

1) Definitions

- A. All definitions should be written using the same format. Some of the definitions now are presented as a sentence (example: Basal area is the ...) and others are presented with the word to be defined followed by a period (example: Canopy, Tree. Upper).

Correction will be made in future draft.

- B. Shouldn't additional specific terms introduced in this ordinance (even if defined in the text of the ordinance) also be defined in the opening section? For example, woodlands, water resources, wetlands).

Ideally text in a Zoning Ordinance should not be listed twice. To make the standards clearer, we included what a Water Resource or Woodland is with the standards. The City is the process of updating its Zoning Ordinance outside of the NFP process. Last fall we approved the first bits of the new Ordinance and set up the Use Regulations in the same way.

- C. Critical Root Zone: Another way to describe the critical root zone is to use the "drip line." Would you consider this measure as an additional minimum distance from the base of the trunk of the tree if the drip line/zone is greater than the ratio measure or the ten-foot measure?

Because the drip line can be difficult to measure, forestry literature and experts tend to favor the CRZ definition based on trunk diameter at breast height. We used this definition with input from the technical committee.

- D. Endangered and Threatened species should include locally recognized species as well. Different ecosystems contain different species. What may be in State or Federal lists may not be consistent with local data (native species)

The ordinance requires all rare species identified in the Michigan Natural Features Inventory database to be reviewed, which can include locally recognized species other than State and Federal Threatened and Endangered.

- E. Disturbance - Has the committee considered expanding the definition of disturbance to align more closely to the ecological definition which is much more multi-dimensional? The current definition only discusses the changing of the physical environment, through plant removal or soil digging, but light, sound, vertical barriers and changed traffic patterns are also disturbances. Disturbance is "...any relatively discrete event in time that disrupts ecosystem, community, or population structure and changes resources, substrate availability, or the physical environment" (following Picket & White 1985, quoted in Miller et. Al. 2011). Disturbances have a cause, an effect and a species response 1. It would be ideal to expand this definition in regard to all three components of ecosystem disturbance and could be addressed as appropriate to the different natural feature rules. For example, the introduction of intense nighttime light, various types of blinking or colored lights, intense or sustained sound changes, interruption of well used travel/migration routes (buildings/glass/impermeable surfaces for amphibians/reptiles/birds). It is not only the digging up of soil, but the interruption of relationships. A wetland, forest and prairie are all different successional environments with different disturbance regimes. The interruption of disturbance regimes is also something of importance to consider when thinking about organisms who have evolved in dynamic habitats that can also be altered by human impacts (alteration of hydroperiod, fire suppression etc.) and any human use that stabilizes water levels where natural fluctuations are the norm would be a disturbance and should be reviewed. I assume that management activities such as fire where appropriate would be supported by an allowance.

Definitions are tied to how they are used in this ordinance. We have not explored other physical disturbances other than those in the draft ordinance.

F. Disturbance: Is razing a structure considered to be a disturbance?

Yes, razing a structure requires a demolition permit and triggers review of a project.

G. Natural Features = Geographical landforms and ecosystems. Explain rationale for limitations

City staff with the advisory technical committee selected these Natural Features because of their importance to Kalamazoo and the City's ability to set standards for development.

H. Natural vegetation should include restoration efforts through human aid for plants native to this area

We will consider revising definition based on how it is used in the ordinance.

I. Natural vegetation: The definition should end with "without human aid." The remainder of the definition is unnecessary and seems to limit natural vegetation only to those plants that have deep roots or are part of the canopy.

See 1-H above.

J. Redevelop is now limited to structures. Should include any changes or alterations to a parcel such as, but not limited to, habitat restoration, plantings, removal of vegetation, mineral extraction or any other alterations of current property characteristics

We will review which activities require a permit and adherence to this ordinance, and adjust the definition.

K. Species of Concern should include a local component as well

See 1-D above.

L. Top of Slope: This definition seems to have a "cut and paste" from the definition of Toe of Slope beginning with the words "where the slope markedly decreases..." This added portion of the definition of Top of Slope does not make any sense. Consider deleting it.

Definition will be reviewed and revised.

M. Vegetative buffer should include temporary buffers if justified on a case by case basis

Temporary buffering is typically accomplished through silt fencing as required in Chapter 30 Soil Erosion and Sedimentation Ordinance.

N. DBH is diameter of a tree truck...should be tree trunk.

Revision will be made.

O. Ecosystem Assessment – Why is it referenced only in terms of woodlands? Shouldn't any natural feature be subject to an ecosystem assessment?

Definitions are tied to how/when they are used in the Ordinance. Different assessments have different, specific terms to provide clarity to those implementing the standards.

P. "Ecosystem Assessment refers to a method for quickly gathering useful data on *to* the *ecologically* and biological components of a woodland habitat over small spatial scales." Seems like "to" should be deleted & "ecologically" should be "ecological"?

Revision noted.

- Q. Best Management Practices (BMP). The draft definition is too open-ended and lacks enforcement. Just what is considered a “correct” BMP? Who determines which BMP is “most effective?” Why not use the definition for BMPs that already exists in the City’s Stormwater Ordinance? This definition clearly states that any BMP must be consistent with the most current MDEQ Guidebook of BMPs. Please consider using consistent and concise definitions among the City’s ordinances.

For the NFP ordinance, we decided to require BMPs from the lists within the Michigan Low Impact Development Manual instead of the MDEQ Guidebook of BMPs. The Michigan LID Manual contains more green infrastructure type BMPs instead of the traditional “grey” infrastructure. We want developers to prioritize the use of vegetative, green infiltration practices that are closest to the source whenever possible. A professional engineer must design all stormwater treatment systems, show their calculations, and prove they have prioritized green infrastructure.

- R. Ordinary High Water Mark. A high water mark should be the upper limit that the water level reaches during regular changes in water level. Where is the “line between upland and bottom land?”

We will review this definition and compare to standard definitions.

- S. Riparian. Since this draft distinguishes between water resources and wetlands, then this definition of riparian must include wetlands as having a riparian character. After “alongside a water resource” add “and a wetland.”

We will make this change in the next draft.

- T. Slope Impact Zone: Why use this term which sounds like a bomb hit? Slope face or face of the slope is more intuitively understood and matches the concept of a slope’s surface area.

We will review this definition and compare to standard definitions.

- U. Steep Slope Analysis: What is the function of this analysis? Shouldn’t the definition indicate what the outcome of measuring changes between contour lines is? Furthermore, this analysis should be conducted by a licensed surveyor.

For the purposes of the definition section, we only include the exact definition and not a full description of the criteria needed to complete the analysis. The purpose of the analysis is to determine which slopes are 20% or greater and therefore protected under the ordinance. We will add that this must be done by a licensed surveyor or licensed professional engineer.

- V. Toe of slope: Keep it simple: the lowest part of a slope. This definition matches the American Geological Institute definition.

We will review this definition and compare to standard definitions.

- W. Top of slope: Keep it simple: the highest part of a slope. Same as above comment

We will review this definition and compare to standard definitions.

- X. Slope area is not defined even though it is used in the document. Is slope area is not intuitive. Does it mean the area of the face of the slope? Does it mean the area of the slope face or does it include the setbacks or the general location on the site where a slope is?

We will make this change in the next draft.

- Y. Invasive Species: Consider adding a definition for Invasive Species since these plants are specifically identified as needing to be removed and avoided in restoration projects.

We will make this change in the next draft.

- Z. Natural Vegetation. Invasive species fit this definition! Is that the intent to include invasive species as acceptable natural vegetation that may be retained in landscape buffers, etc.?

We will include a list of restricted invasive species that are not allowed to be intentionally planted on NFP sites. The Technical Committee and City Staff carefully weighed the decision to require all invasives be removed from the shore or bank when it was already vegetated because once disturbed the bank will be even more prone to the establishment of additional invasive species. There is an exception in the ordinance whereby a landowner can disturb the bank/shore for invasive removal when there is a plan to replant with natives and do long-term maintenance.

2) 50-6.1 Overlay District Requirements

- A. 50-3.2 Overlay Zone Districts: The NFP Overlay Map obviously does not include all water resources and slopes that should be included in the NFP Ordinance. I do understand that the Phase II Gap Analysis process is designed to identify and “catch” these missing areas. They really should be included, as much as possible, in this draft overlay map, not during a second time around. The map should be as inclusive and complete as possible before the adoption of this ordinance.

With the moratorium deadline approaching and the required outreach to add areas beyond what are noted in the 2025 Master Plan, all additional mapping will take place in Phase II after adoption of the NFP standards in the Overlay Ordinance.

B. A. Applicability.

- i. We see Kleinstuck was/will be added, but can there be other neighborhood parcels identified for consideration of inclusion?
- ii. If so - What is the process to review AND UPDATE in the Master Plan any "missing" NFP areas of the zoning map within our neighborhood? (Use our Neighborhood Plan?)

We proposed the addition of Kleinstuck in Phase 1 because it was noted as missing, repeatedly by residents from the time of the Master Plan's adoption. No other location had the same level of comment.

C. C. Conflict.

- i. What will be the defined process or standard to make a determination of “overriding” the Overlay?
- ii. Any circumstance(s) that come to mind that might currently allow a Base Zoning District to take precedence?

The Overlay district takes precedent outside of unique circumstances. I cannot think of an example that would cause the base zoning to take precedent without the property going through a variance request. We will review this language with the City Attorney.

- D. Overlay District regulations take precedent over base zoning “unless otherwise approved by the City Planner”. This should include public participation and not be a one person, City staff decision.

This will be reviewed with the City Attorney.

- E. Article 6, 50-6.1 Overlay district requirements, C. Conflict. I note that conflict resolution regarding Overlay District Regulations take precedent unless "otherwise approved by the City Planner." I agree that the Overlay District Regulations should take precedent over the base Zoning District but I wonder if the approval for inevitable conflict should be the responsibility of the elected city commission as opposed to the appointed City Planner?

See 2-D above.

3) 50-6.2 Natural Features Protection Overlay Standards

- A. C. Natural Features Standards.

- i. Floodplains? The Master Plan includes in its definition of “Natural Features,” among other things, Floodplains.
 - 1. Why are floodplains not included in the draft, even though it was specified in the Master Plan as areas that need to be protected?

Floodplains are currently regulated by the City, but in another Ordinance. The City is studying flooding and floodplains in collaboration with FEMA and regional partners, this work, plus additional mapping done in phase 2 of NFP could result in its inclusion into the NFP Overlay.

- B. Floodplains: I am dismayed that floodplains were not considered for NFP Overlay protection, since floodplains are an integral aspect of water resources and wetlands, as well included in the Master Plan. It is crucial that floodplains be added to the draft ordinance, especially since the floodplain maps are already available.

See 3-A above.

- C. (1) Wetlands. “A Wetland is any area two (2) acres or greater”; how was the 2 acre minimum size determined?

The 2 acres relates to a State of Michigan Law where Cities wanting to regulate wetlands smaller than two acres we would need a stand-alone wetland ordinance, mapping, notice, and mitigation program. The creation of these types of regulations is beyond the scope of this Ordinance.

- D. Wetland setbacks. Setbacks are established for parcels from 1, 1/2, and less than 1/2 acre. Not consistent with definition of a wetland (2 acres or greater).

Any wetland two acres or greater *that is located on any portion of a parcel* must apply a setback, regardless if the entire wetland is located on multiple parcels. We will clarify this language to be more direct.

- E. Wetland Setbacks: Continuing on the importance of floodplains and their potential role in this NFP Ordinance, setbacks from water resources and wetlands should be based upon the 500-year floodplain map, instead of the size of the parcel. Using parcel size will result in abutting parcels with vastly different setbacks along the same water resource or wetland. Furthermore, some areas subject to flooding will not be protected by the parcel-sized based setbacks.

Wetland and Water Resources setbacks are designed to protect the Natural Feature from stormwater impacts on the upland adjoining site. The City is working with FEMA and regional partners to determine what restrictions or development standards are needed to address floodplain protection.

- F. Wetland (1)(a) Wetland Delineation. “a wetland delineation study can be undertaken”. *How/who will make the determination that a study is warranted?*

This refers to areas that appear to be wetlands, but that are not on the National Wetland Inventory Map. For the purposes of applying the overlay standards, an applicant/property owner can opt to treat the area like a delineated wetland and apply the setbacks/protection standards or they can undertake a study to 1) determine if it is indeed a wetland and 2) determine size and boundaries for the application of setback/protection standards.

- G. Wetland [2] Prohibited Activities. (a) Stormwater BMPs. Why not? Especially if other utilities are being allowed. May need to define this differently. Would an outfall be allowed?

City staff will review existing laws to determine what is allowable. Some use of the wetland as a stormwater asset may be permissible (e.g., outfall).

- H. Wetland [3] Permitted Activities. (c) Timely Planting. "All disturbed areas must be stabilized and restored with plantings" This is not clear: What type of plantings? Only native? Same ones as in (2)(d) "Required Plantings and Activities" at the top of p. 9?

Refer to (3) Permitted Activities (b) Wetland Restoration, which references State/Federal requirements for plantings and the Michigan Low Impact Development Manual (LID) for planting lists. Staff will consider rephrasing this to emphasize the timing so as to not invite erosion or other issues.

- I. Wetland - Give a timeframe for planting.

This planting work, like all required landscaping in the Zoning Ordinance, is required as part of the site's development (like the building or driveway) before the Certificate of Occupancy is approved. Time extensions are occasionally granted due to weather/season and the ability to install plants. When this happens, a temporary Certificate of Occupancy may be granted. If the planting work is not done in the permitted extension time, the temporary Certificate of Occupancy would expire and the business or residence would be closed until the work is complete.

- J. All language must clearly state what might be obvious to us. A statement like "restored with plantings" needs to clearly state what plantings or reference a page with a list of appropriate plants.

See 3-I above.

- K. Wetland - Could a maintenance period for the planting be entered here to ensure establishment and prevention of invasive species? "Timeliness and maintenance of plantings"

See 3-I above. Also, refer to the draft section F. Bonding of Projects.

- L. Wetland - Permitted Activities (p 8) call for wetlands restoration with no size specificity or duration for successful monitoring. Both should be included. {NOTE: Need to check NREPA Act, 1994 PA 451 or Section 404 of the Clean Water Act to see if included there.} If Federal Standards are weakened, can the City set and maintain higher standards? Local control?

Staff will check into state and federal requirements and consider rephrasing to emphasize the timing so as to not invite erosion or other issues.

- M. Wetland - (c)[3][b] and [c] Permitted Activities: Wetland Restoration and Timely Planting Both restoration and planting are currently outlined in this ordinance as permitted activities. In reality, the intent of this ordinance is that restoration and timely planning are not only permitted but also required, if disturbance of the setback or wetland has occurred due to utility lines, pathways, etc. The intent of the ordinance might be better served if restoration and timely planning were under a separate heading emphasizing the importance of restoration, instead of as "permitted activity."

This is the intent and language in the ordinance language will be reviewed and revised.

- N. Wetland - (c) Natural Features Standards includes a definition of wetlands that is partially taken from Part 303, but Part 303 has some additional requirements that might merit considering. First, obviously this ordinance uses 2 acres as the size minimum whereas NREPA uses 5, so good for the City there. But NREPA also has other requirements - it can be less than 5 acres (any size really) if contiguous to or within 500 feet of an inland lake or stream, or in some other situations. Also, Part 303 has now incorporated the definition used in the US Army Corps of Engineers manual, which includes not only the presence of water & wetland vegetation, but also hydric soils. Long story short, it might be worth considering defining "wetland" as you have but then adding "or as otherwise defined in Part 303 of the NREPA." or something similar.

The City will review these other federal definitions and consider revisions to the definition. Hydric soils have been mentioned in other comments.

- O. 50-6.2 C(1): Wetlands: Why was two acres selected as the minimum size for a wetlands? It is likely that there are numerous smaller sized wetlands along the course of a stream or surrounding a kettle pond. Should there be a reference here to the specific State and Federal regulations for the protection of wetlands in this section of the NFP ordinance draft?

See 3-C and see 3-N above.

- P. Wetlands/Hydric Soils. I just wanted to follow up with you in regards to my inquiry about hydric soils. I will be attaching a link that provides description of what hydric soils are and also some information where we can find all the mapped hydric soils in the city. Having this information available can also help with the mapping of the Natural Features throughout the city. If you already have this information available, great! We should consider including some language in reference to this for the drafting of the ordinances.

Thanks for the info.

- Q. (d) Mitigation. References Part 303 of NREPA and section 404 of the Clean Water Act. It might be helpful to also reference the Part 303 administrative rules because that is where the specifics of Part 303 mitigation are set forth. Part 303 (the statute) refers to mitigation, but the administrative rules actually spell out very specific requirements. Referencing those might be helpful to people, since many people don't even know what administrative rules are, let alone where to find them. The Part 303, Wetlands Protection, administrative rules are located at Mich Admin Code R 281.921 et seq. The rule that governs mitigation is Mich Admin Code R 281.925. This link contains them, if you scroll down to "Wetland Laws and Rules" and click on "Part 303, Wetlands Protection, Rules": https://www.michigan.gov/deq/0,4561,7-135-3313_3687---,00.html

We will review these Michigan rules and Part 303 and consider clarifying the mitigation requirements enforced by Michigan DEQ.

- R. Wetland. (d) Required Planting and Activities "...plantings must conform to one (1) of the following options."
i. Does that mean monoculture is acceptable?

A monoculture of mowed turf grass is not acceptable according to the ordinance. The ordinance does not address other undesirable species that can become monocultures.

- S. Native Species – What about "nativars"? Are there specific cultivars that should be disallowed in natural features due to their risk to the natural community? Or perhaps only a certain percent of new plantings can be cultivars? Are there any specifics that pose a threat to the wildlife and should be disallowed? Perhaps it is not a problem for the specific habitats in Kalamazoo city, but I know for example that the lupine cultivar tricks butterflies into laying their eggs on it and then the larva die due to malnutrition. The "education and outreach" phase could highly suggest local Michigan genotype or Great Lakes genotype producers to developers and landowners.

A list of cultivars and non-native species that are most harmful to the environment will be explored as an additional prohibition in the ordinance.

- T. Wetland - [2][a] There should be a minimum depth for a planted and maintained vegetative buffer

The buffer must be planted in the entire setback area, which serves as the minimum depth. This language will be clarified in the ordinance.

- U. Wetland - [b] a reference should be provided for "proper soils erosion controls"

A reference to the City's Soil Erosion and Sedimentation Control ordinance (Chapter 30) will be added.

- V. (2) Water Resources. (b)[1][b] Stormwater BMPs prohibited. What about an outfall?

Currently an outfall is not allowed. City staff will consider emergency overflow outfalls with pre-treatment.

- W. Water Resources - [2] The words "Wetlands setback" needs to be replaced with "Water Resource setback."

Revision noted.

- X. Wetland and water setbacks seem to be easily resolved when the 500 year flood mark is used rather than amount of land that the water runs through. If we are protecting the waters the 500 year flood mark is a much more reliable marker.

The floodplain is not present along all water bodies. For example, there is no floodplain around most lakes and headwater streams. The purpose of the setback along water resources and wetlands is to filter stormwater from the upland portion of the parcel before it enters the water body.

- Y. Page 9 b "a line drawn from the Ordinary High Water Mark...." This could easily be changed to the 500 year flood mark as well. Again we are actively protecting our water systems using this mark instead.

See 3-X above.

- Z. Water Resources - Setbacks: See Comment in Wetlands that setback should be in conjunction with 500-year floodplain delineations.

See 3-X above.

- AA. 50-6.2 C(2)(b): Water Resources Setbacks: If a small parcel within the NFP overlay map requires a 10- foot setback from a stream and the floodplain for that parcel is greater than 10 feet, which restriction on structures or impervious surfaces apply? Would the NFP overlay with the lesser restrictive setback still apply?

The NFP overlay would still require the 10' setback where no pavement or structures can be placed, and additionally this setback area must be planted in natural vegetation. The floodplain rules would also apply, which require any structures to be built above the 100-year floodplain elevation. Any cut or fill done within the floodplain must be offset by a ratio of 2:1 to increase floodplain capacity.

- BB. With reference to floodplains: Even though the draft NFP ordinance does not mention floodplains as a natural feature and during a focus group presentation we were assured that floodplains do not need to be included (and here I paraphrase) "because floodplains are mentioned elsewhere in the City ordinances," would you consider incorporating a new section identified as "floodplains" with the notation "reserved for future use?" I suggest this idea as a way to supplement the NFP, if it is found that the stormwater/floodplain ordinances are not adequate to regulate protection of natural features listed in the current ordinance. "Keep the door open." After all, floodplains were included in the Master Plan and should be a part of the Natural Features to be protected.

Yes, a section will be reserved within the NFP ordinance for future floodplain regulations.

- CC. Who will review the health of the lakes designated in a NFP site in order to see how they are affected by the land use around them? Without monitoring a lake can go from Oligotrophic to Mesotrophic or Eutrophic.

This is a great topic included in the Watershed Management Plan for Portage and Arcadia Creeks that was just updated by local partners and approved by MDEQ. Both Asylum Lake and Woods Lake have been monitored by faculty and students from WMU and WMU has had lake assessments and studies done by private consultants ([see website](#)).

- DD. Water Resources - (c)[4] Dredging or other operation and maintenance for flood or stormwater control facilities. Does this conflict with (b)[1][b]?

O&M is only required for flood or stormwater control facilities. Language will be clarified within the ordinance.

- EE. Water Resources - (c)[4] Dredging or other operations and maintenance of ...
The current draft language states that dredging and other operations are permitted. No restrictions? Just dredge and do whatever "operations" as wished? Is the intent of this permitted activity supposed to apply only for (not and) maintenance of flood control facilities? Please clarify when dredging is permitted. What are included in other operations?

The only operation and maintenance activities that will be allowed are those described in a stormwater maintenance agreement which is filed with the Public Services Department. In order for stormwater storage BMPs and flood control structures to continue to function properly, regular maintenance (e.g., removal of sediment build-up) is required and will be allowed under this ordinance.

- FF. Water Resources - [6] All disturbed areas must be stabilized ...my concern is that this stabilization is within the permitted activities category rather than a required activity. Would this be better placed under (d) Required Planting and Activities?

The disturbance to ground surface is not within the permitted activities; instead it is placed under special exceptions, whereby re-stabilization is required. The building inspector will not grant the project a certificate of occupancy until all of the stabilization activities have been completed.

- GG. Water Resources (d) Required Planting and Activities: "...must conform to one (1) of the following options"

This requirement is followed in the outline by four (4) options, including the option [3] for silt fencing and option [4] for erosion control mats. Aren't [1] and [2] supposed to be the only options for setback plantings? Shouldn't [3] and [4] be under a different heading to indicate that silt fencing and erosion control measures are required (even though [3] and [4] are written as "must be" done, their placement in the outline as equals to [1] and [2] is confusing).

Yes; the draft will be revised accordingly.

- HH. Clarify "immediately" following construction for planting.

See 3-I above.

- II. (3) Trees [4] (c). "Replacement trees cannot be located within a parking lot", why?

Parking lot trees are required for many developments by the Zoning Ordinance. For the required tree replacement through the NFP, this type of tree planting are not permitted to count toward the replacement requirements because parking lot trees typically have short life span than those planted in areas not constrained by pavement and planters.

- JJ. Trees - What is the basis for a DBH set at 24"

The ordinance protects many species of trees smaller than 24" DBH. The purpose of including any tree over 24" DBH is to protect all large trees that provide ecosystem services and because trees these large are not as common.

- KK. 50-6.2 C(3)(d): Replacement (of trees): Is replacement of trees regulated if trees are removed for purposes other than development or redevelopment? The current Tree Ordinance does not regulate nor protect mature trees outside of the right of way. Perhaps, the NFP overlay should.
- Within the NFP overlay any tree that is removed would fall under the replacement requirement. An exception is made for dead or diseased trees.
- LL. Trees - (b) [1]. "Tree is located such that when applying all NFP Overlay Standards, the reasonable use of the property was zoned is substantially impacted"; how is this determined?
- This will be determined by reviewing the proposed development, specifically the options for building placement and access, as permitted by the Zoning Ordinance. The review would take place by City Staff, NFP Review Board, and/or the Planning Commission, depending on the type of project.
- MM. Trees - (b)[1] Tree location. Are there specific guidelines to determine "reasonable use" and "substantially impacted" ? Which regulatory body determines "reasonable use" and "substantially impacted" ?
- See 3-LL for Reasonable Use. Substantially impacted would be reviewed and determined in a similar manner as reasonable use.
- NN. Trees - [1] Is "the reasonable use of the property as zoned" subject to interpretation? Anyone can put a plan together that places trees "in the way" thus forcing removal.
- See 3-LL above.
- OO. Trees - (b) Tree Protection "Trees...shall not be removed except in the following circumstances." Followed by two tables of trees (pgs 12-13); confusing as to whether or not the trees included in these tables fall into "the following circumstances". These tables should be relocated where more appropriate in this draft to avoid any confusion.
- Future draft ordinance will be edited for clarity on this.
- PP. Trees - Condition Codes No species are listed as RESTRICTED. Is this an oversight?
- Future draft ordinance will include a list of restricted trees.
- QQ. Replacement trees could be rated for higher carbon sinks.
- Good suggestion. We will look into carbon sequestration research and determine if this can be incorporated into the tree replacement list and/or replacement ratio.
- RR. I realize that Fill Material is addressed by the City, but how do we assure that species like Japanese Knotweed is kept from building sites. The problem of controlling Knotweed continues to increase in the city.
- This was mentioned by a couple of people. Fill material restrictions will be added to the NFP site development standards.
- SS. Who checks to see if critical Root Zone Growths are being properly applied?
- CRZ calculations will be checked by staff during Site Plan Review and NFP Review Board.
- TT. How are the Critical Root Zone standards applied to the possible adult growth of some of the younger trees at a given site? Structures built too close to immature Oaks and Maples will greatly affect the health of these trees.
- Size at maturity is not taken into consideration in the current ordinance. The CRZ calculation is more protective than what is often used in forestry practices (i.e., 1 foot per 1" of tree trunk is a

common standard, and in the Kalamazoo NFP ordinance we require 1.5 feet per 1" of tree trunk; this increases the CRZ on a 10" tree from 10 feet to 15 feet).

UU. Trees - (d) Replacement. Will there be any requirement that replacement trees be maintained and/or replaced if trees die within a specified time period

Yes, a bond will be required so to ensure that replacement trees that have been planted on the site survive in the short run (up to five years being considered). Currently, a development must maintain its required landscaping as approved through site plan review; this would be true for replacement trees approved through the NFP review process.

VV. Who will check to see if the percentage of trees left standing in the Woodland lots is correct?

The site plans will be checked by staff and the NFP Review Board prior to approval. The building inspector and/or zoning code inspector both visit the site throughout the development process. The Certificate of Occupancy cannot be obtained by the owner until the full site plan is completed and all building and zoning codes are followed.

WW. (4) Stormwater- [a] Surface water shall not be directed toward any Slope regulated by this Overlay. Who is responsible for making this determination? How will this be done? What's the timetable for identification of these areas? What is the recommended procedure for stopping such circumstances?

During site plan review before a project is permitted or constructed, all stormwater runoff from the site will be reviewed for compliance with the City's stormwater regulation, including those in the NFP Overlay ordinance. City staff and/or the NFP Review Board will be involved in this review, depending on the project scope.. Only parcels seeking permits for construction activities undergo this review.

XX. Stormwater - [b] Stormwater BMPs are not permitted within the Slope Impact Zone or the setbacks from the Toe and Top of Slope. Does this mean a berm cannot be created near or at the base of a slope for the purpose of capturing or redirecting slope runoff?

As currently written, the ordinance requires the berm to follow the toe of slope setback (i.e., a distance one-half the height of the slope, but not less than 10').

YY. (5) Slopes. "...regulated by the NFP Overlay are those over a *given size*..." How is "given size" defined?

Given size is defined in (5)(a), as it relates to slopes greater than 20% that also meet one of the 4 conditions noted in (5)(a)[1-4].

ZZ. Slopes - The opening line reads "a slope of any size." What exactly is a slope of any size? Please clarify.

See 3-YY above.

AAA. Slope - C(5)(a) Slopes Criteria: In order to be regulated during a development project, why does a slope have to be associated with another natural feature? Should not a slope on its own be considered important enough to have its stability protected?

The standard was developed to protect significant slopes that are part of a natural system, that if current vegetation is removed would be prone to destabilization, and/or could negatively impact adjacent property owners if disturbed. The general building code includes regulations on building activities to prevent slope failure and will apply city-wide, including on NFP sites and all other parcels in the City.

BBB. Slope - C(5)(b) Slope Assessment: Who is responsible for measuring a slope and for determining if the slope meets the 20% protection status?

This cost is put on the developer to use a licensed, professional engineer, certified or licensed geoscientist, or licensed surveyor. This will be described in section (E)(3) NFP Site Plans & Documentation for Project Review. The NFP Review Board will review the assessment to determine if it is satisfactory in identifying protected slopes.

CCC. Slope - C(5)(c) Slope Standards: If a slope in its entirety is to be regulated, as per this draft ordinance, including if the slope extends onto adjoining parcels, then how is a developer to comply with the toe and top setbacks if they are not present on the parcel that is being developed? It appears to me the development of the abutting properties not within the NFP overlay could negate the value of regulation under the NFP ordinance.

Any top or toe of slope identified on the site requires a setback. It is possible for a property to have a protected slope while not having the defined toe or top of the slope on the property.

The Phase II analysis and mapping will help determine if additional slopes should be included in the NFP Overlay.

DDD. Slope - (c) Slope Standards. [2] Permitted Activities in Setbacks. [b] "...structures may expand up to twenty-five (25) percent of the structure's footprint..." How is "footprint" defined?"

- a. Does this mean that the structure can expand, using the existing footprint, 25% in all directions of it?
 - i. With a large existing footprint, a 25% expansion of a building abutting a slope could easily allow the a building, deck, etc. to be built well onto an existing slope, using retaining walls, pylons, etc., yes?
 1. How does this protect the NFP slope?
- b. The expansion must be contiguous to the existing structure, or not?

An existing structure within the setback or slope impact zone is permitted to continue and can expand in size (square feet) up to 25% greater than its current size (current = to time of Ordinance approval, size measured in square feet). It does not regulate in which direction, but puts a cap on the total additional square footage that can be added to an existing structure. This is adding square footage to an existing structure, not creating a new (noncontiguous) structure.

This allowance is included in the Ordinance to recognize that there are existing structures adjacent and in what will be defined by this Ordinance as a protected slope and setback.

EEE. Slope C(5)(c) [2][b] and [3][b] Permitted Activities: One of the factors affecting the stability of a steep slope is the stress imposed by the weight of structures on its upper surface. So why is expansion of existing structures (which will invariably add weight and stress to the stability of the slope) permitted both in the setback and on the slope face? And, which footprint of an existing structure will be used to determine the 25% allowable expansion: the entire structure's footprint or only the footprint within the setback or slope? Clarification is needed.

See 3-DDD above.

FFF. The language about the expansion of a structure's foot print by 25% is confusing. How does this affect properties near a slope? How does the size or weight of the larger building possibly affect the existing habitat?

See 3-DDD above.

GGG. Natural Heritage Areas. (6) Natural Heritage Areas. Will the City only use the MNFI database to identify Species of Concern leading to Natural Heritage Areas?

Yes, this allows both the City and a property owner to the same database, the MNFI rare species database. The City is exploring a subscription to the MNFI, which allows for more detailed geo-located information than is available from the general access website.

HHH. Who designates protected species within a site? Who then double checks their work and follows up at the site to make sure the species (plant, animal, insect) are protected?

Protected species would be listed on the rare species in the MNFI database, which is compiled and continuously updated by MNFI field staff and biologists from Michigan State University. A developer would have to provide search results from this database, which would be confirmed by staff during Site Plan Review and/or NFP Review Board.

III. Natural Heritage Areas. Are non-woodland and wetland/water habitats assumed to be covered by the “natural heritage area” designation? I am thinking about grasslands/savanna specifically (there used to be many in Kalamazoo city and perhaps they will “recover from human disturbance” due to our good stewardship, but perhaps they are not currently represented aside from in established preserves).

Yes, this standard is meant to include other habitats you mentioned. The MNFI database search is meant to be a first step in determining if any species related to these Natural Heritage Areas exist within the vicinity of a parcel.

JJJ. Please add “Preserves” and “Watersheds” to 50-6.2 A. As a concerned citizen, I recommend the NFPO consider all Preserves in Kalamazoo as a separate classification or entity. Presently, NFPO protects “parts” of a Preserve—Wetlands, Water Resources, Trees, Woodlands, Slopes, Natural Heritage Areas. The total needs of the “Preserve” are different from the needs of the “parts,” and more extensive. For example, the inhabitants of a Preserve are not protected unless the whole Preserve is protected.

My recommendation also includes adding “Watersheds” to the list of protected Natural Features. While Watershed is a broad term, the ultimate destination of Asylum Lake, is Lake Michigan. Kalamazoo and the NFPO must feel some environmental responsibility here.

The ordinance does have an additional layer of scrutiny for sites that will be developed adjacent to publicly accessible open lands (e.g., preserves). These parcels must undergo further review and approval by the Planning Commission to be sure the public has an opportunity to communicate their concerns or desires to the land owner/developer and the Planning Commission.

Some of the basic concepts of Watershed Management are included in the ordinance, such as protection of the land or basin draining into a water body (i.e., slopes) and vegetative buffers required around water resources. Not all Watershed Management efforts can be accomplished through an overlay ordinance; rather it is a single tool in the Watershed Management toolbox.

KKK. Why is Watershed not mentioned in the draft?

See 3-JJJ above.

LLL. Where is the Fenn in Parkview Hills listed? If we are fortunate enough to have a Fenn in the City then we must also address it in the Ordinance. It is troubling to know that “no site plan” sites within a NFP area may have no protection under this Ordinance.

Fens meet the definition of Wetlands and the setback applies. When a project is not required to go through site plan review, it must still meet all of the standards in the NFP Overlay and Zoning Ordinance. The review will be done by city staff before any permits are issued.

4) Site Development Standards.

A. (2) Uses. Please provide examples of restricted uses for clarity.

See the Wellhead Protection Overlay District in the Zoning Ordinance. The link to this can be found [here](#).

- B. 50-6.2 D: Site Development Standards: These standards do not seem to address the previously mentioned situation of clearing woodlands without building. Would a property owner within the overlay be allowed to remove vegetation along a stream without restoring a buffer zone with native plantings? How can natural features that are not being removed by development, redevelopment, or disturbance (as defined in this ordinance) within sensitive areas be protected by this ordinance? Are natural features even protected or regulated under these situations or similar ones?

Clearing land of ½ acre or greater requires a permit regardless of whether a building is going up. Under this ordinance, any clearing of vegetation or disturbance to the ground surface is prohibited within the setback of water resources and wetlands. During site plan review the applicant will be reminded of the requirement to install substantial barrier fencing around existing natural features on the site to be sure these areas are protected and properly managed during and following construction.

- C. Maintenance Agreement. Why is this included when the City cannot provide any sort of publicly available schedule for its own storm sewer maintenance, the lack of which can be harmful to private property owners? One is important to the City while another is important to those in the City. Both should be available.

Requiring NFP protection measures, such as native plant buffers, to be included when a stormwater maintenance agreement is already required provides long-term assurance the practice will remain in place.

- D. “no-to-be disturbed areas” looks like a typo.

Yes, future draft Ordinance will be changed to: not-to-be.

- E. Section F(6) uses the hyphenated phrase, "no-to-be disturbed areas" but should probably say, "noT-to-be disturbed areas."

Yes; see 4-D above.

- F. 50-6.2 D(4) Landscaping and Screening: The outline has the sequence of (a), (a), (b). The first (a) on Relief logically should become (c), so that Plant Selection and Existing Vegetation guidelines precede the Relief process.

Yes, future draft Ordinance will be revised.

- G. 50-6.2 D(5)(c) Stormwater: Water Quality Treatment Runoff Volume Standard. Is it standard to treat only the first one (1) inch of runoff? Kalamazoo area has many rainstorms during the year that far exceed this amount, and, if possible, more than one inch of runoff should be required to be treated.

Treating the first 1 inch rainfall event is a standard threshold for water quality treatment since the vast majority of the pollutants are washed off the ground/impervious surfaces with this amount of rain. In addition, the up to a 1" rainfall event represents about 80% of the events we experience in our region. The ordinance requires sites within the NFP Overlay District to capture and hold the 10-year, 24-hour (or approximately 3.5") rainfall event to protect the stream channel from erosion and other detrimental impacts.

- H. 50-6.2 D(5): Stormwater management Criteria: During the focus group presentation, it was mentioned that the NFP draft requires more reduction in stormwater runoff than the Stormwater Ordinance. Did I hear correctly? If so, how much additional detention, retention, and treatment will there be?

See 4-G above. The current standard is 2-year, 24-hour rainfall event.

- I. The effect of phosphorus continues to change the quality of our Watershed. 1 unit of phosphorus produces 500 times its weight in algae. (Wetzel, RG, Limnology, 2nd Edition).

Yes, the ordinance works to address the excessive phosphorus we have here in Kalamazoo, which enters waterways through stormwater runoff. The ordinance increases the amount of stormwater capture required on NFP sites, prioritizes green infrastructure practices, and requires vegetative buffers along waterways to filter out pollutants like phosphorus, sediment, nitrogen, and other suspended solids.

- J. Storm Water - rain gardens and bio swells - how do developers effectively deal with road salts especially around protected water features?

It is true that structural stormwater BMPs and green infrastructure cannot remove the salt from roadway runoff. Alternatives to chloride-based deicers must be used to reduce salt getting into water features.

- K. NFP Review Bodies and Processes. (1) Project Review. "Review of projects in the Natural Features Protection Overlay will occur as follows"

Whether a Site Plan is required or not:

How, by whom, and when in the Site Plan or permit process, will each parcel be evaluated to determine exactly which defined Natural Features are present and subject to the NFP Overlay?

Which specific city staff member and/or body will actually determine if there are Natural Features on that land?

Will an actual site visit to the property in question be required?

Whether a site plan is required will impact how a project in the NFP overlay is reviewed.

If no site plan is required (typically the development of a single family home or a duplex or a very minor expansion) then the plans are reviewed by a member of the Planning Division. A zoning review always occurs with building permits; this would be treated in a similar manner.

Projects that require site plan that do not fall into the next category listed are reviewed by staff and the NFP Review Board in addition to the Site Plan Review Committee.

Projects that require site plan as well as zoning approvals and/or that have multiple features and/or are adjacent to publically used open spaces or water resources/wetlands, are reviewed by staff, the NFP Review Board, and the Planning Commission.

It is the burden of the applicant to determine and note on plans where the defined Natural Features are located using the parameters in the Ordinance. City staff will not undertake a study of a Feature on a property, such as a tree survey, in reviewing a plan. Plans will be reviewed using the data available from the applicant and from the City's own data and experiences in the same way that we review plans now. City Staff may make site visits to verify as they do now with projects and permits. If staff is reviewing an application in the NFP Overlay and have concerns that the Feature is not properly delineated or protected, the applicant will be asked to review and revised plans.

- L. Board Review/Bonding/Penalty – For those properties not requiring site plan review, is there a square footage of the project that could trigger one? For example, if a property owner wanted to put in a single-family home on a parcel abutting an established water resource, the size of the "single family home" being large enough that it would constitute an impact more commensurate with a commercial building project (a new mansion along the Portage Creek or overlooking

Kleinstuck). If not, how can the planner/zoning administrator have the tools needed if this situation arises? Could a bond be required if the project is a certain size? (b) Projects where Site Plan is required. The NFP Review Board reviews the NFP Site Plan in conjunction with the Site Plan Review process. NFP Review Board approval is REQUIRED for a project to achieve Site Plan approval.

Staff will consider this, but is currently proposing rules that trigger site plan across the City and not revised standards. Though a development does not require Site Plan Review, such as a single family home, plans are reviewed against the zoning code as part of the building permit review. All zoning requirements, including those in an overall, must be met.

- M. Projects where Site Plan is required and any of the following conditions are met must be reviewed by both the NFP Review Board, who makes a RECOMMENDATION on the project, and the Planning Commission who approves or disapproves the NFP Site Plan.
- a. Why does (b) require NFP Board approval while (c) only asks for a recommendation from the Board?
 - b. Based on the conditions set forth in E.(1)(c), it appears that in practice, virtually all NFP decisions will fall to the Planning Commission, with the Board only allowed to weigh in with a recommendation vs. giving approval or not? (Especially based on (c)[2][c] Contains multiple Natural Features. – most all of the identified lands will likely have more than one defined Natural Feature)

We will clarify in the text; the NFP Review Board is intended to serve the same purpose before Site Plan and Planning Commission review.

The NFP Review Board is being set up following the Downtown Design Review Commission (DDRC) and the Historic District Commission (HDC). These boards approve projects as part of the site plan process in order for project to gain Site Plan Approval. The difference is that these boards do not formally review projects until Site Plan; they do not review before a project goes to the Planning Commission for approvals. For projects meeting the conditions noted in the Overlay Ordinance, we have set up both a NFP Review Board step and a Planning Commission step. Practically speaking if the NFP Board does not recommend approval of the plan to the Planning Commission, the plan will not be looked on as favorable. An applicant can opt to go forward to the Planning Commission (or other board) without a favorable staff recommendation.

- N. Properties where a “site plan is required...” Does the NFP Review Board only make recommendations to the Planning Commission? The draft it states that the decision of the NFP Review Board overrides other decision makers.

See 4-M above.

- O. (2) NFP Review Board. (c) NFP Review Board Members. Could you tell me a little bit more about the new review board proposed? I'm curious why there is a need for a new one. Do you expect the demand for reviewing the projects to be significant or is it the technical nature of the review process that needed to be accounted for? Will there be space for non-expert citizens to be a part of this? If so, I'd definitely be interested as well. It seems like it would be good to have strong communication between that board and the ECC as well.

The NFP Review Board will be established because of the technical nature of the review process. It is designed so that there is at least 1 member with a working knowledge/expertise in each of the defined Natural Features. Thanks for the suggestion about the ECC relationship.

- P. 50-6.2 E(2)(c): NFP Review Board Members: Even after attending a focus group presentation, I am not completely clear on the composition of its members. I heard there will be specialists in

each area. So, please, please, be very specific in describing each of the seven members' areas of expertise. The Board will be composed of one member from the development community, one member from each of the six regulated Natural Features areas (Wetlands, Water Resources, Trees, Woodlands, Slopes, and Natural Heritage Areas). As currently drafted, there are only three natural features (1. water/wetlands, 2. plants/trees, 3. slopes). Which composition is it? Six or three? If the latter (3) then who will fill in the remaining three positions?

You are correct that 6 natural features experts will serve on the NFP Review Board. The ordinance has 6 NF sections as you mention. It was just on the presentation slides that they were grouped into fewer categories.

- Q. "At a minimum, the Board must have one (1) member representing water/wetlands, plants/trees, slopes, and site development or building construction" Is this one member from EACH of the listed areas above, or just one from ANY of the areas? If just one from ANY of the above, then what expertise(s) and/or specific qualifications will the other six members be required to hold to serve on this Board? This is not explained or defined in the Overlay.

The NFP Board will have one member for each feature, at a minimum.

- R. 50-6.2 E(2)(c) [2] NFP Review Board Members: The composition of the Review Board, as currently written, is unclear. Although you stated at the public meeting on February 20 that each of the categories (trees, water resources, etc.) would be represented on the Review Board by a different person, this decision is not clearly stated in the draft. Please revise. Furthermore, will appointment to the Review Board require that each person be certified, licensed, or otherwise deemed an expert (not just experienced) in his or her designated area?

See 4-O through Q above. Those individuals with certificates and licenses should include these in their application, which would show their higher level of qualification to serve on the board. At this time the ordinance is flexible to the exact qualifications to ensure seats on the committee are not left vacant.

- S. 50-6.2 E(2)(c) [2] NFP Review Board Members: The composition of the Review Board, as currently written, is unclear. Although you stated at the public meeting on February 20 that each of the categories (trees, water resources, etc.) would be represented on the Review Board by a different person, this decision is not clearly stated in the draft. Please revise. Furthermore, will appointment to the Review Board require that each person be certified, licensed, or otherwise deemed an expert (not just experienced) in his or her designated area?

See 4-O through Q above. Those individuals with certificates and licenses should include these in their application, which would show their higher level of qualification to serve on the board. At this time the ordinance is flexible to the exact qualifications to ensure seats on the committee are not left vacant.

- T. I also had a question about the board itself. In the current draft it states that the board will have 7 members, each of which should have experience in at least one of the areas addressed by the overlay. It then goes on to say that there is a minimum of one person from each category required (trees/plants, waters/wetlands, slopes, and development). I'm a bit confused- would the person in the development category also have expertise in one of the features protected? If not, it seems like there is a possibility that environmental members could be a minority on the NFP board (e.g. one person from each of the three environmental categories and four people with development experience). I doubt that's the case, but I'd appreciate it if you could clear that up for me. One last thing, do you think it would be possible to require someone on the board to have experience in wildlife conservation, or ecology? All of the specific categories are very important, but I think having someone with a more holistic understanding of the way all of these features interact with

one another and the surrounding environment would really tie the board together.

See 4-O through Q above. Members of the NFP Review Board covering the categories of Trees, Woodlands, or Natural Heritage Areas could easily have a background in ecology or wildlife conservation and qualify to serve on the Board.

- U. On page 7 c. Is the Overlay District Technical Team the same as the NFP Review Board?

Any reference to a technical team would mean the NFP Review Board.

- V. NFP Review Board Members = The term of service for any member should be no longer than 3 years, with no continuation of service until at least at three years hiatus. Terms of committee members should be staggered. Will Mayoral appointments be based upon recommendations from City staffers or will this be “a good ol’ boy” system of appointments.

The NFP Review Board will create bylaws that will be recorded with the Clerk’s Office. Applications to serve on this board will be accepted from anyone interested in serving, will be reviewed and recommended by the Mayor, and then appointed by approval of the full City Commission.

- W. A technical Committee was created to assist with the ordinance. It is my understanding that many members never attended any meetings and, further, provided no written comments distributed among committee members. Are these same people now eligible to serve on the NPS Review Board?

The Technical Committee meetings were well attended and participants generally commented on the topic matching their technical expertise, not necessarily on all NFP standards. See 4-J-L above.

- X. 50-6.2 E(4)(b)[2]: Process (for Relief): When the NFP Review Board makes a recommendation, must the recommendation be a vote of “yes” before the proposal can go to the BZA? Or can a “no” recommendation also be appealed to the BZA?

Anyone can appeal to the Zoning Board of Appeals by right. The ZBA (or if it’s the case that the Planning Commission is hearing the case) will get the recommendation of the NFP Review Board and hear public comments.

- Y. Enforcement – Will zoning enforcement staff be trained in basic ecosystem literacy? Could they be provided with the MSU Conservation Stewards Training in order to understand the basic processes and main invasive species that are at play in the region? It’s not just about what we write, it’s what we let slip/allow or disallow in practice. Does the planning and zoning department have the financial and educational tools to uphold these rules? What can the public do to ensure that they do?

Staff regularly undergoes trainings to support their work in applying the City’s building and zoning codes. Thank you for the reference to the MSU training.

It is critical that the City’s Ordinances, especially the Zoning Ordinance, be written so that it can be understood, applied, and enforced by residents, seasoned developers, and staff. It is the goal of the staff to make this also true for the new NFP Overlay.

- 5) Bond Amount. Allows a bond amount to be determined satisfactory by the City’s Engineer. Bonds are key for ensuring compliance, but loads of problems with bonds being insufficient. And most state statutes require some semi-objective criteria for bond amounts (“bond shall be required in an amount sufficient to do X”). If Kalamazoo has an engineer who’s corrupt or biased or something he might be

satisfied with totally insufficient bonds. I don't know if the ordinance can do this, but having some more objective bond criteria might be good.

We will review options for bond criteria and consider adding clarification to the ordinance.

6) Penalty.

A. Fine \$1,000. Too low = consider raising fine to \$5,000.

City staff and the City Attorney will consider fine structure, schedule, and additional penalties.

B. Section G should probably identify each day of a continuing violation as a separate violation (like other Kzoo ordinances regarding civil infractions) so that the "cost" of a violation isn't just a \$1000 if someone disregards the NFP requirement. Make it a pricey violation.

See 6-A above. City staff will be considering a fine per infraction, rather than one fine per property.

C. The \$1,000 fine per occurrence and court costs is not stated clearly in the draft. Many of us think it should be higher than \$1000 to make sure that there are no "accidents." Using a higher amount would make sure that developers understand that we take this document very seriously and that they need to continue to make sure that plantings survive at the site.

See 6-A above.

D. Obviously a \$1,000 fine is peanuts to developers, but I assume there are limits on how large a fine for a civil infraction in a city zoning ordinance can be. However ... what about natural resource damages? Trees, for example, are expensive. And there are state statutes that require treble damages for natural resources.

Also, the order to restore from the judge is key ... but I'll tell you this: most judges (and most non-experts in general) have no clue what constitutes adequate restoration. Real restoration is expensive & difficult. For example, DEQ sometimes refers cases to local county prosecutors to pursue criminally and they always get some worthless one sentence order to restore with no specs or requirements. Just FYI, in getting an order to restore, get the following things in the court order (which may be worth referencing in the ordinance):

1) The defendant must retain the services of a professional environmental consultant to prepare a restoration plan that does the following (and then list the items of restoration with specifics). The restoration plan must include a schedule for restoration of ____ and planting of native plant species.

2) The defendant's consultant must prepare the plan and submit it to the plaintiff for review within 90 days

3) If the plaintiff identifies insufficiencies in the restoration plan, those must be communicated to the defendant in writing within 30 (or 60) days of receipt of the restoration plan

4) Any insufficiencies identified by the plaintiff must be corrected by the defendant within 30 days

5) If the plaintiff approves the restoration plan, then the defendant must begin restoration in accordance with the schedule set forth in the plan.

6) Restoration must be completed no later than _____

Of course include a provision that allows for the parties to extend dates in writing by agreement, etc.

The Penalty section will be reviewed and revised to ensure it is correctly detailed.

7) NFP District Overlay Map

A. Potential inclusion on map:

One of our staff members noted the following omissions from the map:

- KNC's Stryker Nature Preserve on the south end of Oakland
- KNC's conservation easement in the triangle between Long, Short, and Wheaton
- Wooded area south of Mosel, along with the State Drain area along 131-BR between Douglas and Woodward
- The small stream that runs parallel to Ravine along to Interfaith

Or, regarding the two KNC properties, were easement-protected properties already left off of the map, given that they are unlikely to be affected by development?

Thank you for noting these. For this Phase of NFP, we are following the approved Future Land Use Plan in the 2025 Master Plan. Phase II of the NFP project will address gaps in the map and a review of properties already protected by conservation easements or other permanent conservation tools, deed restrictions, etc.

- B. Just need some clarification: The current Future Land Use Map defines areas of property parcels as NFP-protected, but the updated draft map now seems to indicate that entire parcels will now be considered when determining NFP status. *Is this a correct assumption?*

Yes, zoning regulations are applied to the whole parcel.

8) Other Questions

- A. Is there a difference between "semi-pervious" and "semi-impervious"? The ordinance uses both (see, for example, p 9). it seems like those might be the same thing.

Future draft will be revised.

- B. The 6-month Moratorium has dwindled down to a number of days. Please allow Jamie to work on the NFPO full time. There is still so much to do. When will a second draft be available for review? The sooner, the better. Each review, by many eyes, will make the NFPO stronger, clearer, more comprehensive, and a document more likely to protect Natural Features for generations to come.

The second draft will be available for review before the next Community Meeting on March 21.

- C. How do we address the loss of wildlife in the NFP zones?

The ordinance is designed to require landowners and developers to better manage the natural features on and adjacent to their properties by protecting and preserving habitat in a more intentional way than is currently required.

- D. In Phase 2/3 Stewardship will that include the education for land owners on how to create natural buffers for water protection?

Yes, the City will look to partner with local conservation groups, certified natural shoreline contractors, institutes of high education, and others to provide educational opportunities and other programs.

- E. How are septic systems and storm drains regulated near water features?

Septic systems are regulated by the Kalamazoo County Health and Community Services Department. The majority of septic systems have been phased out within the City, and homes are required to hook up to the public sanitary sewer. Storm drains are part of the Municipal Separate Storm Sewer System (MS4) and are permitted and regulated by the MDEQ under the National Pollutant Discharge Elimination System as required by the Federal Clean Water Act.

- F. 50-3.2 Overlay Zone Districts: This ordinance does not include any guiding principles or any indication of the purposes and intents of this ordinance other than "additional development standards." My understanding is that the impetus for this ordinance was the development and

adoption of the Master Plan (Imagine Kalamazoo 2025). This draft would be enhanced by adding the reasons for its creation, such as its connection to the Master Plan. What is the purpose of this document, what might be accomplished by its adoption, why protecting natural features is imperative for the City and its residents? Your presentation includes some guiding principles, yet none of them appear in this draft. By contrast, the Stormwater Ordinance has a list of five objectives. Occasionally within the document there is an “intent” mentioned; however, these intentions are scattered and not always obvious. Please consider incorporating some rational, principles, intents, and objectives in the introductory section.

These are important points and values that we heard during Imagine Kalamazoo Master Plan project and much of this language is included in it. The NFP technical committee discussed these at length and developed some language around intent for the ordinance. By following best practice in writing zoning codes, we have to draft language that is very concise and specific to only the standards and requirements for building and site development. Another best practice is to have zoning codes that directly relate to and support the desires outline in the Master Plan, and the City is trying to do just that.

- G. If a property lies within a NFP area and the property owner does not create a site plan but decides to clear cut the area or regrade the slope how does the draft deal with it?

The zoning code describes the action taken when appropriate building or demo permits are not obtained prior to construction. In the case described, a landowner would need to obtain a permit if clearing more than ½ acre of land. If the area in question exceeds this threshold, an inspector would place a stop work order on the site until site plans have been approved and/or all appropriate permits are in place. Legal action is the next step if the zoning code is not followed.

- H. 50-6.2 B(1) Applicability: I understand that the entire parcel within the NFP zone is covered by this ordinance. Do these regulations apply when activity on the parcel is not a development or redevelop? What actions are considered “any site alterations?” If a parcel owner chooses to clear a wooded area without any plan to build or grade, would the woodland be protected by this ordinance? Is there a permitting or prohibition process that would prevent clearing of woodlands?

See 8-G above.

- I. Phase II Gap Analysis: What is the proposed timing for identifying additional parcels and supplementing the NFP Overlay Map?

Phase II will begin immediately following adoption of the ordinance. There is no targeted end date. We will allow the time necessary to complete the project.

9) General Comments

- A. Key features in the area that require protection would be lake, streams, and wetlands in the city area. Gourneck SGA is a high priority area for DNR as well as the Kalamazoo River and Portage Creek (much of which is actually in Portage). There are additional Tamarack and forested wetlands and fens that should be a high priority for protection. Due to the flooding crisis in Texas Corners, there is a need for review of building ordinances near area lakes and wetlands. After touring the sites that are impacted by the flooding it is apparent that much of the flood damage could have been avoided with responsible building practices and appropriate setbacks.
- B. I live on Woods Lake and have read the draft of the Natural Feature Protection Overlay. I have no disagreements with any of it and appreciate the commitment of the City of Kalamazoo to protect our lakes and wetlands.
- C. Referring the Master Plan, p.28, under heading Natural Features. By the stated definition I wonder how the city vis-a-vis this planning body worked with conservation minded organizations to achieve the stated goal of land acquisition for public enjoyment. I am referring to the parcel of environmentally sensitive land at the corner of Stadium and Drake. It has been purchased by a commercial developer and I am curious why, with enough time that had been available, this parcel was not singled out for this express purpose. It appears that a Natural Features Overlay and the oversight thereof is only as valid as the City Planning offices personnel deems it so. In other words, the final say on these decisions should rest with the people of this city vis-a vis the city commission. This parcel of property should never have ended up in a commercial property developer's hands. This particular circumstance leads me to believe that the process is tainted with the agenda of developers needs before the city resident's needs. Since it currently is zoned as a residential property I would expect the least this office will do is leave it zoned for this purpose. After all, that was the premise under which the developer purchased it...right? (Not too many people reside in car washes).
- D. I attended the Natural Features Overlay Protection public meeting on Wednesday, February 20. It was very well managed and many suggestions for improving the draft ordinance were provided. One that I didn't hear expressed, but that I think important, is that in certain situations the Natural Feature to be protected is so important that the alternative of "no development" should be considered. I understand that this ordinance is not designed to prevent development, bur to make development more environmentally compatible. However, in some rare circumstances any development may pose too great a threat to key natural features to be allowed. I taught a course on environmental impact assessment for many years at WMU and something I stressed is that in evaluating a project the "no action" alternative must always be seriously considered.
- E. I just wanted to follow up with you in regards to my inquiry about hydric soils. I will be attaching a link that provides description of what hydric soils are and also some information where we can find all the mapped hydric soils in the city. Having this information available can also help with the mapping of the Natural Features throughout the city. If you already have this information available, great! We should consider including some language in reference to this for the drafting of the ordinances.
- F. I think it's outside the scope of what an overlay is for but I was wondering if there are any incentive mechanism in city code/property tax code that encourages dense development and discourages developers to always go up to the maximum allotted "terraforming" (for my lack of knowing a better word). If they have to keep a minimum of 25% of protected woodlands on the parcel, for example, is there anything that incentivizes them to leave more than that? I just have a feeling that this overlay could be a useful tool in prevent further sprawl and encourage increased density and all the perks that come along with it.

- G. I have questions and will write them out and submit them to you as well as ask for clarification at the meetings. I am very concerned about the NFP Draft especially when it comes to slopes. It is very difficult to understand and I don't see anything that addresses flood plains which affects all of our water ways and is the main reason for slope failure.
- H. The ordinance refers to stormwater BMPs a couple times (in the definitions at p 4 and again later on p 22). I think there are stormwater BMP, at least construction stormwater BMPs that the DEQ uses & that are actually legally binding in some situations. I will see if the Part 31 and Part 91 of NREPA are any different from the LID ones referenced in the ordinance. here is the BMP manual that DEQ uses for its surface water programs, including stormwater: https://www.michigan.gov/deq/0,4561,7-135-3313_71618_3682_3714-118554--,00.html
- I. INVASIVE SPECIES
- a. The following list is drawn from the USDA Forest Service publication A Guide to Nonnative Invasive Plants Inventoried in the North by Forest Inventory and Analysis, by Cassandra Olson and Anita F. Cholewa (General Technical Report NRS-52). I've omitted species which are not generally present in Michigan.

This publication is useful for both professionals and developers or contractors because it's authoritative, non-technical, and helpful with identification.

Tree Species

Acer platanoides (Norway maple)
Ailanthus altissima (tree-of-heaven)
Albizia julibrissin (silktree)
Elaeagnus angustifolia (Russian olive)
Robinia pseudoacacia (black locust)
Ulmus pumila (Siberian elm)

Woody Species (shrubs)

Berberis thunbergii (Japanese barberry)
Berberis vulgaris (common barberry)
Elaeagnus umbellata (autumn olive)
Frangula alnus (glossy buckthorn)
Ligustrum vulgare (common or European privet)
Lonicera x.bella (showy fly honeysuckle or hybrid honeysuckle)
Lonicera maackii (Amur honeysuckle)
Lonicera morrowii (Morrow's honeysuckle)
Lonicera tatarica (Tatarian honeysuckle)
Rhamnus cathartica (common buckthorn)
Rosa multiflora (multiflora rose)
Spiraea japonica (Japanese meadowsweet)
Viburnum opulus (European cranberrybush)

Vine Species

Celastrus orbiculatus (Asian bittersweet)
Cynanchum louiseae (black swallow-wort)
Cynanchum rossicum (European swallow-wort)
Hedera helix (English ivy)
Lonicera japonica (Japanese honeysuckle)

Herbaceous Species

Alliaria petiolata (garlic mustard)
Centaurea biebersteinii or *C. maculata* (spotted knotweed)
Cirsium arvense (Canada thistle)
Cirsium vulgare (bull thistle)
Euphorbia esula (leafy spurge)
Hesperis matronalis (Dame's rocket)
Lysimachia nummularia (creeping jenny or moneywort)
Lythrum salicaria (purple loosestrife)
Polygonum cuspidatum (Japanese knotweed)
Polygonum sachalinense (giant knotweed)

Grass Species

Phalaris arundinacea (reed canary grass)
Phragmites australis (common reed)

Another useful reference is *Invasive Plants of the Upper Midwest*, by Elizabeth J. Szarapata. It includes information on control of invasive species.

An invaluable reference for anyone wishing to find native alternatives to invasive and weedy species is the Brooklyn Botanic Garden's publication, *Native Alternatives to Invasive Plants*, by C. Colston Burrell.

Some other invasive species commonly appearing on authoritative lists.

Tree Species

Pinus sylvestris (Scotch pine)
Pyrus calleryana (Callery pear)
Ulmus parvifolia (Chinese elm)

Shrubs

Buddleja davidii and hybrids (butterfly bush)
Cotoneaster apiculatus, *franchetii*, *microphyllus*, and *pannosus* (cotoneaster)
Euonymus alatus (burning bush or winged euonymus)

Vine Species

Vinca minor and *Vinca major* (periwinkle or myrtle)

Herbaceous Species

Coronilla varia (crown vetch)
Daucus carota (Queen Anne's lace or wild carrot)
Gypsophila paniculata (baby's breath)
Hemerocallis fulva (orange daylily)
Melilotus alba (white sweet clover)
Melilotus officinalis (yellow sweet clover)

- J. We spoke a bit at the Eastside meeting about including wildlife in the NFP Overlay. Karin brought up the fact that the current draft does not take into account the effects of a development on the surrounding wildlife. I also believe this is a pressing issue. I brought up the idea of site-specific wildlife assessments or natural resource inventories, something I found in the attached article from New Hampshire's Department of Environmental Services (page 5, under "Municipalities can strengthen...").

My idea is not to require every parcel to perform a wildlife assessment, but I think it would be good to have an idea of what species inhabit the proposed developments that will already require board review (pathways 2 and 3 on the handout). Based on this information, the board could approve or alter a proposed development depending on how strong its impacts will be on the wildlife currently inhabiting the area. Do you think this is something that could be implemented in the overlay? I can't say specifically how these surveys would be interpreted, but I imagine that the NFP review board would be able to gauge the potential impact of a development on wildlife, and come up with strategies to minimize it.

K. I am so proud of the City of Kalamazoo for taking a crucial step towards preserving and rehabilitating our natural areas. Bravo!

L. This seems like a start to protect the natural amenities in the City of Kalamazoo. It stops development on the corner of Drake Road and Stadium Drive. There are still for sale signs on the corner above a steep grade. The only access would have to be on Drake Road. There are lots of pretty trees on the site.

M. This is a request to the environmental zoning board and city commission of Kalamazoo. The land at the South West corner Drake Road and Stadium Drive is being considered for a change in use. A developer wants to build several small businesses there. This land is directly on the shore of Asylum Lake.

Asylum Lake has been a dumping ground for waste from the trailer park across the street in Oshtemo Township and the run off from the parking lot across stadium drive. The result is that the lake cannot purify the waste and passes contaminants downstream all the way to the Kalamazoo River. This small parcel of land should be put in a classification where it cannot be developed and must be left natural. It is a first step in cleaning up the waters affected. We both really enjoy the natural beauty and would be upset if business is built there. Please keep the Asylum Lake as it is now.

N. The NFPO is a legal document and must stand up in a court of law as strong, clear, well-written, and comprehensive. There may be a spotlight on the NFPO and legal entities may review it word-for-word. I strongly suggest the City Attorney review the document, if he has not already, and further suggest an editor with an English degree review it also.

O. Land around a preserve is essential to the preserve.

- a. Habitat loss creates stress on all wildlife and the NFP needs to address this issue.
- b. Wasting Disease is increasing in the US and as recent as 2 years ago there were devastating losses to deer throughout west Michigan.
- c. The loss of habitat that surrounds a preserve creates stress on all animals that are in and around the preserve. Loss of space to thrive, limited food availability will cause stress to most species. Survival of the fittest will prevail and there will be loss of life.
- d. When stress happens there is bound to be additional illness and death within the preserve. The illness can easily lead to death and then other species will be feeding off of the diseased remains. Causing additional illness and possible death.

P. How we can talk about Nature Feature Protections without a single word about the crisis on the wildlife because of human encroachment. We are already aware of the affects man has created on the population on pollinators, song birds, and a variety of insects that are essential to the food chain within these naturalized areas.

- Q. No were does this document address Light or Noise pollution. Again the areas around a preserve should have special regulations to decrease Light and Noise. Humans have adapted to the invasion of light in their lives and yet suffer stress and illness due to both. Animals are do not adapt to these issues.
- R. Although Flood Plains are already regulated, they should be included in this plan just to reinforce the regulations. The information could easily be cut and pasted into the NFP document. It will make it easier for anyone trying to understand or conform to the NFP ordinance.
- S. Make sure that the language is clear and strong. There are a couple of places where the use of may or can should be more specific.
- T. After waiting 6 months for the Ordinance to be approved, developers will not want to wait any additional time for a NFP Review Team to be created and educated. The NFP Review Team needs to be up and ready by June.
- U. Additional NFP sites need to be included before the final draft becomes an ordinance.
- V. I have been closely following the community input concerning the NFP and particularly Asylum Lake Preserve, discussing with neighbors, friends and new acquaintances about the critical nature of this overlay map and ordinances governing future footprints of humans on the precious few remaining acres that surround, touch on and encompass these vulnerable to damage areas.

You all could be heroines to the cause doing the right thing to vigorously protect the areas of earth that are within this map. It is such a small area but so important to the living system - water , land, plants, animals and humans. I truly appreciate that you are involving the concerned citizens and I hope our input is useful and provides perspective and facts that may not have been readily apparent in putting together this big project that affects a small area.

The concerns of the pollutions that are already present - light, noise, chemicals, overcrowding of natural habitat and developed habitat for humans and the constant movement all around are proving detrimental to health. The human nervous system is not designed to be in a constant barrage of stimulation. It leads to depression, hopelessness and violence.

I believe the IK2025 is supposed to guide the maintenance and development of Kalamazoo to make it a City to be Proud of Now and in the Future. We are at a "tipping point" here in Kalamazoo, all the inhabitants. Why can't we have a strong voice in developing what ground is left in this city?

These ordinances can be that strong voice, that line in the sand where we say this development is NOT in the best interest of our citizens and all the other participants that live here. Make the language firmly in support of protection. The development side has enough power in the greed, law and financial areas to find the loopholes and the work-arounds so the language needs to be BOLD. Your community has to put their trust in you and what you are doing. I'm watching, listening and sending you energetic support to make this a document that will do the job now - and for seven generations to come.

- W. The purpose of this letter is to request stronger protections and enforceable provisions in the Natural Features Protection Overlay for The Asylum Lake Preserve, its watershed, and other preserves in the City of Kalamazoo.

This Council is charged with following the Declaration of Conservation Restrictions that established the Asylum Lake Preserve. Section H.1 of the Restrictions states the following: "Promote Ecosystem

Integrity and Natural Esthetics: Maintain the Asylum Lake Preserve as green space and wildlife habitat. Policies should be adopted that promote ecosystem integrity and natural aesthetics. Selected landscape features such as woodlands, old fields, wetlands and lake should be protected from further degradation and enhanced through carefully considered restorative action. Objectives include converting land previously used for agriculture to prairie and converting portions of old fields to oak savanna. Special attention should be given to water quality in Asylum Lake and protection of the Asylum Lake watershed.” The Policy and Management Council accepts its responsibility seriously.

The Council appreciates that the fundamental intent of the Natural Features Protection Overlay is a good faith effort to protect the many diverse natural areas in the City. However, the Overlay does not currently contain provisions adequately addressing the special issues stated in the Declaration of Conservation Restrictions. Special attention must be extended to the Asylum Lake Preserve, its watershed, and other Preserves in Kalamazoo. Enforceable provisions should be added to the Overlay to address the historically significant environmental benefits of the Preserves and watersheds.

It is the opinion of this Council that the Natural Features Protection Overlay should provide stronger provisions that will better protect the Asylum Lake Preserve, its watershed, and other Preserves within the City of Kalamazoo. The Preserve has very special environmental quantities and qualities that must be zealously safeguarded. If not zealously safeguarded, these special quantities and qualities will be subjected to potentially permanent damages. Stronger provisions must be enforceable.

The Council invites additional communications regarding the stated concerns. The Council is prepared to be a productive voice in the improvement of the Overlay, as it regards the Asylum Lake Preserve. The Council invites you to contact its Chairperson, Duane Hampton.

- X. For future reference, in addition to clarifying that the State and Federal Threatened and Endangered Species lists pertain to specifically to Michigan species, you can refer to this URL: <https://mnfi.anr.msu.edu/species>. The lists are here, as well as explanations of the laws requiring them.
- Y. I support the inclusion of something like, “excessive light and noise pollution that disrupts the natural behaviors of wild animal species.”
- Z. The intent of the definition of natural vegetation is explicitly to define as “without human aid”, but I see the point of others questions. Consider revising to “Plants that grow naturally without human aid ESPECIALLY BUT NOT LIMITED TO THOSE that provide habitat for wildlife, deep-roots to stabilize banks and shorelines, and canopy for shade.”
- AA. Do we need an additional definition for “Restoration” or “Ecological restoration?” as “the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed.”
- BB. Hopefully we will identify features during Phase II (e.g., vernal pools) that the wetland definitions would not classify as a wetland.
- CC. I support include language requiring “Great Lakes genotypes” and “no cultivars are allowed”. I can supply some support if needed.
- DD. This is something that we might like to consider while we develop the NFP. To me it addresses that we need to include Preserves in our ordinance.

https://aeon.co/ideas/its-wrongheaded-to-protect-nature-with-human-style-rights?utm_source=Aeon+Newsletter&utm_medium=email&utm_campaign=MIT_AD_EINSTEINS_WIFE_2019_19_03"

- EE. Flood Plains do need to be specific to Kalamazoo. The State or Federal Standards are not enough and the NFP Ordinance needs to be a document that stands on its own without having to refer to other sites for information. The NR Review team needs to be ready to be voted on at the same meeting as the Ordinance. It will show that the City is respectful of the developers in the area and that they are standing strong to support the Ordinance.
- FF. The city of Kalamazoo is graced with three Preserves, two of which are owned by WMU. Both Kleinstuck and Asylum are the last of the wild places that use to inhabit all of Kalamazoo. They are sanctuaries for both the wild within and those of us that know it is sacred to walk within these properties. The lands that surround these preserves are crucial to their life: the watershed, wildlife sustainability, light and noise pollution and most of all the road salts that are killing the waters within.
- GG. If the NFP Ordinance was true to these Preserves there would be a separate listing for Lands Surrounding Preserves in order to address the importance of carefully monitoring the health and wellbeing of the Preserve itself. The Vermulen Property is the perfect storm. With the proposed development the animal wildlife corridor will be truncated, the density of wildlife will be increased, the light pollution will change the preserve in ways yet to be determined and the watershed will continue to increase the salinity of Asylum Lake which is already stressed beyond being sustainable. It is our obligation to find ways to increase the protection around these areas for ourselves and future generations.
- HH. Thank you, part of my question is whether there will be any certified Geologist that will be reviewing this part of the document to make sure that we are as clear as possible. Secondly, I would just like to be better informed and the issue of slopes is “slippery” for me. I would love for someone to explain how this part of the ordinance will ensure clear and easy understanding about what is required and who will be responsible to make sure it is followed.
- II. For the Water Resources setback (and Wetlands and whatever other ones where setbacks are determined by size), this should be modified to deal with scenarios where there are multiple parcels likely being developed singularly. Otherwise, you’re going to have weird outcomes where different parts of a single development site will have varying setbacks, and it does not seem to be your intent.
- JJ. Woodlands:
- Need to clean up this definition. In the immediately prior section, you define “trees” “for purposes of the NFP Overlay” differently than you’re defining them here. Also, again, need to make clear that these are “ands” not “ors”.
 - This “gaps” concept doesn’t make sense. I’m sure that came out of a meeting somewhere, but as articulated here, it’s way too vague and could subject basically anything with any trees on it to this determination.
 - On the preservation criteria, there needs to be at least a factor added for impact on developability (making up words now!) of the balance of the site. Maybe something like, “minimizing impact on the development opportunities on the remainder of the property.”
 - As an aside, the entire NFP Overlay is inviting a takings claim, but this one in particular. This is basically saying that if you have *any* Woodlands on your property, you’re losing 25% of your buildable area out of the box.
- KK. Slopes:

- I do not understand this section. I mean that not in the sense that I don't understand the concept. I mean it in the sense that I don't understand how it operates. The probably needs to be reworked and simplified a little. I think I understand what the drafter wants to accomplish, but someone who knows development standards and controls (and the law) needs to take a red pen to this.
- Section 5(c)(1) has the potential to be a straight up taking. If I have a property where the toe of a 100' slope is 50' inside my boundary line, this would have my de facto setback be 100', and that doesn't even consider the depth of the property in general. There needs to be some serious built-in protections/limitations/exceptions to this setup in order to make it pass muster. Moreover, if it remains unlimited, it needs to be deferential to other site planning considerations (access, safety, visibility, etc.). I don't know how you're going to bridge those, but without it, I think there's an issue.
- Section 5(c)(4)(a) is unnecessary; there are already soil erosion and sedimentation control controls and permitting in place; this provision reads as if it was written by someone who doesn't know how erosion controls work. Same comment applies to 5(c)(4)(d).
- Section 5(c)(4)(b), not permitting storm water management with in the setback is nuts; again, consider the implications of this for de factor no-build areas on all sorts of properties. This is the kind of thing that gets the City sued. You should build in an exception to this for where the owner reasonably demonstrates that slope integrity is maintained.
- Section 5(c)(4)(c), I suppose I would ask why not. You should build in an exception to this for where the owner reasonably demonstrates that slope integrity is maintained.
- Again, as with Woodlands, the devil here is in the application. You can mitigate the impact of this a little if you make clear that "slope impact zones" and "slope setbacks" can serve to satisfy other setback and coverage ratio requirements, but if these are ON TOP of those requirements, I think you are taking on real legal trouble you don't need. That said, I don't see a case for why they wouldn't serve both purposes. This NFP Overlay exists not to exponentially worsen the developer's development burden and reduce the value of these properties; it exists to try to say that in the NFP Overlay areas, the typical setback/lot coverage/etc. rules get applied in more thoughtful ways (or so goes the theory). Under that theory, if you have a property that's in a zoning district with, say a 25% open space requirement that has a woodland on it, you don't further the objectives by saying, "you have to have 50% undeveloped – 25% per underlying ordinance and 25% woodland;" but you do further the objective by saying, "you have to have 25% undeveloped, but since you're in a woodland, that 25% needs to be woodland," or what have you. Same thing for screening; there should be a clear statement that this is dual purpose.
- Just conceptually, there's this weird belief out there that all slopes are somehow historic and natural features worthy of protection. That is not always the case, and indeed, you may be inviting problems you don't need to invite. If someone in an NFP area goes out and creates a "slope impact zone" just by shoving some dirt around (which, under these definitions, it easily could), it's just inadvertently subjected itself to an extremely onerous set of regulations. That can't be the City's intent.

LL. On trees:

- Somehow this needs to get integrated with the tree survey requirement in the site plan ordinance.
 - Under 3(b)(1)-(2), need to make clear that that is an "or", not an "and" (i.e., stick an "or" after (1)).
 - I think 3(d)(3)(a) is intended to say "removed trees", not "replacement trees;" "replacement trees" are the product of the calculus (the "then"); "removed trees" are the conditions (the "if").
 - On the mitigation in general, this is unnecessarily complicated. I read/write complicated text for a living, and it took me 10 minutes to figure out what you were trying to say. This should be cleaned up to just say that if the removed tree is <4", then the replacement tree ratio is 1:1; if the removed tree is >= 4" (or you use one of the special trees), then the ratio is 2:1.
 - You should clearly delineate what the "special trees" are for purposes of replacement trees (note this is different than special trees for removal trees, which you have a separate table for). As with 3(b)(1)-(2), there should also be an "or" here between (a) and (b) in 3(d)(3)(a)-(b).
- G. Finally, the terms of off-site mitigation in 3(d)(4)(b) need to be made a little more clear. You're going to have a lot of people asking for this, so you should make the criteria more clear

MM. I've put together a list of the trees most suitable for sequestering carbon over fairly long periods of time, thus mitigating the effects of climate change. These trees are characterized by relatively high density of wood, tolerance of urban and climate stress, and long life. I'm including only species already on the Special Status Tree List.

Larch, tamarack
Eastern white cedar
Oak species
Hickory species
Silver maple
Red maple
American elm
Black walnut
Basswood, linden
Tulip tree
Buckeye, horse chestnut

I'm not sure how best to note this on the Special Status list. Perhaps another category: cs, for carbon sequestration and climate-change mitigation? Or are we headed toward some kind of rating of replacement trees? I note that, on average, 50% of a tree's dry mass is carbon, and a 12-foot hardwood tree already harbors roughly half a ton of carbon. Recent research indicates that mature, old-growth trees continue to sequester additional amounts of carbon but that young woodlands are especially effective for taking up and sequestering carbon.