

Subject: Suggestions on the Plan
Attachments: LT-HTListProposed10Jan23.pdf; LandmarkTreeList.docx; SouthSideRiverGeddes.png; HowForward10Feb26.pdf

From: Christopher Graham
Sent: Tuesday, February 10, 2026 11:26 AM
To: Manor, Courtney <CManor@a2gov.org>; Planning <Planning@a2gov.org>
Subject: Suggestions on the Plan

Hi, Courtney --

I am hoping you will pass these suggestions on to the CPC members promptly, so they have time to digest them before the meeting next week. Thank you.

I have been working weeks to both digest your plan and to find a way to comment that is not just being critical. I settled on trying to make suggestions on "How to go Forward." Perhaps you will agree it is useful to look at what you have in that way. Clearly many people are not enthusiastic about the way things are proceeding nor about how (it seems right now) things will work out.

I would guess many of you do not know how successful and effective our Natural Features regulations along with the efforts of the Planning staff have been in minimizing the abuse of land (valuable natural features) on the large parcels developed north of the City the last 20 years. No one has been trumpeting that horn. But they have truly worked.

In case you don't know, I served on the CPC in the early 2000's when we wrote and approved the Natural Features Master Plan. I served on the Environmental Commission all the years since then, until last Spring. All those years I led the Natural Features Subcommittee. The EC was disbanded last Summer. Now we are the Sustainability Commission (with the Energy Commission). It seems we are required only to work on the City's projects, not on things that members see that need attention.

I am trained as a Landscape Architect, have operated for 45 years outdoors as a garden builder and contractor, have Planning training, likely have more than the average person's understanding of many of the matters before you. These suggestions, if worked into your plan, could help ease people's concerns.

Attached please find the EC's proposed revision to the Landmark and Heritage Tree List (one of several amendments to the Natural Feature regulations we drafted in Code language), a copy of the original Landmark Tree list first formulated in the late 1980's, a copy of a small portion of a GIS map of the City produced by Master students at SEAS a couple of years ago. It is the first attempt to identify canopy tree species from aerial imagery. And last, find my suggestions on "How Forward10Feb26.pdf."

I do much apologize for the long read. Your plan is a long and complicated read, too. It takes a bit to get into the details.

I am happy to chat with any of you who would like to do so.

Thank you
Chris.

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DATE: 10 February 2026
TO: CPC Members
FROM: Christoher Graham, et al
RE: How forward? Some different ways

This is a series of suggestions to you about how you might move forward with your plan and gain more acceptance than you are receiving so far. You have received widespread pushbacks from residents quite alarmed about what could become significant Code changes, ones allowing projects in their neighborhoods that they may not like or want and which certainly could change their neighborhood. They are understandably afraid of this.

The fear (among those who know) is compounded by rule and procedure changes well underway that eliminate or reduce elected body approvals, that expand administrative review (no public process), that pre-approve certain types of plans (performance standards that are insensitive to site characteristics and/or to harmony of design), dramatic reduction in lot sizes, setbacks, number of units and more parameters.

Changes to ordinances and procedures which remove the elected officials from accountability for the results of these changes have already been made. It is alarming when politicians duck the flak intentionally – or otherwise act in ethically challenged ways.

How Forward? - Part 1 **(What parameters?!)**

The various types of residential neighborhoods have long had parameters built into the Code (Unified Development Code, or Chapter 55, Article II.5.11) which limit what use and structure can happen next door, usually with just building permits. Each of these zones allows types of use/housing within specific parameters – lot size, set back distances from property lines (building envelopes), percent of open space and distance between buildings, maximum height, minimum lot dimensions and area per dwelling unit or density unit. Let's say R3 parameters could become the parameters for the above zones of the City. This will allow significant or radical or very radical change in the types of use/structures allowed in the City's existing single-family detached housing neighborhoods. Is it any wonder folks are unhappy with a plan that enables that? Is it any wonder they are afraid of what can happen next door?

Why can't the plan prescribe more specific parameters for each existing Zone type? People are justifiably afraid of an open-ended plan giving a wildly wide latitude in what could happen next door. Why the total lack of reasonable limits, spelled out in the plan? Other cities have certainly found ways to be far gentler than the plan suggests we will be. Other cities have found a way to place nature first in their planning decisions.

How forward? – Part 2 (Real Worry about Next Door)

It has been true for a long time that work on houses in single-family residential districts require no Site Plans, no notices to neighbors, no public review or hearings, and certainly no review of plans that would take down old trees nor any regulation to protect ones to be retained. Allowing new parameters such as allowing/encouraging subdivision of properties into smaller lot sizes could allow things to happen next door that are quite radical. What if there are four buildings, or a large building with multiple units built from property line to property line? What if all the trees are gone and not replaced? What if the units are filled with renters who don't care at all about their property, even while their neighbors still have owners and trees and nice gardens and do care? What if the new buildings are much closer to property lines, have shorter front setbacks, don't provide parking for all the residents living on the property, and don't even have room for new trees and shrubs? What if the architecture for the new buildings is downright ugly? What if Landmark and Heritage trees long growing around the once single-family house are all removed? And what if all of this happens when neighbors have not been notified in any way, before construction work begins? Aren't these abusive results and abusive procedures?

There is not the slightest good reason to treat anyone who owns a house or who lives in a successful and happy neighborhood in Ann Arbor in such a way. Why would the City fail to be brave enough to have engaging, transparent, before the fact, specific discussions with owners in neighborhoods, led by talented landscape architects/designers -- coming to agreeable solutions how to go forward with their part of the City? Sure, not everyone will agree on how to go forward. But, if the process of working with people is a good one, then most can reach agreement. The plan proposes just the opposite approach with its constituents. Yes, there is much room to grow, but not by fiat and not with crummy results. If the plan does not give people confidence that there will be good public procedures and will produce pleasing results, then it is not a good plan.

How forward? – Part 3 (How more to Improve the Plan?)

As suggested above, the plan could launch work to re-design residential neighborhoods but also be sure to implement Code changes only as agreeable neighborhood design work is completed. Code changes would be carefully based upon those agreements.

The City could recraft its plan to have some focus on the region – Milan, Ypsilanti, South Lyon, Hamburg and the Huron River/Lake area, Dexter and Chelsea, Saline and the townships between. It is clear Ann Arbor will not be welcomed to tell neighboring governments what to do. But there are many ways we could be of genuine help -- with a much better transportation network, with increasing protection of valuable farms and food production, with protecting open space and Natural Features, with finding spaces and much more traction in bringing new businesses and well-paying jobs to the area, and more. In

return, we could work cooperatively with each other in reaching housing solutions that are more pleasing to all. Many people who live in these areas would never move into the City. Everything is less expensive (apples to apples). No one is threatening their established neighborhoods, and they can have what most people want -- a single-family detached house at a lower price.

The plan could recognize that the main problem of affordability is not that we are ourselves raising the price of our houses to discriminate, to be unfair, to not be welcoming to new neighbors. It is because the price of materials, labor, land, costs of borrowing and taxes, costs of utility fees and maintenance, costs of living and other circumstances have grown much faster in recent years, than our incomes. How do we fix the income, well-paying job problem? It makes people uncomfortable and unsupportive if they are accused of not "wanting new neighbors," as a justification for forcing changes by fiat.

The plan does call out for progress on what will always have to be subsidized housing for those who are at the lower end of the income scale. That type of housing is tough to persuade developers to do at their expense. It usually requires projects of larger size. Could the plan address how we might work to bring many more people's income up relative to their expenses (some of which need to go down)? Maybe a focus on more well-paying jobs here?

The plan (the entire Zoning Code) could embrace an ethic of "designing with nature." It would require an environmental ethic for every project. Extending back to Ian McHarg at the University of Pennsylvania via a 1969 book by the same name, he inspired Landscape Architects, Architects, Planners to think holistically, to cooperate with nature, to bring human delight into built results. It was and remains a foundational text for sustainable design.

Bringing great urban spaces (from big buildings on corridors to low density residential neighborhoods) to joyful life does not happen if it is conducted without great public participation, without considerable talent involved by people trained in design, and without enlightened Site Planning. That means we do NOT do away with Site Plans. It means we require more of them and for all projects. Surely there can be more than one type of Site Plan with varying degrees of information and process required, depending on the project. The least complicated ones would be required single-family houses doing small footprint changes.

Formal Site Planning and sound public processes are good for everyone, including for developers. They may not like the increased costs or scrutiny, but their projects will be much better received for the effort, therefore more profitable. The current plan seems to head to a future where we allow development primarily for more units, not for human delight and joy, not for elegance and good site arrangement, and not enough for sustainability.

Site Planning among many other things requires each City department to weigh in on a plan with comments. They are not "yes men." Usually, their comments are quite useful and about things the public does not have much ability to know in detail. Site Plans require

detailed drawings and information be placed fully on the public table, well ahead of permit approvals. In that way (and not in any other) is there time to improve them for more harmonious results.

Site Plan use (it can have several levels of detail required) should be applied now to all projects in the City, including to housing projects proposed along transit corridors, downtown, and in residential neighborhoods for residences.

These are the ways to reduce people's fears, to end up with a more interesting, attractive, and appealing City – not one with just double the number of people.

How forward? – Part 4 (One key to Design with Nature in AA)

There are (by the City's numbers) about 1.4 million canopy trees in Ann Arbor. Perhaps 60,000 of them are on our Parks, an equal number are on University property. There are about 40,000 street trees. Let's add a fudge factor of 50,000 trees.

That leaves more than 1 million canopy trees growing on residential neighborhoods. Many of them are Landmark and Heritage Trees. Areas of the City never farmed have many more native trees, many in highly valuable Woodlands (Native Forest Fragments). Even in areas once farmed, there were fields on the back 40's left unplowed. As a guide, from Stadium south and west, and from Plymouth Road north -- lands were flatter and farmed. The Steep Slopes on both sides of the River, the last glacier's local end moraines are a key (but not the only key) to Native Forest Fragment locations.

Landmark and Heritage Trees on residential properties in AA have never been protected by any regulation (Natural Features or any other). Densification without some sort of regulation will put many valuable trees seriously in harm's way. If that happens, continued lack of their protection and regulation will truly bother people, as it has in the past.

A plan which seems to say "we have already protected our Natural Features on our Parks (the great majority of them are small spaces with mowed grass and play structures) -- does not give comfort to those who are afraid of what the plan proposes do. It is also a false statement. There are many valuable Natural Features and other environmental values not on our Parks, especially Landmark and Heritage Trees, which can be lost to "densification." How can we have a plan that is not protective of valuable trees and is not involved via every project with enhancing our outdoor environment?

How forward? – Part 5 (Landmark and Heritage Trees)

The Environmental Commission (prior to its cancellation by the Council) was deeply involved in writing improvements to Natural Features regulations into the Code. Among those was a recommendation to update (and long overdue, c. 1988), reworking the Landmark (and Heritage) Tree List. A key element was to add recognition and more protection (greater mitigation requirements) to old, native trees – Heritage Trees. The new list we proposed is attached. So is a copy of original list.

How forward? – Part 6 (It's about our most important Heritage Trees, the Oaks!)

Beginning some 50 million years ago, the climate cooled, which launched the replacement of the world-wide tropics with temperate forests, more able to withstand cooler weather and the Winters. The Oaks and their associations came to dominate many ecosystems around the world, including ours in Michigan and here in Ann Arbor. For us these plants ebbed and flowed here with the glacial epochs of the last 100,000 years. The last glacier melted back to north from Ann Arbor about 12,000 years ago. The Oak's ability to move across the landscape was aided by their high quantities of wind-borne pollen, by acorns easily transported by wildlife, and by other adaptive attributes.

Indigenous people here over the last 10,000 years or so developed a marvelous and biologically very diverse habitat for themselves. Their landscape across southern Michigan was spectacular. This result was derived from their way of embracing their landscapes, carefully controlling deer populations, and the use of leaf litter fires.

European settlers arriving after 1824 soon platted their town exactly on the Indigenous people's local camp, on the east shore of Allen's Creek. Allen and Rumsey named their fledgling town Ann's (Burr Oak) Arbour, for their wives first names and for the glade of great Burr Oak trees they built their houses under. It was a park-like setting with great trees and a very diverse Oak Woodland prairie of tremendous beauty beneath them. This was the dominant ecosystem association in Ann Arbor.

Shouldn't we be fully recognizing our Natural Features, designing with them and nurturing them as we grow? What would our town be like without our Oaks and Oak Woodlands? They are a major part of what makes our town terrific! For example, look at Woodlands north and south when one crosses the Huron Parkway Bridge. Mostly what you see are Oak dominated hillsides. They are the most obvious and wonderful late Fall leaf colors. Most of those trees are not on Parks.

It must be said that our Oaks are in trouble. Voracious herbivores, the deer, find Oak seedlings and saplings a nutritious food, available to them even in Winter (when most food is scarce). They also eat much of the flora growing beneath the trees, diminishing important root zone functions. That means the current generation of Oaks will not replace themselves, will be replaced by less valuable trees and invasive woody plants. Climate change is also having negative effects. We must regularly manage deer numbers as part of a broader, sophisticated stewardship effort to sustain our native forested areas.

Where is this understanding of our natural heritage in the plan? Where is a willingness to call out the need to work with that in the plan, as intimate parts of all projects? Why is the Natural Features Master Plan abandoned rather than improved? What does all of this say about the plan and its motivations?

How forward? – Part 7 (Protecting Old Trees, Native Forest Fragments)

Ann Arbor was clearcut of its pre-settlement forest (as was much of Michigan, in the mid 1800's to very early 1900's). So much wood was gone that local people had little of it to warm and cook with until the railroad came. Clearing stems and roots of the original forest

allowed much of Ann Arbor to slowly convert its lands to European style farming and animal husbandry. From that came many herbaceous weeds that make recovery of native flora much more difficult. The City's urbanization began as well.

Lands too steep to clear of roots and to plow, lands too moist to grow crops, lands on a farmer's back woods were allowed to regrow the plants and trees that had existed there before clearing of original stems. Where this happened and where old trees have not been hurt since – these are our areas of Native Forest Fragments. These trees now vary in age from 200 years old to 100 years old or so. In many cases around the City, trees in some of those now Native Forest Fragments had houses built under them by hand. That meant trees are still there in those Native Forest Fragment neighborhoods. They did not suffer the damage to tree roots that today's building machines and techniques fatally cause.

The remaining Native Forest Fragments vary greatly today in their relative biological importance – by size, diversity of species, trouble in them from invasive plants and pathogens, by physical and cultural conditions like slope and orientation to the sun (microclimates), by the extent there are still elements of the original rich herbaceous flora still growing beneath the trees, and by whether they survived the construction of a house under them.

Everyone on the CPC should please know that Landmark (and Heritage) Trees have zero regulatory protection on residential properties. Many old trees are lost each year, not intended to be lost, by uncaring or unknowing practices (damaging roots) of people working on residential projects. The EC was quite concerned about this problem for more than a decade. They were working hard toward proposed improvements to the Natural Features regulations that would expand and improve them. The Council representatives on the EC refused to take our proposed amendments to the Code to the full Council and then on to you for consideration.

Old trees are fabulous natural resources, veterans of providing sustainability services including natural beauty of value to all the people of Ann Arbor. To lose an old tree just for failure to care about its roots is not good. To provide a plan that minimizes their loss in a project is not good either. Not planting new trees as required or paying mitigation fees for lost trees, following current Natural Features requirements, everywhere Landmark and Heritage Trees are in harm's way is also not good.

This is a sustainability issue, a climate issue. Why? Because it will take decades for young trees to contribute ecosystem services equal to what the single old tree provides now. If density is increased widely in the City, in the manner done on 904-906 Lincoln a couple of years ago, then there will barely be room for any tree (new or old). Zero landscape plantings (except grass) have been installed on that site, where two buildings and four units replaced one building with one unit. How does that result square with the City's climate goals? There is certainly more carbon demand from four units than there was from one, yet not the slightest green offset provision via a Landscape Plan was installed.

Wouldn't it be quite sensible for the City to have regulations that protect old trees and Native Forest Fragment Woodlands as much as possible, wherever they are? Isn't it quite right to minimize their loss as much as possible, everywhere in the City? Our Natural Features regulations have been successfully doing exactly that for more than 20 years on the large properties with large housing projects north of town. Can't we easily adapt our Natural Feature regulations and Site Plans to work more simply, but effectively for residential property changes?

How forward? – Part 7 (Native Forest Fragments)

The Environmental Commission worked with SEAS students a couple of years ago to use aerial imagery and field proofing to train their computers to identify canopy tree species across the City. They were most successful in identifying Oaks.

The EC wanted to use the information to bring more attention to Native Forest Fragments, to increase folks understanding of our biological heritage in Ann Arbor, and to give strength for improved regulation. Having a clear picture across the City of good indicators where Native Forest Fragments exist was important. Unfortunately, the layer showing species of trees never was posted on the Natural Features webpage. Why is this information being hidden? A sample map is attached. It shows the Riverview neighborhood and across the River to Furstenberg Park and north to Woodland around University Commons. Green symbols are Oaks. Other trees on this map are mostly canopy Landmark and Heritage Trees. In the Riverview neighborhood, tripling housing units in this Native Forest Fragments would wipe out most of these trees, along with the ecosystem services they are providing to the City.

What is it about the City guidance of the plan that seems to depreciate our Natural Features, not including them as a key element in designing buildings and sites?. The plan seems to say we have the "job done" in protecting Natural Features. Apart from a Natural Areas Program which is increasingly unable to perform needed stewardship on our Natural Areas on our Parks (inflation, mileage limited funding), the evidence for Natural Features (especially old trees) elsewhere is clear. Until lately the Council's record of support for protecting Natural Features has been solid, beginning with unanimous approval of regulations by Council and the CPC more than 20 years ago. What has happened?

How forward? – Part 8 (The value of Oaks)

It's clear that our old Oaks are splendidly valued members of the community, for us and for the habitats they create. Every single species of our Ann Arbor Oaks -- according to Rick Darke and Doug Tallamy in the manual "The Living Landscape" -- provides nest sites for birds, cover for wildlife, pollen to carry on the species, nectar for wildlife, food for wintering birds, food for breeding birds, food for spring and then fall migrant birds, food for mammals, food for caterpillars. They sequester carbon both in their tissues and into the soil in a big way. They in turn produce oxygen the wonder chemistry of chlorophyll cells. They act like giant wicks transmitting rainwater into the soil below. And they have awesome Fall colors later than most other trees. They give us shade, defend against the wind. No other family of trees is more valuable (include with them the Chestnuts and the Beeches).

According to Andrew Hipp at the Morton Arboretum in his book "Oak Origins," each old Oak tree is an ecosystem unto itself. More than 1000 insect species are known to feed on Oaks, probably more. No other trees do more for diversity of leaf eating caterpillars (critical food for breeding birds). Acorns are immensely important food sources for ants and weevils and squirrels and birds and dozens of other creatures. Fungi in the trees and in the soils beneath them weave an extraordinary web of life which extend root systems away from stems, interconnect trees, process nutrients, and enrich the soil for many other organisms. Put Oaks and their related species of trees and plants into a Native Forest Fragment Woodland with still intact native flora beneath them and these benefits are compounded.

How Forward? -- Part 10 (Summary)

More public notice and public process, not less. More great design on a more cooperative basis with people on the properties to be affected by change, not less. More Site Planning that brings the best out in projects, not less. More attention to our long-standing effort to protect Natural Features, not less. More concern for exciting and interesting architecture, not less. Recognition in the plan that doubling the number of housing units in the City and removing old trees to a significant degree is not a good strategy – including not helping to diminish carbon demand. More understanding that "Design with Nature" in all its manifestations and for all projects is just as important as carbon management, not less. More honor for old trees, not less. Less urgency and more patience with our place and our people, not less. Less developer influence in elections. A more regional approach, not blinders to how our region works.

It would be good to have a plan that reaches these things -- to make the growth of our town and area result in a more wonderful place to live, not less.

Then people will be more comfortable working with you.

Thank you.

LANDMARK AND HERITAGE TREE LIST (This list is intended to replace the existing list, dating from the late 1980's)

Scientific Name	Common Name	Landmark Tree	<u>Heritage Tree</u>
Abies	Fir	18 16"	
<u>Acer nigrum</u>	<u>Black Maple</u>	<u>16"</u>	<u>22"</u>
<u>Acer negundo</u> ^{1, 2, 5}	<u>Boxelder</u>	<u>20"</u>	<u>24"</u>
<u>Acer rubrum</u> ^{4, 5}	<u>Red Maple, Swamp Maple Water Maple, Soft Maple</u>	<u>16"</u>	<u>22"</u>
<u>Acer palmatum</u> (include cultivars)	<u>Japanese Maple, Palmate Maple</u>	<u>8"</u>	
<u>Acer pensylvanicum</u> ⁵	<u>Striped Maple, Moosewood, Moose Maple, Goosefoot Maple</u>	<u>8"</u>	<u>12"</u>
<u>Acer saccharinum</u> ^{1, 2, 5}	Silver Maple	18 20"	18 24"
<u>Acer saccharum</u> ^{3, 5}	Sugar Maple	<u>16"</u>	<u>22"</u>
Acer	Maple	16"	
<u>Aesculus glabra</u> ³	<u>Ohio Buckeye</u>	<u>8"</u>	<u>12"</u>
<u>Aesculus hippocastanum</u>	<u>Horse-chestnut, European Horse-chestnut, Conker</u>	<u>18"</u>	
Aesculus	Horse Chestnut	18"	
<u>Amelanchier</u> ^{4, 5}	<u>Serviceberry, Shadbush, Shadblow, Juneberry, Saskatoon, Wild-plum, Chuckley Pear</u>	<u>8"</u>	<u>10"</u>
<u>Asimina triloba</u>	Pawpaw	8"	<u>10"</u>
<u>Betula alleghaniensis</u> ⁵	<u>Yellow Birch, Golden Birch, Swamp Birch</u>	<u>12"</u>	<u>16"</u>
<u>Betula murrayana</u>	<u>Murry Birch</u>	<u>12"</u>	<u>16"</u>
<u>Betula papyrifera</u> ^{1, 2, 3, 4, 5, 7}	<u>Paper Birch, Canoe Birch</u>	<u>12"</u>	<u>16"</u>
Betula	Birch	12"	
Carpinus <u>betulus</u> ⁴ (and cultivars)	<u>European Hornbeam, Common Hornbeam</u>	8"	
<u>Carpinus caroliniana (and cultivars)</u>	<u>American Hornbeam, Blue Beech, Ironwood, Muscle-wood, Muscle Beech</u>	<u>8"</u>	<u>12"</u>
<u>Carya cordiformis</u> ⁵	<u>Butternut Hickory, Bitternut Hickory, Swamp Hickory</u>	<u>16"</u>	<u>22"</u>
<u>Carya laciniosa</u> ⁵	<u>Pignut Hickory</u>	<u>16"</u>	<u>22"</u>

LANDMARK AND HERITAGE TREE LIST (This list is intended to replace the existing list, dating from the late 1980's)

<u>Carya ovata</u> ⁵	<u>Shagbark</u> Hickory	16"	22"
<u>Carya</u>	<u>Hickory</u>	<u>16"</u>	
<u>Castanea dentata</u> ^{3, 5, 7}	American Chestnut	8"	<u>16"</u>
<u>Cercidiphyllum japonicum</u>	<u>Katsura, Camel Tree</u>	<u>12"</u>	
Cedrus	Cedar of Lebanon <u>Atlas Cedar, or Deodar Cedar</u>	<u>8"10"</u>	
<u>Celtis occidentalis</u> ⁵	<u>Northern Hackberry, Common Hackberry, American Hackberry, Nettletree, Beaverwood</u>	12"	<u>16"</u>
<u>Cercis canadensis</u> ^{1, 4}	<u>Redbud</u> , Eastern Redbud	8"	<u>15"</u>
Cladrastis lutea	Yellowwood, <u>Kentucky Yellowwood, American Yellowwood</u>	12"	
<u>Cornus alternifolia</u> ⁵	<u>Alternate-leaf Dogwood, Pagoda Dogwood</u>	<u>8"</u>	<u>12"</u>
<u>Cornus florida</u> ^{4, 5, 7}	Flowering Dogwood	8"	<u>10"</u>
<u>Cornus kousa</u> ⁴	<u>Oriental Dogwood, Kousa Dogwood, Chinese, Japanese, Korean Dogwood</u>	<u>8"</u>	
<u>Cornus mas</u> ⁴	<u>Cornelian-Cherry, European Cornell, Cornelian Cherry Dogwood</u>	<u>8"</u>	
<u>Crataegus punctata</u> ⁵	<u>Dotted Hawthorn, White Haw</u>	<u>8"</u>	<u>12"</u>
Crataegus	Hawthorn	<u>8"</u>	
Diospyros virginiana	Persimmon	12"	
<u>Fagus grandifolia</u>	<u>American</u> Beech	18"	<u>22"</u>
<u>Fagus sylvatica (including cultivars)</u>	<u>European Beech</u>	<u>18"</u>	
<u>Fagus</u>	<u>Beech</u>	<u>18"</u>	
<u>Fraxinus americana</u> ^{5, 7}	<u>American Ash</u>	<u>16"</u>	<u>20"</u>
<u>Fraxinus nigra</u> ^{5, 7}	<u>Black Ash</u>	<u>12"</u>	<u>16"</u>
<u>Fraxinus pennsylvanica</u> ^{5, 7}	<u>Red Ash, Green Ash</u>	<u>16"</u>	<u>20"</u>
<u>Fraxinus quadrangulata</u> ^{5, 7}	<u>Blue Ash</u>	<u>16"</u>	<u>20"</u>

LANDMARK AND HERITAGE TREE LIST (This list is intended to replace the existing list, dating from the late 1980's)

<u>Fraxinus</u> ^{5,7} (no infertile cultivars)	<u>Ash</u>	<u>16"</u>	
Ginkgo biloba	Ginkgo	12 <u>16"</u>	
<u>Gleditsia triacanthos</u> ^{1,2}	<u>Honey Locust, Thorny Locust, Thorny Honey Locust</u>	<u>16"</u>	<u>22"</u>
<u>Gleditsia</u>	<u>Honey Locust</u>	18 <u>16"</u>	
<u>Gymnocladus dioicus</u>	Kentucky Coffeetree	<u>18"</u>	<u>22"</u>
<u>Hamamelis virginiana</u> ⁴	<u>Witch-hazel, Common Witch-hazel, American Witch-hazel</u>	<u>8"</u>	<u>16"</u>
<u>Hamamelis</u>	<u>Witch-hazel</u>	<u>8"</u>	
<u>Juglans cinera</u> ⁵	Butternut	<u>8"</u>	<u>12"</u>
<u>Juglans nigra</u> ^{2,5,7}	Black Walnut	<u>18"</u>	<u>24"</u>
<u>Juniperus virginiana</u> ^{2,7}	<u>Juniper, Eastern Red Cedar, Red Cedar, Virginia Juniper, Eastern Juniper, Red Juniper, Baton Rouge, Red Stick</u>	<u>8"</u>	<u>12"</u>
Juniperus (upright cultivars)	Juniper	<u>8"</u>	
<u>Koelreuteria paniculata</u>	<u>Golden Rain Tree, Pride of India, China Tree, Varnish Tree</u>	<u>8"</u>	
<u>Larix laricina</u> ⁵	<u>Tamarack, Hackmatack, Eastern Larch, Black Larch, Red Larch, American Larch</u>	<u>12"</u>	<u>20"</u>
Larix	Larch	<u>12"</u>	
Liquidambar styraciflua	<u>Sweetgum, American Sweetgum, American Storax, Hazel Pine, Redgum, Satin-walnut, Star-leaved Gum, Alligator wood</u>	<u>12"</u>	
<u>Liriodendron tulipifera</u>	<u>Tuliptree, Yellow Poplar, Tulip Tree, American Tulip Tree, Tulip Poplar, Tulipwood, Whitewood, Fiddle Tree, Yellow Poplar</u>	<u>18"</u>	<u>24"</u>
<u>Maclura pomifera</u>	<u>Osage-orange Osage Orange, Horse Apple, Hedge Apple</u>	<u>12"</u>	
<u>Magnolia</u> ⁴	<u>Magnolia</u>	<u>8"</u>	
<u>Malus coronaria</u> ^{4,5}	<u>Wild Crab Apple, Sweet Crabapple, Garland Crab</u>	<u>8"</u>	<u>12"</u>
<u>Malus pumila</u>	<u>Cultivated Apples</u>	<u>12"</u>	
Malus	Crabapple	<u>12"</u>	

LANDMARK AND HERITAGE TREE LIST (This list is intended to replace the existing list, dating from the late 1980's)

Metasequoia glyptostroboides	Dawn Redwood	12"	
<u>Morus rubra</u> ^{3, 5}	<u>Red Mulberry</u>	<u>12"</u>	<u>18"</u>
<u>Nyssa sylvatica</u> ⁵	Black Tupelo, <u>Black Gum, Tupelo, Sour Gum</u>	12"	
<u>Ostrya virginiana</u> ⁵	<u>American Hop-hornbeam, Ironwood</u>	8"	<u>12"</u>
<u>Picea abies (and upright cultivars)</u> ⁵	<u>Norway Spruce, European Spruce</u>	18 16"	
<u>Picea glauca (and upright cultivars)</u> ⁵	<u>White Spruce</u>	18 16"	<u>22"</u>
<u>Picea mariana</u> ⁵	<u>Black Spruce</u>	18 16"	<u>22"</u>
<u>Picea pungens (and upright cultivars)</u> ^{5, 7}	<u>Colorado Blue Spruce</u>	18 16"	
Picea	Spruce	18 16"	
<u>Pinus banksiana</u> ³	<u>Jack Pine</u>	18 8"	<u>14"</u>
<u>Pinus mugho</u>	<u>Mugho Pine, Bog, Creeping Pine, Pine, Dwarf Mountain Pine, Mugo Pine, Mountain Pine, Scrub Mountain Pine, Swiss Mountain Pine</u>	18 16"	
<u>Pinus resinosa</u>	<u>Red Pine</u>	18 16"	<u>22"</u>
<u>Pinus strobus</u>	<u>White Pine</u>	18 16"	<u>22"</u>
Pinus	Pine	18 16"	
<u>Platanus x acerifolia</u> ⁷	<u>London Plane Tree, Plane Tree</u>	18"	
<u>Platanus occidentalis</u> ⁷	<u>Sycamore, Buttonwood, American Sycamore, American Plane Tree, Western Plane</u>	18"	<u>24"</u>
Platanus ⁷	<u>Oriental Plane</u>	18"	
<u>Populus deltoides</u> ^{1, 2, 5}	<u>Cottonwood, Eastern Cottonwood, Necklace Poplar</u>	12 20"	<u>24"</u>
<u>Populus grandidentata</u> ^{5, 6}	<u>Big-tooth Aspen, Large-tooth Aspen, American Aspen, Canadian Poplar, White Poplar</u>	12 10"	<u>16"</u>
<u>Populus tremuloides</u> ^{5, 6}	<u>Aspen, Quaking Aspen</u>	12 10"	<u>16"</u>
Populus (not Populus alba)	Populus	12"	
<u>Prunus pennsylvanica</u> ^{5, 8}	<u>Pin Cherry, Bird Cherry, Red Cherry, Fire Cherry, North American Cherry</u>	<u>8"</u>	<u>12"</u>

LANDMARK AND HERITAGE TREE LIST (This list is intended to replace the existing list, dating from the late 1980's)

<u>Prunus serotina</u> ^{1, 5, 8}	<u>Black Cherry, Wild Black Cherry, Rum Cherry, Mountain Black Cherry</u>	18"	<u>24"</u>
<u>Prunus virginiana</u> ^{5, 8}	<u>Choke Cherry, Bitter-berry, Virginia Bird Cherry, Western Chokeberry</u>	8"	<u>12"</u>
<u>Prunus</u> ⁵	<u>Cherry, Plum, Peach, Apricot</u> Wild Plum	12"	
<u>Pseudotsuga menziesii</u>	<u>Douglas-fir, Douglas Spruce, Oregon Pine, Columbian Pine</u>	18 16"	
<u>Pyrus</u>	<u>Pear</u>	12"	
<u>Quercus alba</u> ⁵	<u>White Oak</u>	<u>16"</u>	<u>22"</u>
<u>Quercus bicolor</u> ⁵	<u>Swamp White Oak, Swamp Spanish Oak</u>	16 14"	<u>20"</u>
<u>Quercus coccinea</u> ⁵	<u>Scarlet Oak</u>	<u>16"</u>	<u>22"</u>
<u>Quercus imbricaria</u> ⁵	<u>Shingle Oak</u>	16 14"	<u>20"</u>
<u>Quercus macrocarpa</u> ⁵	<u>Bur Oak</u>	<u>16"</u>	<u>22"</u>
<u>Quercus palustris</u> ⁵	<u>Pin Oak</u>	16 14"	<u>20"</u>
<u>Quercus rubra</u> ⁵	<u>Red Oak, Northern Red Oak</u>	<u>16"</u>	<u>22"</u>
<u>Quercus velutina</u> ⁵	<u>Black Oak</u>	<u>16"</u>	<u>22"</u>
<u>Quercus</u>	<u>Oak</u>	16"	
<u>Salix</u> ^{1,5}	<u>Willow</u>	<u>20"</u>	
<u>Sassafras albidum</u> ⁵	<u>Sassafras, White Sassafras</u>	12"	<u>16"</u>
<u>Sorbus americana</u> ^{5, 7}	<u>American Mountain-ash</u>	8"	<u>12"</u>
<u>Taxodium distichum</u>	<u>Bald Cypress</u>	12"	
<u>Taxus (upright varieties)</u> ⁸	<u>Yew</u>	<u>12"</u>	
<u>Tilia americana</u> ⁵	<u>Basswood, American Basswood, American Linden</u>	<u>16"</u>	<u>20"</u>
<u>Tilia cordata</u>	<u>Littleleaf Linden, Small-leaved Lime, Small-leaved Linden</u>	<u>16"</u>	
<u>Thuja plicata</u>	<u>Western Red Cedar, Green Giant Arborvitae, Giant Cedar Shinglewood</u>	<u>12"</u>	

LANDMARK AND HERITAGE TREE LIST (This list is intended to replace the existing list, dating from the late 1980's)

Thuja occidentalis	Arborvitae, <u>Eastern White Cedar, Northern White Cedar</u>	12"	12"
Thuja	Cedar	12"	
Tsuga canadensis ⁵	Eastern Hemlock	12"	<u>16"</u>
Ulmus americana ^{3, 5, 7}	<u>American Elm, White Elm, Water Elm</u>	18"	<u>22"</u>
Ulmus rubra	<u>Red Elm, Slippery Elm</u>	<u>12"</u>	<u>18"</u>
Ulmus	Elm	18"	

Note: Notes are substantially rewritten, footnotes are added

NOTES:

- A Landmark or a Heritage Tree is any tree growing in the City which is large enough to equal or surpass the diameters at breast height (DBH) on this list.
- This list supersedes and replaces the previous list (2004)
- Trees that do not have a health and condition factor of over 50%, based on the standards established by the International Society of Arboriculture will not need to be protected. These standards consider the soundness of the main stem, the presence of pathogens which may be life threatening, the structure of the tree and development of the crown, the tree's growth rate, the tree's life expectancy. If a tree or some part of a tree represents a safety issue, it should be removed.
- Trees native to Southern Michigan and found in Ann Arbor are shown in bold type, e.g. **Acer rubrum**. In this case there is a size listed in the DBH-HT space.
- Trees where only the genus name is shown are usually exotic, or they are cultivars and hybrids. Some may be natives that are uncommonly found in the City. In this case the DBH – HT space is BLANK.
- This list is more comprehensive than the earlier list, more native tree species are specifically called out, and more non-native trees are shown.
- Landmark Trees, if taken, are mitigated at the 50% rate (a replacement tree for each 2" of DBH removed).
- A Non-native tree, if taken, that has reached a DBH of 24" shall be mitigated at the 75% rate (a replacement tree for each 1.5" of DBH removed).
- Heritage Trees, if taken, shall be mitigated at the 100% rate (a replacement tree for each inch of DBH removed).
- Trees which appear on the City's Invasive Species List are not protected. They do not appear on this list.
- Multi-stemmed trees shall be measured by adding the areas of each stem at breast height together, where the area of each stem is calculated by the formula: $A = 3.14 \times \text{radius squared}$.
- There are footnotes that are new to this list. They are intended to provide more information about protected trees.

FOOTNOTES:

1. Tree may have issues such as weak wood, poor form, weediness.
2. Tree should not be used as a replacement tree in most circumstances.
3. Tree is uncommon or is a species that may be in trouble from pathogens or climate change.
4. Tree may be multi-stem.

LANDMARK AND HERITAGE TREE LIST (This list is intended to replace the existing list, dating from the late 1980's)

~~1-5.~~ Tree is native. Known to host more than 100 butterflies, moths, and caterpillars. ALL native trees provide significant ecosystem services compared to most non-natives.

~~2-6.~~ Tree root clones, protect to outer CRZ of clone.

~~3-7.~~ Tree has a propensity to be susceptible to pathogens.

Landmark Tree List

TABLE 5.23-1 LANDMARK TREE LIST		
COMMON NAME	SCIENTIFIC NAME	DBH
Ash	Fraxinus spp. (not cultivars)	18"
Basswood	Tilia spp.	18"
Beech	Fagus spp.	18"
Buckeye (Horsechestnut)	Aesculus spp.	18"
Cherry, Black	Prunus serotina	18"
Elm	Ulmus spp. (except pumila)	18"
Fir	Abies spp.	18"
Fir, Douglas	Pseudotsuga menziesii	18"
Kentucky Coffee Tree	Gymnocladus dioicus	18"
Maple, Silver	Acer saccharinum	18"
Pine	Pinus spp.	18"
Spruce	Picea spp.	18"
Sycamore; London Plane	Platanus spp.	18"
Tuliptree	Liriodendron tuliperifera	18"
Walnut, Black	Juglans nigra	18"
Hickory	Carya spp.	16"
Honey Locust	Gleditsia triacanthos	16"
Maple	Acer spp. (unless otherwise noted)	16"
Oak	Quercus spp.	16"
Arborvitae	Thuja occidentalis	12"
Bald Cypress	Taxodium distichum	12"
Birch	Betula spp.	12"
Black Tupelo	Nyssa sylvatica	12"
Cherry, Flowering	Prunus spp.	12"
Crabapple (cultivar)	Malus spp.	12"
Dawn Redwood	Metasequoia glyptostroboides	12"
Eastern Hemlock	Tsuga canadensis	12"
Ginkgo	Ginkgo biloba	12"
Hackberry	Celtis occidentalis	12"
Hawthorn	Crataegus spp.	12"
Larch/Tamarack	Larix spp.	12"
Pear	Pyrus spp.	12"
Persimmon	Diospyros virginiana	12"
Populus	Populus (except deltoides, alba)	12"

TABLE 5.23-1 LANDMARK TREE LIST		
COMMON NAME	SCIENTIFIC NAME	DBH
Sassafras	<i>Sassafras albidum</i>	12"
Sweetgum	<i>Liquidambar styraciflua</i>	12"
Yellow Wood	<i>Cladrastis lutea</i>	12"
American Chestnut	<i>Castanea dentata</i>	8"
Butternut	<i>Juglans cinerea</i>	8"
Cedar	<i>Juniperus</i> spp. & upright cultivars	8"
Cedar of Lebanon	<i>Cedrus</i> spp.	8"
Eastern Redbud	<i>Cercis canadensis</i>	8"
Dogwood, Flowering	<i>Cornus florida</i>	8"
Hornbeam, Blue Beech	<i>Carpinus</i> spp.	8"
Ironwood	<i>Ostrya virginiana</i>	8"
Maple, Mountain/Striped	<i>Acer spicatum/pensylvanicum</i>	8"
Pawpaw	<i>Asimina triloba</i>	8"