

Somerset Tree Inventory and Assessment

Preliminary Report

Prepared by Lisa Harmison, The Ames Gardener, August 15, 2007

Disclosure statement

I have used my knowledge, education, and experience to visually inspect the trees in the described area, to recommend measures to enhance their beauty and health, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations put forth in this report or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments cannot be guaranteed.

All trees represent a certain inherent degree of risk and this evaluation does not preclude all the possibilities of failure.

Certain trees are borderline cases as to whether they should remain or be removed. Also conditions change, and a tree may need further monitoring in the future to determine its health and structure. Trees can be managed, but they cannot be controlled, and to live near a tree is to accept some degree of risk. The only way to eliminate all risks is to remove all trees.

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I was employed by the Somerset Property Owners Association Board of Directors to identify, map, and assess the health and damage of all existing park and street trees. The primary purpose of this survey is to establish a baseline inventory and general health assessment of the trees. Replacement of declining trees, future tree care and planting plans can be developed based on the information presented in this report. This report will be updated after re-inspection when the tree canopy is bare, to be completed in the early spring of 2008.

Inspection method

This inspection used the 360 degree walk by method of visual inspection of the above ground portions of the trees. Neither root system assessments nor diagnostic tests were performed. Data was collected June 6, 2007 through July 20, 2007; digital photographs of each tree were taken. Images include one of the entire tree, one of the base of the trunk, and additional images of any damaged areas on the trunk or potential areas for future problems (i.e. cankers and pruning wounds). Information collected consisted of

- the location of each tree,
- species,
- estimated height,
- site problems,
- stress indicators,
- type and presence of mulch,
- planting depth, and
- additional comments noted at the time of inspection, including specific species and cultivar.

Stress indicators include

- abiotic factors (i.e. mower damage),
- biotic (i.e. insect or disease symptoms), and
- environmental stresses (i.e. leaf scorch).

Ratings for stress indicators that affect the health of the tree were given on a scale from 1 to 5 with 5 being most severe.

Trees will be inspected again in the winter when the leaves have fallen. This will provide a better opportunity to view the branching structure of the tree. Trees along the walking trail southwest of Lake Somerset will be more closely inspected when the vegetation growing around them has gone dormant. Annual updates to the report should be made to include new plantings and changes in the health status of the trees. Trees in question regarding the City Planting Guidelines will be measured for conformity (see section on City Code Violations). The information gathered during these inspections will change the rankings of the trees in Appendix E.

There are 804 trees included in this assessment. Street trees on

- Somerset Drive,
- Kent Avenue between 24th and Kingston,
- Stange Parkway between 24th and Kingston including the Stange median,
- Kingston Drive,
- Clayton Drive,
- Aspen Road,
- Bristol Drive,
- Camden Drive,
- Sherwood Avenue,
- Bradford Drive,
- Buckingham Court,
- Eaton Avenue,
- Hampton Street,
- Northridge Lane,
- Northridge Parkway and
- park trees in The Crescent Lawn, The Grove, The Stange Crescent, Stange Road entry sign at 24th Street, the walking trail between Aspen and Bristol, and the walking trail around the southwestern edge of Lake Somerset (both sides) are included.

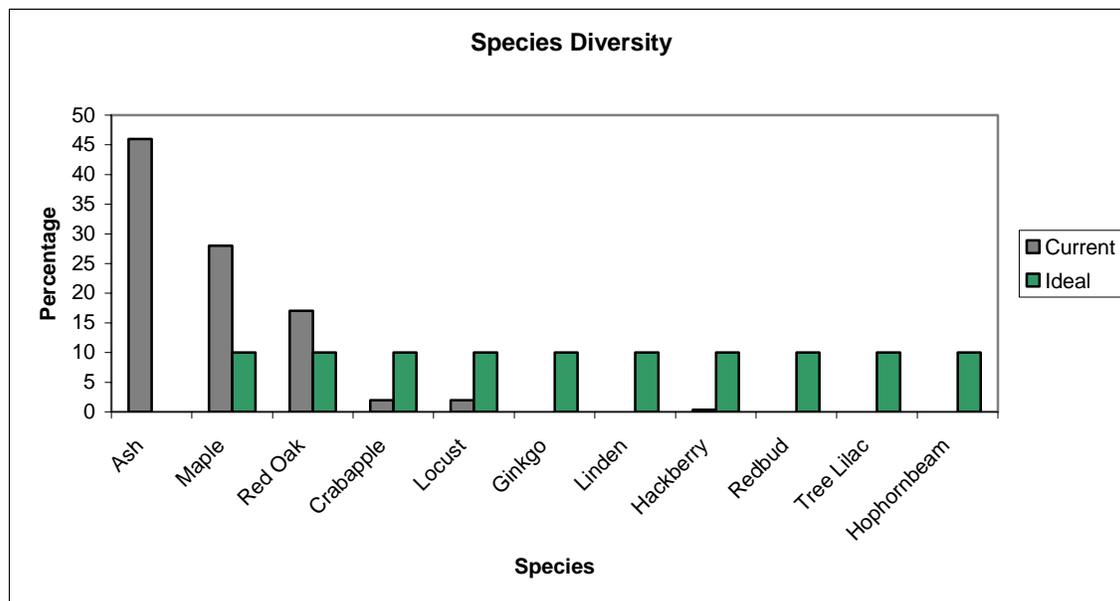
The exceptions are the large maple trees in The Grove. These trees are not included in this inventory as they are too large for me to assess properly.

The oldest trees are estimated to be no more than 10 to 15 years old. The development was built in the mid to late 1990's. New trees have been planted within the last two years.

Problem Areas and Recommendations

Lack of diversity

As the graph below shows, Somerset has a large fraction of its trees in just three species, and even more troubling is that nearly half of all trees in the subdivision are Ash—a species that is currently threatened by the spread of the devastating emerald ash borer.



Many of us can recall the terrible effect Dutch Elm Disease had on the urban forest during the 1960s and 70s. One disease destroyed entire neighborhoods worth of trees. Plant diseases and pests often affect only one species of plant (Harris, 2004). As such, it is easy to see that the fewer of any one species your urban forest contains, the less your risk of losing a large fraction to one hazard. An old rule of thumb for tree species diversity is to have no more than 10% of one species, 20% of one genus, and 30% of one family (Glavin, 1999, Iles, 1998).

Emerald ash borer (EAB) is a nonnative insect that is spreading across the country. Millions of ash trees have been lost to this insect in Michigan, parts of Ohio and Ontario, Canada. EAB has also been found in parts of Illinois, Indiana, Maryland and Virginia. It is just a matter of time before the insect reaches Iowa (Shour, 2006). With nearly half of Somerset's trees being Ashes, EAB presents a serious risk to having a healthy and enjoyable streetscape.

To increase the species diversity, new trees should *not* be ash, maple, or red oak. A list of appropriate alternative tree species recommended by the City is provided later in this report (Appendix B).

A plan for systematic removal and replacement of the ash trees on an annual basis should be developed. The economic and aesthetic impact of the removal of a large

number of ash trees when the emerald ash borer attacks will be greatly reduced with such a plan.

People damage

Just over half of the trees (58%) have trunk damage. Seventeen percent of the trees have mower damage. Weed whackers and vehicle doors also cause trunk damage, as does occasional vandalism. Trunk wounds are an invitation for disease and insect invasions to the tree. They also are weak spots for the stability of the tree, especially if a significant portion of the tree's circumference is damaged (over 40%) (USDA Forest Service).



Stakes with ties and tree wraps left on the trees too long have caused injury to the Somerset trees in two ways. First the ties and wraps impair the growth of the trunk, some even strangle the tree. Second, the wraps rub the bark off the tree and cause a weak spot



that insects can use to enter the trunk.

Insects frequently attack a tree that is already stressed, i.e. wounded by the ties or by a mower. Insects noted in the inventory are ones that cause damage under the bark of the tree, weakening the interior structure and stability. Twenty-nine percent of the trees have evidence of damaging insects through exoskeletons, borer exit holes, and fresh wood shavings at entry holes.

It is important to reduce damage caused by lawn mowers. All trees should be mulched with as big a mulch circle as possible, up to five feet in diameter. Individual home owners need to understand the importance of protecting the trees from damage. Commercial lawn care companies need to be held responsible for mower damage they cause.



Contrary to popular practice, it is not necessary to stake every tree. Wraps and leader ties should be removed at planting time. Trees need staking only when the tree is not strong enough to stand upright or to hold the roots or root ball when the soil is wet. Ties are removed at the end of the first growing season in nearly all cases. Material used to tie the tree should have a broad, smooth contact surface with the trunk. Material also needs to be elastic to minimize trunk abrasion and girdling. Trees grow stronger without staking, or with ties that allow them to bend in the wind (Harris, 2004).

Improper planting and care

Only 23% of trees were planted at the proper depth for a good root system. This is a factor in the overall health of the tree when considering the other stresses the trees' face. Trees planted too deeply or too shallowly have a more difficult time absorbing nutrients and establishing a strong anchor system (USDA Forest Service). The roots are more likely to girdle the trunk. Girdling roots grow in a circle around the trunk of the tree, above or below ground, and can compress and kill the stem tissue. (USDA Forest Service, Harris, 2004) Insufficient watering during the first few years after planting inhibits tree root growth, adding to the trees' inability to grow a healthy root system and canopy (Harris, 2004). Incorrect pruning of some branches, either by improper cutting procedures or timing, have left areas where disease and insects may invade the tree as well as epicormic shoots (commonly called water sprouts or suckers).

Property owners should learn the correct way to plant trees and to water trees during the critical tree establishment period. The initial effort and expense will help maintain the health and vigor of the tree which in turn helps the tree to resist disease, insects, and the environmental stresses it faces. Proper pruning techniques should be taught to any one who may prune the trees. This can be done with a simple flyer or brochure or a 'live demonstration'.



The picture at right shows epicormic shoots have grown around a spot where the tree was pruned improperly. The wound from cutting the removed branch has not callused and stimulated the growth of several epicormic shoots.

Wrong tree for the site

Street trees are exposed to higher soil temperatures, compacted soils, reflected heat from the roads, limited root space, and de-icing salts.

Soil type, water drainage, and wind exposure appear not to have been considered when many of the trees were planted. The evergreens along the walking trail do not tolerate poor drainage very well. Residents in this area note that the area is sometimes

flooded after heavy rains and is slow to drain. The crabapple trees along the southern edge of Lake Somerset are exposed to the wind and are not species that tolerate potentially wet sites one finds along a lake. Oak trees do not tolerate the pH of clay soils, hence the chlorosis (yellow leaves) found on several of the red oak trees along Stange.

The trees planted in the sidewalk planting pits have the same stresses as the trees planted in the parking strips, but at a higher degree. The root zone area is considerably smaller; the soil is of poor quality and does not drain well. Some have no mulch. Some of the trees are planted at incorrect depths and the pits have differing soil depths. The concrete surroundings decrease the amount of rainfall that reaches the root zone. There may also be underground utilities limiting the root zone. Some pits have signs and outlets in them. The iron grates make tending to the soil surface difficult and will potentially restrict the growth of the tree and require premature removal or removal of the iron grate



The mature size and spread of the trees planted in the sidewalk pits in the commercial area was not considered as several of the trees will interfere with the building awnings and signs. Several trees also block or will block street signs and street lights in the residential areas as well as driveways and mailboxes. The acorns and ash and maple seeds will drop onto the sidewalks and streets of some relatively high traffic (vehicle and pedestrian) areas.



Parking strips and sidewalk pits have a restricted area for root growth for large trees. Restricted root growth also decreases the stability of the tree. If a tree in these tight spaces reaches mature size, sidewalks and driveways may be disrupted by the large tree roots.

Site considerations, natural and manmade, must be taken into account for new tree selection. Mature size of the tree and

species characteristics need to be considered when planting new trees. Existing trees need to be monitored annually for signs of further decline. Many of the trees also violate City Code; see City Code Violations section.

Mulch

Most of the trees surveyed had some type of mulch. Most of the mulch was wood chips. There were some mulched with stone and a few with rubber tree rings. The wood mulch tended to be a little too deep and too close to the tree trunk. Mulch that is too deep blocks oxygen from the soil, tends to stay wet longer, and encourages the tree to grow shallow roots. Mulch too close to the tree trunk keeps the trunk moist. This moisture interferes with the exchange of oxygen and carbon dioxide and also creates a favorable environment for plant pathogens and insects. (Herms, 2001)



The ideal size of a mulch circle is slightly larger than the drip line (edge of the canopy). Since mulch provides a ‘no mower zone’ it reduces the chance of the trunk being damaged by a lawn mower. The bigger the circle, the better the chances are of reducing mower damage. The mulch should be kept six inches away from the trunk. The desired effect is to make a mulch doughnut that is about three inches deep.

Any type of mulch is better than no mulch. Organic mulch such as wood chips is best. The organic material will add to the soil structure and fertility as it decays. The rubber mulch rings will need periodic checking to make sure they are not obstructing the growth of the trunk.

Several of the trees with the wood chip mulch need to have the mulch spread away from the trunk of the tree. Some trees also need to have the thick, volcano like mulch pile spread out to three inches deep. This can be done at any time of the year.

City Code violations

Some trees are planted too close to signs, street lights, and intersections. The trees should be no closer to each other or to light poles than the spread of their canopy. For example, ash trees have a spread of 40-50 feet so they should not be closer than 40 feet to another tree or light. Trees should be planted no closer than 10 feet from a driveway. They need to be 30 feet from the corner at intersections (City of Ames). Some trees are planted in areas where the parking strip is not suitable to support the root system of a large tree. City guidelines state that “no tree shall be planted nearer than 2 ½ feet to the curb and sidewalk line and centered in parkings 8 feet and less in width.” Trees are required to have at least nine square feet of ground and “no impervious material placed

nearer than 30 inches to the trunk of the tree” (City of Ames). The city will remove these trees if they pose a traffic hazard. New trees will not be permitted in these areas. See Appendix D for listing of trees that may be in violation of city planting guidelines.

New planting sites will have to be approved by the Department of Public Works. The City has an application process for homeowners who want to plant trees in the parking area. The SPOA (Somerset Property Owners Association) Board should consider working with the developer(s) to help with some of the replacement plantings. The trees and parking areas will be measured more accurately to compare with the City guidelines. It is likely that once certain trees have been removed, the City will not approve replanting in the same location. Planting trees in the homeowner’s yards should be considered.

I have talked briefly with Matt Pepper, Grounds Supervisor in the Operations Division of Public Works for Ames. There have been two complaints recently. One was from the Post Office about trees too close to mail boxes. The second came from the Police Department about the stop sign on Chester at Kent being blocked. Someone ran the stop sign and was ticketed. The trees in question have been pruned to reduce the hazard. I plan to submit a copy of this report to Mr. Pepper once the ‘offending trees’ have been better identified. I think the Somerset Property Owners Association will be able to work positively with the City and, hopefully, the developers to address these code violations.



Picture to the right is of the tree at Chester and Kent before pruning. The stop sign is now more visible to drivers on Chester.

Further recommendations

I recommend that the Somerset Property Owners Association develop a tree management plan. This plan would incorporate a list of trees needing replacement based on the health of the tree, the species and the location. The SPOA Board should set an annual budget for tree care and maintenance, removal, and replacement.

New trees should be of the highest quality affordable to increase the trees’ ability to recover from transplanting and establish themselves relatively quickly. Planting new

trees in the homeowners' yards instead of the parking area will give the tree more root growth space as well as eliminate several of the other planting site problems. However, it would no longer be a 'street tree'. New trees can be planted in the spring (March through mid-May) and in the fall (mid-August through September). Before any trees are removed (other than cutting them at the ground) and before any trees are planted, the person doing the work must call Iowa One Call to have the utilities marked. This is the law.

The SPOA should also consult with a certified arborist to inspect and maintain the mature trees in The Grove park area. These trees are beyond my current equipment and ability to assess.

Data storage and retrieval

As a result of conducting this survey of Somerset's trees, I have developed a comprehensive database of tree location, species, condition and images. While it was not part of the original proposal, I am prepared to work with anyone from SPOA or the City to share the data I have collected. The data is immediately available upon request as an OpenOffice database file, and I can convert it to other formats as required (some additional charges will apply).

Summation

This report should provide a starting point of discussion and action for the Somerset Property Owners Association to implement a tree risk management plan for the park and street trees. This assessment is the first step. A review of current management practices, fiscal and human resources for managing trees will help to identify what Somerset has and program goals. Then a strategy to reduce risk and increase health can be developed. The end result will aide in growing healthy street and park trees that add to the value of the neighborhood.

A final report of the winter assessment and maps of the location of the trees will be completed and provided to the Somerset Property Owners Association in 2008.

Further questions, comments, or suggestions can be made to Lisa Harmison, The Ames Gardener, 515-231-5926, lisa@amesgardener.com.

Appendix A: Additional Information

Summary of Major Stress Factors

Stress Factor	Number of Trees	% of Trees
Trunk damage	466	58
Insect damage	236	29
Still staked, tied, or wrapped	187	23
Identifiable lawn mower damage	137	17
Sidewalk planting pits	55	6.8
Dead, nearly dead, or stump	38	4.7
Poor branching	164	20
Poor pruning	85	11

Poor branching and poor pruning practices will be further studied during the winter inspection. These two conditions can be easily remedied with proper pruning techniques.

Species diversity

Common Name	Family	Genus	Species
46% ash	Oleaceae	<i>Fraxinus</i>	<i>F. americana</i> , <i>F. pennsylvanica</i>
28% maple	Sapindaceae	<i>Acer</i>	<i>A. rubrum</i> , <i>A. platanoides</i> , <i>Acer x freemani</i>
17% red oak	Fagaceae	<i>Quercus</i>	<i>Q. rubra</i>
2% crabapple	Rosaceae	<i>Malus</i>	
2% locust	Fabaceae	<i>Gleditsia</i>	<i>G. tricanthos</i>
2.7% evergreen	Pinaceae	<i>Picea</i> , <i>Abies</i>	<i>P. pungens</i> , <i>P. strobes</i> , <i>A. concolor</i>
2.3% other species and unknown	Rosaceae	<i>Prunus</i>	<i>Prunus x cistena</i> (one identified)

Appendix B: Alternative Tree Species: City Suggested Trees for Planting in Parking Areas

This was edited to remove existing species already planted above the species diversity guideline. Specific guidelines are available at the City of Ames website.

Parking 8 feet and over (in width)

Hackberry

Ginkgo (fruitless male selections 'Lakeview' and 'Princeton Sentry')

American Hophornbeam

American Linden ('Boulevard' and 'Redmond')

Littleleaf Linden

Parking 5 to 7.5 feet

Eastern Redbud

Japanese Tree Lilac

Crabapple (variety of cultivars listed)

Other species suggestions can be made for more specific sites.

Site characteristics to consider for tree selection: Soil pH, soil compaction, drainage, light, exposure to sun and wind, susceptibility to ice, snow, and wind damage, de-icing salt damage, human use of the area, space limitations.

There are other species to consider if the trees will be planted in the homeowners' yards. Specific recommendations can be made for each particular site. Some possible tree species in addition to the above street trees include willow, sycamore, male cottonwood, elm, catalpa, Kentucky coffeetree, American hophornbeam, river birch, dogwood, magnolia, and evergreen trees.

Appendix C: Dead or nearly dead trees

Key to Street Addresses for Parks and Tree Designation

The park areas have a street address and most also have an outlot designation. These addresses are used in the data tables. Below is the key to finding a park address.

The Crescent Lawn	0 Somerset Drive, Outlot EE
The Grove	0 Stange, Outlot DD
Entry Sign	0 Stange, Outlot NN
East side of Stange at 24 th	2645 Stange, Outlot CC
The Stange Crescent	0 Stange, Outlot GG
Walking Trail	2310 Aspen, assessed north to south
Lake Somerset walking trail	0 Northridge, Outlot RR

The 'Which tree' column refers to the particular tree located on a property when there are more than one tree per property. This will be indicated on the maps in the Final Report.

Street	House No	Which tree	Species
Aspen	2310	5	Dead
Aspen	2310	13	Dead
Aspen	2505	S	Maple
Aspen	2508	E	Maple
Aspen	2511	E	Maple
Camden	2510	W	Ash
Clayton	2510	W	Dead
Eaton	2414		Dead
Eaton	2503	M	Ash
Hampton	2810		Ash
Kingston	2400	E	Maple
Kingston	2416	E	Ash
Kingston	2431	S	Dead stump
Kingston	2438	N	Maple
Kingston	2505	N	Maple
Kingston	2603		Ash
Kingston	2610		Maple
Lake Somerset	0	18	
Lake Somerset	0	21	
Lake Somerset	0	11	
Lake Somerset	0	12	Ash
Lake Somerset	0	8	Ash
Lake Somerset	0	9	
Lake Somerset	0	6	Ash

Lake Somerset	0	7	
Lake Somerset	0	2	Ash
Lake Somerset	0	5	
Northridge	2700	E	Dead
Northridge Lane	2818		Maple
Sherwood	2506	W3	Stump
Sherwood	2506	E	Stump
Somerset Drive	2706	N	Ash
Somerset Drive	2806	N	Ash
Somerset Drive	2817	S	Unknown
Stange	0-DD	3	Ash
Stange	0-GG	13	Red oak
Stange	0-GG	14	Red oak
Stange	2716		Red oak

Appendix D: Site problems needing further investigation

Trees too close to a structure. This list needs to be checked against the City Guidelines for Tree Plantings.

Street	House No	Which Tree	Species	Site Problem
Aspen	2311		Maple	Too close to sidewalk
Aspen	2430	E	Ash	Too close to sidewalk
Aspen	2505	M	Maple	Too close to sidewalk
Aspen	2508	M	Maple	Too close to sidewalk
Aspen	2511	W	Maple	Too close to street sign
Aspen	2511	M	Maple	Too close to sidewalk
Aspen	2522	M	Maple	Too close to sidewalk
Aspen	2609	M	Maple	Too close to sidewalk
Aspen	2615	W	Maple	Too close to hydrant
Bradford	2417		Ash	Too close to mailbox
Bradford	2505		Ash	Too close to light pole
Bradford	2507		Ash	Too close to mailbox
Bradford	2509		Ash	Too close driveway
Bristol	2320	E	Ash	Too close to sidewalk
Bristol	2329		Ash	Too close to street sign
Bristol	2415	5	Ash	Too close to sidewalk
Bristol	2415	2	Ash	Too close to street sign
Bristol	2506		Ash	Too close to sidewalk
Bristol	2508		Ash	Too close to sidewalk
Bristol	2511	M	Crabapple	Too close to street sign
Bristol	2512		Ash	Too close to sidewalk
Bristol	2516	E	Ash	Too close to sidewalk
Bristol	2519	1E	Ash	Too close to hydrant
Bristol	2613	W	Ash	Too close to street sign
Bristol	2704		Ash	Too close to sidewalk
Bristol	2708		Ash	Too close to sidewalk
Bristol	2713		Ash	Too close to sidewalk
Bristol	2821	E	Maple	Too close driveway
Buckingham	2829		Ash	Too close to mailbox
Buckingham	2834		Ash	Too close driveway
Buckingham	2838		Ash	Too close driveway
Camden	2302	2	Ash	Too close to street sign
Camden	2302	1N	Ash	Too close to light pole
Camden	2302		Ash	Too close to mailbox
Camden	2305	1N	Ash	Too close to sidewalk
Camden	2305	E	Ash	Too close corner
Camden	2308	W	Ash	Too close driveway
Camden	2308	E	Ash	Too close driveway
Camden	2311		Ash	Too close to sidewalk
Camden	2316	W	Ash	Too close driveway
Camden	2316	E	Ash	Too close driveway

Camden	2317	E	Ash	Too close to light pole
Camden	2317	M	Ash	Too close to hydrant
Camden	2322	E	Ash	Too close driveway
Camden	2401	E	Ash	Too close to sidewalk
Camden	2406		Ash	Too close driveway
Camden	2418	W	Ash	Too close to mailbox
Camden	2418	E	Ash	Too close driveway
Camden	2424		Ash	Too close driveway
Camden	2425	E	Ash	Too close to sidewalk
Camden	2425	W	Ash	Too close to light pole
Camden	2430	W	Ash	Too close to mailbox
Camden	2430	M	Ash	Too close driveway
Camden	2431	E	Ash	Too close to sidewalk
Camden	2437	W	Ash	Too close to sidewalk
Camden	2503	E	Ash	Too close to sidewalk
Camden	2504	W	Ash	Too close to mailbox
Camden	2510	E	Ash	Too close driveway
Camden	2515	E	Ash	Too close to hydrant
Camden	2515	W	Ash	Too close to light pole
Camden	2522	W	Ash	Too close driveway
Camden	2528	W	Ash	Too close driveway
Camden	2528	E	Ash	Too close to mailbox
Camden	2611	4	Ash	Too close to hydrant
Camden	2620	W	Ash	Too close to light pole
Camden	2620	E	Ash	Too close to mailbox
Camden	2628		Ash	Too close to street sign
Clayton	2307		Ash	Too close corner?
Clayton	2427		Red oak	Too close to street sign
Clayton	2602		Maple	Too close to sidewalk
Clayton	2606		Maple	Too close to sidewalk
Eaton	2504	N	Red oak	Too close to street sign
Eaton	2508		Ash	Too close driveway
Eaton	2510		Ash	Too close driveway
Eaton	2512		Ash	Too close driveway
Eaton	2512		Red oak	Too close corner
Eaton	2601		Red oak	Too close to street sign
G W Carver	2714	12	Maple	Too close to street sign
Hampton	2707		Ash	Too close to sidewalk
Hampton	2711		Ash	Too close to sidewalk
Hampton	2715		Ash	Too close to sidewalk
Hampton	2808		Ash	Too close to sidewalk
Kent	2509	S	Ash	Too close to sidewalk
Kent	2518	N	Ash	Too close driveway
Kent	2518	S	Ash	Too close to hydrant
Kent	2527	E	Ash	Too close to street sign
Kent	2627	4	Maple	Too close to street sign

Kingston	2625		Maple	Too close to street sign
Northridge	2623	5W	Locust	Too close corner
Northridge	2700	S	Red oak	Too close to street sign
Northridge Lane	2818	W	Maple	Too close driveway
Sherwood	2506	W1	Ash	Too close corner?
Sherwood	2507	S	Ash	Too close corner
Sherwood	2517	S	Ash	Too close driveway
Somerset Drive	0-EE	6	Ash	Too close to light pole
Somerset Drive	0-EE	1S	Ash	Too close to light pole
Somerset Drive	0-EE	W	Ash	Too close to street sign
Somerset Drive	0-EE	M	Ash	Too close to street sign
Somerset Drive	0-EE	E	Ash	Too close to street sign
Somerset Drive	0-EE	6	Ash	Too close to street sign
Somerset Drive	0-EE	11	Hackberry	Too close to sidewalk
Somerset Drive	0-EE	10	Crabapple	Too close to sidewalk
Somerset Drive	0-EE	9	Crabapple	Too close to sidewalk
Somerset Drive	0-EE	8	Hackberry	Too close to sidewalk
Somerset Drive	0-EE	7	Hackberry	Too close to sidewalk
Somerset Drive	2504	M	Ash	Too close to light pole
Somerset Drive	2504	N	Ash	Too close to street sign
Somerset Drive	2510	S	Ash	Too close to mailbox
Somerset Drive	2516	S	Ash	Too close driveway
Somerset Drive	2517		Ash	Too close driveway
Somerset Drive	2522	N	Ash	Too close driveway
Somerset Drive	2522	M	Ash	Too close driveway
Somerset Drive	2522	S	Ash	Too close to mailbox
Somerset Drive	2523	S	Ash	Too close driveway
Somerset Drive	2523	N	Ash	Too close driveway
Somerset Drive	2529	5E	Ash	Too close to light pole
Somerset Drive	2529	N	Ash	Too close corner
Somerset Drive	2530	N	Ash	Too close to street sign
Somerset Drive	2608	N	Ash	Too close driveway
Somerset Drive	2608	S	Ash	Too close to sidewalk
Somerset Drive	2609	1E	Ash	Too close to street sign
Somerset Drive	2609	S	Ash	Too close to sidewalk
Somerset Drive	2609	N	Ash	Too close driveway
Somerset Drive	2620	N	Ash	Too close to mailbox
Somerset Drive	2620	S	Ash	Too close to mailbox
Somerset Drive	2623	N	Ash	Too close driveway
Somerset Drive	2637		Ash	Too close to sidewalk
Somerset Drive	2706	S	Ash	Too close to mailbox
Somerset Drive	2722	N	Ash	Too close driveway
Somerset Drive	2722	S	Ash	Too close to mailbox
Somerset Drive	2738	S	Ash	Too close to hydrant
Somerset Drive	2754		Ash	Too close to street sign
Somerset Drive	2755	S	Ash	Too close driveway

Somerset Drive	2805	2	Maple	Too close to street sign
Somerset Drive	2805		Ash	Too close to street sign
Somerset Drive	2811	S	Ash	Too close driveway
Somerset Drive	2811	N	Ash	Too close driveway
Somerset Drive	2812	N	Ash	Too close driveway
Somerset Drive	2812	S	Ash	Too close to street sign
Somerset Drive	2818	N	Ash	Too close driveway
Somerset Drive	2818	M	Ash	Too close driveway
Somerset Drive	2818	S	Ash	Too close driveway
Stange	0-DD	4	Ash	Too close to street sign
Stange	0-DD	3	Ash	Too close to street sign
Stange	0-DD	1W	Ash	Too close to street sign
Stange	0-GG	20	Red oak	Too close to light pole
Stange	0-GG	4	Red oak	Too close to light pole
Stange	2616	N	Red oak	Too close to street sign
Stange	2622	3	Red oak	Too close to structure
Stange	2622	2	Red oak	Too close to structure
Stange	2622	1S	Red oak	Too close to steps, ramp
Stange	2630	N	Red oak	Too close corner
Stange	2630	S	Red oak	Too close to street sign
Stange	2645	3	Red oak	Too close to street sign
Stange	2716		Red oak	Too close to street sign
Stange	2730	4	Maple	Too close to street sign
Stange	2733	6	Red oak	Too close to street sign
Stange	2733	1N	Red oak	Too close to light pole
Stange	2804	N	Red oak	Too close to utility
Stange	2804	S	Red oak	Too close to structure
Stange	2810	N	Red oak	Too close to utility
Stange	2810	S	Red oak	Too close to structure
Stange	2816		Red oak	Too close to structure
Stange median	28		Red oak	Too close to light pole
Stange median	6		Red oak	Too close to light pole
Stange median	5		Red oak	Block view?
Stange median	3		Red oak	Too close to light pole
Stange median	1N		Red oak	Too close to light pole

Appendix E: Rankings of Park and Street Trees

Due to the length of this appendix, it is included in this report as a separate document.

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