Springville, IA

2011 Community Street & Park Tree Management Plan

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Springville, IA
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Executive Summary

Overview

This plan was developed to assist the City of Springville with managing its urban forest, including budgeting and future planning. Trees can provide a multitude of benefits to the community, and sound management allows a community to best take advantage of these benefits. Management is especially important considering the serious threats posed by forest pests such as the emerald ash borer (EAB) and gypsy moth. EAB is an invasive insect imported from Eastern Asia on wood shipping crates that kills all species of ash trees (this does not include mountain ash). **This pest was found in northeast Iowa in the spring of 2010, but has not been found in your area yet.** There is a strong possibility that ~9 % of Springville's city owned trees (ash-18) will die once EAB becomes established in the community. With proper planning and management, the costs of removing dead and dying trees can be extended over years, mitigating public safety issues. Another concern is that 25% of Springville's city owned trees are some type of (maple-49), so if any type of insect or disease starts to threaten the health of maples in the community this could have a significant impact on the community tree population. Basically, 34% (67) of Springville's city owned trees are either maple or ash.

Inventory and Results

In the fall of 2010 a tree inventory was conducted using Global Positioning System (GPS) data collectors. The inventory was a complete inventory of street and park trees in the community. Below are some key findings of the 199 trees inventoried.

- Springville's trees provide $23,574 of benefits annually, an average of $118 a tree
- There are ~30 species of trees
- The top three genus are: Maple 25%, Oak 16%, and Ash 9%
- 22% of trees are in need of some type of management, the majority of the management is pruning such as raising above streets and sidewalks for safety or cleaning out dead material
- 7 trees are recommended for removal consideration and all of them are on Springville park property
- There are 13 trees outlined in a 10/19/2010 letter to the Mayor from the Iowa DNR District Forester that need to be inspected to see what action (s) is/are needed

Recommendations

The core recommendations are detailed in the Recommendations Section. The Emerald Ash Borer Plan includes management recommendations as well. Below are some key recommendations.

- There are 7 trees to be considered for removal and they are all on Springville park property. *City ownership of the trees recommended for removal should always be verified prior to any removal*
- Only 1 of the 18 ash trees is in need of follow up at this point.

- Attempt to prune all park trees on a routine schedule, and since there have been a significant number of new trees planted in some of the parks it is critical over the next 5 to 15 years that good maintenance pruning is used to develop quality trees.
- Plant a diverse mix of trees that do not include: ash, maple, cottonwood, poplar, boxelder, Chinese elm, willow, black walnut, or evergreen species as street trees. Evergreen species such as Norway spruce, Serbian spruce, white spruce, Eastern white pine, Eastern redcedar, concolor fir, or arborvitae can be considered for park plantings.
- Check ash trees with a visual survey yearly
- EAB could potentially kill all ash trees within 4 to 10 years of its arrival to Springville. If removal costs range from $600 to $1,000 per tree, total estimated costs to remove all 18 ash in the community would be between $10,800 and $18,000.

Introduction

This plan was developed to assist Springville with the management, budgeting and future planning of their urban forest. Across the state, forestry budgets continue to decrease with more and more of that money spent on tree removal. With the anticipated arrival of Emerald Ash Borer (EAB), an invasive pest that kills native ash trees, it is time to prepare for the increased costs of tree removal and replacement planting. With proper planning and management of the current canopy in Springville, these costs can be extended over years and public safety issues from dead and dying ash trees mitigated.

Trees are an important component of Springville's infrastructure and one of the greatest assets to the community. The benefits of trees are immense. Trees provide the community with improved air quality, stormwater runoff interception, energy conservation, lower traffic speeds, increased property values, reduced crime, improved mental health and create a desirable place to live, to name just a few benefits. It is essential that these benefits be maintained for the people of Springville and future generations through good urban forestry management.

Good urban forestry management involves setting goals and developing management strategies to achieve these goals. An essential part of developing management strategies is a comprehensive public tree inventory. The inventory supplies information that will be used for maintenance, removal schedules, tree planting and budgeting. Basing actions on this information will help meet Springville's urban forestry goals.

Inventory

In the fall of 2010, a tree inventory was conducted that included 100% of the city owned trees on both streets and parks. The tree data was collected using a handheld Global Positioning System (GPS) receiver. The data collector gives Geographic Information Systems (GIS) coordinates with an accuracy of 3 meters, which can be used in Arc GIS as an active GIS data layer. Because the inventory is a digital document the data can be updated with new information and become a working document.

The programming used to collect tree information on the data collectors was written to be compatible with a state-of-the-art software suite called I-Tree. I-Tree was developed by the USDA Forest Service to quantify the structure of community trees and the environmental services that trees provide. The I-Tree suite is a public domain which can be accessed for free.

To quantify the urban forest structure and benefits, specific data is collected for each tree. This data includes: location, land use, species, diameter at 4.5 ft, recommended maintenance, priority of that maintenance, leaf health, and wood condition. Additionally, signs and symptoms of EAB were noted for all ash trees. The signs and symptoms noted were canopy dieback, epicormic shoots, bark splitting, D-shaped borer exit holes, and wood pecker damage.

Inventory Results

The data collected for the 199 city trees was entered into the USDA Forest service program Street Tree Resource Analysis Tool for Urban forestry Management (STRATUM), part of the I-Tree suite. The following are results from the I-Tree STRATUM analysis.

Annual Benefits

Annual Energy Benefits

Trees conserve energy by shading buildings and blocking winds. Springville's trees reduce energy related costs by approximately $6,583 annually (Appendix A, Table 1). These savings are both in Electricity (31.3 MWh) and in Natural Gas (4,296.2 Therms).

Annual Stormwater Benefits

Springville's trees intercept about 309,850 gallons of rainfall or snow melt a year (Appendix A, Table 2). This interception provides $8,398 of benefits to the city.

Annual Air Quality Benefits

Air quality is a persistent public health issue in Iowa. The urban forest improves air quality by removing pollutants, lowering air temperature, and reducing energy consumption, which in turn reduces emissions from power plants, and emitting volatile organic matter (ozone). In Springville, it is estimated that trees remove 384.2 lbs of air pollution (ozone (O_3), particulate matter less than 10 microns (PM10), carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2)) per year with a net value of $1,076 (Appendix A, Table 3).

Annual Carbon Benefits

Carbon sequestration and storage reduce the amount of carbon in the atmosphere, mitigating climate change. In Springville, trees sequester about 64,841 lbs of carbon a year with an associated value of $842 (Appendix A, Table 5). In addition, the trees store 1,044,944 lbs of carbon, with a yearly benefit of $7,837 (Appendix A, Table 4).

Annual Aesthetics Benefits

Social benefits of trees are hard to capture. The analysis does have a calculation for this area that includes: aesthetic value, property values, lowered rates of mental illness and crime, city livability and much more. Springville receives $6,676 in annual social benefits from trees (Appendix A, Table 6).

Financial Summary of all Benefits

According to the USDA Forest Service i-Tree STRATUM analysis, Springville's trees provide $23,574 of benefits annually. Benefits of individual trees vary based on size, species, health and location, but on average each of the 199 trees in Springville provide approximately $118 annually (Appendix A, Table 7).

Forest Structure

Species Distribution

Springville has 30 different tree species along city streets and parks (Appendix A, Figure 1). The distribution of trees by genus is as follows:

Maple	49	25% (Sugar, Norway, Boxelder, Red, and Silver)
Oak	31	16% (Bur, Swamp White, Red, and Pin)
Ash	18	9% (Green & White)
Hickory	13	7%
Eastern Redcedar	11	6%
Pine	11	6% (Austrian, Red, and Scotch)
Apple (crabapple)	11	6%
Black Walnut	10	5%
Hackberry	9	4% Species 3% or less are below
Willow		
River Birch		
Honeylocust		
American Basswood (Linden)		
Elm (Siberian and elm species)		
Aspen		
Kentucky Coffeetree		
Eastern Redbud		
Northern white Cedar (Arborvitae)		

Size Class

Almost half of Springville's public trees (49.7 %) are 12 inches and under in diameter at 4.5 ft (Appendix A, Figure 2). This data indicates that there are a significant amount of smaller and most likely younger trees in the public tree population. The remaining portion of the trees (34.7%) are between 12 and 24 inches, and (15.6%) are 24 inches and greater. In the fall of 2010 there were a significant amount of new trees planted, and the inventory indicates 23% of the trees surveyed were 3 inches in diameter or less.

Condition: Wood and Foliage

Both wood condition and leaf condition are good indicators of the overall health of the urban forest. The foliage condition results for Springville indicate that 94% of the trees are in good health, with only 3% of the foliage identified as dead or dying (Appendix A, Figure 3 & Appendix B, Figure 3). Similarly, 66% of Springville's trees are in good health for wood condition (Appendix A, Figure 4 & Appendix B, Figure 3). Wood condition that is in poor health is about 7% of the population.

Management Needs

- In (Appendix B, Figure 4) the specific management needs of the inventoried trees are identified. Management practices needed include crown cleaning, crown raising, crown reduction, and some potential removal. Twenty-two percent of the inventoried trees are in need of some type of management, the majority of the management is pruning such as raising above streets and sidewalks for safety or cleaning out dead material. City ordinance 151.08 Trimming Trees assigns the responsibility to trim over the street and the sidewalk to the city. There are 7 trees on the map listed for possible removal that should be evaluated as soon as possible to decide if they need to be removed and when. All of the proposed removal trees are on Springville park property. *City ownership of the trees recommended for removal should be verified prior to any removal*

Land Use and Location

The majority of Springville's city trees are in the parks (80%), and the remaining trees (~20%) are in areas of single-family residential homes and are planted within planting strips. (Appendix A, Figure 5 & Figure 6).

Recommendations

Risk Management

Hazardous trees can be a significant threat to both people and property. Trees that are dead or dying, or that have large issues such as trunk cracks should be removed. Broken branches and branches that interfere with motorist's vision of pedestrians, vehicles, traffic signs and signals, etc should be removed.

Hazardous trees

Springville has 7 trees that need to be considered for removal as soon as possible. These trees can be seen on the Location of Trees with Recommended Maintenance map (Appendix B, Figure 5). There are also 13 trees outlined in a 10/19/2010 letter to the Mayor from the Iowa DNR District Forester that need to be inspected to see what action (s) is/are needed. Below is the list of those 13 trees that need to be looked at:

- 404 5th Avenue there is a sugar maple with multiple 4 inch dead limbs over the sidewalk and street that need to be removed.
- 502 5th Avenue large silver maple with some hollow limbs adjacent to power lines needs closer inspection.
- 506 5th Avenue large sugar maple with multiple dead limbs greater than 2 inches in diameter over sidewalk that need to be removed. Also, tree is hollow and needs closer inspection.
- 508 5th Avenue large sugar maple has very large damaged limb over sidewalk, and tree has poor structure where two large branches come together that needs closer inspection.
- Between 205 & 209 5th Street large sugar maple with decay hole where branches come together needs closer inspection.
- 203 5th Street large Siberian elm has 5 to 7 inch large broken branch hanging in the top that needs removal.

Lower Butler Park

- Forked black walnut ~15 feet north of small parking area has poor structure/decay where two stems come together a few feet from the ground. Tree needs closer inspection.
- Large willow limb/stem with many dead spots is wedged in a nearby ash and hanging directly over the park grill. This stem needs to be removed.

Butler Park

- Large bur oak east of the new shelter ~15 feet with multiple 4 inch dead branches over the sidewalk that need to be removed.
- Large bur oak 15 to 20 feet north of new shelter with a couple 2 to 4 inch dead branches over sidewalk that need to be removed.
- Large bur oak 30 to 35 feet north of new shelter with multiple dead branches over sidewalk that need to be removed.
- Large sugar maple 20 feet west of large rock has dead limbs over picnic table that need to be removed.
- A number of large bur oak trees along the power line on the north side of the park have 4 to 6 inch dead limbs that need removal.

Example of dead branches and a hollow branch

Pruning Cycle

Proper pruning can extend the life and good health of trees, as well as reduce public safety issues. In the Management Needs section of the Findings there are four main maintenance issues to be addressed: routine pruning, crown cleaning, crown raising, and crown reduction. Crown cleaning removes dead, diseased, and damaged limbs. Crown raising is the removal of lower branches that are 2 inches in diameter or larger in the case of providing clearance for pedestrians or vehicles. Crown reduction is removing individual limbs from structures or utility wires. It is recommended that all trees be pruned on a routine schedule every five to seven years, and since there have been a significant number of new trees planted in some of the parks it is critical over the next 5 to 15 years that good maintenance pruning is used to develop quality trees. Please refer to the six year maintenance plan for further information.

Planting

During this process I was never able to obtain budget information for Springville. If some trees are removed in the next few years consider replacing these trees at a minimum. It is recommended to plant 1 to 2 trees for every tree removed, since survival rates will not be 100%. Please refer to the six year maintenance plan at the end of this section. It is not essential that the new trees be planted in the same location of the trees being removed. However, maintaining the same number of trees helps ensure continuation of the benefits of the existing forest in Springville.

It is important to plant a diverse mix of species in the urban forest to maintain canopy health, since most insects and diseases target a genus (ash) or species (green ash) of trees. Current diversity recommendations advise that a genus (i.e. maple, oak) not make up more than 15 to 20% of the urban forest and a single species (i.e. silver maple, sugar maple, white oak, bur oak) not make up more than 10% of the total urban forest. Presently, the forest has 25% maple and for this reason consider not planting maple on public property until this percentage becomes lower. Also, ash trees have not been recommended since 2002, due to the threat of EAB. Currently, 16% of the public trees are oak and half of these trees are bur oak. At this point in time avoid planting more bur oak, but continue planting a mix of other oak species such as swamp white, red, black, chinkapin, and white.

Species to avoid because they can be public nuisances include: cottonwood, poplar, boxelder, Chinese elm, evergreens as street trees, willow or black walnut. In the current Tree Ordinance 151.07 there is a list of recommended trees to plant within the community, and ash and 4 different maples are still on the list. The city should consider revising this list very soon. Instead of revising the recommended tree list I would recommend that list be removed from the tree ordinance completely. Tree lists can become outdated quickly because of new health threats developing in the area, so it can be difficult to keep it updated. Manage community tree selection through the current permit system (151.01). As part of the permit application, require the applicant to list the tree species they are proposing to plant, and then have a city representative determine if the proposed tree species is appropriate to plant.

Continual Monitoring

Due to the threat of EAB, it is important to continuously check the health of ash trees. It is recommended that ash trees be checked with a visual survey every year for tree death and for the following signs and symptoms: canopy dieback, epicormic shoots, bark splitting, D-shaped borer exit holes, and wood pecker damage. With many new potential tree health threats on the horizon attempt to monitor the health of all city owned trees on a regular basis.

Six Year Maintenance Plan

I was not able to obtain a current tree budget from the community, so the maintenance plan below are general guidelines to consider depending on available funds.

Year 1

Removal: 7 trees (@ estimate $200 to $1,000/tree) with the highest concern that have been identified
Planting and Replacement: 10 to 15 trees (@ $50 to $150/tree) planted in open locations
Visual Survey for signs and symptoms of EAB
Routine trimming: Prune a portion of park and street trees (@$20 to $200/tree)

Year 2

Removal: Removal of any new critical concern trees and ash in poor health as budget permits
Planting and Replacement: 5 to 15 trees planted in open locations
Visual Survey for signs and symptoms of EAB

Year 3

Removal: Removal of any new critical concern trees and ash in poor health as budget permits
Planting and Replacement: 5 to 15 trees planted in open locations
Routine trimming: Prune a portion of park and street trees (@$20 to $200/tree)
Visual Survey for signs and symptoms of EAB

Year 4

Removal: Removal of any new critical concern trees and ash in poor health as budget permits
Planting and Replacement: 5 to 15 trees planted in open locations
Visual Survey for signs and symptoms of EAB

Year 5

Removal: Removal of any new critical concern trees and ash in poor health as budget permits
Routine trimming: Prune a portion of park and street trees (@$20 to $200/tree)
Visual Survey for signs and symptoms of EAB

Year 6

Removal: Removal of any new critical concern trees and ash in poor health as budget permits
Planting and Replacement: 5 to 15 trees planted in open locations
Visual Survey for signs and symptoms of EAB

EAB could potentially kill all ash trees within 4 to 10 years of its arrival to Springville. If removal costs range from $600 to $1,000 per tree, total estimated costs to remove all 18 ash in the community would be between $10,800 and $18,000.

Emerald Ash Borer Plan

Ash Tree Removal

There is only one ash tree that currently has some crown dieback, but there are no ash that need to be consider for removal at this point. Any tree removal that occurs will be prioritized with hazardous, dead, and dying trees to be removed first. *City ownership of the tree recommended for removal should be verified prior to any removal*

EAB Quarantines

EAB is an extremely destructive plant pest and it is responsible for the death and decline of over 25 million ash trees. Ash in both forested and urban settings constitute a significant portion of the canopy cover in the United States. Current tools to detect, control, suppress and eradicate this pest are not as robust as the USDA would desire. In order to stay ahead of this hard to detect beetle, the USDA is attempting to contain the beetle before it spreads beyond its known positions by regulating articles.

A regulated article under the USDA's quarantine includes any of the following items:
- emerald ash borer
- firewood of all hardwood species (for example ash, oak, maple and hickory)
- nursery stock and green lumber of ash
- any other ash material, whether living, dead, cut or fallen, including logs, stumps, roots, branches, as well as composted and not composted chips of the genus ash (Mountain ash is not included) In addition, any other article, product or means of conveyance not listed above may be designated as a regulated article if a USDA inspector determines that it presents a risk of spreading EAB once a quarantine is in effect for your county.

Wood Disposal

A very important aspect of planning is determining how wood infested with EAB will be handled, keeping in mind that quarantines will restrict its movement. Consider who will cut and haul the dead and dying trees? Is there an accessible, secured site big enough to store and sort the ash trees and the associated brush and chips? How will wood be disposed of or utilized? Do you have equipment capable of handling the amount and size of ash trees your tree inventory has identified? Once your county is under quarantine for EAB, contact USDA-APHIS-PPQ at 515-251-4083 or visit the website http://www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/regulatory.shtml. Wood waste can be disposed of as you normally would if your county is not part of a quarantine.

Canopy Replacement

As budget permits, all removed ash trees should be replaced. New plantings will be a diverse mix and will not include ash, maple at this time, cottonwood, poplar, bur oak, box elder, Chinese elm, evergreens along the streets, willow or black walnut.

Postponed Work

While finances, staffing and equipment are focused on the management of ash, usual services may be delayed. Tree removal requests on genus other than ash will be prioritized by hazardous or emergency situations only.

Monitoring

It is recommended that ash trees be checked with a visual survey every year for tree death and for the following signs and symptoms: canopy dieback, epicormic shoots, bark splitting, D-shaped borer exit holes, and wood pecker damage.

Private Ash Trees

It is strongly recommended that private property owners start removing ash trees on their property upon arrival of EAB. City Code 151.09 states "**DISEASE CONTROL.** Any dead, diseased or damaged tree or shrub which may harbor serious insect or disease pests or disease injurious to other trees is hereby declared to be a nuisance.

151.10 INSPECTION AND REMOVAL.

The Council shall inspect or cause to be inspected any trees or shrubs in the City reported or suspected to be dead, diseased or damaged, and such trees and shrubs shall be subject to the following:

2. Private Property. If it is determined with reasonable certainty that any such condition exists on private property and that danger to other trees or to adjoining property or passing motorists or pedestrians is imminent, the Council shall notify by certified mail the owner, occupant or person in charge of such property to correct such condition by treatment or removal within fourteen (14) days of said notification. If such owner, occupant or person in charge of said property fails to comply within fourteen (14) days of receipt of notice, the Council may cause the condition to be corrected and the cost assessed against the property. "

Budget

EAB could potentially kill all ash trees within 4 to 10 years of its arrival to Springville. If removal costs range from $600 to $1,000 per tree, total estimated costs to remove all 18 ash in the community would be between $10,800 and $18,000.

Works Cited

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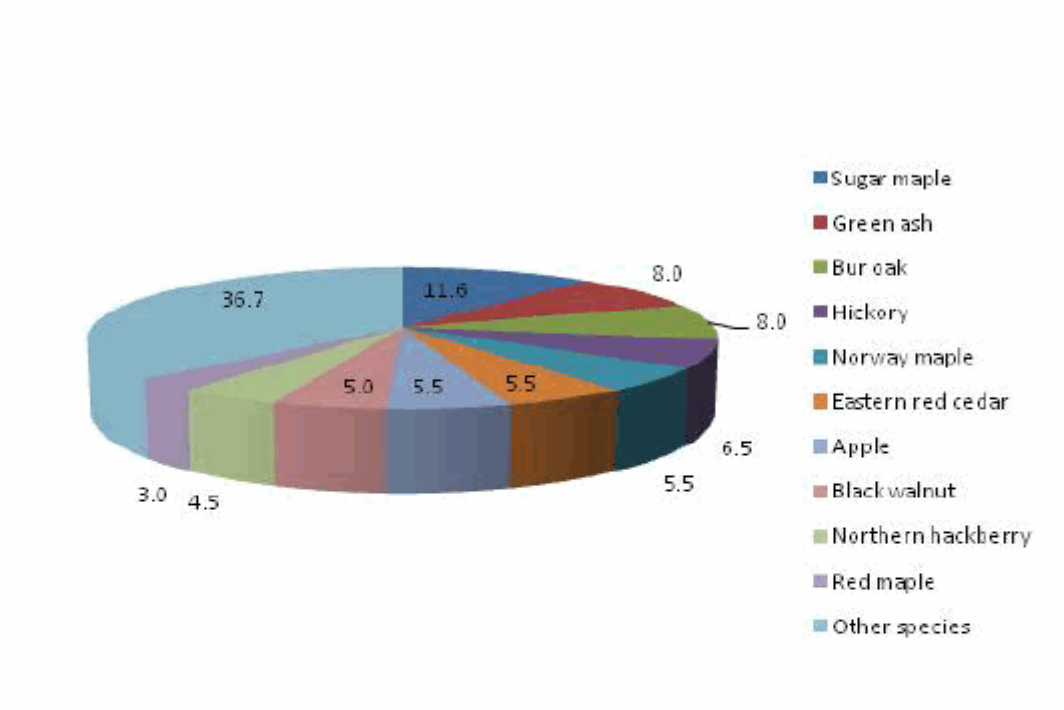
All trees inventoried during fall of 2010

Appendix A: i-Tree Data

Species Distribution of Public Trees (%)

12/12/2011

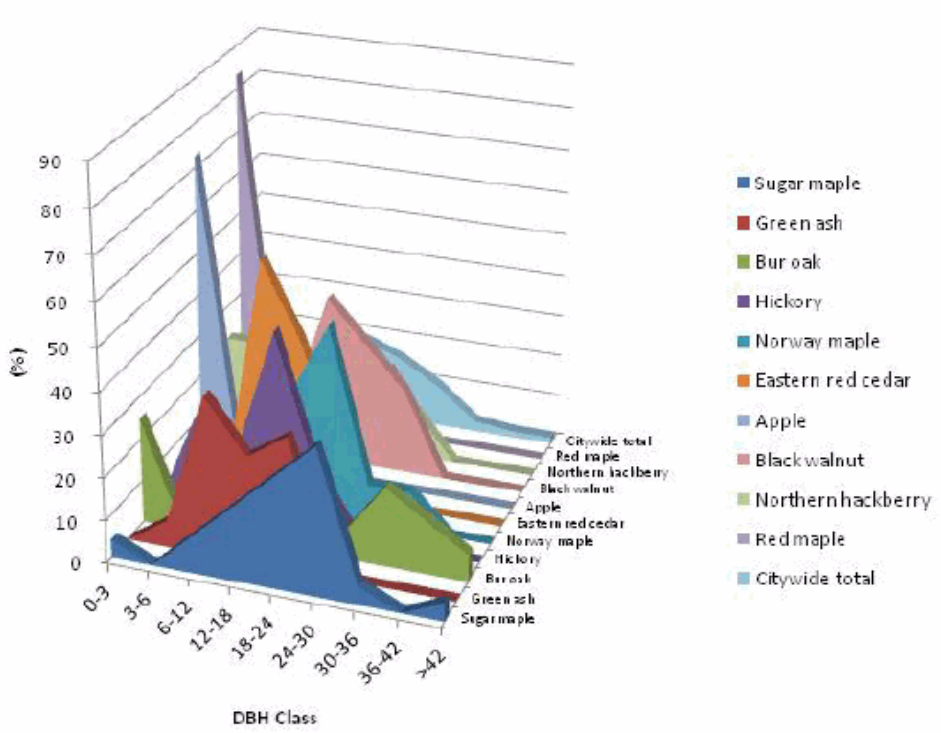


Species	Percent
Sugar maple	11.6
Green ash	8.0
Bur oak	8.0
Hickory	6.5
Norway maple	5.5
Eastern red cedar	5.5
Apple	5.5
Black walnut	5.0
Northern hackberry	4.5
Red maple	3.0
Other species	36.7
Total	100.0

Figure 1: Species Distribution

Relative Age Distribution of Top 10 Public Tree Species (%)

12/12/2011



	DBH class (in)								
Species	0-3	3-6	6-12	12-18	18-24	24-30	30-36	36-42	>42
Sugar maple	4.3	0.0	8.7	17.4	26.1	34.8	4.3	0.0	4.3
Green ash	0.0	6.3	37.5	25.0	31.3	0.0	0.0	0.0	0.0
Bur oak	25.0	0.0	0.0	12.5	18.8	6.3	18.8	12.5	6.3
Hickory	0.0	23.1	15.4	46.2	15.4	0.0	0.0	0.0	0.0
Norway maple	0.0	0.0	9.1	27.3	45.5	9.1	9.1	0.0	0.0
Eastern red cedar	0.0	0.0	54.5	36.4	9.1	0.0	0.0	0.0	0.0
Apple	72.7	0.0	9.1	18.2	0.0	0.0	0.0	0.0	0.0
Black walnut	0.0	0.0	10.0	40.0	30.0	20.0	0.0	0.0	0.0
Northern hackberry	22.2	22.2	22.2	0.0	22.2	11.1	0.0	0.0	0.0
Red maple	83.3	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0
Citywide total	22.6	4.5	22.6	19.1	15.6	10.1	2.5	1.5	1.5

Figure 2: Relative Age Class

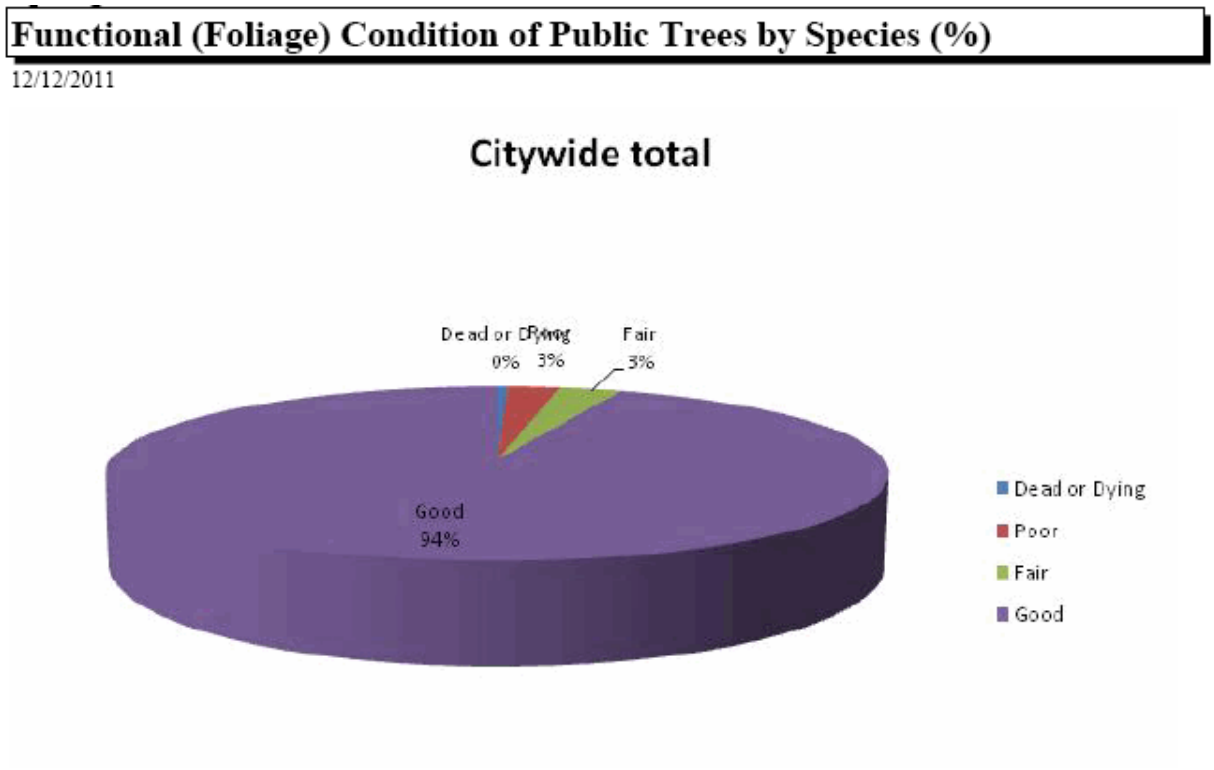


Figure 3: Foliage Condition

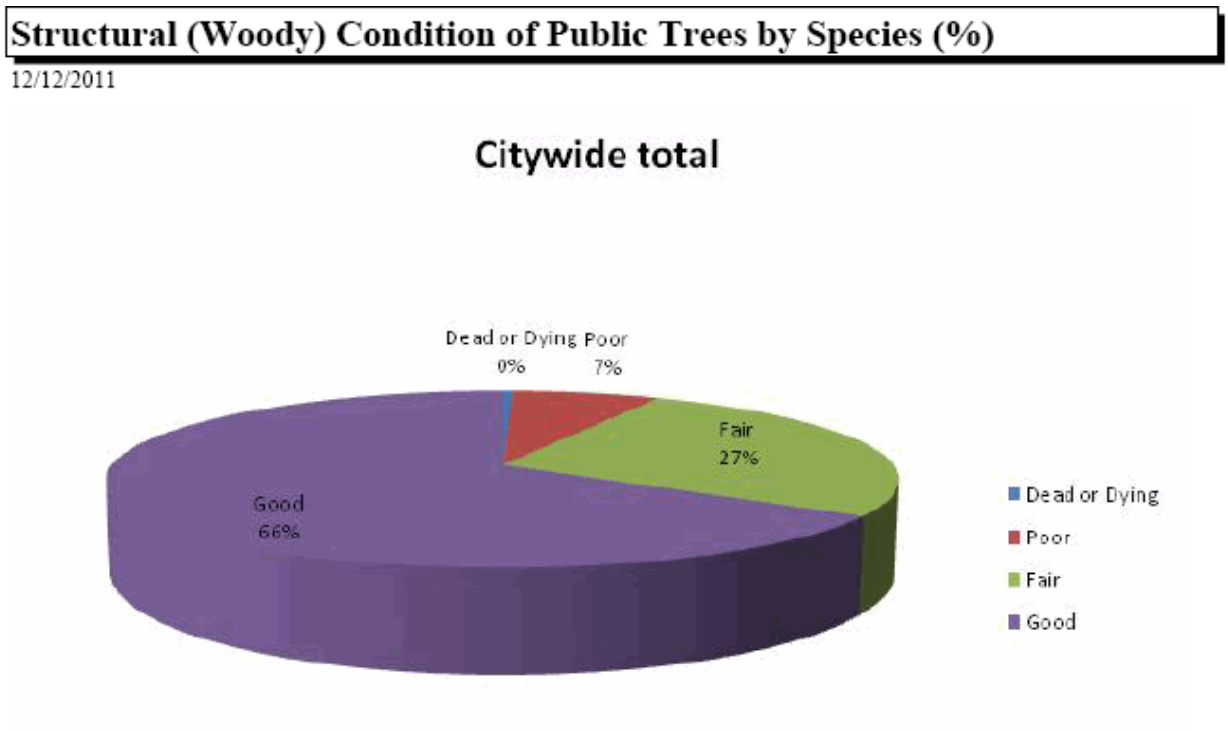
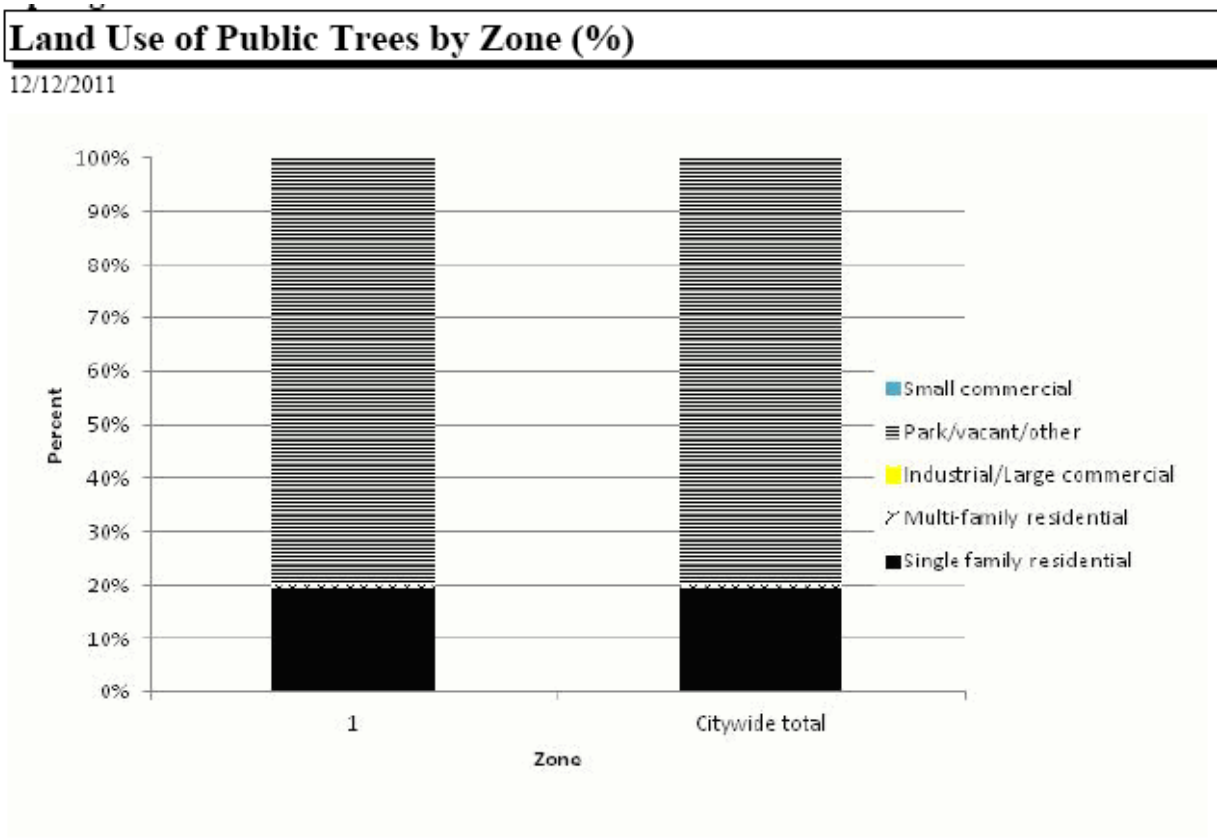


Figure 4: Wood Condition

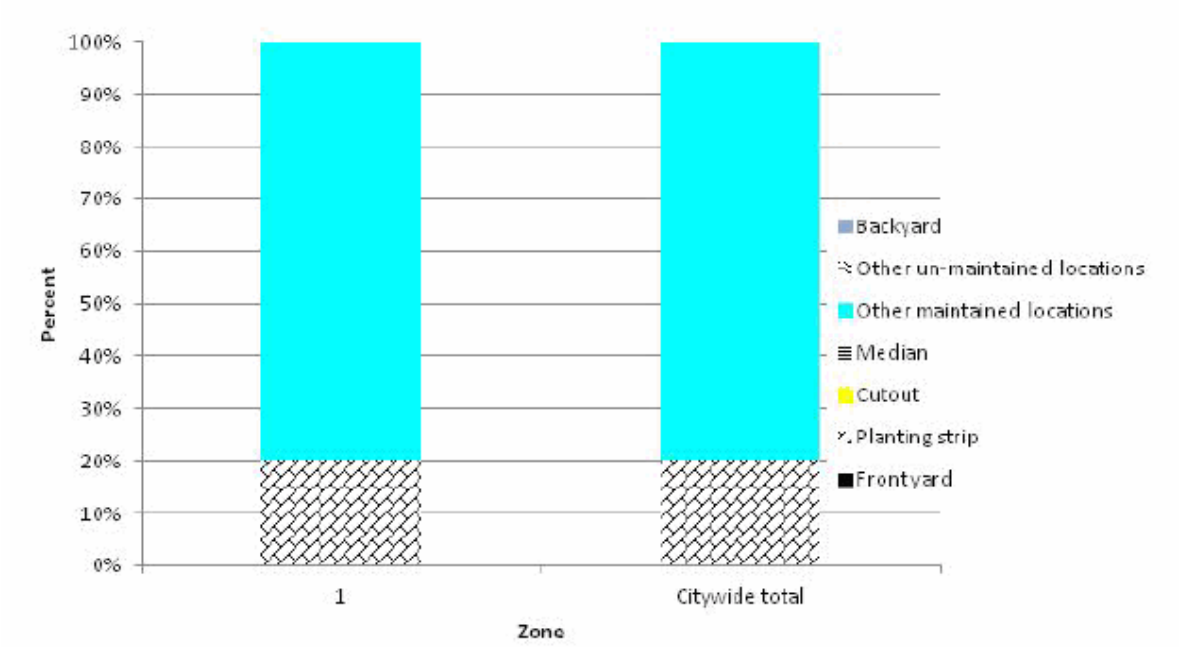


Zone	Single family residential	Multi-family residential	Industrial/ Large commercial	Park/vacant/ other	Small commercial
1	19.6	0.5	0.0	79.9	0.0
Citywide total	19.6	0.5	0.0	79.9	0.0

Figure 5: Land Use of city/park trees

Location of Public Trees by Zone (%)

12/12/2011



Zone	Front yard	Planting strip	Cutout	Median	Other maintained locations	Other un-maintained locations	Backyard
1	0.5	19.6	0.0	0.0	79.9	0.0	0.0
Citywide total	0.5	19.6	0.0	0.0	79.9	0.0	0.0

Figure 6: Location of city/park trees

Appendix B: ArcGIS Mapping

Figure 1: Location of Ash Trees

Figure 2: Location of EAB symptoms

Figure 3: Location of Poor Condition Trees

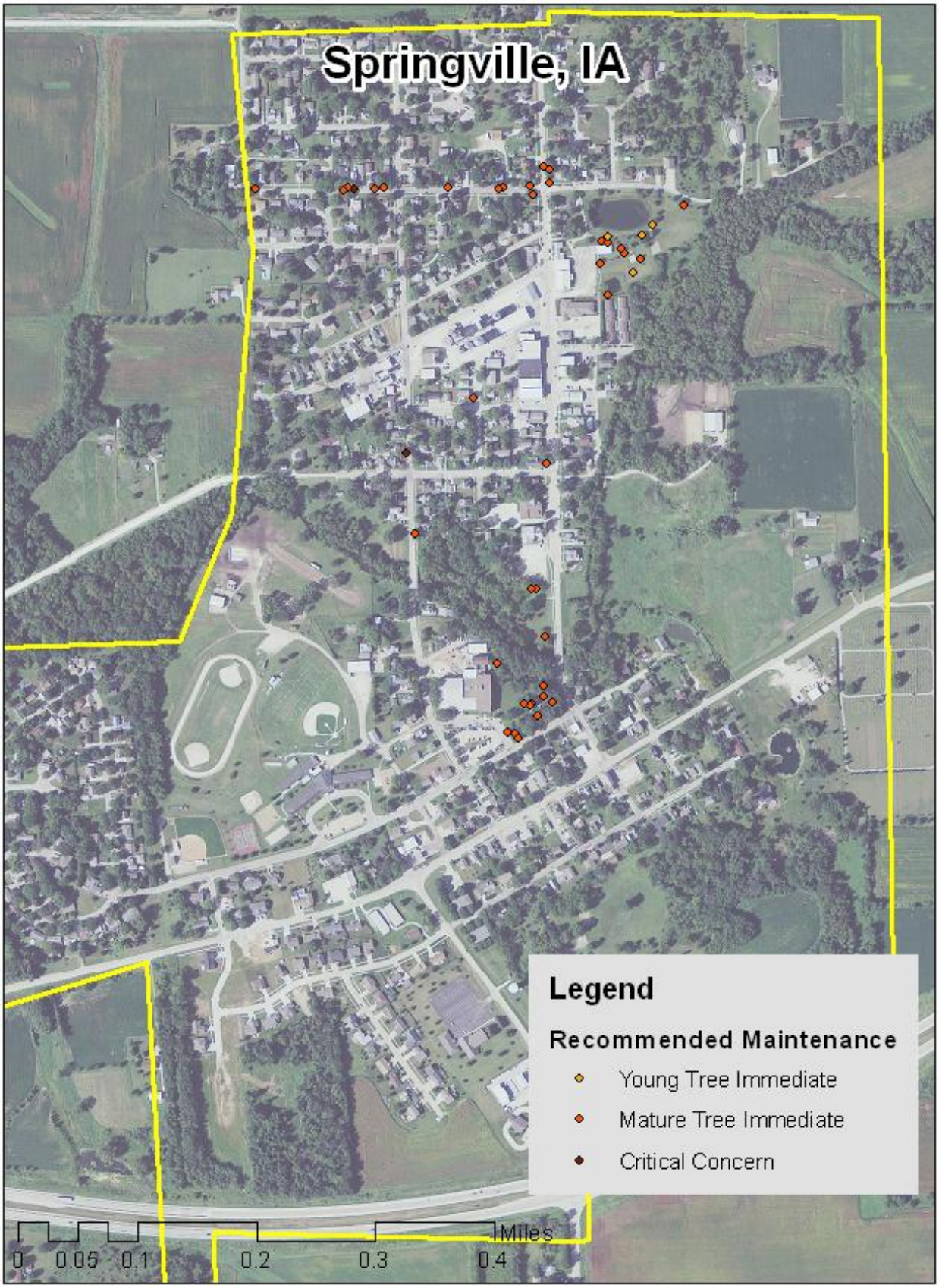


Figure 4: Location of Trees with Recommended Maintenance

Figure 5: Maintenance Tasks *City ownership of the trees recommended for removal should be verified prior to any removal*

Appendix C: *CITY* Tree Ordinances

CHAPTER 151 TREES

151.01 PERMIT REQUIRED. Permits are required for all plantings of trees in the parkway of any street or road. Permits may be obtained from any member of the Park Commission at no cost. Unauthorized and nonconforming plantings will be removed by the City at the owner's expense.

151.02 LOCATION. Trees shall not be planted less than four (4) feet from the curb or where there is less than eighty (80) square feet of exposed soil.

151.03 INTERSECTIONS. Trees shall not be planted closer than twenty-five (25) feet to the intersection of street right-of-way lines at corners and not within ten (10) feet of driveways.

151.04 UNDERGROUND UTILITIES. Trees shall not be planted directly over any water, sewer or storm sewer line or within ten (10) feet of any underground lateral utility service or fire hydrant.

151.05 OVERHEAD UTILITY LINES. Trees that mature at a height of over twenty-five (25) feet shall not be planted under any overhead power, telephone or telegraph lines. Suggested ornamental trees which do not mature over 25 feet in height are flowering crab, red bud and purpose leaf plum.

151.06 HEIGHT LIMITS. Trees other than those controlled by Section 151.05 shall be planted at least twenty (20) feet from the area directly underneath overhead wires and shall not have mature height of over sixty (60) feet or a mature spread of over forty (40) feet.

151.07 RECOMMENDED TREES. Recommended trees include the following:

Tree	**Spacing**	**Height**	**Spread**
Norway Maple	40 feet	60 feet	30 feet
Ginkgo	40 feet	60 feet	40 feet
Schwedler Maple	40 feet	60 feet	30 feet
Littleleaf Linden	40 feet	50 feet	35 feet
Crimson King Maple	40 feet	60 feet	30 feet
Columnar Norway Maple	30 feet	50 feet	30 feet
Pyramidal American Linden	40 feet	50 feet	30 feet
Shademaster Locust	40 feet	50 feet	40 feet
Seedless Green Ash	40 feet	60 feet	30 feet

151.08 TRIMMING TREES. The City is responsible for trimming trees over sidewalks and streets.

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151.09 DISEASE CONTROL. Any dead, diseased or damaged tree or shrub which may harbor serious insect or disease pests or disease injurious to other trees is hereby declared to be a nuisance.

151.10 INSPECTION AND REMOVAL. The Council shall inspect or cause to be inspected any trees or shrubs in the City reported or suspected to be dead, diseased or damaged, and such trees and shrubs shall be subject to the following:

1. City Property. If it is determined that any such condition exists on any public property, including the strip between the curb and the lot line of private property, the Council may cause such condition to be corrected by treatment or removal. The Council may also order the removal of any trees on the streets of the City which interfere with the making of improvements or with travel thereon.
2. Private Property. If it is determined with reasonable certainty that any such condition exists on private property and that danger to other trees or to adjoining property or passing motorists or pedestrians is imminent, the Council shall notify by certified mail the owner, occupant or person in charge of such property to correct such condition by treatment or removal within fourteen (14) days of said notification. If such owner, occupant, or person in charge of said property fails to comply within 14 days of receipt of notice, the Council may cause the condition to be corrected and the cost assessed against the property. *(Code of Iowa, Sec. 364.12[3b & h])*

The State of Iowa is an Equal Opportunity Employer and provider of ADA services.

Federal law prohibits employment discrimination on the basis of race, color, age, religion, national origin, sex or disability. State law prohibits employment discrimination on the basis of race, color, creed, age, sex, sexual orientation, gender identity, national origin, religion, pregnancy, or disability. State law also prohibits public accommodation (such as access to services or physical facilities) discrimination on the basis of race, color, creed, religion, sex, sexual orientation, gender identity, religion, national origin, or disability. If you believe you have been discriminated against in any program, activity or facility as described above, or if you desire further information, please contact the Iowa Civil Rights Commission, 1-800-457-4416, or write to the Iowa Department of Natural Resources, Wallace State Office Bldg., 502 E. 9th St., Des Moines, IA 50319.

If you need accommodations because of disability to access the services of this Agency, please contact Director Richard Leopold at 515-281-5918.