* may be approved through the Greenspace Administrator. Improved cultivars and seedless, thornless varieties **must** be used when available. Northern grown tree stock is advised to improve tree survival rate. Minimum caliper size for single and two-family projects is 1 ½ inches, for multi-family and commercial project 2 ½ inches.

STREET TREES

COMMON NAME	SCIENTIFIC NAME
Coffeetree, Kentucky	Gymnocladus dioica (male only)
Elms, Hybrid	Ulmus x hybrid
Ginkgo	Ginkgo biloba (male only)
Hackberry	Celtis occidentalis (cultivars)
Horsechestnut, Red	Aesculus x carnea 'Briotii'
Katsuratree	Cercidiphyllum japonicum
Linden, Silver ‘Sterling Silver’	Tilia tomentosa ‘Sterling Silver’
Maple, Black	Acer nigrum
Maple, Freeman	Acer freemanii
Maple, Red	Acer rubrum
Maple, Sugar	Acer saccharum
Maple, Sycamore	Acer pseudoplatanus
Oak, Chinkapin	Quercus muehlenbergii
Oak, Northern Red	Quercus rubra
Oak, Shingle	Quercus imbricaria
Oak, Swamp White	Quercus bicolor
Oak, White	Quercus alba
Sweetgum	Liquidambar styraciflua
Tulip	Liriodendron tulipifera
Zelkova, Japanese	Zelkova serrata

LANDSCAPE TREES
(but unacceptable as street trees)

COMMON NAME	SCIENTIFIC NAME
Bald Cypress	Taxodium distichum
Beech, American	Fagus grandiflora
Beech, European	Fagus sylvatica
Birch, River	Betula nigra
Corktree, Amur	Phellodendron amurense (male only)
Elm, Lacebark	Ulmus parviflora
Oak, Bur	Quercus macrocarpa
Oak, Shumard	Quercus shumardii
Pine, White	Pinus strobus
Spruce, Colorado	Picea pungens
Spruce, Norway	Picea abies
Spruce, Serbian	Picea omorika
Sycamore	Platanus occidentalis

Table 2
Alternate / Substitute Trees
Small Tree List

Trees from Table 2 will eventually reach a height of between fifteen (15) to thirty (30) feet in most urban situations. The *Alternate / Substitute Tree List* may be used with the approval of the Greenspace Administrator under circumstances not conducive to trees listed in Table 1 (i.e. overhead power lines, narrow planting strips). See note below.

STREET TREES

COMMON NAME	SCIENTIFIC NAME
Cherry, Cornelian	Cornus mas
Crabapple, 'Spring Snow' (sterile)	Malus 'Spring Snow'
Hawthorn, 'Crusader' (thornless)	Crataegus crusgalli 'Crusader'
Hornbeam, American	Carpinus caroliniana
Hornbeam, European	Carpinus betulus
Ironwood	Ostrya virginiana
Japanese Lilac Tree	Syringa reticulata
Maple, Amur	Acer ginnala (single stem)
Maple, Hedge	Acer campestre
Maple, Paperbark	Acer griseum
Redbud	Cercis canadensis
Serviceberry	Amelanchier species

LANDSCAPE TREES
(but unacceptable as street trees)

COMMON NAME	SCIENTITIFIC NAME
Crabapple, Japanese	Malus floribunda (disease resistant cultivars)
Crabapple, Siberian	Malus baccata (disease resistant cultivars)
Dogwood, Japanese	Cornus kousa
Dogwood, Pagoda	Cornus alternifolia
Fringetree	Chionanthus species
Hawthorn, Cockspur	Crataegus crusgalli
Hawthorn, Green	Crataegus viridis
Hawthorn, Washington	Crataegus phaenopyrum
Magnolia, Star	Magnolia stellata
Witchhazel	Hamamelis species

Note:
Improved cultivars and seedless, thornless varieties **must** be used when available. Northern grown tree stock is advised to improve tree survival rate. Small trees used as street trees must be upright / columnar in form; not clump form. Most small trees are not suitable for narrow tree lawns due to low branching. Minimum size for trees required by the Landscape Ordinance:

- Single and two-family residential projects 1 ½ inch caliper
- Commercial and multi-family projects 2 ½ inch caliper

Table 3
Undesirable Street Tree List

Trees listed in Table 3 are not suitable for street trees and **shall not** be allowed as trees required by the Landscape Ordinance. Undesirable characteristics are listed.

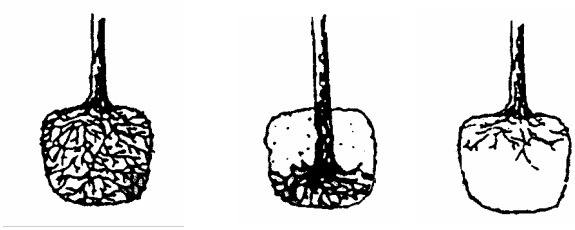
COMMON NAME	SCIENTIFIC NAME	PROBLEMS
Arborvitae	Thuja sp.	visibility obstruction
Ash, green, white and blue	Fraxinus sp.	Borer insects
Ash, Mountain	Sorbus sp.	thrives poorly
Aspen	Populus tremuloides	weak wood
Birch, White Paper	Betula papyrifera	borer insects, poor survival
Boxelder	Acer negundo	weak wood, poor form, invasive seed
Catalpa	Catalpa speciosa	messy fruit
Cherry, Choke	Prunus virginiana	messy fruit, insect problems
Cherry, Common	Prunus sp.	messy fruit, insect problems
Cottonwood, common	Populus deltoides	weak wood, messy seed
Crabapple, Common	Malus sp.	messy fruit, disease problems, poor form
Elm, Siberian	Ulmus pumila	weak wood
Elm, Slippery Red	Ulmus rubra	disease problems
Locust, Black	Robinia pseudoacacia	shallow rooted, borer insects, cankers
Maple, Silver	Acer saccharinum	weak wood, poor form
Mulberry, White	Morus alba	messy fruit & crown
Olive, Russian	Elaeagnus angustifolia	disease prone, invasive
Orange, Osage	Maclura pomifera	messy fruit & crown
Persimmon	Diospyros virginiana	messy fruit
Poplar, Lombardy	Populus sp.	weak wood, canker disease
Tree of heaven	Ailanthus altissima	invasive seed, weak wood
Walnut, Butternut	Juglans sp.	messy fruit, allelopathy
Willow	Salix sp.	weak wood, messy

Note:
Do not plant unknown seedlings which are likely to be an undesirable species.

Standards of Practice

Plant material selection, handling, inspection, storage and planting:

1. Only desirable, long-lived trees of good appearance and beauty, shall be planted on public sites. All plant material should be generally free from injurious insects and disease. **Any trees planted shall be adaptable to USDA Zone 5 climate conditions.**



Good Bad Bad

2. Trees shall be tagged indicating species and size. Trees shall be free of wounds, insects and cankers. Root systems should be full and root balls should be moist but not moldy. Root balls should be protected from freezing.
3. Plants should be protected from wind during transport and kept cool and moist at all times. Care should be taken as not to drop or otherwise loosen root ball. Plant should not be picked up by the trunk. Instead, the soil ball should be supported when moving plant.
4. Bare rooted plants must be planted when dormant (buds are closed and not leafed out). Roots should always be kept moist and cool and trees planted as soon as possible. If stored, the trees should be covered with moist soil or wood chips. All bare rooted trees should be soaked in water immediately prior to planting.

Spacing & Location Specifications for Public Areas:

1. Before digging make certain you are aware of underground utility locations. Call (800) 382-5544 two working days before you dig.
2. Do not plant within thirty (30) feet of the intersection with a local or collector street; or within fifty (50) feet of the intersection with a major or minor arterial.
3. Minimum spacing on planting trees is twenty-five (25) feet from the next tree.
4. Maximum spacing on street trees is forty (40) feet for Table 1; thirty-five (35) for Table 2; and thirty (30) feet for all perimeter parking lot trees.
5. Plant street trees between curb and sidewalk. If the planting strip is less than four (4) feet wide, trees from table 2 (Large/Medium trees) may only be planted behind the sidewalk. Trees from table 1 (Small trees) with upright/columnar branches and single stemmed may be used with approval of Greenspace Administrator.

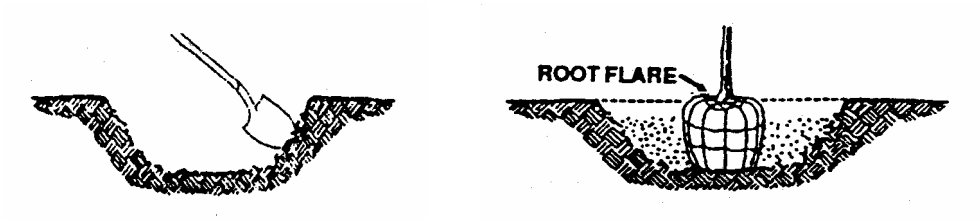
Minimum Size Specification:

- Trees planted on commercial / multi-family projects may be no smaller than (2 ½) inches in caliper (diameter measured at six (6) inches above the ground).
- Trees planted on single / two-family projects may be no smaller than (1 ½) inches in caliper.

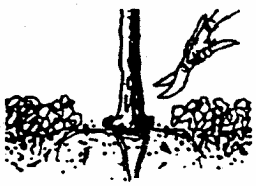
Planting Procedures:

Potted or Balled & burlapped trees

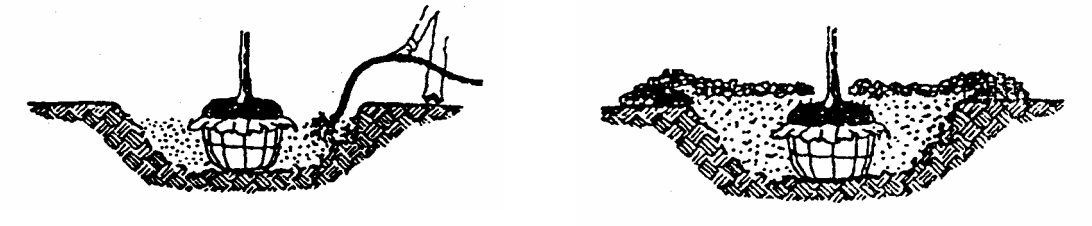
1. Hole shall be dug with the width **three times** the spread of the root ball and no deeper than the root ball. Hole should have slanted sides and be roughened with the shovel.



2. Trees will be planted no deeper than the **original root flare**. Do not confuse a graft union for the root flare. In clay soils trees can be planted slightly high, not to exceed 20% of root ball above ground. Set trees on native soil or thoroughly compact backfill. Special care should be taken when planting in newly developed parking lots. Excavation and soil replacement may be necessary where there is overly compacted subsoil and excessive amounts of gravel.
3. Remove tree from pot or cut away twine around stem and fold back burlap and wire basket below ground level. When possible, remove burlap and wire baskets. Always remove all plastic twine & artificial burlap.



4. Straighten tree and completely backfill the hole with existing soil. Avoid using excessive amounts of organic matter.
5. Apply water to settle the soil and to eliminate any voids. At this time a solution of *root stimulator* (not fertilizer) can be watered in.



6. Chop up any dirt clods; add soil if needed.
7. Place a two to four inch layer of mulch around the tree in a **minimum** three foot radius.

Bare rooted trees

1. Plant trees immediately upon receipt. Soak in water before planting.
2. Avoid any drying or warming of seedlings.
3. Cleanly trim any long root hairs with a sharp tool.
4. Place seedling in slit or hole, making sure roots are straight and not bent in a "J" shape. Pack soil firmly around roots and water. Plant at previous planting depth for hardwood seedlings, slightly deeper for evergreen seedlings.

Early Maintenance Procedures:

1. Plants should be thoroughly watered every 5 to 10 days from April through October as needed as a supplement to natural rainfall. Plants should receive a total of two inches of water every two weeks.
2. Trees should be pruned as needed to remove dead, damaged, or poorly located limbs **only**. Fertilizing is not usually necessary. Only after trees are fully established (2 – 5 years), lower branches may be removed to promote tree structure and facilitate pedestrian and vehicle clearance.
3. Thin barked trees subject to sunscald should be protected from November to April with approved paper tree wrap material. Remove all wrap during the growing season.
4. Only those trees in windy open areas need be staked. Stake to prevent movement of root ball, ***not of tree trunk***. Stake with three (3) guy lines, protecting trunk of tree from rope damage.
5. Mulch shall be maintained at all times at a depth of three (3) inches in a minimum three foot radius around each tree. Recommended mulch shall be shredded bark or aged wood chips.
6. Spraying shall be done only for the control of specific diseases or insects, with the proper materials and the necessary strength, and applied at the proper time to obtain the desired control. All spraying of pesticides shall conform to federal and state regulations.

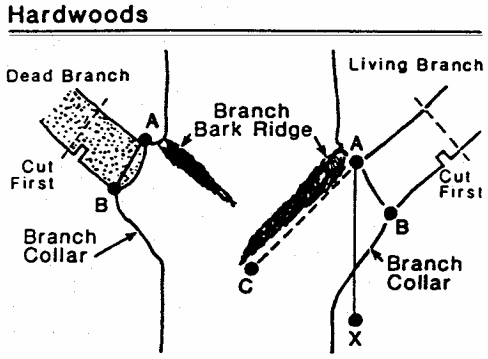
Pruning Procedures:

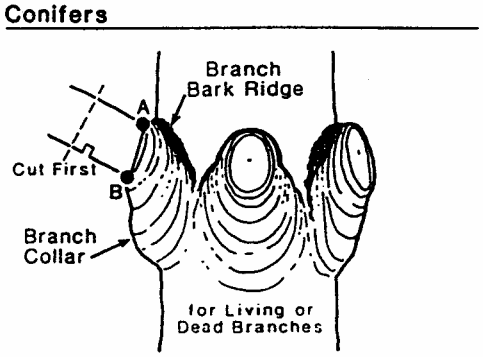
1. **No topping is allowed on trees required by the Landscape Ordinance.**
2. Except for work necessitated by storms or other emergencies, a permit is required before any person may remove or cut any trees upon the public parkways within the city. See page 14 for a permit application.
3. All dead branches shall be removed. Branches that cross or rub shall be pruned.
4. To prevent the spread of infectious disease, all pruning tools should be disinfected before being used on a new tree.
5. All large, established trees shall have their lower branches pruned as necessary to allow the flow of vehicles and pedestrians under the tree; fifteen (15) foot street clearance and eight (8) foot sidewalk clearance is required.
6. Proper pruning techniques shall be used as noted below. All cuts shall be made with a sharp saw or pruning shears and only at the nodes or crotches.
7. Wound dressings are not recommended.

Proper pruning principles – Correct pruning is the best thing you can do for your tree. Here are some guidelines.

Natural target pruning:

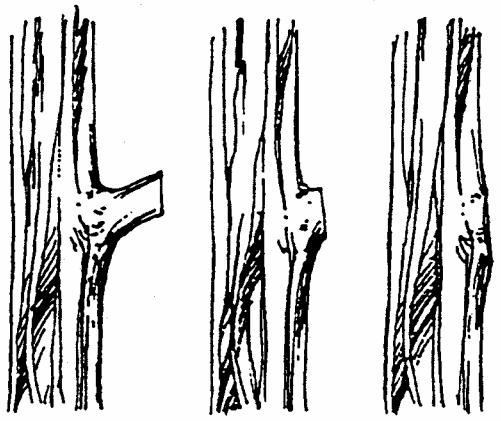
1. Locate the branch bark ride (BBR)
2. Find target A – outside BBR
3. Find target B – where branch meets collar
4. If B can not be found, drop an imaginary line
   at AX. Angle XAC equals XAB
5. Stub cut the branch
6. Make final cut at line AB





Do Not:

- Make flush cut behind the BBR
- Leave living or dead stubs
- Injure or remove the branch collar
- Paint cuts or otherwise treat the cuts
- Top or misshape the tree



too long a stub correct cut too close a cut

The best time to prune living branches is late in the dormant season or very early in spring before leaves form. Dead and dying branches can be pruned anytime. Use sharp tools! Make clean cuts. Be careful with all tools. Safety first!

Removal Procedure for Street Trees & Ordinance Required Plants

Removal Procedures:

1. **All** removals of existing public trees and trees or plants required by this ordinance shall require a permit application and approval by the Greenspace Administrator.

2. Application for a permit must be made with the Greenspace Administrator's office not fewer than eight days in advance of the time the work is to be done.

3. Condition to the issuance of a permit to remove any trees, may be the planting of approved trees in the place of those removed

4. Appropriate street and sidewalk barriers shall be placed where removals may endanger the public. The Street and Police departments shall be notified of any street blockages or restrictions of on-street parking.

5. The stumps of all trees shall be removed to below ground level, filled with soil and seeded.

City of West Lafayette Permit Application for Public Tree Care

1. Name of Applicant _____
   Address _____
   Phone _____

2. Property Owner _____
   Address _____
   Phone _____

3. Name of person (or business) responsible for removal

   _____
   (IF THE RESPONSIBLE PARTY IS A BUSINESS - ATTACH PROOF OF INSURANCE)

4. Site Location _____

5. Request ☐ Prune ☐ Complete Removal ☐ Other

   _____

   If pruning, extent of work _____
   Tree species and condition _____
   Replacement planned or required? _____

Note: When work is done by the property owner a reasonable number of branches cut into manageable lengths and left at the curb will be picked up by the Street Dept.

When work is done by a Tree Removal Service - the commercial operator is responsible for the removal of all limbs & cut wood.

Date received: _____ Date approved: _____

Approved by: _____

Chapter 115.
Trees and Landscaping.

Article I. Definitions.

§ 115.01. Definitions.

Article II. Trees in the Public Right-of-way.

§ 115.20. Maintenance responsibilities.
§ 115.21. Permit--Required for cutting or removal.
§ 115.22. Permit--Application.
§ 115.23. Permit--Issuance conditions.
§ 115.24. Electric utility annual permit.

Article III. Street Trees.

§ 115.40. Planting of street trees.
§ 115.41. Maintenance of trees.

Article IV. Off-street Parking Areas.

§ 115.60. Purpose.
§ 115.61. Landscaping--required for parking lots.
§ 115.62. Off-street parking areas--tree requirements.
§ 115.63. Interior plantings--area and planting requirements.
§ 115.64. Interior plantings--plant material substitutions.
§ 115.65. Tree wells.
§ 115.66. Plant material protection.
§ 115.67. Landscaping--plan modification conditions.
§ 115.68. Approval of plant materials.
§ 115.69. Landscaping--requirements when property is remodelled or enlarged.
§ 115.70. Landscape plan--review of Greenspace Administrator decision.
§ 115.71. New developments--minimum greenspace percentage.
§ 115.72. Protection of existing trees--planting equivalent.
§ 115.73. Maintenance responsibility.
§ 115.74. Appeals and enforcement.
§ 115.75. Variances.

Article I. Definitions.

Sec. 115.01. Definitions.
For the purposes of this chapter:
(a) *Accepted shade trees list* means a list of proven shade trees and plant materials deemed adaptable to urban conditions by the City of West Lafayette, as set forth in the WL Tree Manual prepared by the Greenspace Administrator and approved from time to time by the Board of Public Works and Safety.

(b) A*gent* means the agent of a building or land and shall include any person holding a written contract with the property owner stating they hold the responsibility of managing the property.

(c) *Berm* means a mound of earth with a maximum of thirty-three percent slope, back to grade, and covered with appropriate plant material and/or approved materials to aid in reduction of erosions and/or mud and dust generation.

(d) *Existing landscape plan* for purposes of this chapter shall be a plan of a suitable scale that illustrates all existing plant materials and shade trees and identifies them by species and relative size.

(e) *Existing shade trees*. For the purposes of this chapter, any existing six-inch or larger shade tree shall be deemed worthy of preservation if it can reasonably be determined by the Greenspace Administrator to have a remaining life span equal to or greater than that of the structures proposed in the site plan or subdivision plat or which is unique by reason of size, age, or other outstanding quality, such a rarity or status as a landmark or species specimen or the need to reduce runoff and subsequent erosion or dust or mud generation and to reduce storm water run-off.

(f) *Greenspace percentage*. For the purposes of this chapter, the greenspace percentage will include all plant areas interior to the property lines. Not included in greenspace percentage are areas of gravel or stone mulch. The percentage shall be calculated as follows:

100% - Impervious Surface Percentage = Greenspace Percentage

Greenspace shall be planted with trees, shrubs, groundcover or grass, consistent with good landscape design.

(g) G*reenspace Administrator*. The Greenspace Administrator is a designee of the Mayor who will administer the requirements of this chapter, including review and enforce the requirements of this chapter and report to the Mayor. The Greenspace Administrator shall coordinate with the city engineer and provide staff assistance to the Tree Fund.

(h) *Impervious surface percentage*. For the purpose of this chapter “Impervious surface percentage” (ISP) is an intensity measurement of the impervious surfaces which include building foot print, parking lots, drives, loading areas and sidewalks interior to the property line and all other impervious surfaces. The

ISP is calculated by expressing the following fraction as a percentage:

$$\frac{\text{total area of impervious surface on site X 100}}{\text{total area of the site}}$$

(i) *New development* means any new construction which necessitates the issuance of an improvement location permit and a subsequent certificate of occupancy. New development shall include the enlargement portion of any remodeling which adds additional floor area to any commercial building.

(j) *Owner* means the recorded owner or contract purchaser of any parcel of land or building.

(k) *Perimeter* means the total lineal outside dimension of a parking lot area.

(l) *Planned development* means a planned development as defined and established under chapter 5 of the Unified Zoning Ordinance of Tippecanoe County.

(m) *Plant materials* include, but are not limited to:

(1) *Shrub* - a woody ornamental plant which is multi-stemmed supporting the main leafy growth.

(2) *Groundcover* - low-growing plants used for covering areas in the landscape, which will conserve soil moisture, maintain an even soil temperature, control weeds, prevent soil erosion and reduce storm water run-off. Nonliving materials or mulch may be used in planting beds, as approved by the Greenspace Administrator, consistent with good landscaping design.

(3) *Shade tree* - a shade tree is a deciduous woody plant which is characteristically over thirty feet in height when it reaches full maturity.

(n) *Public parkway* means the land along the curb, or the grass strip between the sidewalk and the curb adjacent to public streets and/or highways in the public right-of-way.

(o) *Remodelling* means the renovation of an existing building, not including the addition of floor space within or outside of the footprint of the exiting building.

(p) *Screen*. For the purpose of this chapter a screen will be a dense planting and/or berming to a total height of between three and four feet which reduces noise, wind and glare; screens views; and utilizes plant materials approved by the Greenspace Administrator and is designed in an acceptable professional manner.

(q) *Tenant*. The words tenant or occupant applied to a building or land shall include any person holding a written or oral lease of, or who occupies the whole or part of such building or land, either alone or with others.

(r) *Tree Manual*. A list of trees approved for various uses and planting and maintenance standards. The Tree Manual shall be prepared and amended from time to time by the Greenspace Administrator and approved by the Board of Public Works and Safety.

(s) *West Lafayette tree fund* means a voluntary organization formed for the purpose of planting shade trees along public streets of West Lafayette. It is supported by voluntary contributions and is run by volunteers, who at all times include at least one person with professional credentials relative to all aspects of tree care. All purchases of supplies, materials, or hiring of employees by the West Lafayette tree fund shall be under the established policy and procedure of the Indiana State Board of Accounts and the West Lafayette board of parks and recreation. (Ord. No. 41-84, § 1; Ord. No. 13-90, § 1; Ord. No. 22-02 § 1.)

Article II. Trees in the Public Right-of-way.

Sec. 115.20. Maintenance responsibilities.
Property owners shall have the following responsibilities for shrubs or trees planted in or near the public parkway:

(a) No property owner shall permit limbs or branches obstructing movement or vision of vehicles or pedestrians along streets, alleys or sidewalks in the city.

(b) The owner of any property adjacent to the public right-of-way shall on twenty days' notice given by the order of the board of public works and safety, trim any trees or shrubs so that no limb or branch is maintained in violation of this chapter. If the owner should fail to comply with such order, the board of public works and safety shall cause such tree or shrub to be maintained in accordance with this chapter.

(c) The expense of trimming, maintenance or improvements which are carried out by the city shall be a lien on the property of the owner and shall be collected in the same manner as assessments for the cutting of weeds if no payment is received for such service within sixty days of request for payment by the clerk-treasurer. In addition to the above methods, the city shall have the right to bring a civil action to recover any delinquent charges, together with reasonable attorney's fee. (Ord. No. 41-84, § 2(A); Ord. No. 13-90, § 2.)

(d) The city shall have the right, but does not have the obligation, to plant, prune, maintain or remove trees, plants and shrubs within the public right-of-way of all streets, alleys, avenues, lanes, square and public grounds, as may be necessary to insure public safety or to preserve the symmetry and beauty of such public grounds. (Ord. No. 22-02 § 1.)

Sec. 115.21. Permit--required for cutting or removal.
Except for work necessitated by storms or other emergencies, a permit shall be obtained before any person may remove or cut any trees upon the public parkway within the city. A permit shall be issued or denied without charge by the Greenspace Administrator within eight days of the application. (Ord. No. 41-84, § 2(B)(i); Ord. No. 13-90, § 3; Ord. No. 22-02 § 1.)

Sec. 115.22. Permit--application.
Application for a permit must be made with the Greenspace Administrator's office not fewer than eight days in advance of the time the work is to be done. (Ord. No. 41-84, § 2(B)(iii); Ord. No. 22-02 § 1.)

Sec. 115.23. Permit--issuance conditions.
Condition to the issuance of any permit to remove any trees, may be the planting of approved trees in the place of those removed. (Ord. No. 41-84, § 2(B)(ii).)

Sec. 115.24. Electric utility annual permit.
An annual permit shall be issued to the electric utility for trimming and cutting trees in the public parkway. The permit shall include utility trimming schedules and procedures and be reviewed annually with the Greenspace Administrator. (Ord. No. 41-84, § 2(B)(iv); Ord. No. 13-90, § 4; Ord. No. 22-02 § 1.)

Article III. Street Trees.

Sec. 115.40. Planting of street trees.
(a) Tree Fund. The city wishes to encourage an orderly planting of shade trees along the public streets of the city. Therefore, the tree fund is authorized to plant shade trees with the cooperation of the adjacent property owner along the streets of the city within the public right-of-way. The cost of tree planting will be borne by the tree fund. In its planting of trees, the tree fund shall conform to all relevant ordinances and regulations already in force. The placement and choice of trees shall take into consideration the individual requirements of the site, preference of adjacent property owners and the goal of a unified street vista.

(b) Required Street Trees. All new developments adjacent to a minor arterial, collector street, local street or shared access road shall have street trees and a street tree plan shall be submitted with the application for an improvement location permit and shall be installed before issuance of a final certificate of occupancy. Street trees shall be installed as follows:

(1) Species and Number. Trees to be planted shall be deciduous and shall be of a root growth pattern which minimizes potential damage to street, sidewalk and utility facilities. Trees shall be required at the standard of one tree per forty feet of frontage for trees listed on the preferred shade tree list, and one tree per thirty-five feet of frontage for trees on the alternate substitute list. The required number shall be rounded to the nearest whole number. Tree species shall be selected from the preferred shade tree list unless overhead lines are present.

(2) Location. Trees shall be located as determined by the first of the following applicable rules. If a location is shown on the subdivision plat, that location must be used unless impractical. If a consistent pattern of street trees is already started on the street, that pattern must be followed unless impractical. If the planting strip between the curb and the sidewalk is at least five feet in width, the trees must be planted in that strip unless impractical. Otherwise the trees shall be planted behind and adjacent to the public parkway. All street trees shall be planted at least thirty feet back from any intersection with a local or collector street and fifty feet back from any intersection with major or minor arterial. Street trees shall have a minimum spacing of twenty-five feet and the spacing of street trees shall coordinate with street trees planted on any adjoining property abutting the same street.

(3) Size. Trees required by this chapter in single and two family projects shall have a minimum caliper of one and one-half inches immediately after planting. Trees required by the chapter for all other uses shall have a minimum caliper of two and one-half inches immediately after planting.

(4) Additional Provisions. For a commercial development, the planting location may be varied or the requirement of street trees may be waived under the following circumstances:

(A) If the planting of the street trees would impair vision at the entrance or exit to any parking lot, or

(B) If the planting of street trees would functionally duplicate trees planted under the section for off-street parking lots. (Ord. No. 41-84, § 3(A); Ord. No. 13-90, § 5; Ord. No. 22-02 § 1.)

Sec. 115.41. Maintenance of trees.
The owner, tenant, and their agent if any, of the property located behind the public parkway on which trees are planted by the tree fund shall be jointly and severally responsible for the maintenance of trees planted under this chapter. Such trees or any other trees required by this chapter shall be maintained in good condition so as to present a healthy, neat and orderly appearance, maintaining the tree's natural shape and crown—excessive pruning or topping are not acceptable or approved practices. Tree topping shall be unlawful as a normal practice by an person, firm or city department to any street tree, park tree, other tree on public property or trees required by this chapter. All plant materials shall be kept free from refuse and debris. (Ord. No. 41-84, § 3(B); Ord. No. 13-90, § 6; Ord. No. 22-02 § 1.)

Article IV. Off-street Parking Areas.

Sec. 115.60. Purpose.
The intent of this article is to set minimum requirements for perimeter and interior planting which would provide screening and shading around and throughout off-street parking areas; and provide pedestrians with safe, shaded walkways. (Ord. No. 41-84, § 4(A).)

Sec. 115.61. Landscaping-Required for parking lots.
(a) Parking Lots Covered. Off-street parking areas which are part of a new development and contain either ten or more parking spaces or a total parking area of five thousand or more square feet shall be landscaped in accordance with this chapter, unless the development is a planned development.

(b) Planned Developments. It is the policy of the city of West Lafayette that planned developments should have landscape plans which meet or exceed the requirements of this chapter, in addition to particular requirements of planned developments including buffering adjacent uses. (Ord. No. 41-84, § 4(A)(i); Ord. No. 13-90, § 7.)

Sec. 115.62. Off-street parking areas--tree requirements.
(a) Shade Trees Required for off-street parking areas as defined in this chapter, the number of shade trees to be planted on the perimeter shall be one for every thirty feet of lineal footage on the perimeter of the parking area. Trees may only be grouped per American Association of Nurserymen (AAN) recommendations.

(b) Screening Requirements for Off-Street Parking Areas. For off-street parking areas in new developments only, as defined above, which are adjacent to a public street, a screening area shall be positioned between the right-of-way and the parking area. This screening area, which may include a berm, shall be planted with shrubs and/or an appropriate ground cover shall be provided. The shrubs shall be approved by the Greenspace Administrator. The shrubs shall be positioned so that they form a continuous, tight screen at mature growth.

(c) Shade trees and screening within the twenty-five-foot vision triangle at entrances to and exits from parking lots shall leave vision clear between two and one-half feet and eight feet in height. For this purpose the screen height may be reduced to between eighteen and thirty inches. (Ord No. 41-84, § 4(A)(ii); Ord. No. 13-90, § 8; Ord. No. 22-02 § 1.)

Sec. 115.63. Interior plantings--area and planting requirements.
For every off-street parking area containing ten or more interior spaces, an interior planting area equivalent to two hundred fifty square feet shall be provided for every ten parking spaces or for each fraction of ten parking spaces not located on the perimeter of the parking area or adjacent to a building. The total area thus determined may be allocated to individual planting islands, or to planting strips paralleling traffic lanes. Each planting island shall have at least one shade tree for every one hundred fifty square feet of planting area, and appropriate ground cover, each planting strip will have one shade tree for each thirty lineal feet. Planting strips or islands shall be sized so that there is at least three feet between the center point of each tree and the inside edge of the nearest border and planted with acceptable ground cover or approved materials. Planting islands or strips and trees shall be spaced so that each parking space has a tree trunk within 25 feet of a point on the perimeter of each such space. Trees may only be grouped per American Association of Nurserymen (AAN) recommendations. (Ord. No. 4184, § 4(A)(iii); Ord. No. 13-90, § 9; Ord. No. 19-91, § 1; Ord. No. 22-02 § 1.)

Sec. 115.64. Interior plantings--plant material substitutions.
For the interior planting requirements, if the parking lot meets the requirement that each parking space has a tree trunk within 25 feet of a point on the perimeter of each such space, the applicant may substitute an additional forty lineal feet of perimeter berming including ten shrubs and one shade tree for each two hundred fifty square feet of planting strip or island. (Ord. No. 41-84, § 4(A)(v); Ord. No. 13-90, § 10; Ord. No. 22-02 § 1.)

Sec. 115.65. Tree islands, strips or wells.
All tree islands, strips or wells shall have pavement or stone removed so that all underlying soil is native soil or better. When tree wells are used in parking areas,

they will be protected by permanent curb stops placed in such a manner as to prevent car overhangs from coming into contact with shade tree trunks. (Ord. No. 13-90, § 11; Ord. No. 22-02 § 1.)

Sec. 115.66. Plant material protection.
The Plants in the planting island, planting strips and tree wells shall be protected by a continuous border of at least six inches in height made of such materials as stone, concrete and/or treated landscape timbers which are solidly anchored. Wheel stops shall be placed three feet from the continuous border as described above, in each parking space that abuts the strip. (Ord. No. 41-84, § 4(A)(iv), Ord. No. 13-90, § 12; Ord. No. 22-02 § 1.)

Sec. 115.67. Landscaping--plan modification conditions.
The Greenspace Administrator may approve minor modifications in a landscaping plan, as long as they are consistent with the terms of this chapter. (Ord. No. 41-84, § 4(A)(vi); Ord. No. 13-90 (part); Ord. No. 22-02 § 1.)

Sec. 115.68. Approval of plant materials.
The plant materials used to meet the requirements of this chapter shall be approved by the Greenspace Administrator and must be on the "preferred shade tree" or the "alternate/substitute" lists in the West Lafayette Tree Manual as required. Variations on plant selections may be allowed by the Greenspace Administrator. Trees shall have a minimum caliper of two and one-half inches immediately after planting. Shrubs shall be of a sufficient size to be hardy upon planting and sized so that the screen reaches the minimum design height within three years after planting. (Ord. No. 41-84, § 4(A)(vii); Ord. No. 13-90, § 13; Ord. No. 22-02 § 1.)

Sec. 115.69. Landscaping--requirements when property is remodelled or enlarged.
(a) For any remodelling or renovation which requires the issuance of an improvement location permit and/or a certificate of occupancy on a new or existing development that contains a parking lot with either ten or more parking spaces or an area of five thousand or more square feet, the property shall be required to match the ratio of square feet renovated to the shade tree requirements of §§ 115.62(a) and 115.63, if applicable (so that if ten percent of the square feet of the building is renovated, then ten percent of the planting requirements of §§ 115.62(a) and 115.63 will be completed).

(b) In the event that the property is enlarged during remodelling so as to constitute a new development, then the property shall be required to match the ratio of square feet added to all requirements of this chapter. The requirements of this subsection shall be cumulative with those of subsection (a) and (c). (Ord. No. 41-84 § 4(A)(viii); Ord. No. 13-90, § 14; Ord. No. 22-02 § 1.)

(c) If any spaces are added to any off-street parking area, such addition shall meet all of the requirements of this chapter. The requirements of this subsection shall be cumulative with those of subsection (a) and (b).

(d) In the event that the property for which an improvement location permit is requested is found to be in violation of this chapter, the Greenspace Administrator may require that the property be brought into compliance before issuance of a certificate of occupancy. (Ord. No. 22-02 § 1.)

Sec. 115.70. Landscape plan--review of Greenspace Administrator decision.
Any decision of the Greenspace Administrator concerning a landscape plan shall be final unless an aggrieved person shall file a written request with the clerk-treasurer for review specifying the reasons the decision of the Greenspace Administrator is alleged to be incorrect within ten days after the decision of the Greenspace Administrator. The board of public works and safety shall hear and determine any review of a decision of the Greenspace Administrator which is filed as required in this section. (Ord. No. 41-84; § 4(A)(ix); Ord. No. 13-90, § 15; Ord. No. 22-02 § 1.)

Sec. 115.71. New developments--minimum greenspace percentage.
All new developments shall have a minimum greenspace percentage as specified below.

(a) Any commercial or industrial use in the following districts shall require the following greenspace:

District	Requirement
Any CB or CBW district	7 percent
NB, NBU, HB or GB district	20 percent
OR or MR district	30 percent
I1 district	30 percent
I2 district	25 percent
I3 district	20 percent

For any lot under one acre in size, the above requirements are reduced by 20 percent of the percentage set forth above.

(b) Any residential use shall require the following greenspace. (Ord. 13-90, § 16.)

District	Requirement
AA or AW district	75 percent
A district	50 percent
NBU or MR district	30 percent
CB or CBW district	7 percent
R1 or R1A district	40 percent
R1B district	35 percent

R1U, R1Z, R2, R2U, R3,
R3U, R3W or R4 districts…….....30 percent

(c) Any use allowed in the Flood Plain (FP) district as per NUZO 3-2 shall require 90% vegetative cover (see NUZO 2-26-8).

(d) It is the policy of the City of West Lafayette that Planned Developments should require minimum greenspace comparable to that of the most similar zoning district and use, as set forth above.

Sec. 115.72. Protection of existing trees--planting equivalent.
There will be clear marking of trees to be preserved; and the marking will be followed through by the construction of protective barriers around the tree to be preserved. Preservation trees six inches or more in diameter when measured three feet from the ground, and in healthy conditions will be considered equivalent of planting two shade trees in meeting the requirements of this chapter. (Ord. No. 41-84, § 4(B); Ord. No. 13-90, § 17.)

Sec. 115.73. Maintenance responsibility.
(a) The owner shall be responsible for the maintenance of all landscaping required by this chapter which 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.

(b) Removal of existing trees or plants required by this chapter shall require prior approval by the Greenspace Administrator.

(c) Should the condition of the tree or plant material not be reversible, the owner shall replace the tree or plant materials with acceptable tree (from the "accepted shade tree list") or plants as applicable, or equivalent trees as specified by the Greenspace Administrator. In such an order, the Greenspace Administrator may give due consideration to the size and species of the tree or plant being replaced, the overall landscape plan and the efforts by the owner to maintain the existing landscape. (Ord. No. 41-84, § 4(C); Ord. No. 13-90, § 18; Ord. No. 22-02 § 1.)

Sec. 115.74. Appeals and enforcement.
(a) Appeals. All orders of the Greenspace Administrator concerning planting, maintenance, removal, replacement or any other matters under this chapter shall be final unless an aggrieved person shall file a written request with the clerk-treasurer for review specifying the reasons the decision of the Greenspace Administrator is alleged to be incorrect within ten days after the decision of the Greenspace Administrator. The board of public works and safety shall hear and determine any review of a decision of the Greenspace Administrator which is filed as required in this section.

(b) Permits Not Granted. In the event of any failure to comply with this chapter, the city engineer or any other officer of the city shall not issue a certificate of occupancy, a rental certificate or any additional improvement location permit until the noncompliance is cured.

(c) Enforcement by Injunction. The requirements of this chapter may be enforced by a mandatory or prohibitory injunction by an appropriate court.

(d) Enforcement by Civil Penalty. Failure to comply with any of the requirements of this chapter is punishable by a civil penalty of not less than one hundred dollars nor more than five hundred dollars and each day an offense occurs shall be considered a separate offense. (Ord. No. 41-84, § 4(D); Ord. No. 13-90, § 19; Ord. No. 22-02 § 1.)

Sec. 115.75. Variances.
(a) An owner of an existing structure which is being remodelled but not enlarged may request a variance from the requirements of this chapter in cases where it would be impossible to meet the requirements of this chapter and other applicable ordinances. A written request with a proposed landscape plan must be filed with the Greenspace Administrator at least fourteen days prior to hearing on forms prescribed by the board of public works and safety.

(b) The board of public works and safety may grant a variance only after a public hearing and upon a showing by the applicant that

(1) The strict application of this chapter would constitute an unnecessary hardship upon the applicant and the hardship is not merely economic nor is it self imposed,

(2) The need for the variance arises from some condition peculiar to the property involved,

(3) The variance would not diminish the use or value of neighboring property, and

(4) The proposed plan with a variance meets the requirements of the ordinance as nearly as possible under the circumstances.

(c) The board of public works and safety may condition the grant of a variance upon any contingencies or commitments by the applicant which further the policies of this chapter. (Ord. No. 13-90, § 20; Ord. No. 22-02 § 1.)

West Lafayette Tree Fund

History:
The Tree Fund formed in 1985 with the adoption of the original West Lafayette Landscape Ordinance. The Tree Fund works in cooperation with the West Lafayette Parks and Development departments. It is supported by voluntary contributions and is run by volunteers, who at all times include at least one person with professional credentials relative to all aspects of tree care.

Purpose:
A voluntary organization formed for the purpose of planting trees and other landscaping along public streets of West Lafayette. The Tree Fund is authorized to plant trees with the cooperation of the adjacent property owner along the streets of the city within the public right-of-way. The cost of tree planting is paid for by the Tree Fund with the support of private donations. In addition to planting street trees, the Tree Fund usually performs 1 or 2 large planting projects each year.

How Can I Help?

Get involved!
Anyone who is interested in the environmental health and beauty of our community is welcome. Volunteers can help with everything from planting, mulching and watering plants to serving on the board. Tree Fund meets once a month at City Hall to plan their activities. Please become involved.

- ☐ Yes, I would like to make a donation $_____
- ☐ Yes, please contact me about becoming a volunteer
- ☐ Yes, I could serve as a member of the board
- ☐ Yes, please place my name on your mailing list

Name _____

Address _____

Email address _____ Phone _____

Mail to: Tree Fund, West Lafayette City Hall, 609 W. Navajo St., West Lafayette, IN 47906