

# City of Gahanna

200 South Hamilton Road Gahanna, Ohio 43230

# COMPREHENSIVE LANDSCAPE PLAN

(Comprehensive City Tree Plan for the City)

JANUARY 7, 2015 AUGUST 3, 2016

#### GAHANNA'S VISION is ...

...to be an innovative model community that values its rich heritage, pursues high standards, and where citizens respect one another.

#### GAHANNA'S MISSION is ...

...to ensure an exceptional quality of life by providing comprehensive services, financial stability, and well-planned development which preserves the natural environment, so that city government will continue to be responsive, accessible and accountable to our diverse and growing community of citizens.

#### PARKS AND RECREATION DEPARTMENT'S MISSION is ...

- To protect and conserve the natural environment and to provide Gahanna citizens with opportunity to spend leisure time in a constructive beneficial manner.
- To provide a balanced recreation program designed to assist the citizens of Gahanna in developing and learning skills and maintaining their general welfare.
- To present stimulating programs to all age groups based on the expressed interest of the citizens of Gahanna.

# **TABLE OF CONTENTS**

# I. Gahanna Codified Ordinances

- A. Chapter 154 Landscape Board
- B. Community & Public Landscape Recommendations

# II. Street Trees

- A. Program Description
- B. Tree Grant Program

# III. Tree City USA

- A. The Tree City USA
- B. The Four Standards of a Tree City USA

# IV. Appendix

- A. Definitions
- B. Invasive Species Lis
- C. Prohibited Tree List
- D. Recommended plants and trees
- E. Residential Street Tree Matching Grant Program Application and Guidelines

### INTRODUCTION

# Purpose Statement

The City of Gahanna Comprehensive Landscape Plan (Comprehensive City Tree Plan for the City) was created for the following reasons:

- a. To provide City leadership and reference materials to Council, Planning Commission, staff, and the community.
- b. To establish current Street Tree guidelines as it pertains to community landscaping (public and private) for the City Forester.

# I. GAHANNA CODIFIED ORDINANCES

# A. Chapter 154 - Landscape Board

#### 154.01 Creation

There is hereby created a Landscape Board which shall consist of five electors of the Municipality who are not otherwise serving as elected or appointed officials of the City. Three of the five electors shall be appointed by Council; and two of the five electors shall be appointed by the Mayor. Beginning January 2, 1997 one of the five electors will be appointed by Council for three years, one will be appointed by Council for one year; one will be appointed by the Mayor for three years and one will be appointed by the Mayor for two years. Thereafter, each January 2 (if January 2 is a Sunday, then January 3) and as the terms expire, appointments shall be made for a term of three years by the respective appointing authorities for the position for which the term is ending. (Ord. 0011-2010. Passed 2-1-10.)

#### 154.02 Organization

Council shall establish the date, time and place for the first meeting each year, at which the Landscape Board shall organize. The Mayor shall preside at this meeting until the chairman is elected. The Landscape Board shall choose its own officers, establish its own rules of operation, and maintain a record of its proceedings and actions. A majority of the members shall be a quorum for the transaction of business. Meetings must be held a minimum of four times a year and shall be open to the public. (Ord. 0110-2012. Passed 6-4-12.)

#### 154.03 Duties and Responsibilities

It shall be the responsibility of the Landscape Board to study, investigate, counsel and develop and/or 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 with such trees and shrubs being designated street trees or park trees. Such plan shall be reviewed and presented to Council every three (3) years. Upon Council acceptance and approval the plan shall constitute the official Comprehensive Landscape Plan for the City. The Board, when

requested by Council, shall consider, investigate, make findings report and recommend upon any special matter or question coming within the scope of its work, and shall perform such other duties as may be prescribed by these Codified Ordinances. (ORD. 0011-2010. PASSED 2-1-10.)

### 154.04 Public Landscape Trust Fund

Members of the Landscape Board shall act collectively as trustees of the Public Landscape Trust Fund and may not delegate or relinquish responsibility for the fund except as defined herein. (Ord. 0011-2010. Passed 2-1-10.)

# B. Community & Public Landscape Recommendations

All plant material used and planting techniques will comply to the latest edition of the *American Standards for Nursery Stock*, published by the American Nursery and Landscape Association. For reference to street trees please see the latest version of Chapter 913 as currently adopted.

Where the three rivers meet is an identifying feature of the Gahanna Community; and by using some common design elements, we hope to achieve continuity while reinforcing the theme throughout the City of Gahanna.

- a. **Hardscape Elements** Commonly used materials for City projects (some examples follow):
  - Limestone or Sandstone Slabs
  - Washed River Rock
  - Bolders
  - Split-rail Fence
  - Dry River Beds
- b. **Softscape Elements** Trees, Shrubs, and Herbs as well as other Herbatious Plants. Plant material that accents the recommended landscape and provide interest through the year are:

#### TREES

- Acer rubrum Red Maple
- Acer saccharum Sugar Maple
- Amelanchier Serviceberry
- Cercis Canadensis Red Bud
- Cornus florida American Dogwood
- Cornus kousa Chinese Dogwood
- Gleditsia triacanthos inermis Seedless and Thornless Honey Locust
- Ginkgo biloba Ginkgo Tree (male or sterile varieties only )
- Larix deciduas Larch
- Platanus acerifolia London Plane Tree
- Picea abies Norway Spruce
- Syringa reticulate 'Ivory Silk' Ivory Silk Tree
- Taxodium distichum Baldcypress

Ulmus x 'Morton' – Accolade Elm

# **SHRUBS**

- Hamamelis Witchhazel
- Ilex verticillata Winterberry Holly
- Rhus aromatica Fragrant sumac
- Spirea Japonica Spirea Species
- Taxus Yew
- Thuja Arborvitae

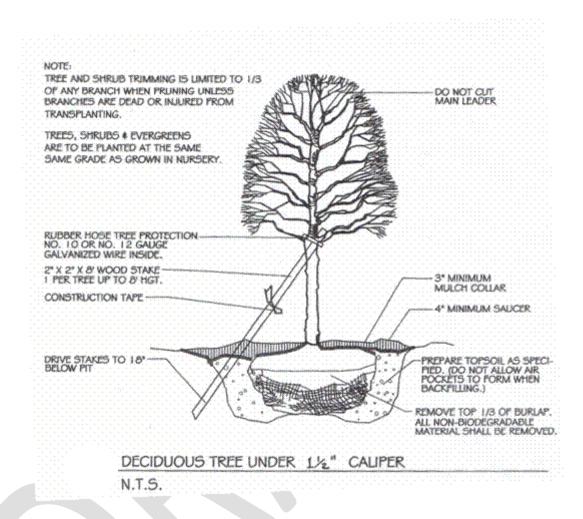
# **GRASSES**

- Calamagrostis acutiflora 'Karl Foerster' Karl Foerster Feather Reed Grass
- Carex Sedge Grass
- Helictotrichon sempervirens Oat Grass
- Liriope muscari Lily Turf
- Panicum Switch Grass
- Pennisetum alopecuroides 'Hameln Dwarf Fountain Grass

# **PERENNIALS / HERBS**

- Achillea filipendulina Yarrow
- Aconitum cammarum Monkshood
- Baptisia australis False Indigo
- Echinacea Coneflower
- Hemerocallis Hybrids Daylilly Hybrids
- Phlox paniculata Tall phlox
- Lavandula Lavender
- Rudbeckia Black-eye Susan
- Salvia nemorosa Meadow Sage
- Salvia officinalis Common Sage
- Solidago Goldenrod

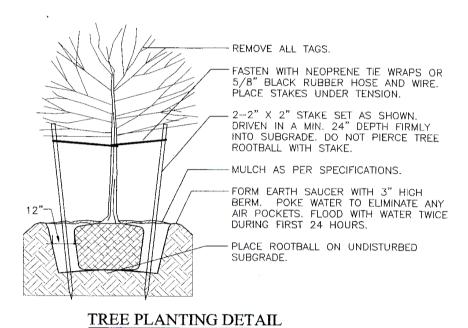
# **Planting Recommendations**



Drawing - 1

Note: Follows the American standards for Nursery Planting Standards

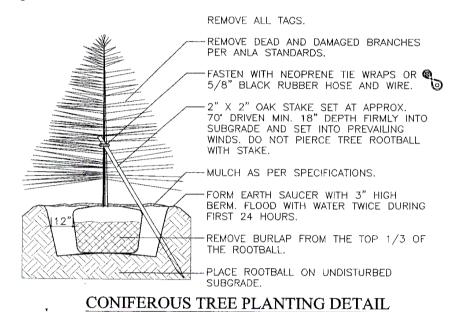
# **Planting Recommendations**



SCALE: NOT TO SCALE

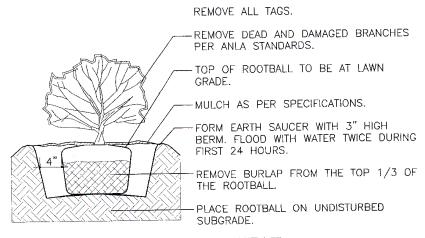
SCALE: NOT TO SCALE

# Drawing - 2



Drawing - 3

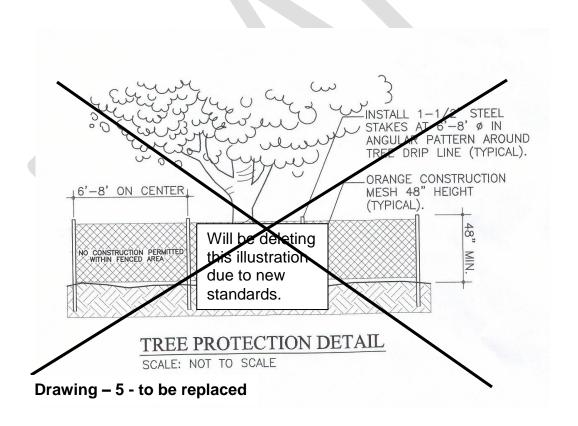
# **Planting Recommendations**



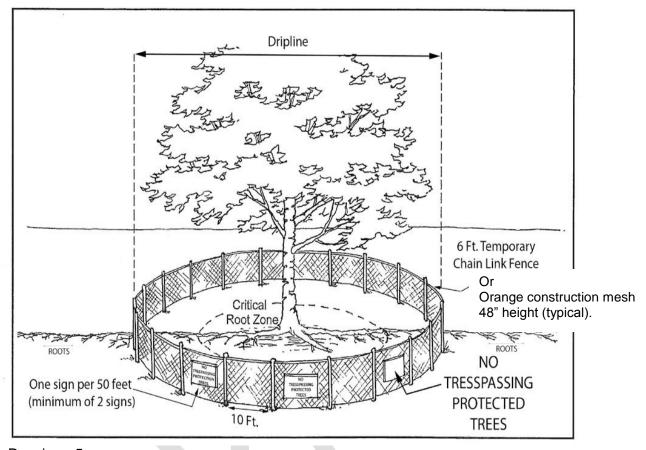
# SHRUB PLANTING DETAIL

SCALE: NOT TO SCALE

Drawing - 4



# Will be replacing this drawing in line with new standards



Drawing - 5

# TREE PROTECTION FENCE DETAIL. DRIPLINE METHOD

# II. STREET TREES

# A. Program Description

#### a. What Are Street Trees?

Street trees are the trees located on the lawn or right-of-way also known as an easement (usually the area between the street and the sidewalk of your lawn). Right-of-way is the area dedicated to the City (usually when a home is built) and the area where utility lines are typically placed. Because the City must have access to these utilities, the City retains ownership of right-of-way areas, including the trees. Like sidewalks, curbs and driveways, street trees are the maintenance responsibility of the homeowner. However, there is assistance available for your street trees by contacting the City of Gahanna Department of Parks & Recreation.

# b. The Importance of Street Trees

Trees are a vital asset to any urban environment. Trees add beauty, are a source of oxygen, absorb carbon dioxide, provide shade, absorb noise and usually increase property values. Gahanna residents enjoy a colorful variety of street trees and their planting is now required for all new residential and most commercial developments. Gahanna has been designated a Tree City USA for more than ten consecutive years, and believes the street tree program is a contributing factor in this recognition.

#### c. Guidelines

Many Gahanna residents ask if they are allowed to help maintain and prune the street trees for their homes. In fact, it is the responsibility of the homeowner to do this. Because residents frequently ask for guidance on how to properly perform this task, we have prepared a Street Tree Care Guide (available for pick-up in the Gahanna Parks and Recreation Department; or available on the City of Gahanna's website: www.gahanna.gov). The City's Parks Department and the City Forester are always available for guidance by calling 614-342-4260; or by sending an email to the City Forester at: parksandrec@gahanna.gov.

#### d. Street Tree Maintenance Guidelines

To help maintain our City trees and their many benefits, Gahanna City Code reads:

- Street tree limbs shall be at least eight feet above the sidewalk.
- Street tree limbs shall be at least fifteen feet above the street.
- The tree location shall be at least twenty feet from street intersections and ten feet from fire hydrants and utility poles. Cul-de-sac street trees will be located at the appropriate discretion of the City Landscape Board.
- A street tree shall be planted one-half the distance between the curb and the sidewalk.
- The center to center spacing for large trees shall be fifty feet, for medium trees shall be forty feet and for small trees shall be thirty feet, with a tolerance of +/-5'.

Street tree maintenance needs can be reported to the City of Gahanna Department of Parks & Recreation at 342.4250. For more detailed information, copies of Gahanna's Landscape Ordinance are available at the City of Gahanna Parks & Recreation Department, 200 S. Hamilton Road, Gahanna, Ohio 43230.

# B. <u>Tree Grant Program</u>

Program temporarily on hold due to funding.

# III. TREE CITY USA

The City of Gahanna and its citizens have always taken pride in their commitment to protecting and improving the quality of the Urban Forest. Tree City USA is a National recognition of that commitment sponsored by the National Arbor Day Foundation.

# A. The Tree City USA®

Provides direction, technical assistance, public attention, and national recognition for urban and community forestry programs in thousands of towns and cities where more than 93 million Americans call home.

#### a. Tree City Benefits

Every community, regardless of size, benefits in different ways from being a Tree City USA. Reports of these benefits have reached The National Arbor Day Foundation through the years and are summarized below in six general categories:

### b. Framework for Action

Meeting the four standards for becoming a Tree City USA provides initial direction for an urban or community forestry program. Like the first rungs on a ladder, the standards help get a community started toward annual, systematic management of its tree resources.

#### c. Education

Education begins with discussion of the standards and getting organized to apply for Tree City USA status. It continues as the desire for Tree City USA recognition leads to contacts with the state forester's staff. In turn, this can set in motion aid from a variety of professionals in the form of technical advice, literature, films, and other assistance.

# d. Public Image

A community's public image is a very real phenomenon and important in many ways. Being a Tree City USA helps present the kind of image that most citizens want to have for the place they live or conduct business. The Tree City USA signs at community entrances tell visitors that here is a community that cares about its environment. It is also an indication to prospective businesses that the quality of life may be better here. It has even been known to be a factor in where meetings or conferences have been held.

#### e. Citizen Pride

Pride is sometimes a less tangible benefit. Gaining and retaining Tree City USA recognition is an award to the tree workers, managers, volunteers, tree board members and others who work on behalf of better care of a community's trees. Non-involved citizens, too, often share a sense of pride that theirs is a Tree City USA. This may translate to better care of trees on private property or a willingness to volunteer in the future.

#### f. Financial Assistance

Preference is sometimes given to Tree City USA communities over other communities when allocations of grant money are made for trees or forestry programs. The reason is that there are invariably more requests than available funds when grants are available through state or federal agencies. If requests are equally worthy, some officials tend to have more confidence in communities that have demonstrated the foresight of becoming a Tree City USA.

# g. Publicity

Presentation of the Tree City USA award and the celebration of Arbor Day offer excellent publicity opportunities. This results not only in satisfaction for the individuals involved and their families, but also provides one more way to reach large numbers of people with information about tree care.

# B. The Four Standards of a Tree City USA

To qualify for Tree City USA, a town or city must meet four standards established by The National Arbor Day Foundation and the National Association of State Foresters.

These standards were established to ensure that every qualifying community would have a viable tree management plan and program.

It is important to note that they were also designed so that no community would be excluded because of size.

### A. A Tree Board or Department

Someone must be legally responsible for the care and management of the community's trees. This may be a professional forester or arborist, an entire forestry department, or a volunteer tree board. Often, both a professional staff and advisory tree board are present, which is a good goal for most communities. A tree board, or commission, is a group of concerned volunteer citizens charged by ordinance with developing and administering a comprehensive tree management program. Balanced, broad-based community involvement is encouraged. Boards function best if not composed entirely of tree-related professionals such as forestry professors, nursery operators, arborists, etc. Fresh ideas and different perspectives are added by citizens with an interest in trees that is entirely a vocational. Limited, staggered terms of service will prevent stagnation or burnout, while at the same time assuring continuity.

#### **B. A Tree Care Ordinance**

The tree ordinance must designate the establishment of a tree board or forestry department and give this body the responsibility for writing and implementing an annual community forestry work plan. Beyond that, the ordinance should be flexible enough to fit the needs and circumstances of the particular community. A tree ordinance provides an opportunity to set good policy and back it with the force of law when necessary. Ideally, it will provide clear guidance for planting, maintaining and removing trees from streets, parks and other public places. For tips and a checklist of important items to consider in writing or improving a tree ordinance, see Bulletin No. 9.

# C. A Community Forestry Program with an Annual Budget of At Least \$2 Per Capita

Evidence is required that the community has established a community forestry program that is supported by an annual budget of at least \$2 per capita. At first, this may seem like an impossible barrier to some communities. However, a little investigation usually reveals that more than this amount is already being spent by the municipality on its trees. If not, this may signal serious neglect that will cost far more in the long run. In such a case, working toward Tree City USA recognition can be used to re-examine the community's budget priorities and re-direct funds to properly care for its tree resource before it is too late. Ideally, this standard will be met by focusing funding on an annual work plan developed after an inventory is completed and a report is approved by the city council. Such a plan will address species diversity, planting needs, hazardous trees, insect and disease problems and a pattern of regular care such as pruning and watering.

#### D. An Arbor Day Observance and Proclamation

This is the least challenging and probably the most enjoyable standard to accomplish. An Arbor Day celebration can be simple and brief or an all-day or all-week observation. It can be a simple tree planting event or an award ceremony that honors leading tree planters. For children, Arbor Day may be their only exposure to the green world or a springboard to discussions about

the complex issue of environmental quality. The benefits of Arbor Day go far beyond the shade and beauty of new trees for the next generation. Arbor Day is a golden opportunity for publicity and to educate homeowners about proper tree care. Utility companies can join in to promote planting small trees beneath power lines or being careful when digging. Smokey Bear's fire prevention messages can be worked into the event, as can conservation education about soil erosion or the need to protect wildlife habitat. Still another way to develop Arbor Day is to link it with a tree-related festival. Some that are currently celebrated include dogwood festivals, locust blossom festivals and Macon, Georgia's Cherry Blossom Festival that annually brings more than \$4.25 million into the local economy. In meeting the four standards, help is available! The urban and community forestry coordinator in your state forester's office will be happy to work with communities in taking these first steps toward better community forestry.



# IV. Appendix

# A. Definitions

- a. "Accessory use or building" means a use or a structure subordinate to the principal use or building on a lot and serving a purpose customarily incidental thereto.
- b. "Board" means the City Landscape Board.
- c. "Injurious plants" includes, but is not limited to the following list of trees that are prone to disease, seek water (trouble for water and sewer lines), are soft wood trees and need room for roots to grow and a curb lawn does not provide enough room. Some of the trees have thorns and some won't tolerate snow, salt and sand that could affect it during the winter.
- d. "Interior landscaping" means the use of landscape materials within the innermost boundaries of the landscape buffer zone and perimeter landscaping.
- e. "Landscape buffer zone" means that area adjacent to any vehicular use area or along common boundaries in which the perimeter landscape requirements are to be met.
- f. "Large tree" means any tree species which normally attains a full grown height in excess of fifty feet.
- g. "Medium tree" means any tree species which normally attains a full grown height of between twenty-five feet and fifty feet.
- h. "Small Trees" means any tree species which normally attains a full grown height under twenty-five feet.
- i. "O.F.T." means or fraction thereof.
- j. "Opacity" means the degree to which a wall, fence or landscaping is impenetrable to light or vision.
- k. "Public Trees" shall include all shade and ornamental trees and/or shrubs now or hereafter growing on any public property.
- "Parking area, lot or structure" means an off-street area or structure, for required parking or loading spaces, including driveways, accessways, aisles, parking or loading spaces, including driveways, accessways, aisles, parking and maneuvering space.
- m. "Perimeter landscaping" means the use of landscape materials within the landscape buffer zone to achieve the required opacity.
- n. "Person" means any person, corporation, partnership, company, contracting firm or other entity.
- o. "Pruning" means to cut branches, stems, etc. from a plant to improve shape and growth.
- p. "Street trees" means those trees, shrubs, bushes, and all other woody vegetation on land lying within street easements or right-of-way, or between property lines on either side of all streets, avenues or ways within the City.
- q. "Topping" means the severe cutting back of limbs within a tree's crown to a stub, or to a bud or a lateral branch not large enough to assume the terminal role and produce healthy growth so as to remove the normal canopy, disfigure the tree, and promote weak rapid growth.
- r. "Treelawn" means that part of a street not covered by sidewalk or other paving, lying between the property line and that portion of the street right-of-way that is paved and usually used for vehicular traffic.
- s. "Vehicular use area" means any area used by vehicles. (Ord. 160-92. Passed 10-6-92)

# **B. Invasive Species List**

Invasive plants are defined by their ability to invade and disrupt an ecosystem. While most species stay within a set range and have predators or other limitations on their growth, invasive species tend to overrun ecosystems into which they are introduced. Collectively they are one of the great threats to biodiversity and ecosystem stability.

Identification of invasive plants is very important. Be sure of species before removal or planting.

- a. Invasive species includes but is not limited to the following list of exotic trees, shrubs, vines, and woody species which can and have escaped cultivation and reproduce rapidly such that they destroy ecological structure and function of natural areas by permanently displacing native vegetation in natural areas on City and private property.
- b. The list of compiled invasive plants as described in above definition are listed below:

### Targeted Species

Common Name
Autumn-Olive
Buckthorn, glossy
Buckthorn, European or common
Common reed grass\*
Garlic mustard
Honeysuckle, amur
Honeysuckle, Japanese
Honeysuckle, Morrow
Honeysuckle, Tatarian
Japanese Knotweed
Multiflora rose
Purple loosestrife
Reed canary grass\*

Scientific Name
Elaeagnus umbellate
Rhamnus frangula
Rhamnus cathartica
Phragmites austrails
Alliaria petiolata
Lonicera maackii
Lonicera japonica
Lonicera tatarica
Polygonum cuspidatum
Rosa multiflora
Lythrum salicaria

Phalaris arundinacea

<sup>\*</sup>These species may have native and non-native strains in Ohio.

#### Well-Established Invasives

Common Name
Air-potato
Asian bittersweet
Bouncing bet
Canada thistle
Cattail hybrid
Cattail narrow-leaved

Caltair narrow-leave Celandine lesser Crown-vetch Curly pondweed Dames rocket

European cranberry-bush Eurasian water-milfoil Field bindweed Flowering-rush Japanese barberry Johnson grass Meadow fescue

Moneywort Lesser naiad

Periwinkle or myrtle Poison hemlock Privet common Quack grass Queen Annes lace Russian-olive

Smooth brome
Sweet-clover white
Sweet-clover yellow
Teasel cut-leaved
Tree of Heaven
Water cress

Willow herb hairy

Willow herb small-flowered hairy

Winged euonymus Wintercreeper Yellow flag Scientific Name
Dioscorea batatas
Celastrus orbiculatus
Saponaria officinalis
Cirsium arvense
Typha Xglauca
Typha angustifolia
Ranunculus ficaria
Coronilla varia

Potamogeton crispus Hesperis matronalis Viburnum opulus var Myriophyllum spicatum Convolvulus arvensis Butomus umbellatus Berberis thunbergii Sorghum halepense Festuca pratensis

Lysimachia nummularia

Najas minor Vinca minor

Conium maculatum Ligustrum vulgare Agropyron repens Daucus carota

Elaeagnus angustifolia

Bromus inermis
Melilotus alba
Melilotus officinalis
Dipsacus laciniatus
Ailanthus altissima

Rorippa nasturtium-aquaticum

Epilobium hirsutum Epilobium parviflorum Euonymus alatus Euonymus fortunei Iris pseudacorus

#### Watch List

Common Name Scientific Name
Black swallow wort Vincetoxicum nigrum
Chinese silvergrass Miscanthus sinensis

Dog rose Rosa canina

Giant knotwood Polygonum sachalinense

Honeysuckle showy pink
Kudzu
Leafy spurge
Mile-a-minute vine
Lonicera Xbella
Pueraria lobata
Euphorbia esula
Polygonum perfoliatum

Napalgrass Microstegium vimineum

Nodding thistle Carduus nutans

Porcelain-berry Ampleopsis brevipedunculate

Privet, border Ligustrum obtusifolium
Spotted knapweed Centaurea maculosa
Star-of-Bethlehem Onithigalum umbellatum

# C. Prohibited Street Tree List

The following list of prohibited trees are considered to be "injurious plants" and are prone to disease, seek water (trouble for water and sewer lines), are soft wood trees and need room for roots to grow and a curb lawn does not provide enough room. Some of the trees have thorns and some won't tolerate snow, salt and sand that could affect it during the winter:

Box Elder Honey Locus (except thornless AND PODLESS species)

Dogwood Silver Maple Buckeye Redbud

Mulberry Catalpa
Black Locust Willow species
Siberian Elm Ginko (female)
Fruit Trees Tree-of-heaven
Evergreens Cottonwood

Poplar species Crab species (limited)

Hawthorns (except thornless ASH

species

# D. Recommended Street Tree List

- a. Small Trees Trees recommended for planting in curb strips between 3 feet—6 feet and are under 30 feet in mature height:
  - Acer ginnala Amur Maple
  - Acer griseum Paperbark Maple
  - Acer Tataricum Tartarian Maple
  - Amelanchier Serviceberry
  - Cornus mas Cornelian Dogwood
  - Carpinus betulus 'Frans Fontaine' Frans Fontaine European Hornbeam
  - Malus amsalazam Amsalazam Crabapple
  - Malus jewelcote Red Jewel Crabapple
  - Malus "Red Barron" Red Barron Crabapple
  - Syringa reticulate 'Ivory Silk' Ivory Silk Tree
  - Viburnum lentago Nannyberry Viburnum (Tree form )
  - Malus 'Rejzam' Rejzam Crabapple
  - Malus 'Sentinel' Sentinel Crabapple
- b. Medium Trees Trees recommended for curb strips between 6 feet—8 feet with a mature height of 30 feet 45 feet:
  - Acer campestre Hedge Maple
  - Acer freemanii 'Celebration' Celebration Maple
  - Acer platanoides 'Ezestre' Easy Street Maple
  - Acer rubrum Red Maple
  - Alnus glutinosa Black Alder
  - Carpinus betulus Europpean Hornbeam
  - Cladastrus lutea Yellowwood
  - Eucommia ulmoides Hardy Rubber Tree
  - Koelreutaria paniculala Goldenrain Tree
  - Tilia cordata Littleleaf Linden
  - Tilia cordata 'Corzam' Corzam Linden
- c. Large Trees Trees recommended for curb strips greater than 8 feet with a mature height greater than 45 feet:
  - Acer nigrum Black Maple
  - Acer saccharum Sugar Maple
  - Cercidiphyllum japonicum Katsura Tree
  - Ginkgo biloba Ginkgo (male trees or sterile trees only)
  - Gymnocladus dioicus Kentucky Coffeetree
  - Liquidambar styraciflua Sweetgum
  - Nyssa sylvatica Blackgum
  - Quercus acutissima Sawtooth Oak
  - Quercus rubrum Red Oak
  - Tilia tomentosa Silver Linden
  - Ulmus Americana American Elm (resistant varieties)
  - Ulmus parvifolia Lacebark Elm
  - Zelkova serrata -- Zelkova