

Agenda

Natural Features Protection

Review Board



City of Kalamazoo

Tuesday, January 28, 2025

4:00 PM

City Commission Chambers at City Hall - 241 W. South Street

A. CALL TO ORDER/ROLL CALL

1. Excuse Absent Board Members (**Action: Motion to Excuse Absent Members**)

B. ADOPTION OF AGENDA

(Action: Motion to approve the agenda)

1. Agenda Approval (**Action: Motion to Approve Agenda**)

C. APPROVAL OF MINUTES

1. Approval of the minutes from the Natural Features Protection Review Board meeting on December 10, 2024 (**Action: Motion to approve the minutes from the Natural Features Protection Review Board meeting on December 10, 2024**)

D. PUBLIC COMMENTS

E. BOARD MEMBER COMMENTS

F. NEW BUSINESS

G. UNFINISHED BUSINESS

H. STAFF REPORTS AND UPDATES

1. Annual Report Presentation, Draft NFP Guide Overview, & 2025 Work Plan

I. COMMUNICATIONS AND ANNOUNCEMENTS

1. City of Kalamazoo Boards and Commissions Openings

J. ADJOURNMENT

Minutes
Natural Features Protection Review Board
December 10th, 2024
Regular Meeting

Held at City Hall, Commission Chambers

4:02 p.m.

A. **Call to Order:** Director Martin called the meeting to order at 4:00 p.m.

B. **Members absent:** Hollander, Bassett

C. **Motion to excuse absences**

Motion to excuse absences made by Director Fuller, supported by Director Lettow, motion passed unanimously.

D. **Adoption of Agenda**

Motion to adopt the agenda made by Director Lettow, supported by Director Fuller, motion passed unanimously.

E. **Approval of the Meeting Minutes**

Motion to approve the minutes from the November 26th, NFP Review Board Meeting made by **Director Martin**, supported by **Director Fuller**, passed unanimously, with the following amendments:

- fix misspelled Director Fredrickson's name and
- change "non-evasive" to "non-invasive" in the minutes

F. **General Citizen Comments**

There were no general citizen comments, either in person or by phone.

G. **Board Comments**

Director Fuller - 3-terms are ending this year and the board will be taking applications to fill these positions. Will need specific knowledge in the areas of Water resources, Wildlife habitat and Plant restoration. With a lot of boards taking applications there will be some combining of forces a little bit for Marketing for the multiple opportunities. Hold Annual meeting to look at applications.

New Business

1. Approval of a recommendation to the Zoning Board of Appeals to grant relief from the NFP Slope Standard for the addition of an upgraded pump house at 1609 Whites Road.

Nolan provided an overview of the project and then the applicant was invited to present on the request.

- Primary Country Club golf course, in February they were looking for upgraded pump house to provide more capacity for their expansion further to the southwest along the lake. The previous variance was similar focusing on some of the protected slope area and some protected trees. The site has changed, the previous site was not the most suitable due to the complexities in that area, costly and the sanitary line runs near there.
- They refocused on where the existing pump house is currently and is located within some sloped areas that are protected, with no trees and within 500 feet of the lake. Will not have to bore a line and switch to 5 centrifugal 75 horsepower pumps versus a vertical turbine pump.
- Use existing concrete building that is 15x15 feet to house the new transformer for power and build a similar concrete building next to it that will be covered over by a roof and earth as well, you will only see the face of the structure with a garage door. They will run 2 smaller lines out into the water which will be only 20 feet because of the depth of the water.
- The golf course sits on 2.53 acres of the existing naturalized area, which is 110,420 sq ft. The new naturalized area will be 31.1 Acres which is 1,335,500 sq ft of tall fescue native naturalized prairie species and will eliminate 257,004 sq ft of impermeable surface: tennis courts, etc. Slope will be improved.
- Sending in pre-application permit application in to get State approval as well.
- Erosion Control plan during construction in front of the pump station it is flat, they will be excavating a hill out and it's about 30x40 ft footprint. With the new design, we won't have the interface with hand digging and see no long-term erosion.

Questions?

Director Fuller: What is the distance between the new pump house to Whites Lake? 25 feet is the setback requirement for a water resource.

Mr. John Fulling: Approximately 75 to 100 feet and everything is flat.

be expanded but there will be no conflicts with trees or critical root zones.

Director Lettow: At the February NFP Board meeting there was a discussion about the permitting required from the Michigan Department of Environment, Great Lakes, and Energy (EGLE), has any aspects of that changed like the water withdraw or capacity?

Mr. John Fulling: No, the only changes are the location of the new pump house which will help so we don't have to run two pump houses (older and newer) at the same time. We can just utilize the new pump house.

Director Lettow: Clarified that the what the board is worried about is the capacity of the slope to erode or not, especially near a water body. Due to that, Director Lettow asked Mr. Fulling to discuss the footprint of the pump house structure.

Mr. John Fulling: Indicated that there will be some earth moving to accommodate the new footprint of the pump house structure but that in front of the structure near the lake is flat and there are plans to add plantings in the sloped areas. This new location will also not require digging a wet well and directional boring. New pipes will only be about 4-5ft underground.

Director Lettow: Asked Nolan if Soil Erosion Control is something handled internally by the City.

Nolan: Confirmed that, yes, the City of Kalamazoo has a staff member in the Building Trades team that works on compliance and Soil Erosion Soil Control permitting.

Director Fuller: The area of variance was approved in February, is it relatively similar for the slope disturbance?

Mr. John Fulling: This new proposal is far less. The existing pump house footprint will those NFP layers. Water Management or impervious surface or native vegetation in a sustainability perspective.

Board questions focused on other aspects of the site which are not pertinent to the variance request case. Nolan clarified that the case before the board is solely focused on the pump house variance request. Any further work will come back to the board through the Site Plan Review Process OR if a variance beyond the scope of the pump house are pursued by the applicant, they would need to come back before the NFP Board.

Motion to approve the recommendation to the zoning board of appeals to grant relief from the NFP slope standard for the addition of an upgraded pump house at 1609 Whites Rd. Made by Director Murgia, supported by Director Martin, motion passed unanimously via a roll call vote.

Staff Reports and Update

Staff Updates: 2025 Work Session Topics

Nolan: Director Hollander brought up a point that led to some discussion about 2025 as we reviewed our meeting schedule and thought about special topics that the board is interested in pursuing as part of an umbrella of NFP phase 3. Could be ordinance-related or special topics, invasive species, storm water, etc. A draft of topics to talk about for possibly years to come.

- **Director Lettow:** NFP as a regulatory zoning tool and what it would look like to incentivize

some of the cases. Put together a packet or set of guidelines for the owners of the parcels in

- **Nolan:** In January you will see the first draft of the guide and we can add more to it. NFP has had a lot of successful projects where you have a classic developer come in and NFP can help with a shift of focus.
- **Director Lettow:** We reframe the tree replacement ratio where basically found if you're going in for inch-for-inch tree replacement and moving a large tree on a small lot and it's a variance that the board feels appropriate and given the difficulty of the situation there's not a way that you're going to be able to replant that many trees in that space. If you do, they're going to be tiny little ornamental trees that will not offer a ton of value from a natural features standpoint. Is there any kind of tree bank or if the City or others have sites that could be recipients for trees?
- **Director Fredrickson:** Stormwater and how it relates to the existing ecosystem in these overlay districts and relying on trying to maintain water movement in the site. They tend to either pond or bury our water and get it off-site as quickly as possible. We should evaluate how we can integrate that into our Natural Features Protection.
- **Nolan:** Can ask City staff who are primary storm water Engineers or reviewers to see if they want to join the board for that work session.

Public Comments:

None

Unfinished Business

None

Communications and Announcements

None

Adjourn Meeting

Director Martin adjourned the meeting at 4:45 p.m.



Natural Features Protection Board Annual Report

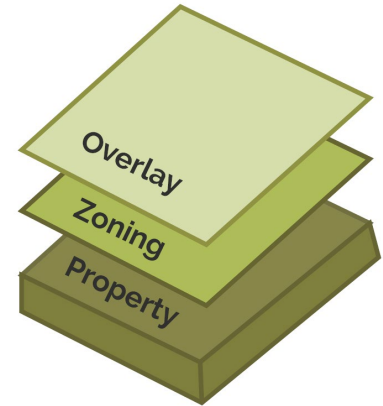
AGENDA

- Five Years of NFP - A look back
- Data Overview
- NFP Guide

What is NFP?

A **Zoning Overlay** is a set of zoning standards applied to a property in addition to the zoning standards from the base or underlying zoning district.

For properties within the NFP Overlay, the standards of today's zoning district apply in addition to those of the NFP Overlay.



What is the intent of NFP?

1. To protect natural features in the City of Kalamazoo, specifically wetlands, water resources, trees, woodlands, floodplains, slopes, natural heritage areas, and habitat corridors.
2. To guide site development, balancing growth and redevelopment with the protection of our existing natural features.
3. To create site designs that are responsive to the existing natural features and minimize impacts to the extent possible.

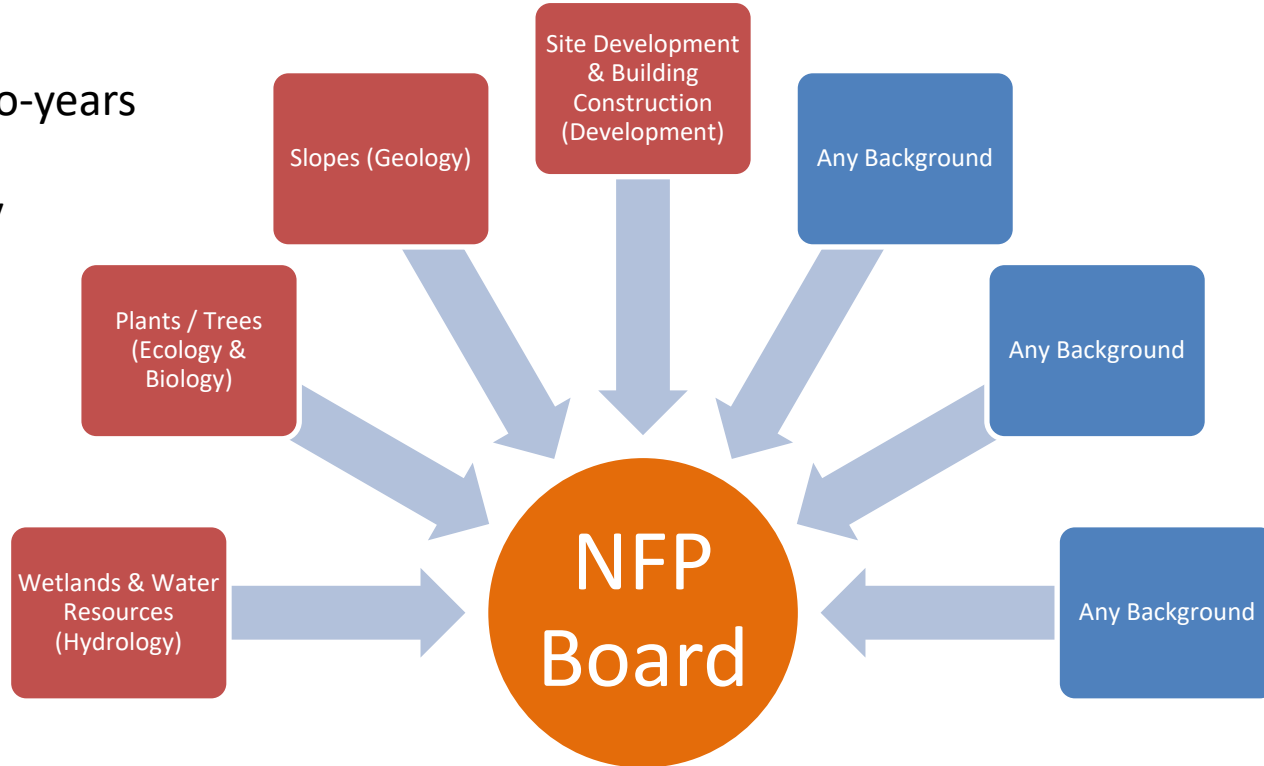
What is NFP?



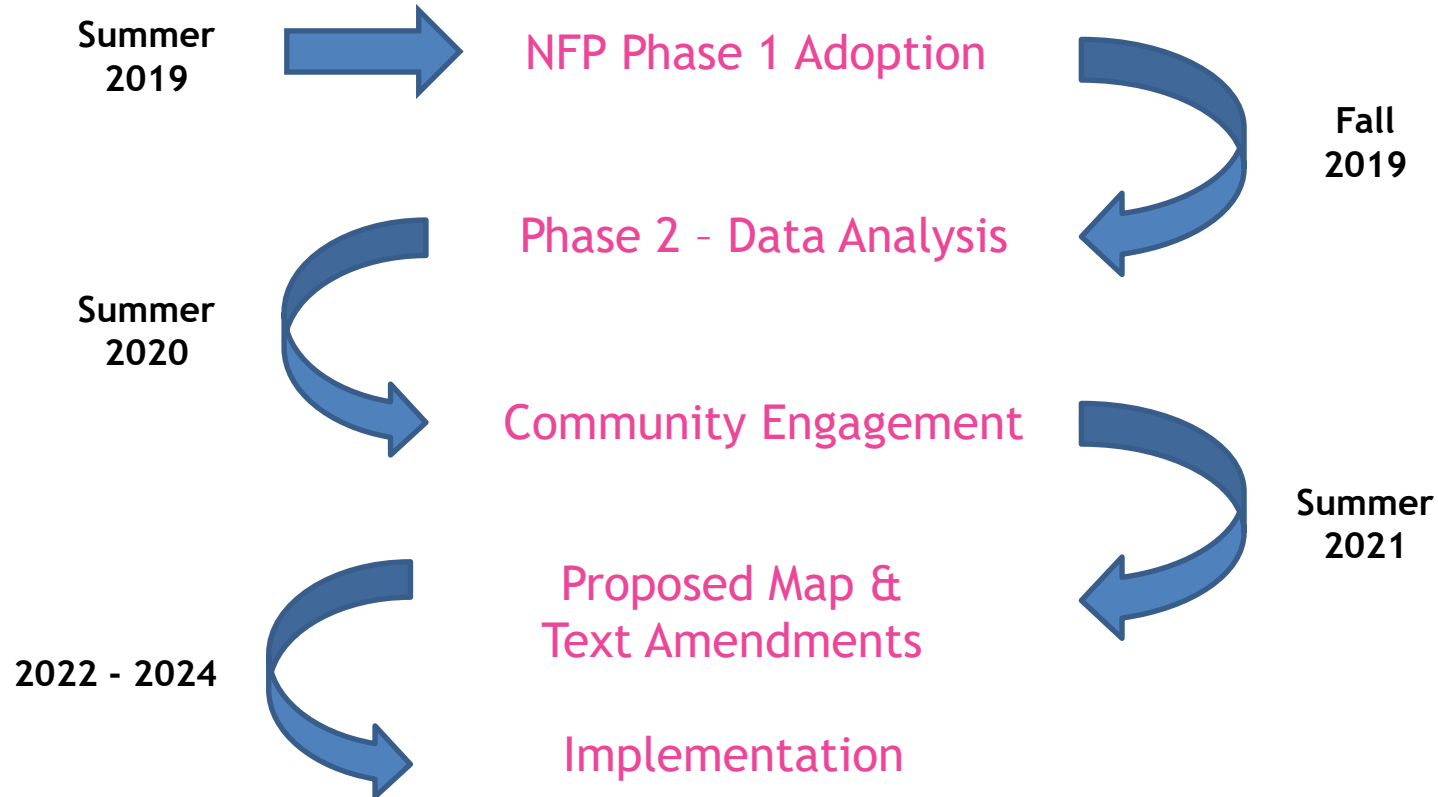
The NFP Board is comprised of 7 board members at least 4 of which need to have education or background in the areas in the red boxes.

Terms are two-years

Appointed by
Mayor & City
Commission

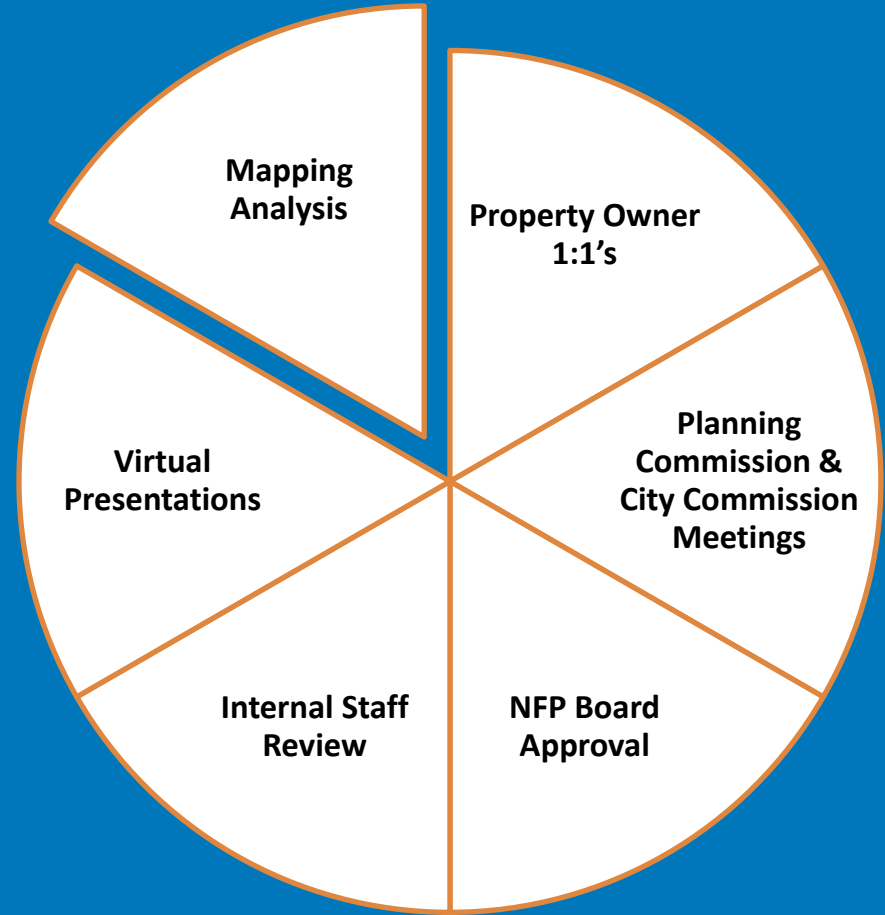


Five Years of NFP – A look back



Phase 2 Community Engagement

- Broad Engagement
- Data Driven
- “Living” document



Protection of Natural Features was a community priority identified in the Imagine Kalamazoo 2025 Master Plan. The Natural Features Protection (NFP) Overlay District and Ordinance aligns with the Environmental Responsibility goal of the City's Strategic Vision.

The NFP Overlay District was adopted in 2019 and has been successfully implemented for the past two years, protecting important Natural Features like water resources, woodlands, rare species, and slopes. The ordinance adds additional development standards that require thoughtful design around Natural Features when properties are developed or redeveloped.

Virtual Information Session

Virtual Information Session
June 16th, 12 pm
<https://zoom.us/j/9151341631>

NFP Review Board Meeting
June 22nd, 4 pm, live streamed
Recommendation to Planning Commission

Virtual Information Session
June 23rd, 7 pm

Planning Commission Meeting
July 1st, 7 pm. live streamed
Recommendation to City Commission

Find meeting access information:
www.kalamazoo-city.org/notices

Natural Features Criteria

The proposed map amendments to the NFP Overlay District were identified by four criteria:

- 1 Properties that have or are near streams, rivers, lakes, and wetlands
- 2 Properties that have steep slopes with tree cover
- 3 Properties in woodland areas identified by the community
- 4 Areas immediately adjacent to public preserves

Phases

There are three phases to Natural Features Protection in the City. Current proposed changes to the map and ordinance are part of Phase 2.

- 1 **NFP Overlay District & Ordinance**
Adopted June 2019
Implementation 2019 - present
- 2 **Mapping Analysis & Amendments**
Map Analysis 2020 - 2021
Text Amendments 2021
- 3 **Public Education & Stewardship**
Long-term voluntary projects
Beginning in 2022



What's a Zoning Overlay?

A Zoning Overlay is a set of zoning standards applied to a property in addition to the zoning standards from the base or underlying zoning district. For properties within the NFP Overlay, the standards of today's zoning district apply in addition to those of the NFP Overlay; in cases of conflict, the NFP Overlay standards apply.



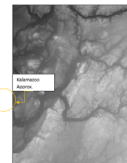
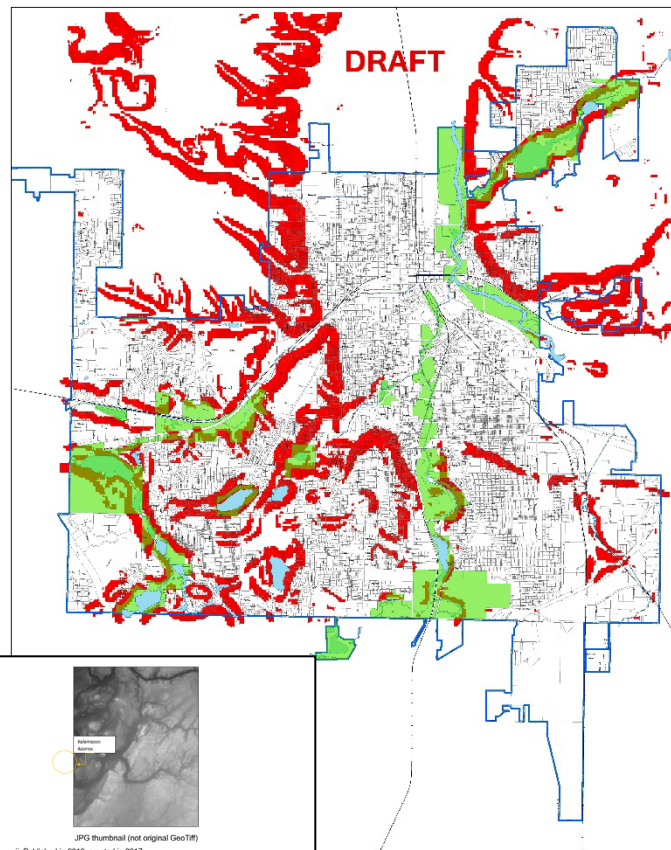
Natural Features Protection Phase I Methodology Breakdown

I. Natural Features Considered during Phase II:

1. Slope
 - a. Greater than 20 percent
2. Hydrology
 - a. Wetlands (current and historic)
 - b. Ponds
 - c. Lakes
 - d. Rivers (Riverine)
3. Woodland
4. Other Considerations:
 - a. Phase I carryover
 - b. Community Input / Engagement

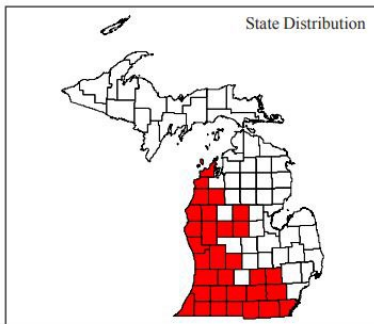
II. Data Sources:

1. Slope (OLD – Fall 2019 – Fall 2020)
 - a. Natural Resource Conservation Service Data Gateway
 - b. 4 USGS DEM Geotiff files combined to cover city-area.
 2. Slope (Updated Spring/Summer 2021)
 - a. 1 USGS DEM downloaded
- Notes on Slope: Raster image (10 meter pixels, moderate resolution), 7.5-minute x 1 quadrangle based. Year not shown in metadata, most-likely from post-2010.



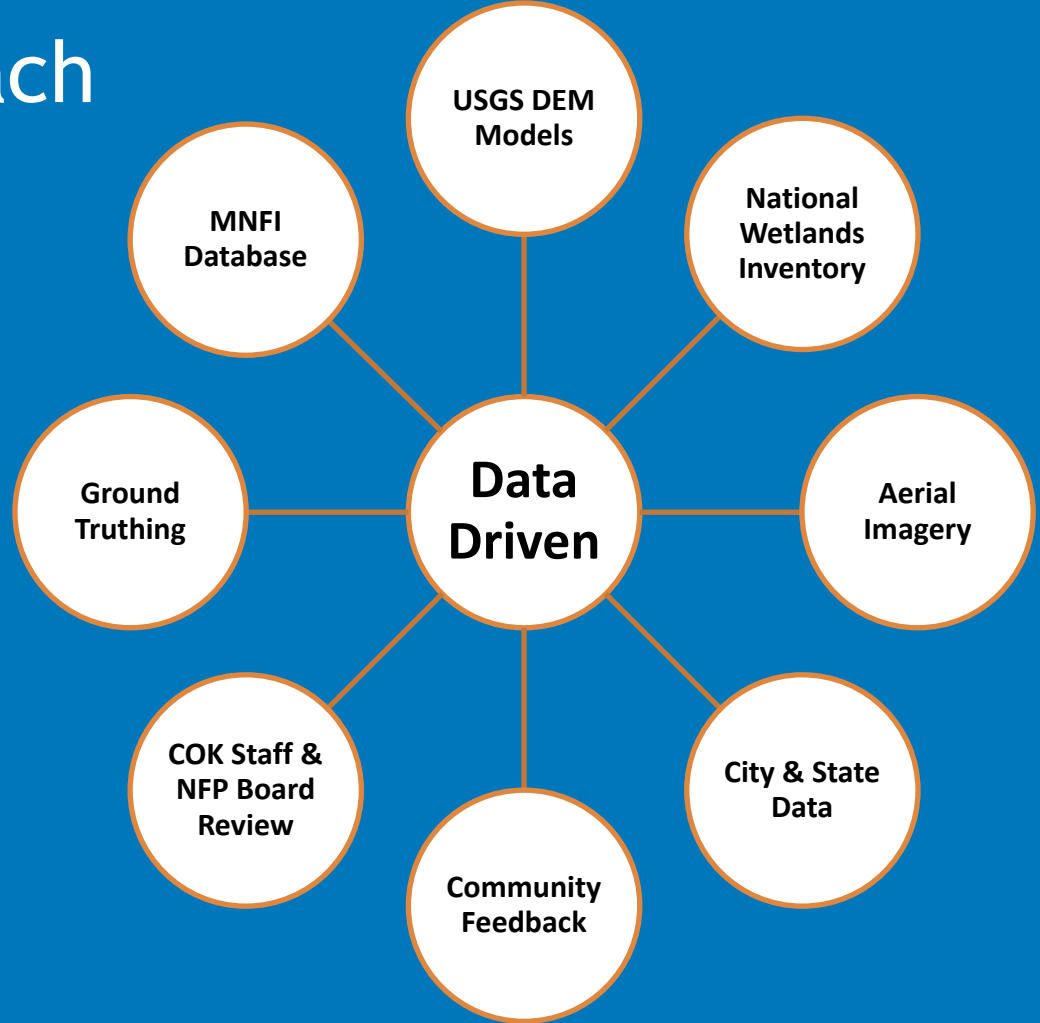
JPG thumbnail (not original GeoTIFF)

- ii. Published in 2019, created in 2017.
 - iii. Spoke with USGS reps over the phone to understand more about how data is published.
- ology
- National Wetlands Inventory via U.S. Fish and Wildlife Service
Wetland_Conus_Polygon Spatial file
i. <https://www.fws.gov/wetlands/data/Mapper.html>
- ources
- City Data – Parcels
Political Boundaries
Published Data Layers via ArcGIS Online Portal for Reference
- i. Roads
 - ii. Topographic Lines
 - iii. Various Base maps
 - iv. Aerial Imagery

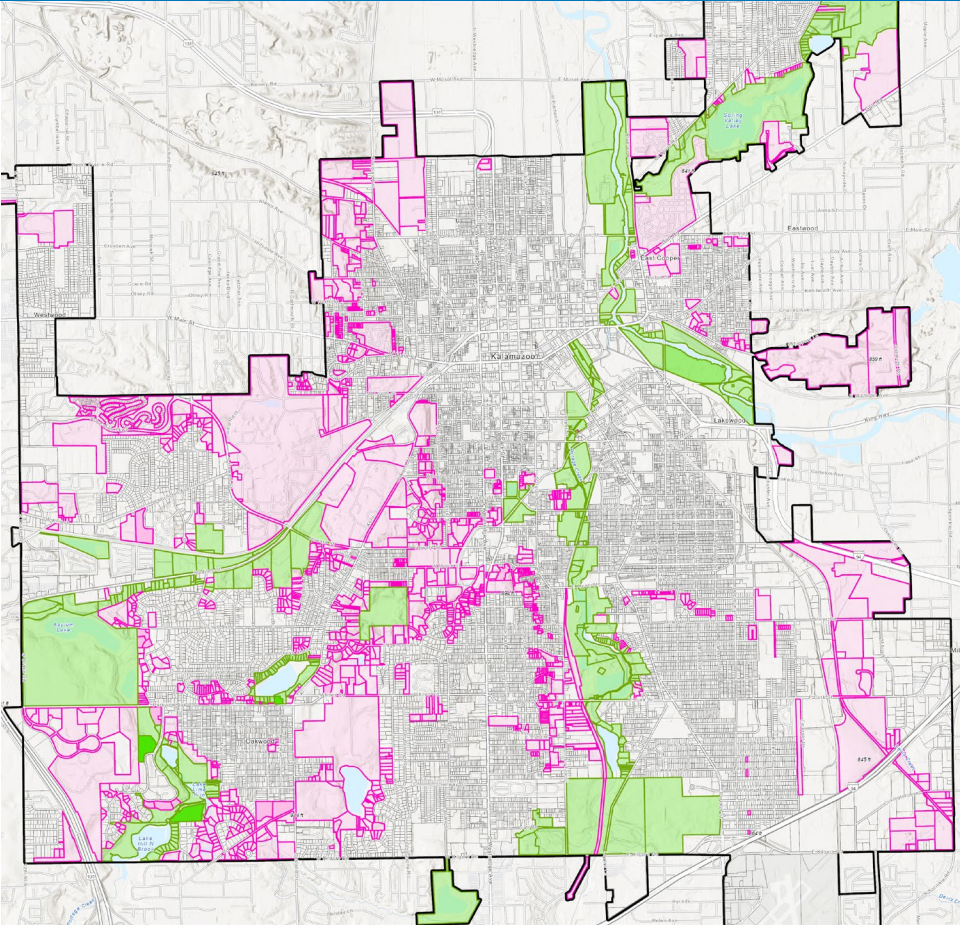


A Data Driven Approach

- Focus on authoritative data sources
- Context-sensitive
- Data has proven accurate



Phase 1 and Phase 2 – A Look Back

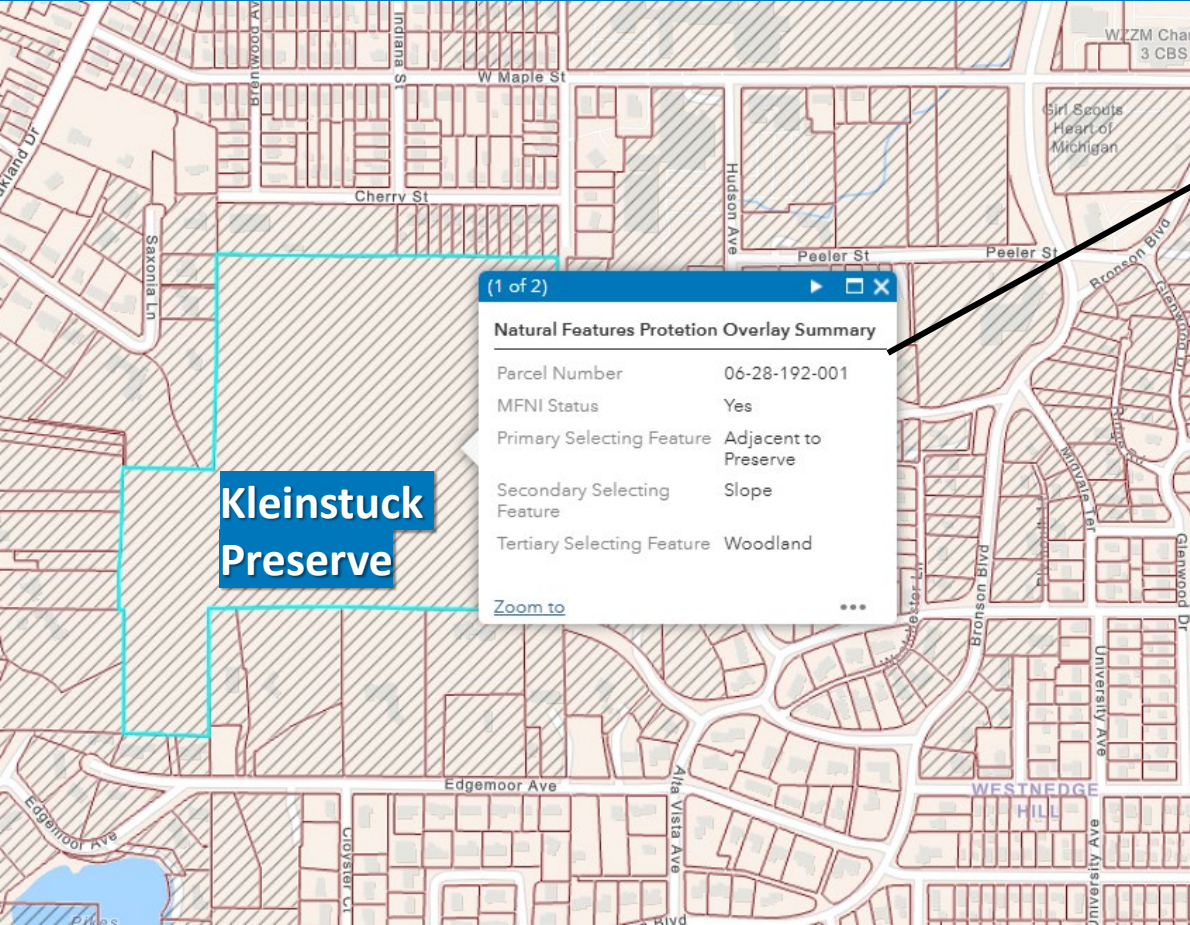


The analysis was effective in capturing more parcels interacting with defined natural features according to the NFP Overlay District Code.

 Phase 1 (376 parcels)

 Phase 2 (1,489 parcels)

Phase 1 and Phase 2 – A Look Back



Interactive Public facing map for ease of use.

- Public Map System (GIS) was updated
- MFNI Status was added
- Selecting Features Shown
- Visual Overlay on NFP Parcels
- 2024 - NFP Properties added to our BS&A System

Text Amendments

Tree Standard

Simplify replacement list &
require with site plan review

Woodland Criteria

Change to fit urban forest form

Native Plants

Native-only for landscaping required by ZO

Bonding Requirement

Required under specific circumstances

Disturbance Definition

Ensure stewardship activities are not
considered “disturbance”

Update the Intent Statement of NFP

Focus on guiding and balancing
development with protection of natural
features

DEVELOPMENT PROCESS UPDATES



Pre-Development

**Development
Administrator**



Site Plan

Planner



Permits & Occupancy

Building Official

NFP FOCUSED IN THIS AREA

Pre-Development Phase:

*Anything outside of Site Plan Review
& Building Permit Process*



- **Contact Development Administrator:**
 - Phone
 - Email
 - Webform
- On-site visit
- Project review meeting – tailored to project needs
- Begin incentive discussions
- Assist in getting you connected and ready for the next steps

A computer monitor displaying the 'Pre-Development' webform. The browser address bar shows the path: Home / Business & Development / Real Estate Development / Pre-Development. The page title is 'Pre-Development'. The main text reads: 'If you're planning to develop a real estate development in Kalamazoo, start here! Pre-development can be a long and complicated process and we want to make sure that we are a part of your team. We'll be able to offer support during the process and we're committed to providing front end, pre-development support to help you bring your project to fruition.' Below this, it says: 'Complete the form below to connect with our team. Just let us know a little bit about your plans and we'll follow up within 48 hours to learn more about your project and how we can help!'. The form is titled 'Pre-Development Form' and contains four input fields: 'First Name', 'Last Name', 'Company', and 'Email'. The monitor is set against a background of a city skyline.

Pre-Development Phase: What's Different in 2025



NOW...

Dedicated Customer-Service Rep



Meet with Development Administrator directly to discuss early aspects of the project – *no longer reaching out to individual staff*

New Way to Schedule



No longer schedule Project Review meetings through website, Permit Technician, or development@kalamazoo.org – **Development Administrator** will schedule



SITE PLAN REVIEW UPDATES

STEP 1: THE CHECKLIST MEETING

Designed for projects with a clear, specific, finalized scope of work.

However, plans are not required. Instead, the Site Plan checklist is the focus.

PUBLIC SERVICES - STORMWATER	Applicant	Internal
	AREAS OF FOCUS	SPRC Codes
Stormwater structures, pipes, and other drainage system components.	☒	SEC XYZ
Site size (small 1/2 acre or less, medium up to 1 acre, large over 1 acre)	☐	
Provide Stormwater Worksheets (from City of Kalamazoo templates):		
• Stormwater Calculations	☒	
• Water Quality Treatment (Uniform Standard 1)	☐	
• Channel Protection Volume (Uniform Standard 2)	☐	
If discharging to County Drain or MDOT system, contact appropriate authority for more information, additional standards, and permitting.	☐	
Provide permit documentation required by MEGLE for floodplain, wetlands, and discharge to surface waters.	☐	
Feasibility of runoff infiltration depends on soil type, groundwater depth, capture zone, existing environmental contamination, and/or proposed use of regulated substances. If infiltration will be restricted, basins/other infiltrative surfaces shall be lined with impervious material with minimum 60-mil (0.060 or 1/16-inch) thickness.	☐	
Buffer adjacent to water features on/near site.	☐	
Existing or planned Manufactured Treatment Devices (MTDs), retention/detention basins, rain gardens & swales will require a recorded stormwater operation and maintenance agreement with the City.	☐	

- Focus on Codes
- Two-way street (applicant & Site Plan Review Committee members)
- Mitigating conflict points with the process

SITE PLAN REVIEW UPDATES

STEP 2: THE CHECKLIST MEETING

- Mostly, unchanged
- Final step & cannot be scheduled without solidified plans.

Applicant	
PUBLIC SERVICES - STORMWATER	Information Found on (Sheet #):
Stormwater structures, pipes, and other drainage system components.	utility sheet
Site size (small 1/2 acre or less, medium up to 1 acre, large over 1 acre)	
Provide Stormwater Worksheets (from City of Kalamazoo templates):	
• Stormwater Calculations	ATTACHED
• Water Quality Treatment (Uniform Standard 1)	
• Channel Protection Volume (Uniform Standard 2)	
If discharging to County Drain or MDOT system, contact appropriate authority for more information, additional standards, and permitting.	N/a

The applicant will call out specific page numbers where the Committee can find the information

ALSO NEW:
Site Plan Review Civil Engineer -

To support City Engineers with SPR reviews; balancing infrastructure work with development review needs.

Development Process: *Permits & Occupancy*



Bolster staff and new hires

Added Building Inspector and Soil Erosion Control and added Mechanical Inspection/Plan Reviewer Position.



More communication.

Development Administrator will help route projects to the appropriate staff for reviews.

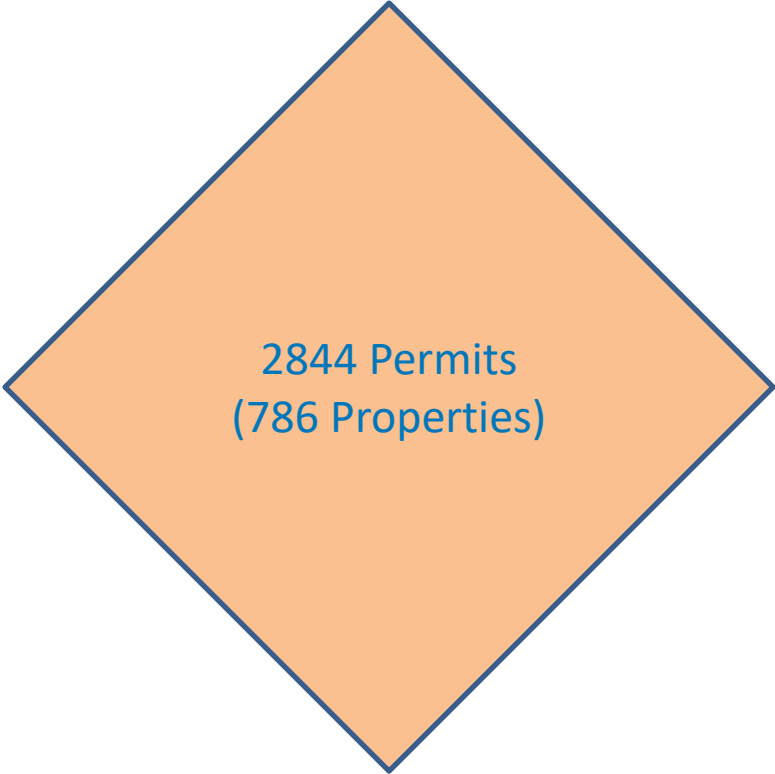


Pre-Construction Review Meeting.

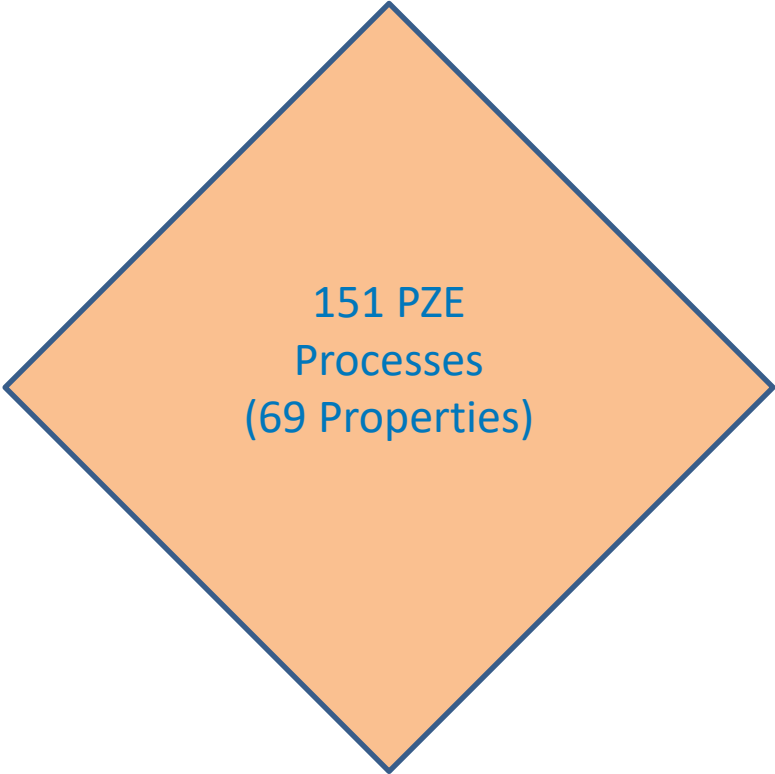
Optional meeting is encouraged between your trades and City Inspectors to coordinate expectations and plans.



Data Overview

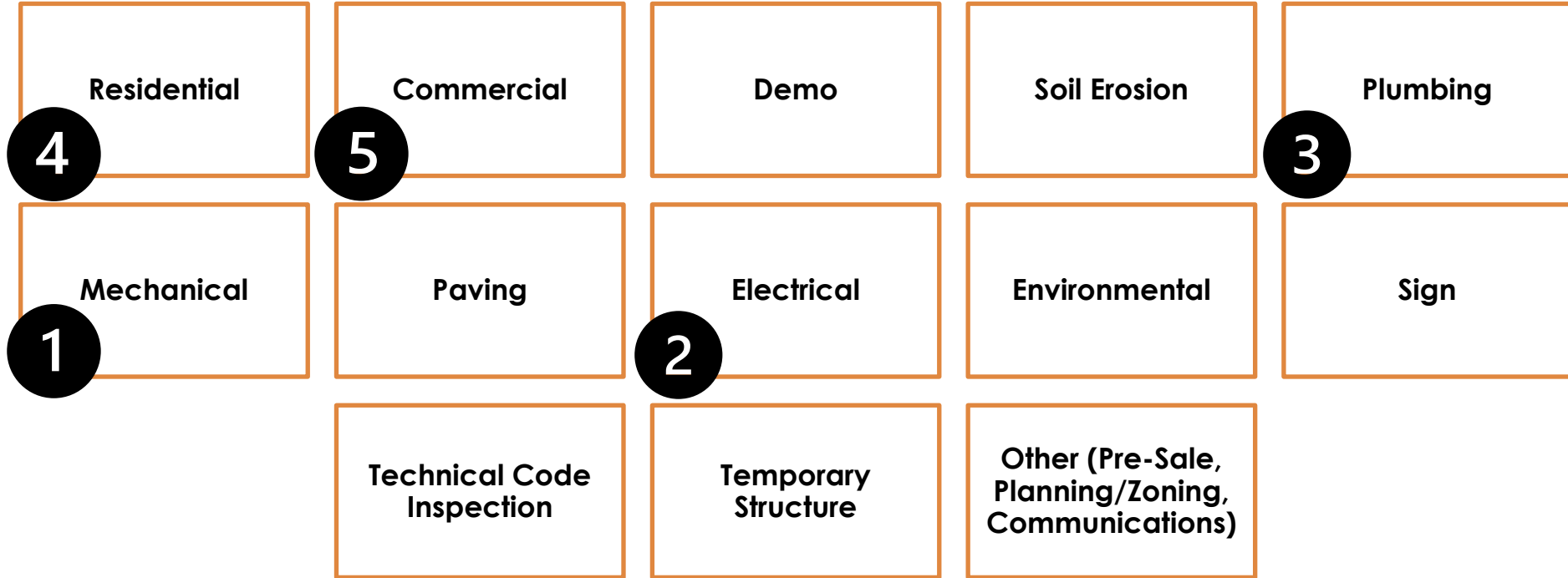


2844 Permits
(786 Properties)

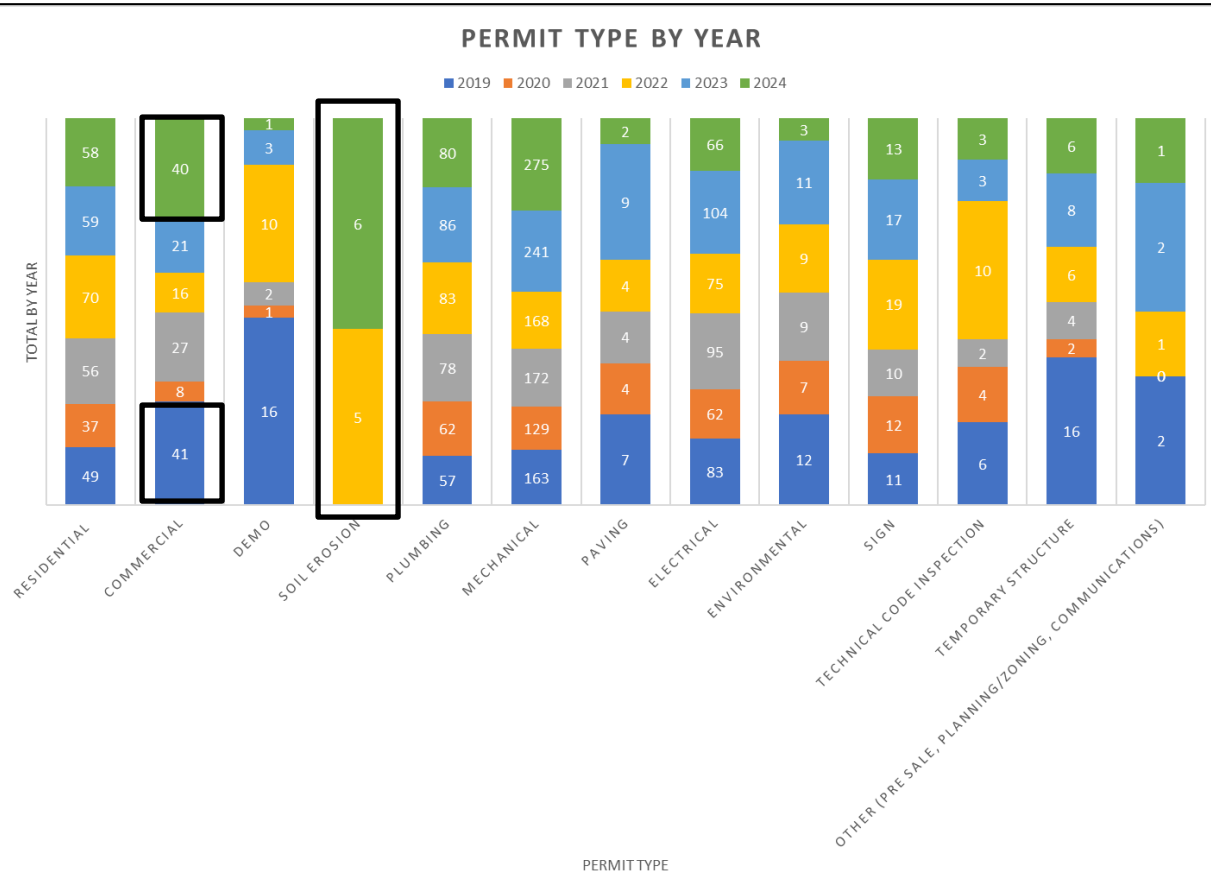


151 PZE
Processes
(69 Properties)

Data Overview - Permitting



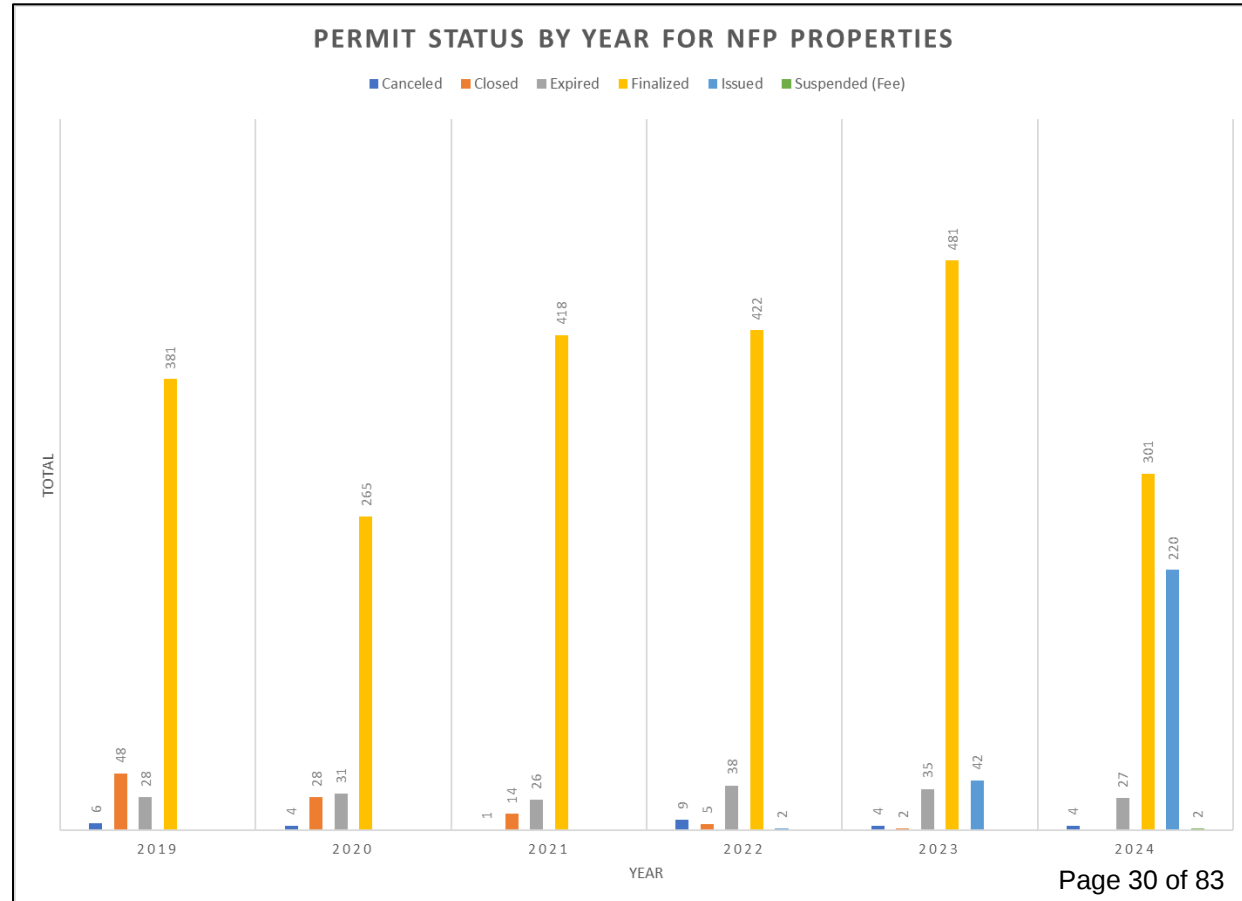
Data Overview - Permitting



- **2019 was not a full-year with NFP**
- **Soil Erosion Permitting is one of the lowest permits for NFP Properties**
- **Top 5 Permit Types are Building & Trades focused**
- **Commercial Permits in 2024 are at 2019 levels for NFP properties**

Data Overview - Permitting

- **Status by Year has stayed consistent over 5 years**
- **2024 Issued Permits will probably be finalized in 2025**



Data Overview - Permitting

Top Ten Properties by Total Permits by Year

Address	2019	2020	2021	2022	2023	2024	Grand Total	Properties
200 W KILGORE RD	1	6	83	21	20	110	241	Candlewyck Apartments
1044 INTERFAITH BLVD	28	9	13	29	15	13	107	Interfaith Homes
3707 GREENLEAF CIR	9	9	5	3	27	40	93	Parkview Hills Clubhouse
3700 WINCHELL AVE		10	5	3	17	19	54	Winchell Way Apartments
3721 GREENLEAF CIR		43	5	5			53	Willow Creek Apartments
1400 N DRAKE RD	17	4	2	6	11	7	47	Friendship Village
3921 OAKLAND DR	2	1		14	26	2	45	Former Lakeside Academy (Kalamazoo Country Club Expansion)
1201 ACADEMY ST	13	9	3	2	10	5	42	Kalamazoo College
1029 BRIDGE ST	3	4	2	13	10	8	40	Riverview Cooperative Apartments

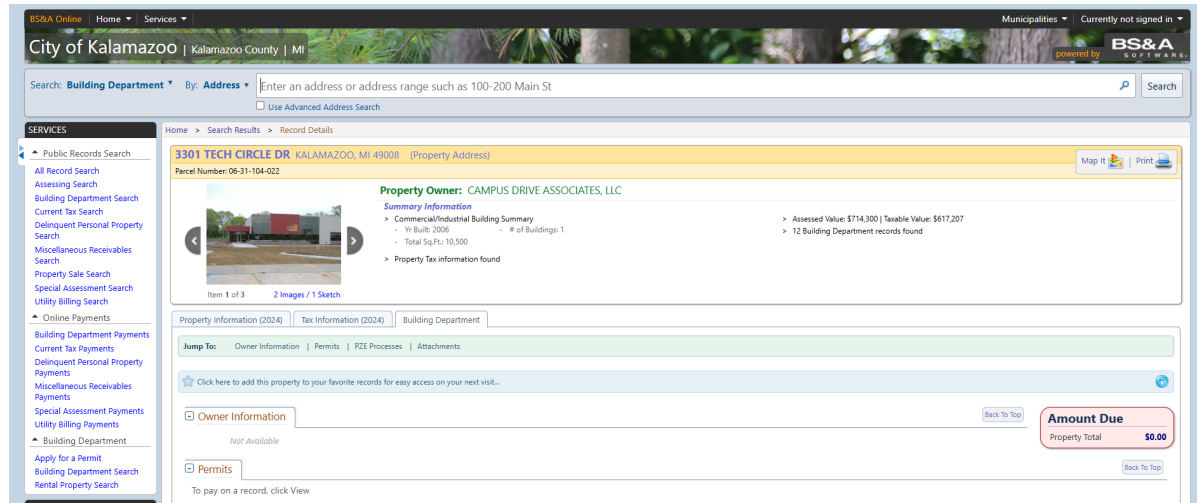
Data Overview – PZE Processes

PZE = Planning / Zoning / Enforcement

This process tracks:

- Zoning Variances
- Site Plan Review
- Permitting
- Enforcement
- Processing Transactions

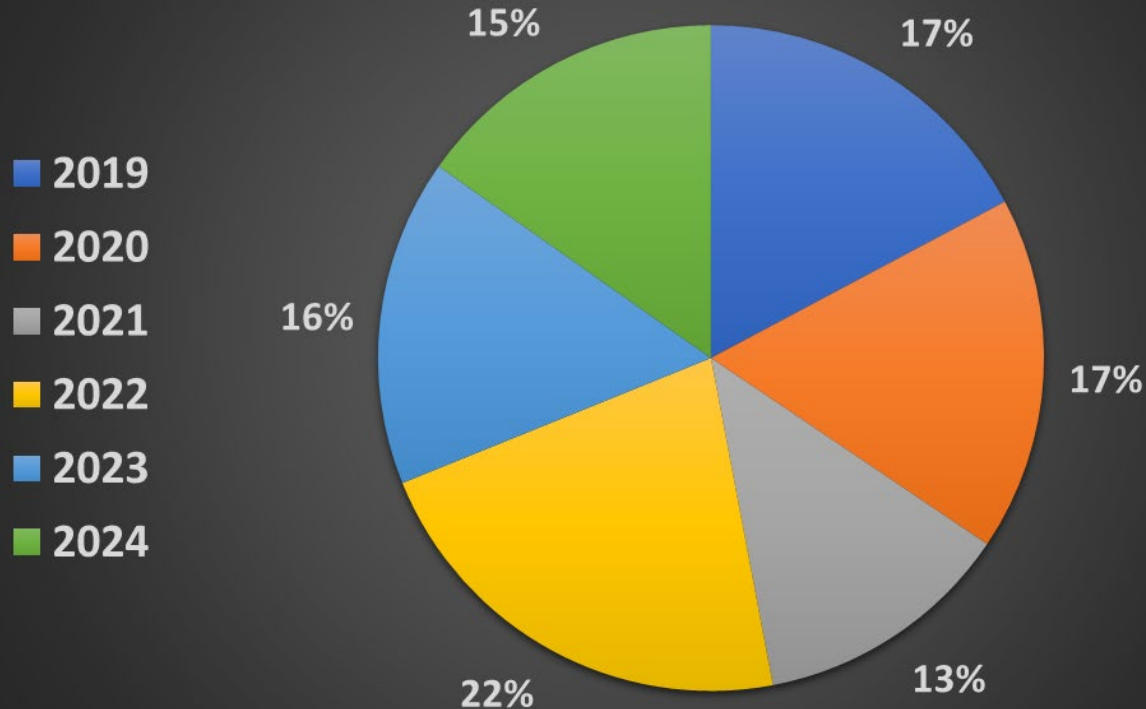
and more...



57 percent of PZE processes since 2019 have been on Phase II Parcels

Data Overview – PZE Processes

PZE Processes for NFP Properties by Year

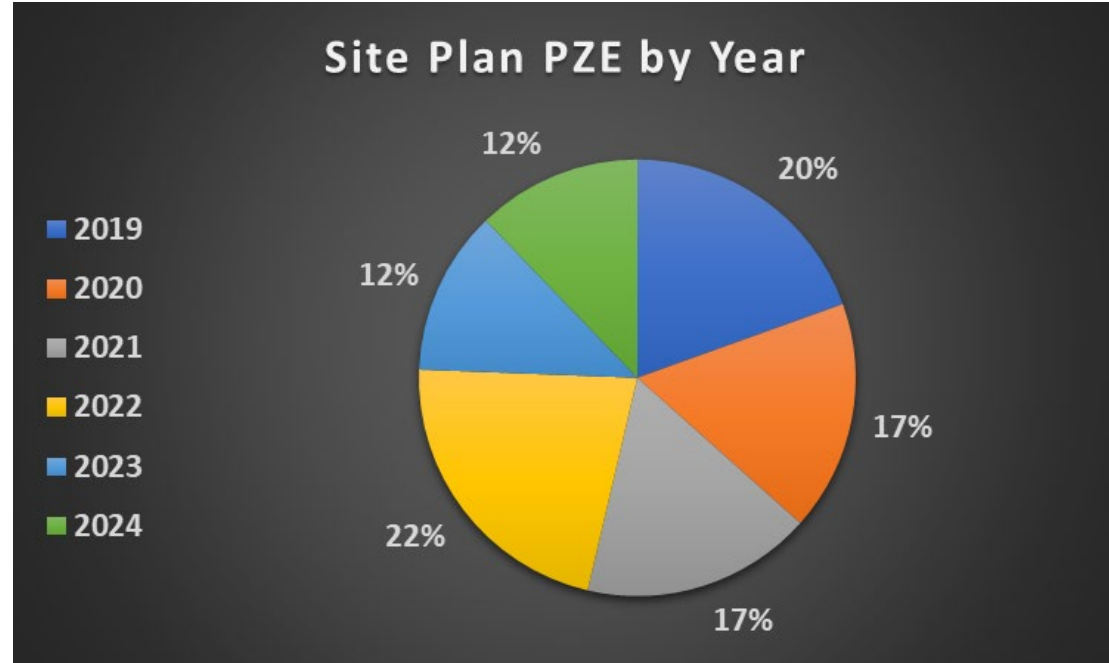


<u>Year</u>	<u>Total</u>
2019	26
2020	26
2021	19
2022	33
2023	24
2024	23
<u>151 PZE Processes</u>	

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Data Overview – PZE Processes

<u>Year / Status</u>	<u>Total</u>
2019*	8
<i>Approved</i>	8
2020	7
<i>Approved</i>	6
<i>Withdrawn</i>	1
2021	7
<i>Approved</i>	5
<i>Withdrawn</i>	2
2022	9
<i>Approved</i>	9
2023	5
<i>Approved</i>	3
<i>Under Review</i>	2
2024	5
<i>Approved</i>	3
<i>Under Review</i>	2
41 Total	

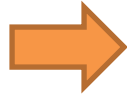


*Some 2019 projects pre-date NFP

Some projects only required Admin review

Data Overview – PZE Processes

Variances	
<u>Year</u>	<u>Total</u>
2019	6
2020	4
2021	2
2022	8
2023	3



<u>Year</u>	<u>ZBA - Dimensional Variance</u>	<u>ZBA - Use Variance</u>
2019	2	4
2020	3	1
2021	1	1
2022	4	4
2023	3	
2024	3	

Dimensional Variance: relief from physical or dimensional standards that apply to a lot or structure → NFP Variances are majority dimensional.

Use Variance: relief from standards that apply to how a lot or structure is used

Data Overview – PZE Processes



Community Planning & Economic Development
245 N. Rose Street, Suite 100 • Kalamazoo, MI 49007
(269) 337-8026 • www.kalamazoo.org

ZONING BOARD OF APPEALS

NATURAL FEATURES PROTECTION REVIEW SHEET

Please Indicate the Nature Features and Requested Variances:

☐ Wetlands _____
☐ Water Resources _____
☐ Protected Trees & Replacements _____
☐ Woodlands _____
☐ Protected Slopes _____
☐ Natural Heritage Areas & Rare Species _____

General Information

Specific Project Details (may also provide on a separate sheet):

Review Criteria for Natural Features Protection Variances
ZBA will review all NFP Variance requests using the following criteria. Please reach out to staff if you have questions.

Are there reasons the parcel cannot be reasonably utilized for its zoned use without the requested relief?

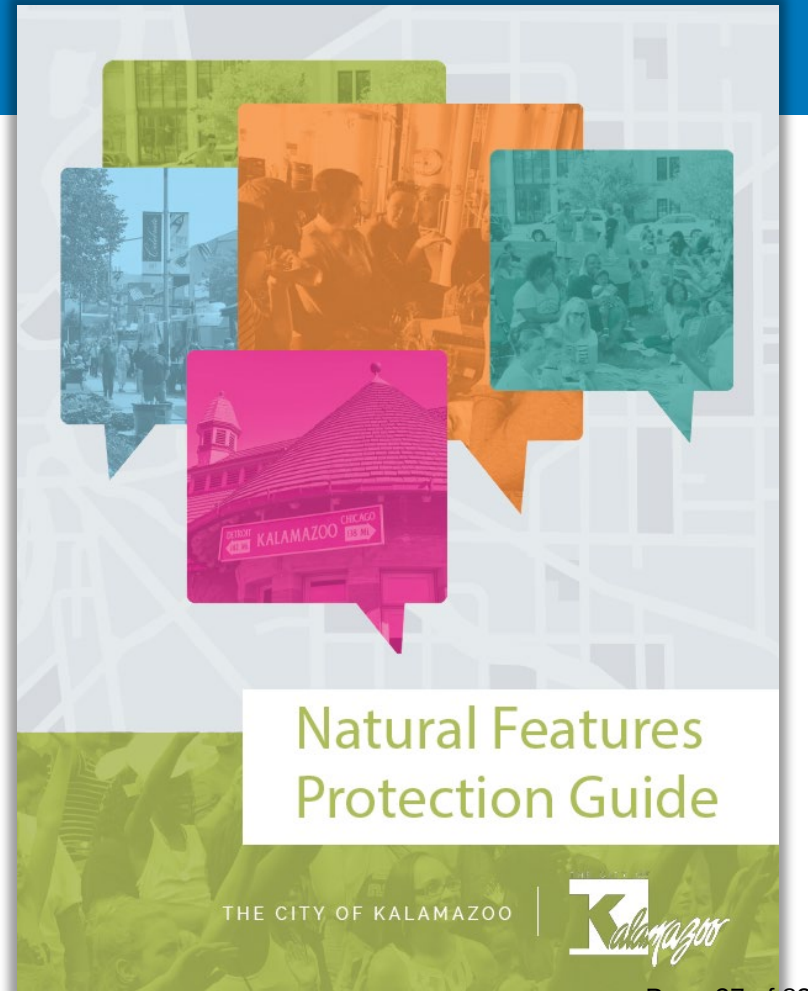
Zoning Board of Appeals has a custom NFP Variance Review Sheet that mirrors the Supplemental Application

The goal is to avoid variances as much as possible or to be a last resort option given tangible hardship via finding of fact

This process occurs prior to Site Plan Review meaning the NFP Board usually will see a project twice.

NFP Guide - DRAFT

- Intended for everyone
- Walks through the standards & considerations
- Provides timelines, broadly
- Project Examples
- Definitions



Introduction

Adopted in 2019, the Natural Features Protection Ordinance put in place standards for the development of land on or near areas identified with Natural Features in order to achieve better management and long-term protection of these areas. Overlay districts provide an additional set of requirements for the development and use of parcels with the overlay.



When a parcel is developed, redeveloped, or the natural feature is impacted due to any site alterations, the standards for all applicable natural features are applied. The site development standards shall be applied to all parcels in the NFP Overlay District. The NFP Overlay District is intended to balance development with the consideration of natural features in the City of Kalamazoo, specifically wetlands, water resources, trees, woodlands, floodplains, slopes, natural heritage areas, and habitat corridors.

Contact Us

NFP Liaison

Nolan Bergstrom, Community Planner

Phone

269-337-8045

Email

development@kalamazoo.city

Location

245 N Rose Street Suite 100
Kalamazoo, MI 49007

Introduction

Creating The NFP Overlay Ordinance

Guiding Principles

The creation of the NFP Overlay was guided by four principles:

- 1 Does not mean no development, means more thoughtful development as it relates to Natural Features
- 2 Standards must be protective of the defined natural feature
- 3 City staff must be able to manage and enforce standards
- 4 The ordinance must work for a variety of parcels all over the City

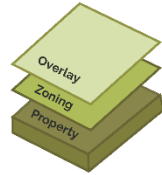
Phases

There are three phases to Natural Features Protection in the City:

- 1 **Engagement, Ordinance Creation, Map**
2019
- 2 **Phase 2 Mapping Analysis**
2020 - 2021
- 3 **Public Education & Stewardship**
2024 & Beyond

What is a Zoning Overlay?

A Zoning Overlay is a set of zoning standards applied to a property in addition to the zoning standards from the base or underlying zoning district. For properties within the NFP Overlay, the standards of today's zoning district apply in addition to those of the NFP Overlay. In cases of conflict, the NFP Overlay standards apply.



Woodlands

How do I know if I have a woodland?

Step 1 Desktop Review

You can use the Public GIS Map to review woodland areas on or adjacent to your parcel. It is still recommended that an ISA-Certified Arborist or other qualified professional assist in both the desktop and in-person reviews and analysis.

City of Kalamazoo GIS

- Expand the layers tab

- Click the checkbox next to the "City Aerial Imagery"

layer

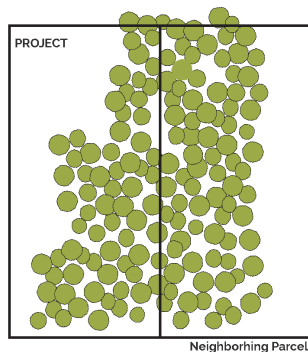
☐ City Aerial Imagery

Step 2 In Person Review

Look for a grouping of trees that covers an area a half acre or greater, regardless of whether the grouping is entirely on your parcel or extends onto adjacent parcels. To be a woodland, the number of trees must be equal to 40 per acre at least 2" diameter or greater. Look for other woodland features, such as natural ground cover (i.e., not mowed lawn) and understory shrubs.

Step 3 Professional Review *Recommended*

If none of the woodlands on the property will be disturbed, then a professional assessment is not required. When woodlands will be cleared, a qualified professional must delineate and assess the existing woodlands (e.g., woodland ecosystem assessment, basal area measurement, or tree survey)



Supplemental Site Plan Review Checklist for NFP

Fill out the corresponding
sections of the checklist:

- ☒ Section II, Part B.
Question 5 & 7

- ☒ Section III, Woodlands
(if you have a
woodland(s))

What should I do if woodlands are present?

Step 1 View the full standards

Chapter 50 NFP Overlay District

- Refer to the [Woodland Section](#)

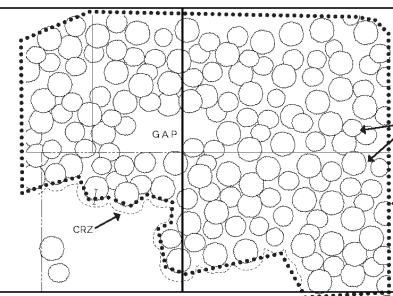
Woodland Coverage of Parent Parcel	Minimum Required Woodland Coverage to be Preserved
75% to 100%	25%
50% up to 75%	50%
25% up to 50%	75%
Less than 25%	90%

Table 3 Woodland Preservation

Step 2 Be prepared to:

- Find an ISA-certified arborist or another qualified professional to delineate and assess woodland
- Mark the full boundary of existing woodland, the section to be removed, and acreage and percent calculations on the site plan map
- Provide justification why the section of the woodland was chosen for preservation
- Fence preserved woodland with temporary barrier fencing during construction at the outer edge of the critical root zone (see Figure 4)

No disturbance allowed in preserved woodlands or critical root zones, except for specific permitted activities in the zoning code



Size of a Woodland is measured across parcel boundaries

Woodland Boundary

A portion of the woodland must be preserved during and after construction (see Table 3)

Figure 4 Defining and Delineating a Woodland



Natural Features Protection Guide

THE CITY OF KALAMAZOO



Table of Contents

Introduction

Adopted in 2019, the Natural Features Protection Ordinance put in place standards for the development of land on or near areas identified with Natural Features in order to achieve better management and long-term protection of these areas. Overlay districts provide an additional set of requirements for the development and use of parcels with the overlay.



When a parcel is developed, redeveloped, or the natural feature is impacted due to any site alterations, the standards for all applicable natural features are applied. The site development standards shall be applied to all parcels in the NFP Overlay District. The NFP Overlay District is intended to balance development with the consideration of natural features in the City of Kalamazoo, specifically wetlands, water resources, trees, woodlands, floodplains, slopes, natural heritage areas, and habitat corridors.

Contact Us

NFP Liaison

Nolan Bergstrom, Community Planner

Phone

269-337-8045

Email

development@kalamazoo.city

Location

245 N Rose Street Suite 100
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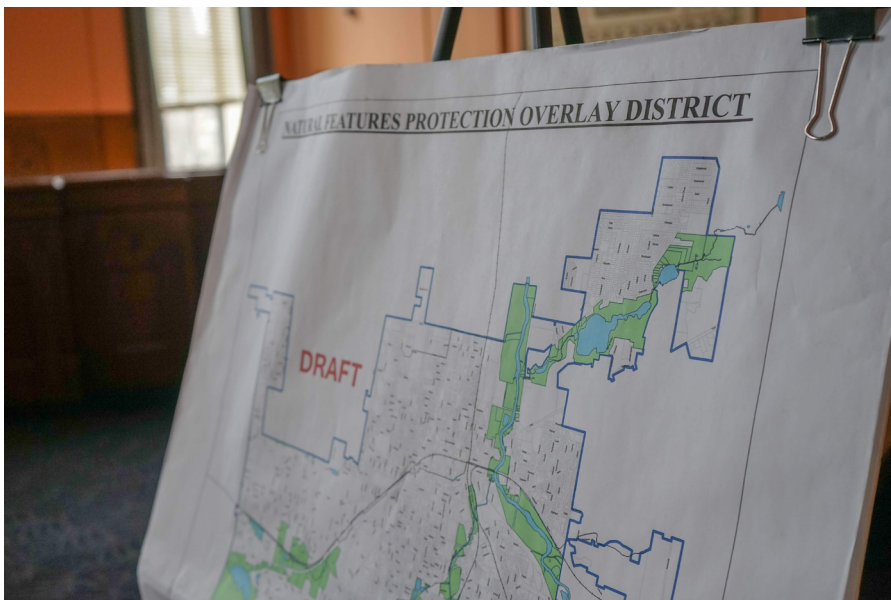
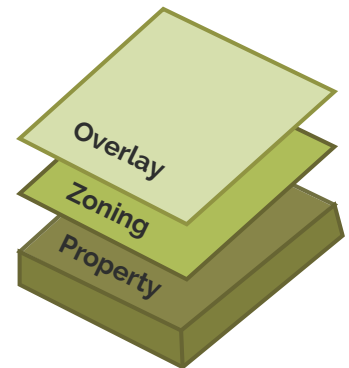
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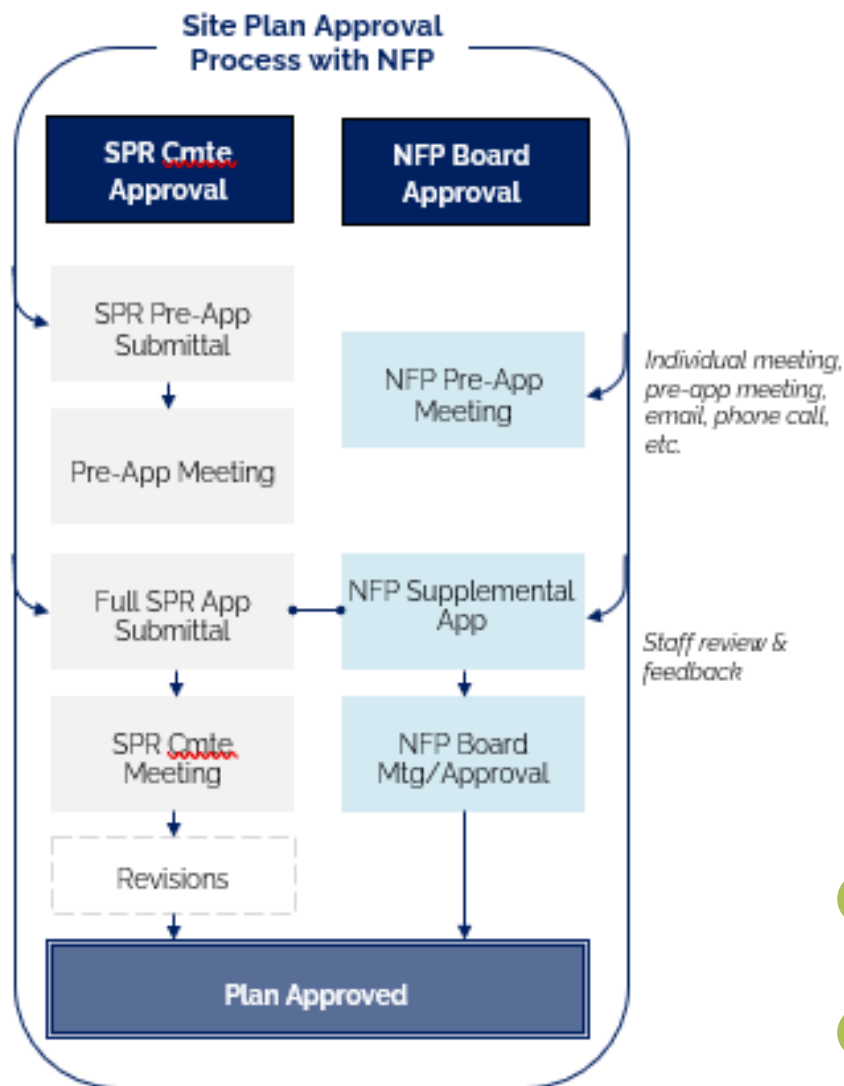
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Process



Road to Approval

Projects located within the NFP Overlay District often require Site Plan Review and NFP Board Approval. The process flow chart below shows how the NFP process is tied to Site Plan Review approval as well as showing how the variance process interacts with NFP and Site Plan Review.

The following pages will go through each step in greater detail. The next section will showcase real project examples and how they navigated this process.

Project Review Paths

There are three different review pathways for projects in the NFP Overlay based upon what development or changes are planned for the property:

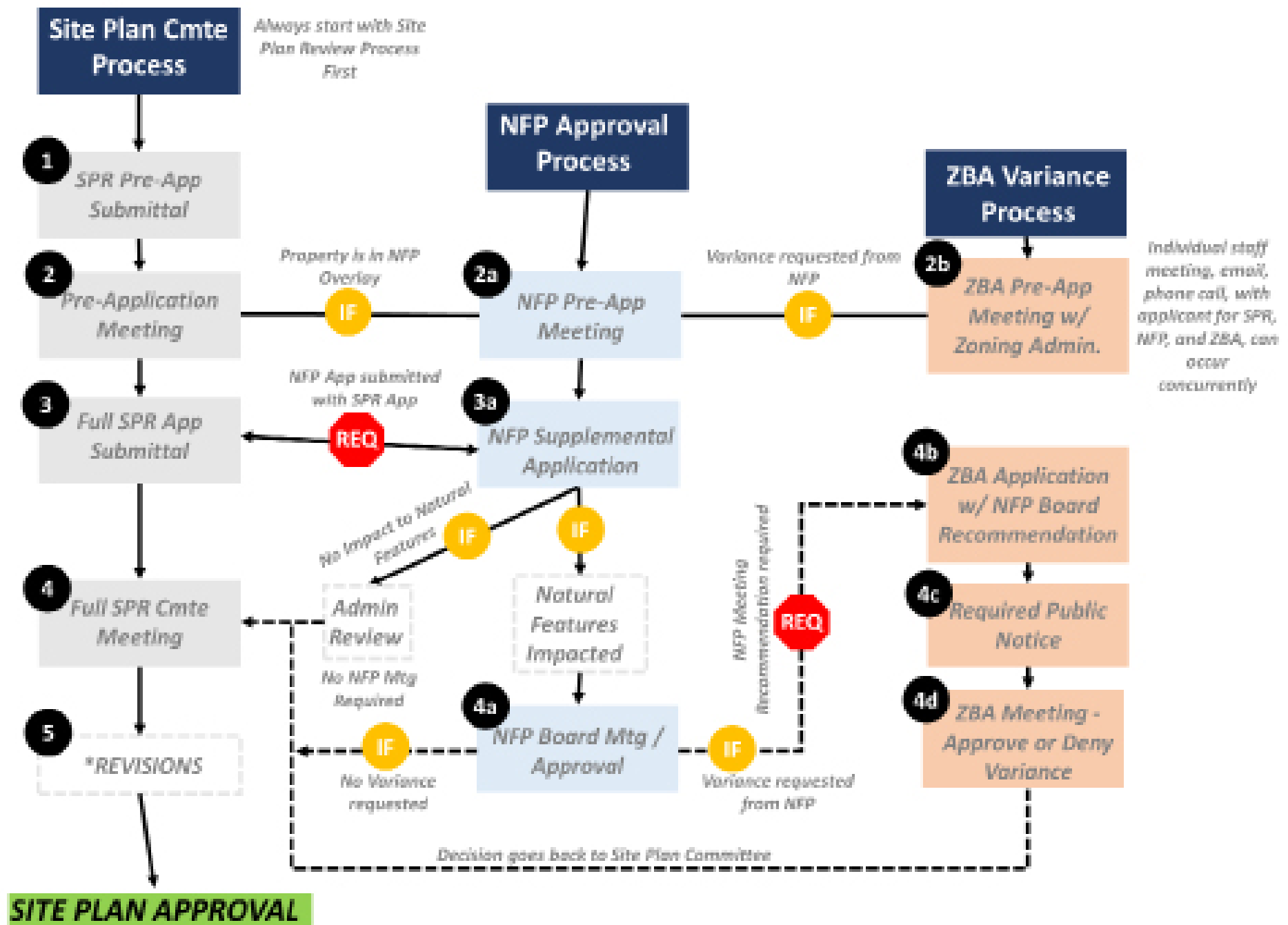
- 1 **Administrative Review**
For smaller projects not requiring Site Plan Review
- 2 **NFP Review Board & Site Plan Review**
For more extensive projects
- 3 **NFP Review Board & Public Notice**
For more extensive projects with multiple Natural Features and those requiring zoning approvals from the Planning Commission or Zoning Board of Appeals

Pre-Application Meeting

It is strongly recommended that all projects requiring NFP Review Board approval (i.e., projects required to get site plan approval from the City) and any other construction or site improvement projects within the NFP Overlay District meet with staff prior to completing a Site Plan Review application or filing for permits.

An NFP pre-application meeting is a high-level discussion with City of Kalamazoo staff.

During the NFP pre-application meeting, staff will explain the NFP review and approval process and direct applications towards zoning code standards, online resources, and other guidance to assist them in evaluating their own site for natural features and apply all relevant



NFP Regular Meeting Schedule - 2024

2024 Meeting Schedule

All meetings held at City Hall (241 W South St, Kalamazoo MI 49007)
The meeting room is the City Commission Chambers

January 23
February 27
March 26
April 23
May 28
June 25

July 23
August 27
September 24
October 22
November 26
December 17

You can visit the [City of Kalamazoo website](#) to look at the board meetings calendar to track changes to meeting dates.

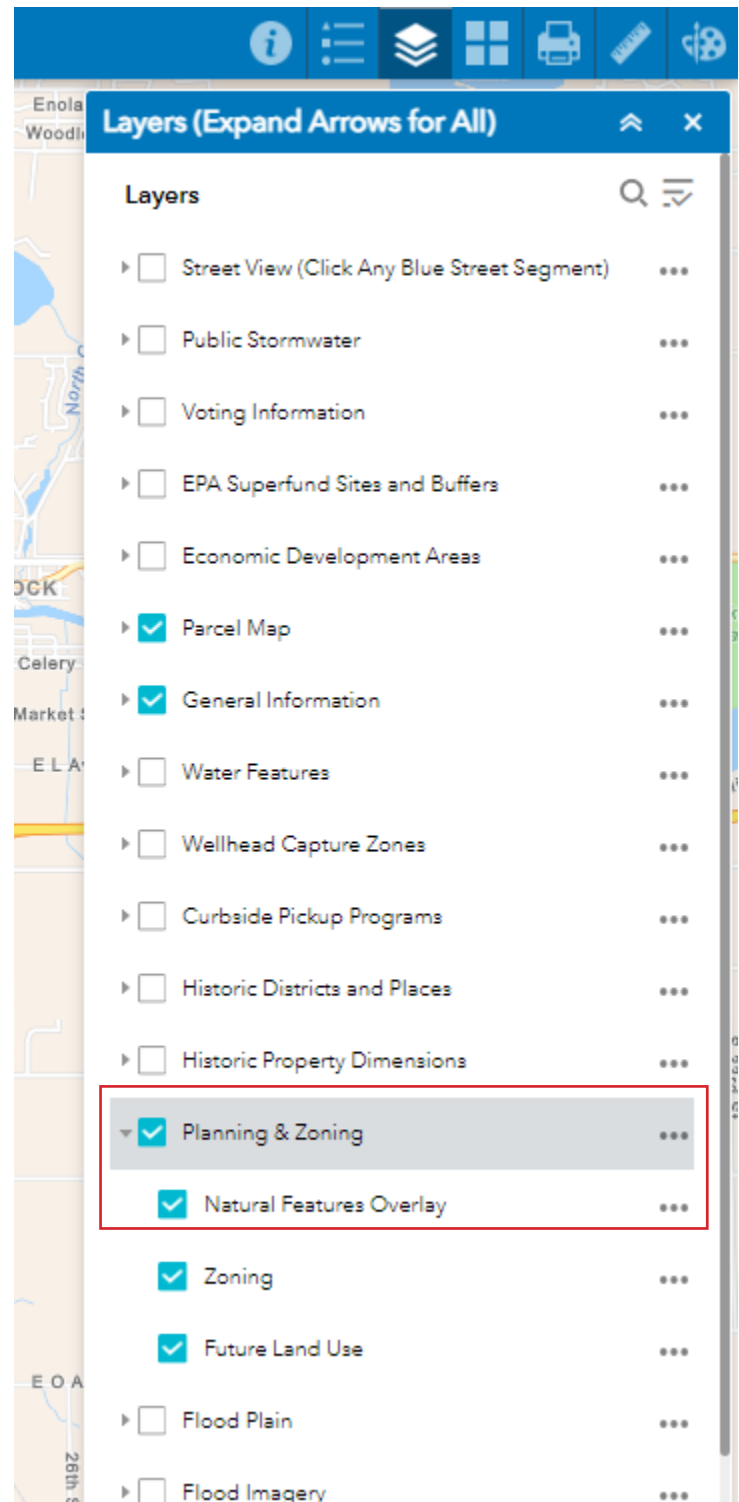
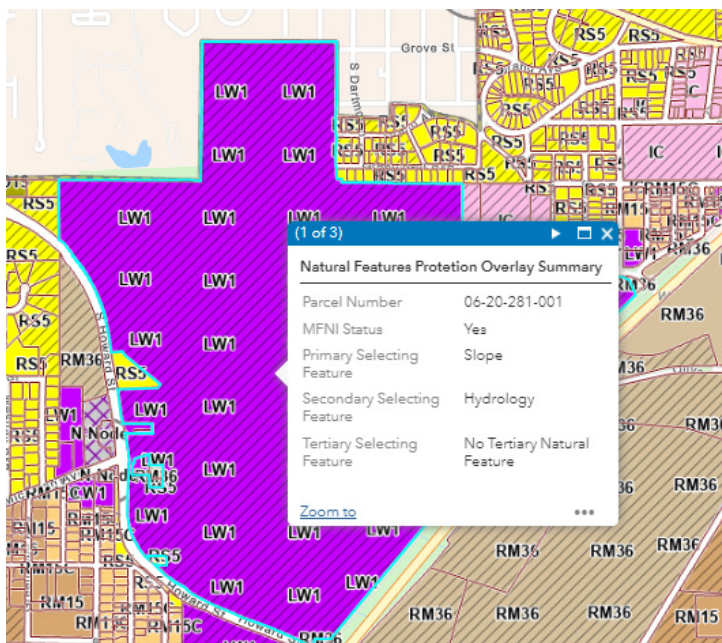
November 2023						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 CR Civil Rights Bo...	2 EC Election Com...	3	4
5	6 SP Shared Prosp...	7	8	9 UP Utility Policy C... ZB Zoning Board ...	10	11
12	13	14 PR Parks & Recre... PS Citizens Publi...	15 E Environmental...	16 BR Brownfield Re... KG Kalamazoo M... CD Community D... NC Northside Cul...	17	18

GIS / Map Review

The City of Kalamazoo has a Public GIS Map available for anyone to use. A desktop review is advisable to understand which natural features are on your site, if you require rare species review, and what the base zoning is for the site. The Public GIS Map system is available here: [City of Kalamazoo GIS](#) and provides many layers including aerial imagery to help conduct a desktop review of your property.

When you expand the layers tab on the Public GIS Map you will want to expand the Planning & Zoning category and make sure the Natural Features Overlay is checked. With this layer checked, properties within the NFP Overlay District will have a hatched marking within them. You can select your property and a pop-up box will give a brief summary of what the natural features identified on-site are as well as the Michigan Natural Features Inventory Rare Species Review Status.

There are a many other layers available to help complete a thorough desktop review. Once this review is complete, you can move onto a review of the ordinance and NFP Supplemental Application.

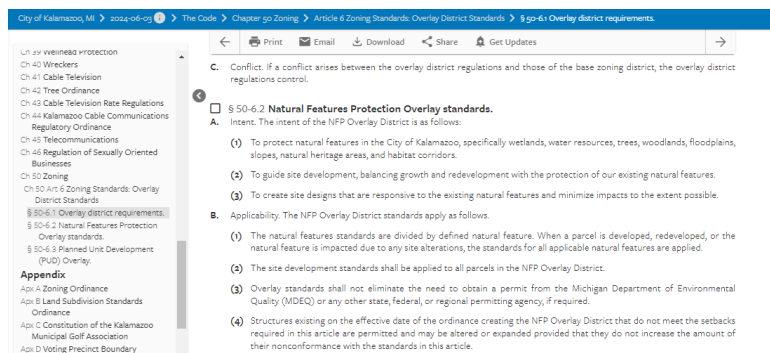
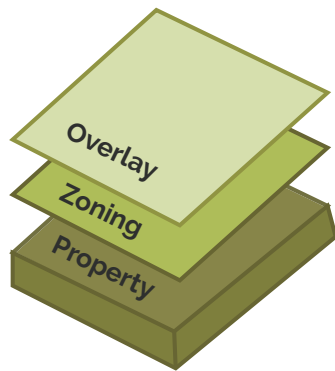


Ordinance Review

NFP Overlay District Standards are located within Chapter 50 of the Zoning Code. It is highly recommended that applicants review the standards and procedures to prepare for conversations with City staff. This review is a benefit to you as an applicant in prepping questions for City staff and familiarizing yourself with the Standards within the NFP Ordinance. This can also save time and financial resources.

It is important to remember that Zoning still applies to the site.

[The ordinance is available online to review.](#)



Supplemental NFP Application

A Supplemental Application is required for project that are on a parcel in the NFP Overlay District.

An example of what the Supplemental Application looks like is on the following pages. The application consists of various sections related to the NFP Standards. There is a section about if an NFP Application is required. If the project is limited to interior work only with no increase in impervious surface or ground work apart of the scope, then you would sign the page and not fill-in the sections on the following pages. A conversation with the NFP Staff Liaison can help determine what the best path forward is based upon the proposed project scope. The supplemental application is available on the City's website [here](#).

SUPPLEMENTAL SITE PLAN REVIEW APPLICATION FOR NATURAL FEATURES PROTECTION

For projects located within the Natural Features Protection (NFP) Overlay District, separate site plan approval is required before the full site plan can be approved. This review is done either by the NFP Review Board or administratively by staff to verify conformance with NFP Overlay District zoning code ([Chapter 50, NFP](#)). The NFP Overlay District map can be found on the [City's GIS mapping website](#) (select "Planning & Zoning" layer and make sure "NFP Overlay" is clicked on).

The NFP Supplemental Application must be completed and submitted with the regular Site Plan Review Application and checklists. The NFP Review Board meets monthly to review and approve applications. City staff can assist in scheduling a project at an upcoming NFP Review Board meeting. While the review process offers some flexibility, projects often seek NFP approval between the Pre-Application meeting and regular Site Plan Review meeting.

Section I. Project & Applicant Information

All projects must complete Section I. If the project will not impact any natural features on the site, and does not trigger additional stormwater controls or treatment, applicants should sign and submit Section I only. Staff will review and determine if the application can be approved administratively.

Section II. Natural Features Checklist & Attachments

For projects proposing improvements or changes to the site that impact natural features, change grading, or involve work in or near NFP setbacks, Sections II and III must be completed. Section II identifies which natural features are present and standards apply. Section III will assist you in determining what documentation and additional plan sets are needed for a complete application. Once a complete application is submitted to the City, the project will be scheduled for the next available NFP Review Board meeting and an application fee of \$110 will apply.

QUESTIONS

SECTION I. PROJECT AND APPLICANT INFORMATION

Please provide all of the project and applicant information requested below. Include the date of your regular site plan review meeting, if one has been scheduled or already taken place.

APPLICANT NAME:	(first) (last)		
APPLICANT ADDRESS:	(number) (street name)		
	(city)	(state)	(zip)
APPLICANT EMAIL:		PHONE:	()
PARCEL ADDRESS/PIN:			
PROJECT DESCRIPTION:			
OWNER NAME: (if different)	(first) (last)		
HAS REGULAR SITE PLAN REVIEW MEETING OCCURRED?	☐ Yes ☐ No	DATE OF SITE PLAN REVIEW MEETING:	

NFP APPLICATION REQUIRED?

Is the project limited to interior work only with no exterior ground changes or increase in impervious coverage?

YES	If YES , Sections II & III of this application are not needed. Sign below & submit only this page with your site plan review or permit application.
NO	If NO , proceed to Sections II & III. Do NOT sign below.

By signing below, the applicant certifies that no natural features will be disturbed as part of this project.

Print name: _____

Signature: _____ Date: _____

SECTION II. NFP SITE PLAN CHECKLIST & ATTACHMENTS

Use the checklist to determine what documentation and additional plans sets must be prepared for this application. All plan sets, maps, and additional information must be attached to this application to be considered complete. If you checked “no” to certain NFP items in questions 1-7 in Section II, record “N/A” on the checklist.

REQUIRED: NFP SITE PLAN SET

All applications must include separate sheets in the plan set showing the following:

1. Existing conditions map showing an inventory of all protected natural features and any associated natural features setbacks with distances (use checklist below)
2. Future development plan overlaid onto the existing conditions and natural features inventory; indicate where and to what extent protected natural features will be disturbed, removed, altered, or impacted in any way and which natural features will be protected during and after construction

Future development plan must include:

- **Boundary with extent of re-grading**, construction, or site preparation activities
 - **All existing and new building footprints** (mark whether existing buildings will be removed or maintained)
 - **New and existing parking** surfaces or structures, sidewalks, trails, and other impervious or semi-impervious surfaces including decks, patios, viewing platforms, etc. (list proposed surface materials and whether existing surfaces will be maintained or removed)
 - **Proposed location of fencing and screening**, whether permanent, natural, or construction silt fencing and/or natural feature protection fencing (with specifications)
 - **Stormwater facilities** showing boundary of ground disturbance, grading or construction activities, if located near natural features
 - **New utilities** and/or relocation of existing utilities showing corridors that could impact natural features
3. Landscape plan detailing the minimum elements needed to meet zoning code requirements and all proposed additional landscaping elements or features (include table with species name)
 4. Any additional plans or tables detailing which natural features will be restored or replaced after construction, if required (e.g., riparian buffer installation or slope restoration plan may be required under certain circumstances when the ordinance allows changes within these protected areas)

WETLANDS	Present:	Included on page #:	Notes:
Mark existing wetland boundaries with notes about wetland conditions. <i>Attach a copy of EGLE permit or permit application for work impacting Part 303 wetlands regulated by the State.</i>	☐ Yes ☐ No		
WATER RESOURCES	Present:	Included on page #:	Notes:
Mark the location of all water resources on the parcel and those within 25 feet of the parcel boundaries. <i>Attach a copy of EGLE permit or permit application for work impacting Part 301 waters regulated by the State.</i>	☐ Yes ☐ No		
Show required setbacks with dimensions; describe existing or future ground cover within riparian setbacks.			
TREES	Present:	Included on page #:	Notes:
Mark the location of all “protected” trees that are proposed to be removed and those that will remain and require protection fencing.	☐ Yes ☐ No		
Include a table with species name, size (DBH and height), and condition of “protected” trees that are proposed to be removed and list replacement tree information.			
Provide a note with justification for removal.			
WOODLANDS	Present:	Included on page #:	Notes:
Delineate the boundary of all woodlands on the parcel noting where woodlands likely extend onto adjacent parcels.	☐ Yes ☐ No		
Mark all areas of woodland that will be retained and removed (i.e., cleared).			
Include a table or note with the required preservation ratio (based on existing woodland coverage), percentage proposed to be removed, and rationale for selecting area for removal.			
SLOPES	Present:	Included on page #:	Notes:
Provide a slope analysis that shows the boundaries of all “protected” slopes and mark the required setback(s).	☐ Yes ☐ No		
Include a note with co-existing feature that triggers “protected” slope status (e.g., wooded, within 500 ft of water resource).			

NATURAL HERITAGE AREAS	Present:	Included on page #:	Notes:	
Is an MNFI* rare species review required? <i>Parcels can be pre-screened using the City's GIS website, click on the "Planning & Zoning" layer and "NFP Overlay" layer; then click on parcel and see MNFI status.</i>	☐ Yes ☐ No			
If an MNFI rare species review is required, attach the resulting report.				

*Michigan Natural Features Inventory (MNFI) Rare Species Reviews can be requested at:
<https://mnfi.anr.msu.edu/services/rare-species-reviews>

ACCEPTED DATA SOURCES & ANALYSIS

All data sources, analysis, and professionals are subject to approval by the City Planner according to Chapter 50-6.2. The following guidance may be useful when selecting a professional or methodology for inventorying natural features.

1. WETLANDS

- Wetland delineation report performed by a qualified consultant including a map denoting delineated boundary of all wetlands, OR
- Most recent US Fish & Wildlife Service's National Wetlands Inventory boundary (State of Michigan mapper: <https://www.michigan.gov/egle/about/organization/water-resources/wetlands/inventory-maps>)

2. PROTECTED TREE IDENTIFICATION

- May be performed by an qualified professional (including ISA Certified Arborist or similar); a full tree inventory is not required if all necessary information can be obtained and communicated using another survey, inventory, or site assessment methodology

3. WOODLANDS

- A qualified professional, such as an ISA Certified Arborist, landscape architect, or license engineer may perform a desktop analysis or field survey to delineate woodlands
- When a variances is being requests to remove more woodland cover than is allowed under the preservation ration, the following is required
 - Woodland assessment report with determination that the Trees per Area (TPA) meets the NFP definition of a woodland and mapped delineation of woodland
 - Woodland assessment report with a determination that Basal Area is equivalent to the TPA in the NFP definition and meets definition of a woodland and mapped delineation of woodland
 - In addition to determination of whether stand of trees meets NFP definition of a woodland, assessment must include information on general species diversity,
 -

composition of species, any notable trees (either notable species or size), invasive species composition, and general health and age observations of tree stand

4. PROTECTED SLOPES

- Topographic survey performed in the field by a qualified consultant to delineate areas of a slope with grade of 20% or greater
- Desktop analysis performed using U.S. Geological Survey digital topographic maps, LIDAR, digital elevation map, or equivalent data showing 2' intervals or finer resolution, performed by a qualified consultant or engineer

Submitting Your Application

Once you have completed your NFP Supplemental Application you must submit it along with your regular site plan checklist for review by both City staff and the NFP Review Board.

Full site plan approval requires approval from the NFP review board or an Administrative Approval. Meeting with City Staff to discuss the project will help determine the appropriate next steps.

Timing is important. A completed application must be submitted 14-21 days before the regular meeting of the NFP Review Board. If you are required to notice the public, letters must be mailed no less than **14 days** before the regular NFP Review Board Meeting.

Public notice is required under [certain situations \(§ 50-6.2K\(1\)\(c\)\)](#). Send a letter to all parcels located within 300' of the project. The letter must be mailed first-class postage no later than 14 days before the NFP Regular Board Meeting.

Remember!

If a property is multiple units, in the letter ask the property owner/manager to share this info with tenants or post this information in a public location.

What about Application

The NFP Fee is \$110 and can be paid alongside fees associated with [Site Plan Review](#).

Direct questions about fees to development@kalamazoocity.org and siteplan@kalamazoocity.org

For all other questions call 311 or visit www.kalamazoocity.org/Residents/Solve-a-

Completed Checklist Due
Date:

14-21 days

Turn in your checklist no less than **2-3 weeks** before the regular NFP Review Board Meeting

IF/When Public Notice is
Required:

14 Days

Mail your letters no less than **14 days** before the regular NFP Review Board Meeting. NOTE! Checklist must be submitted prior to mailing

NFP Board Meeting Preparation

NFP meetings occur the fourth Tuesday of each month at 4pm in [City Hall in the City Commission Chambers \(2nd Floor\)](#). Meetings are recorded and live-streamed to the public and both phone-in and in-person comments are available.

It is strongly recommended that the following be completed in preparation for the NFP Board Meeting:

1. Share copy of Presentation with NFP Board Liaison
2. Bring copy of presentation on PC or USB Thumbdrive
3. Advisable to have both applicant and consultant team members available for the presentation
4. Consider Accessibility of Presented content (see Public Participation Plan Document in Resources section)
5. Review previous NFP Meetings on the City YouTube page to understand pace of meeting
6. Prepare for questions from NFP Board Members
7. Work with City staff to review timing of other required meetings through the approval process
8. **Parking is available along South St, Lovell St, next to City Hall and along Rose St**
9. **Utilize the rear entrance of City Hall**
10. **Check-in with security staff prior to moving to the second floor**

There is a microphone available for when presenting content at the podium. There are TV screens that will show the presentation on the live-stream and for Board members.



How should I come prepared?

NFP meetings are always held at City Hall in the City Commission Chambers. Meetings are livestreamed and recorded over Facebook and YouTube by Public Media Network.

Coming prepared for this environment is crucial. Consider how you will present information and plan for questions from Board Members.

At the right is a pre-meeting checklist that helps identify items of importance for a smooth meeting experience. It is also recommended that you bring a laptop with an HDMI port. There is an HDMI cord available at the podium to connect your laptop.

Please see the July 2023 NFP Meeting by scanning the QR code below as an example of a well prepared presentation on a larger-scale project.

NFP Pre-Meeting

The following are tips to a concise and smooth NFP

- ✓ Paper Copies of slide
- ✓ Flash Drive with copy of slide deck
- ✓ Universal and Readable graphics and
- ✓ Copy of Presentation emailed to NFP Board



July 25, 2023 City of Kalamazoo, Natural Features Protection Review Board



City of Kalamazoo
863 subscribers

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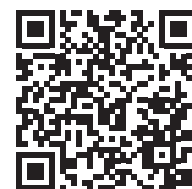
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Share



July 2023 NFP Meeting



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Site Development Standards - Overview

Development Standards

View the full [zoning code](#) and [NFP Ordinance](#) to view all information related to NFP Site Development Standards. These items can be discussed with city staff throughout the Site Plan Review Process. The following Resources are represented in the NFP Ordinance.



Water Resources & Wetlands

Protection of these Natural Features requires specific setbacks from wetlands, rivers, streams, and lakes. A planted buffer is required in the setback to limit pollutants from getting into our waterway.



Woodlands

Protection of this Natural Feature requires developers to preserve a portion of Woodlands on the property, maintain habitat corridors, and avoid damaging roots of nearby trees.



Trees

Individual trees located on a property must be protected within the NFP Overlay. Large trees and special species trees must be replaced if they must be removed. A list of native, climate resilient, and site-appropriate trees guides developers to plant trees that will thrive.



Slopes

Slopes tied to Water Resources, Wetlands, and Woodlands are protected Natural Features and new development will be limited. Setbacks at the top and bottom will help protect the stability of the slope and other Natural Features.



Natural Heritage Areas

Remnants of natural communities and rare species are protected by requiring a database search for known locations of these Natural Features. An on-site survey must be done when species are found in the vicinity of the property.



Zoning & Stormwater

Additional zoning and stormwater requirements apply within the NFP Overlay. For example, certain intensive uses are not allowed and all landscaping must use native plants. And sites must capture and treat more of the stormwater on the property.

Site Development Standards - Detail

View the full [zoning code](#) and [NFP Ordinance](#) to view all information related to NFP Site Development Standards. These items can be discussed with city staff throughout the Site Plan Review Process.

Impervious Coverage

- Areas that are required to remain pervious must be left undisturbed (no grading, clearing, etc.)

Landscaping

- Native species must be used for all required landscaping
- No invasive species from the Prohibited Planting List may be planted
- Fill material brought on the parcel must not be contaminated or contain invasive species

Protected Trees

- Table 6.2-4 shows what are considered Protected Trees
- In order to be considered a protected tree both the species and DBH requirements need to be met
- A certified Arborist can help with inventorying protected trees
- If the Woodland standard is being applied, the

Rare Species Review

- Some NFP sites require MNFI Rare Species Review
- MNFI stands for the Michigan Natural Features Inventory via the Michigan State Extension
- Fees and Review is conducted in conjunction with the MSU Extension or another qualified professional

Stormwater Management

- Restricted uses: Wellhead Protection Overlay 10-year restrictions and Wellhead Protection Overlay 1-year restrictions within 500 feet of surface water
- Higher volumes of stormwater must be collected and treated on-site using more than one stormwater BMP (or underground storage can be used)

Water Resources & Setbacks

- A water resource is any lake, pond, or impoundment; a river, stream, or creek which may or may not be serving as a drain; or any other body of water that has defined banks, a bed, and visible evidence of a continued flow or continued occurrence of water, or as otherwise defined in Part 301 of the NREPA
- The setback from water resources is accompanied by a vegetative buffer to protect the resource where no existing vegetation exists.

Slopes & Slope Setbacks

- Slopes greater than or equal to 20% grade are protected
- Usually coincides with woodland areas
- Many limitations to work that can be completed within the slope face and slope setback

Woodland

- Defined as a minimum area of 21,780 square feet or half an acre, regardless of parcel boundaries.
- At least 40 trees per acre of at least 2 inches DBH
- Requires a Woodland Assessment

Water Resources

How do I know if I have a water resource?

Step 1

Desktop Review

The City's online GIS map can be used as the first step in exploring water resources on your parcel.

[City of Kalamazoo GIS](#)



- Expand the layers tab
- Click the checkbox next to the "Water Features" layer



Step 2

In Person Review

Any lake, pond, river, stream, wetland, or county drain is considered a Water Resource. Look for these features on your parcel or on adjacent parcels within 25 feet of your parcel

Step 3

Professional Review *Optional but Recommended*

The exact location of Water Resources on the parcel should be confirmed on-site, beyond the review of online maps. This is not required to be done by a professional.

Supplemental Site Plan Review Checklist for NFP

Fill out the corresponding sections of the checklist:

- ☒ Section II. Part B. Questions 2-4
- ☒ Section III. Water Resources *(If you have a water resource)*

Find a Certified Natural Shoreline Professional

- mishorelinepartnership.org/find-a-shoreline-contractor

Design Your Own Vegetated Buffer

Natural Shoreline Landscaping

- tworiverscoalition.org/naturalshoreline.asp

Native Plants

- mishorelinepartnership.org/plants-for-inland-lakes

What should I do if I have a water resource?

Step 1

Ordinance Review

Chapter 50 NFP Overlay District

- Refer to the [Water Resources Section](#)(§ 50-6.2D)

Size of Parent Parcel	Minimum Required Setback
Greater than 1 acre	25 feet
1/2 acre - 1 acre	20 feet
Less than 1/2 acre	15 feet

Table 2 - Water Resource Setbacks

Step 2

Be prepared to:

- Mark the location of water resources and the correct setback on the site plan map
- Design your site plan to keep impervious coverage out of the setback area
- Work with a landscape architect, Certified Natural Shoreline Professional, or consultant to design a vegetated buffer or create your own design with native plants
- Install temporary construction fence or silt fencing at the setback boundary to protect this area during construction

Note!

- A setback is required from the edge of the water resource based on the size of your parcel
- When measuring the setback, be sure to start from the ordinary high watermark
- No impervious coverage, grading, or vegetation removal allowed in the setback area
- Natural vegetation must be kept within the setback area or new vegetation must be planted

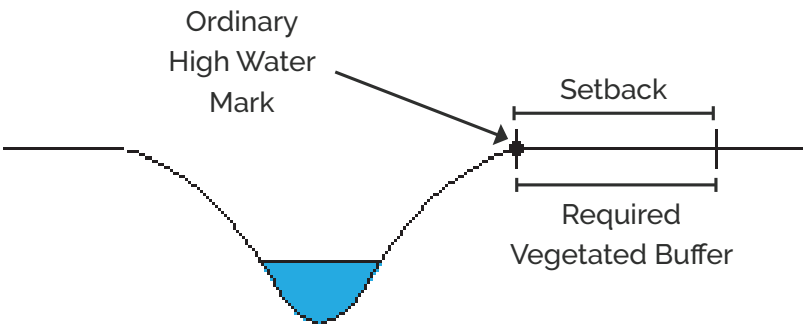


Figure 3 Measuring Water Resource Setbacks

Wetlands

How do I know if I have a wetland?

Step 1

Desktop Review

There are several online maps you can use as the first step in exploring if you have wetlands on your parcel.. Wetlands are considered a water feature.

Michigan EGLE Wetland Map Viewer
mcgi.state.mi.us/wetlands/mcgiMap.html

Step 2

In Person Review

You can also review your property in person and look for any area on the parcel that is wet enough during some part of the year to grow wetland plants (e.g., cattails, pond weed, water lilies, sedges, willow, white cedar, dogwood, or moss).

Step 3

Professional Review *Optional*

If there are low lying areas, soggy spots, or other areas on the parcel you are unsure are wetlands, a Professional Wetland Scientist can perform a wetland determination through an on-site assessment to confirm whether wetlands are on the parcel. The State of Michigan maintains a list of consultants.

State of Michigan List of Consultants

- Visit michigan.gov/egle
- Click "Water" "Wetlands"
- Under "Wetland Quick Links" click "Wetland Consultants List"



Note!

A wetland does not have to be wet all of the time. Areas with soggy, saturated soils that grow wetland plants can also be wetlands.

If you are unsure whether or not you have wetlands, but don't want to hire a consultant for a professional review, you can always just treat the area in question as a wetland and apply the wetland standards.

Supplemental Site Plan Review Checklist for NFP

Fill out the corresponding sections of the checklist:



**Section II. Part B.
Question 1**

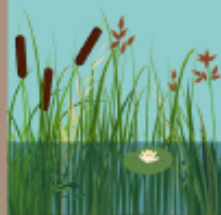


Section III. Wetlands
(If you have wetlands)

TYPES OF WETLANDS

MARSH

Marshes are wetlands found at the edges of water bodies, dominated by rooted plants that grow underwater, float, or extend out of the water.



WATER DEPTH 1-6 feet (standing or slow moving)

FREQUENCY Permanent

PLANTS Cattails, Bulrushes, Lotus, Sedges, Water Lily

WET MEADOW

Wet meadows can occur in wetland depressions, swales, or in the transitional zone between marshes and other wetlands with less saturated soils.



WATER DEPTH At or near soil surface

FREQUENCY Permanent or near permanent

PLANTS Sedges, Grasses

WET PRAIRIE

Wet prairies are wetland ecosystems where the water level usually varies in wetness between wet meadows and dry prairies.



WATER DEPTH Saturated soils (0-1 feet below soil surface)

FREQUENCY Frequent

PLANTS Grass-like and Flowering plants, Orchids

SWAMP

Swamps are dominated by woody vegetation, and are often found in basins or low-elevation floodplains along rivers or slow-moving streams.



WATER DEPTH 0-2 feet (standing or slow moving)

FREQUENCY Permanent

PLANTS Alders, Cypress, Ferns

BOG

Bogs are isolated basin wetlands characterized by spongy peat-rich soils. They have nutrient-poor, acidic waters with floating mats of vegetation that are fed by rainfall and snow melt.



WATER DEPTH Shallow lake basins

FREQUENCY Seasonal to Permanent

PLANTS Sphagnum Moss, Pitcher Plant, Tamarack, Cranberry

FENS & SEEPS

Fens are peatlands that are fed by a calcareous groundwater source, resulting in an alkaline water chemistry. Seeps, or springs, are areas where the groundwater naturally comes to the surface at the base of slopes.



WATER DEPTH Saturated soils

FREQUENCY Seasonal to Permanent

PLANTS Sedges, Grasses, Orchids, Marsh Marigolds

VERNAL POOL

Vernal pools are shallow, isolated depressions that are filled each spring by rain and snow melt, then dry up since they are not connected to other water bodies. They serve as an essential breeding habitat for frogs and salamanders.



WATER DEPTH 0.5-3 feet

FREQUENCY Seasonal (Spring)

PLANTS Ferns, Irises, Mosses, Marsh Purslane

PRAIRIE POTHOLE

Prairie potholes are water-holding depressions of glacial origin. These isolated wetlands provide essential food and resting places to migrating waterfowl.



WATER DEPTH 1-4 feet

FREQUENCY Seasonal to Permanent

PLANTS Water Lilies, Pondweeds, Bulrushes, Arrowhead

www.wetlands-initiative.org



What should I do if I have a wetland?

Step 1

View the Full Standards

[Chapter 50 NFP Overlay District](#)

- Refer to the [Wetland Section \(§ 50-6.2C\)](#)

Size of Parent Parcel	Minimum Required Setback
Greater than 1 acre	25 feet
1/2 acre - 1 acre	20 feet
Less than 1/2 acre	15 feet

Table 1 - Wetland Setbacks

Step 2

Be prepared to:

- Mark the location of wetlands and the correct setback on the site plan map
- Design your site plan to keep impervious coverage out of the setback area
- Install temporary construction fence or silt fencing at the setback boundary to protect this area during construction

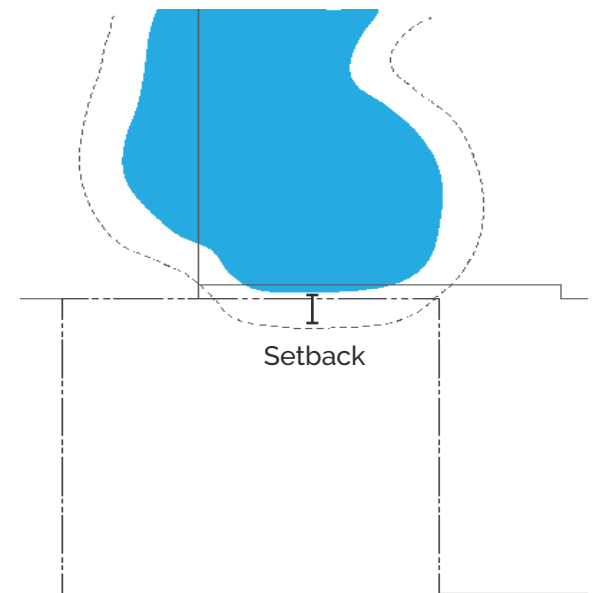
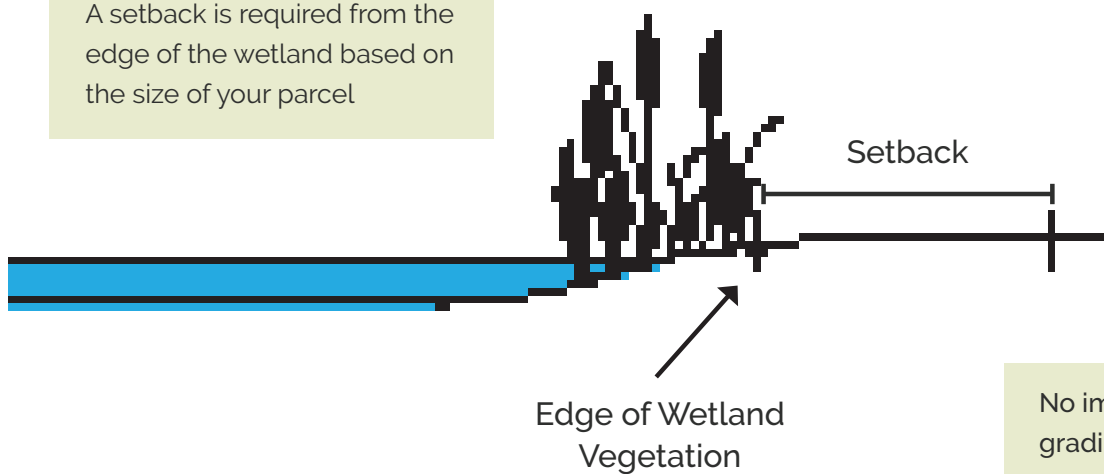


Figure 2 - Setbacks Across Parcel Boundaries

A setback is required from the edge of the wetland based on the size of your parcel

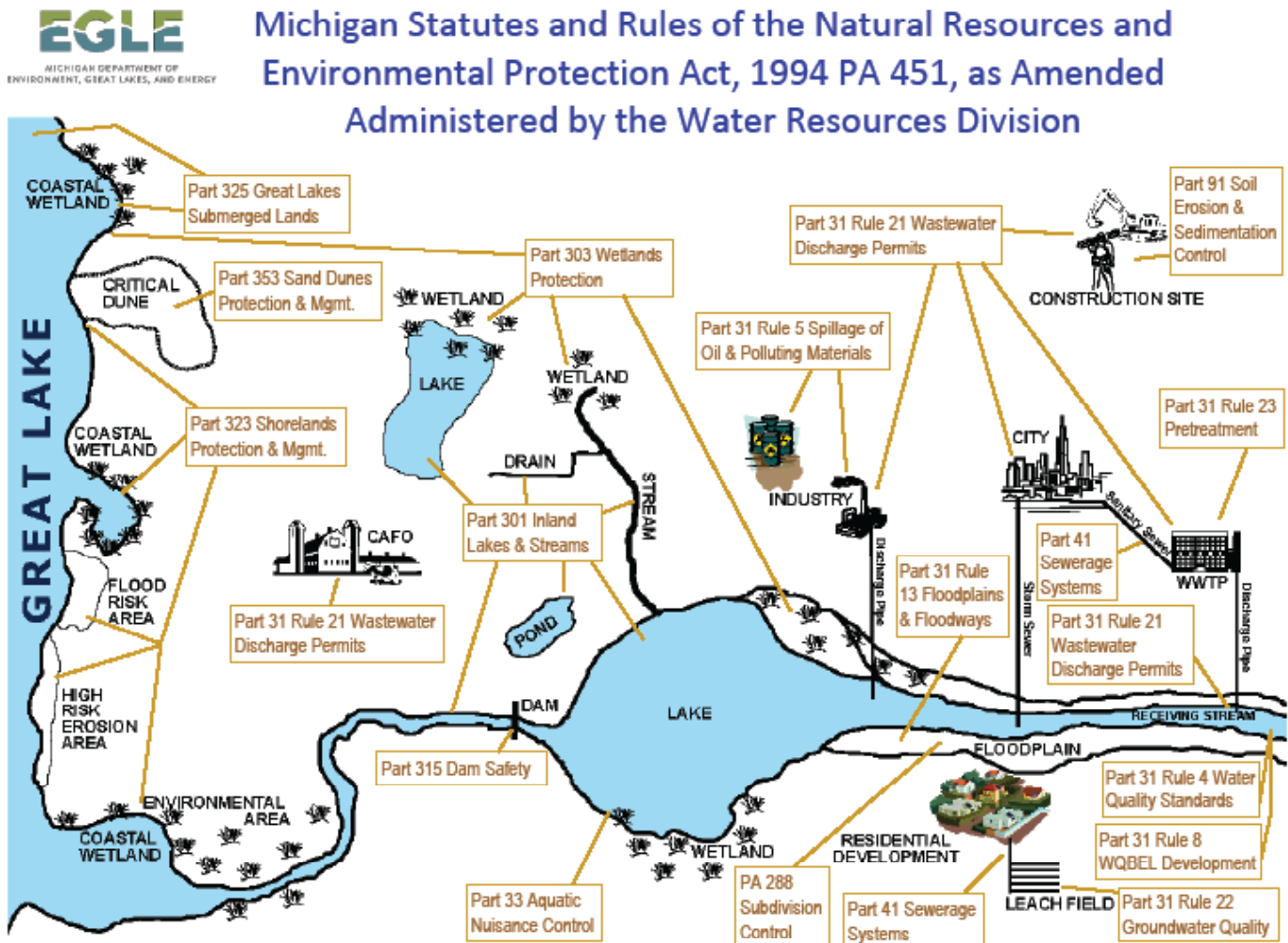


No impervious coverage, grading, or vegetation removal allowed in the setback area

Figure 1 - Measuring Wetland Setbacks

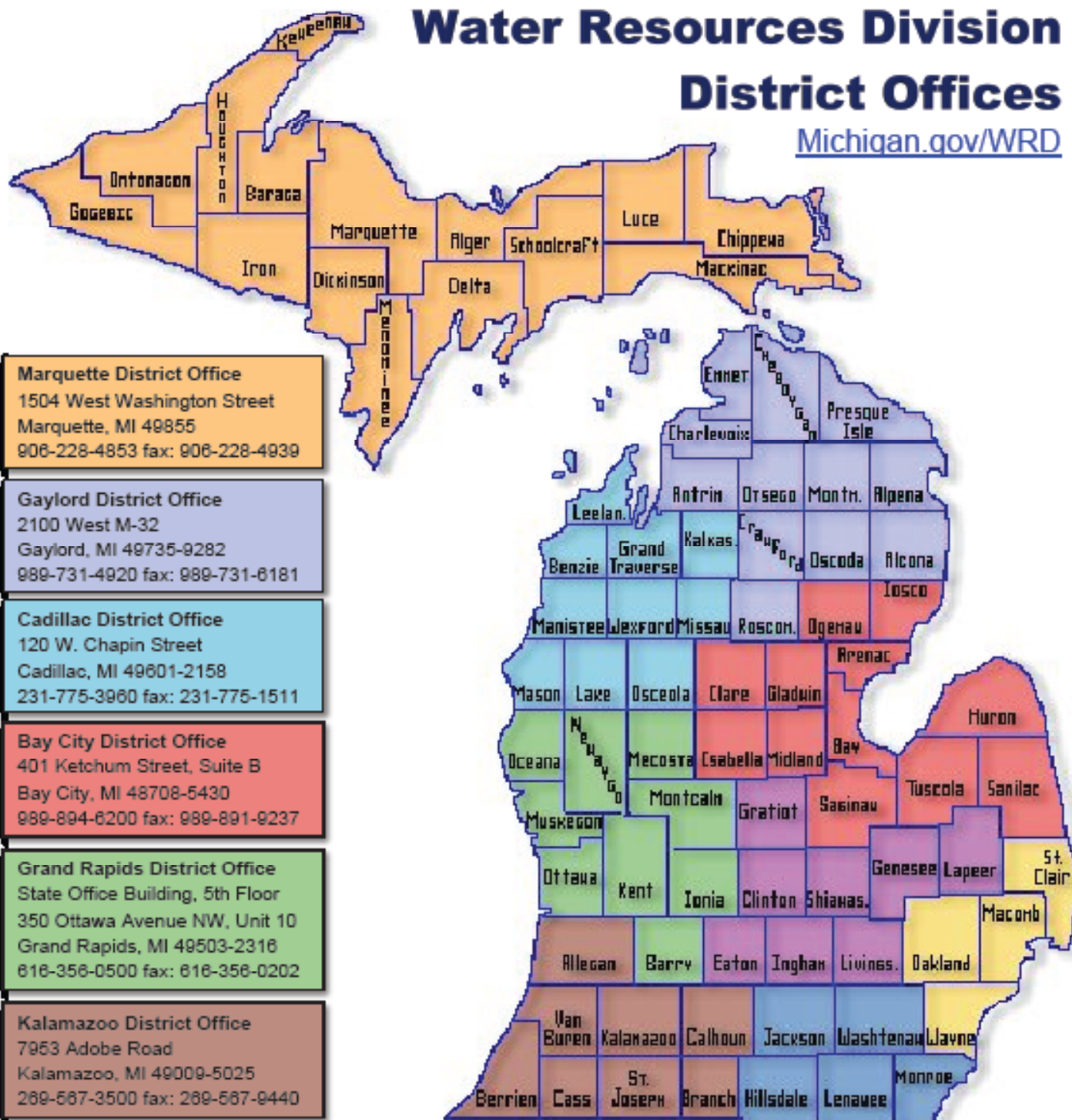
State and Federal Regulations

It is important to understand if any State of Michigan or Federal permits are required for your project. The Michigan Department of Environment, Great Lakes, and Energy provides a nice overview of when certain permits may be required. If you are unsure of what permit is required, please contact the Michigan Department of Environment, Great Lakes, and Energy.



Water Resources Division District Offices

Michigan.gov/WRD



EGLE Water Resources Division

MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Michigan.gov/WRD ↔ 517-284-5567

Protected Trees

How do I know if I have a protected tree?

Step 1

Desktop Review

The easiest way to identify trees on the parcel is by visiting the site when leaves are on the trees. Individual trees may be visible on the City GIS map, but distinguishing individual trees may be difficult.

[City of Kalamazoo GIS](#)



- Expand the layers tab
- Click the checkbox next to the "City Aerial Imagery" layer

☐ City Aerial Imagery ...

Step 2

In Person Review

Look for any tree with a trunk diameter of 24" or larger (or equal to approximately 75" when measured around the trunk at 4.5 feet above ground). Measuring Tree DBH can vary based on external factors like angle of the tree due to slope and the growing pattern of the trunk or if a tree has multiple trunks. Some specific types of trees are "protected" when smaller than 24" diameter.

- Refer to Table 6.2-4 in the Ordinance for the Protected Tree List

Step 3

Professional Review *Recommended*

If you have more than just a few trees or have trouble identifying the tree species, it is best to get a tree survey performed by an ISA-certified arborist. The tree survey should include location, species, size (diameter and height), and condition for all "protected" trees.



Note!

The tree standard only applies to individual trees not grouped in what would be considered a woodland.

All of the protected trees on the parcel must be marked on the Site Plan Documents.

What should I do if I have a protected tree?

Step 2

View the full standards

Chapter 50 NFP Overlay District

- Refer to [Protected Tree](#) Standard (§ 50-6.2F)

Step 2

Be prepared to:

- Find an ISA-certified arborist to complete a tree survey
- Mark on the site plan map the location, species, size, and condition of all "protected" trees and whether they will remain or be removed
- Provide justification why a tree must be removed
- Use tree protection fencing during construction to protect the Critical Root Zones of ALL Protected Trees.

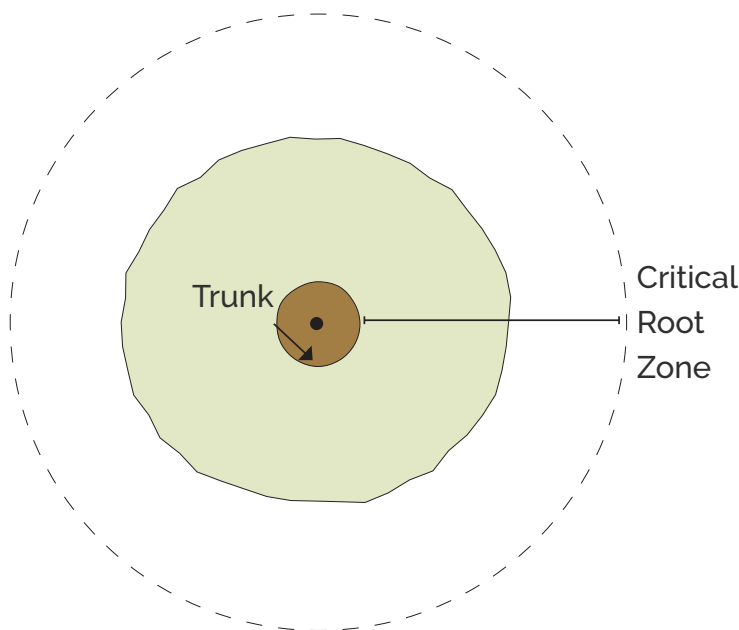


Figure 4 Measuring Critical Root Zone

Supplemental Site Plan Review Checklist for NFP

Fill out the corresponding sections of the checklist:

- ☒ **Section II. Part B. Question 5**
- ☒ **Section III. Trees** (*If you have a protected tree(s)*)

Note!

- Protected trees must remain on the site during and after construction
- In specific situations, some trees may be removed (see full tree standard)
- Any "protected" trees that are removed must be replaced with new trees



Woodlands

How do I know if I have a woodland?

Step 1

Desktop Review

You can use the Public GIS Map to review woodland areas on or adjacent to your parcel. It is still recommended that an ISA-Certified Arborist or other qualified professional assist in both the desktop and in-person reviews and analysis.

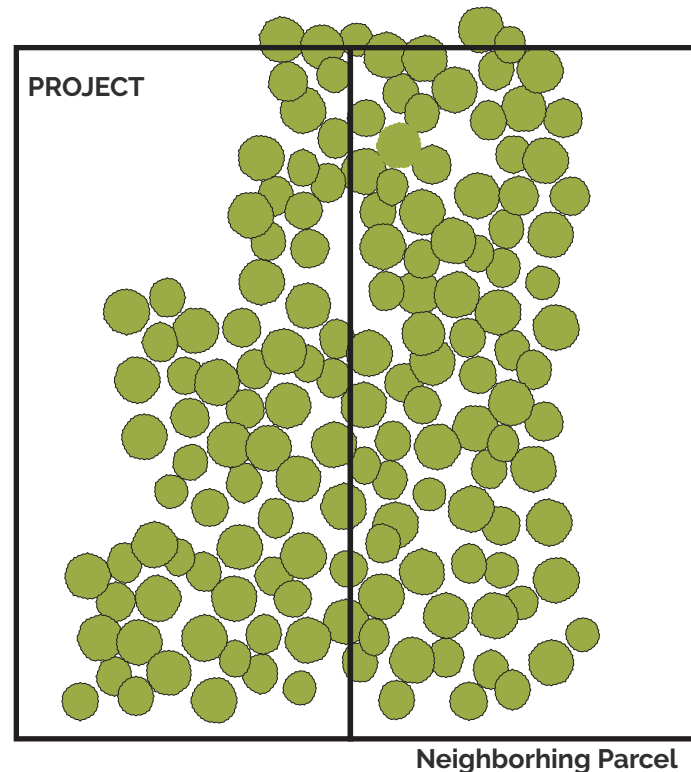
[City of Kalamazoo GIS](#)



- Expand the layers tab
- Click the checkbox next to the "City Aerial Imagery" layer

☐ City Aerial Imagery

...



Step 2

In Person Review

Look for a grouping of trees that covers an area a half acre or greater, regardless of whether the grouping is entirely on your parcel or extends onto adjacent parcels. To be a woodland, the number of trees must be equal to 40 per acre at least 2" diameter or greater. Look for other woodland features, such as natural ground cover (i.e., not mowed lawn) and understory shrubs.

Step 3

Professional Review *Recommended*

If none of the woodlands on the property will be disturbed, then a professional assessment is not required. When woodlands will be cleared, a qualified professional must delineate and assess the existing woodlands (e.g., woodland ecosystem assessment, basal area measurement, or tree survey)

Supplemental Site Plan Review Checklist for NFP

Fill out the corresponding sections of the checklist:



Section II. Part B.
Question 5 & 7



Section III. Woodlands
(If you have a woodland(s))

What should I do if woodlands are present?

Step 1

View the full standards

Chapter 50 NFP Overlay District

- Refer to the [Woodland Section](#)

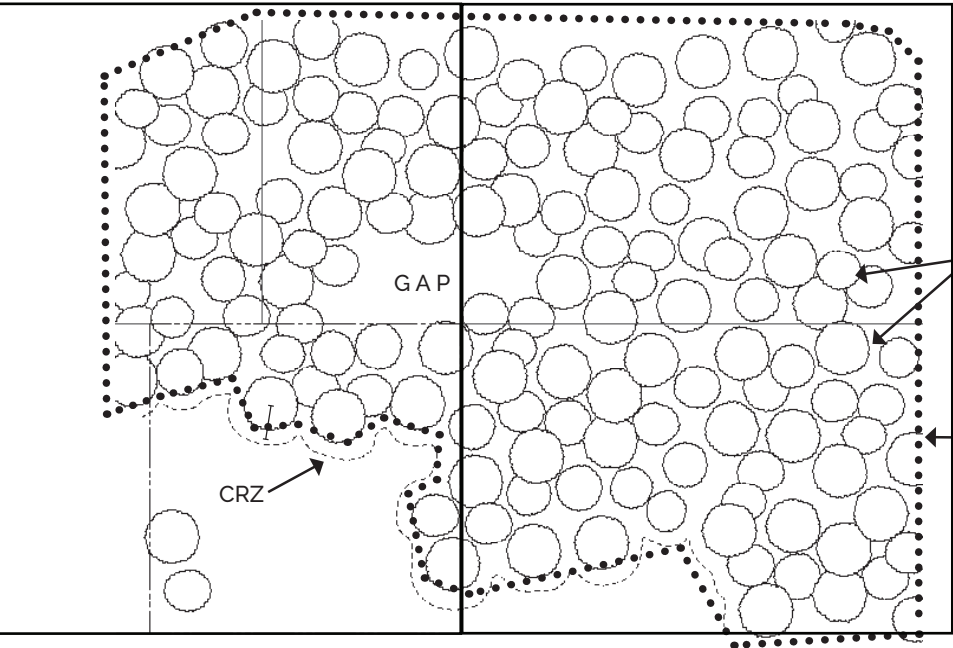
Woodland Coverage of Parent Parcel	Minimum Required Woodland Coverage to be Preserved
75% to 100%	25%
50% up to 75%	50%
25% up to 50%	75%
Less than 25%	90%

Table 3 Woodland Preservation

Step 2

Be prepared to:

- Find an ISA-certified arborist or another qualified professional to delineate and assess woodland
- Mark the full boundary of existing woodland, the section to be removed, and acreage and percent calculations on the site plan map
- Provide justification why the section of the woodland was chosen for preservation
- Fence preserved woodland with temporary barrier fencing during construction at the outer edge of the critical root zone (see Figure 4)



No disturbance allowed in preserved woodlands or critical root zones, except for specific permitted activities in the zoning code

Size of a Woodland is measured across parcel boundaries

Woodland Boundary

A portion of the woodland must be preserved during and after construction (see Table 3)

Figure 4 Defining and Delineating a Woodland

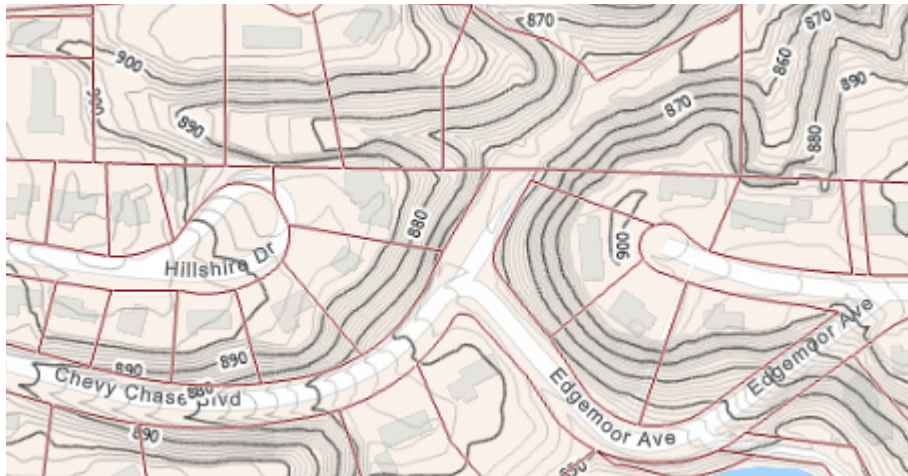
Slopes

How do I know if I have a slope?

Step 1

Desktop Review

The City's online GIS map can be used as the first step in exploring slopes on your parcel. When 2-foot topographic contour lines are spaced 10 feet or closer, the slope grade is 20% or greater. Closer lines mean steeper grades



City of Kalamazoo GIS



- Expand the Layers tab
- Expand the "General Information" Layer and check the "Contours" Layer

Step 2

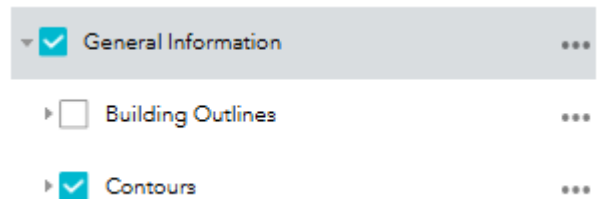
In Person Review

Look for sloping areas on your parcel (with grade of 20% or greater) that are covered in woodlands or a natural heritage area or within 500 feet of a water resource or wetland. Slopes that meet this definition are considered "protected" slopes.

Step 2

Professional Review *Required*

If none of the slopes on the property will be disturbed, then a professional assessment is not required. All setbacks still apply. For sites with "protected" slopes, complex topography, or a site plan that would disturb or encroach on slopes, a slope analysis must be done by a qualified professional. A resulting map showing "protected" slopes and the top and toe of slope setbacks must be included with your site plan review application



Supplemental Site Plan Review Checklist for NFP

Fill out the corresponding sections of the checklist:



**Section II. Part B.
Question 6**



Section III. Slopes *(If you have a slope)*

What should I do if a protected slope is present?

Step 1

View the full standards

[Chapter 50 NFP Overlay District](#)

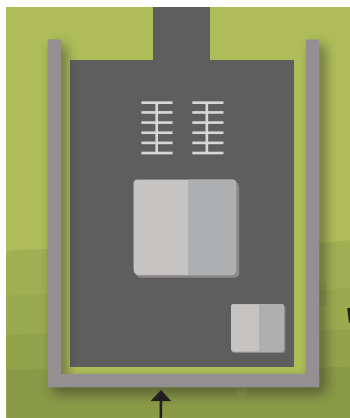
- Refer to the [Slopes Section](#)(§ 50-6.2H)

Step 2

Be prepared to:

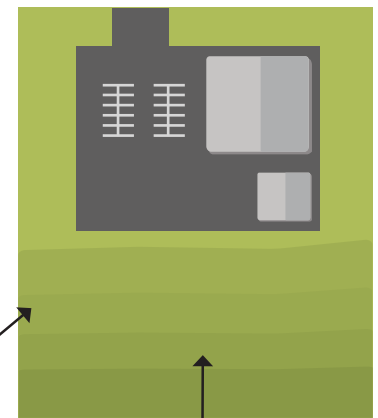
- Mark the location of "protected" slopes and the setbacks on the site plan map
- Consult a qualified professional for a slope analysis, if necessary
- Design your site plan to keep impervious coverage out of the setback area
- Fence "protected" slopes with temporary barrier fencing during construction at the outer edge of the setbacks

Initial Design

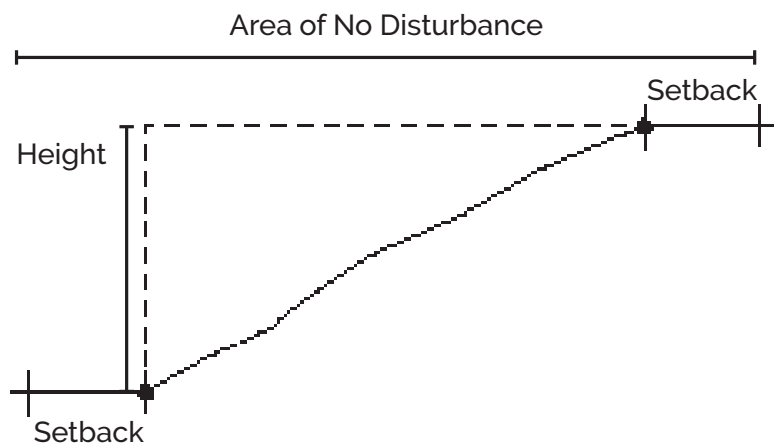


Retaining Wall

NFP Sensitive Design



NFP
Protection
Area



is required
op and toe of all
" slopes based
eight

No impervious coverage,
grading, or vegetation
removal allowed in the
setback area

Figure 5 Protected Slope Setbacks

Natural Heritage Areas

Michigan Natural Feature Inventory (MNFI) Rare Species Review

Step 1

Desktop Review

Natural heritage areas include rare species of plants and animals and patches of historically or culturally significant ecosystems, all of which are considered protected under the zoning code. You can use the City of Kalamazoo Public GIS webmap to pre-screen if your property requires Rare Species Review. You can learn more about this program by viewing this [StoryMap](#) created by the Michigan State University Extension in partnership with the MI-DNR.

Step 2

MNFI Species Review

If the property is labeled as "Yes" for Rare Species Review, then the review process should be started as soon as possible as the Michigan State University Extension staff can be busy during

Visit: mnfi.anr.msu.edu/services/rare-species-reviews

- Follow the procedure and payment processes for submitting for Rare Species Review

Step 3

On-Site Survey

In some cases, an on-site survey is required when the MNFI rare species search confirms sightings of rare species within close vicinity of the property.

Michigan Natural Features Inventory
MSU Extension

What should I do if a natural heritage area is present?

Step 1

View the full standards

[Chapter 50 NFP Overlay District](#)

- Refer to the [Natural Heritage Area](#) Section

Note!

All State and Federal protections and/or mitigation activities must be followed. Learn more at:

mnfi.anr.msu.edu/species/definitions-laws

Step 2

Be prepared to:

- Apply for a Rare Species Review through the MSU Extension as soon as possible
- Follow State and Federal protections, if necessary

Supplemental Site Plan Review Checklist for NFP

Fill out the corresponding
section of the checklist:



**Section III. Natural
Heritage Areas**

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Project Examples

Example 1: Commercial Redevelopment

Project Address:

209 E Stockbridge Ave (including 205 E Stockbridge and 210, 216, 220, 302, 302 Rear, 308, 308 Rear, & 316 Lake St)

Natural Features:

Wetlands

Trees

Woodland

Applicable NFP Standards:

Wetlands

Protected Tree

Woodland

Landscaping

Stormwater

<i>C1.0.0</i>	<i>EXISTING CONDITIONS MAP - ZONING</i>
<i>C1.1.0</i>	<i>EXISTING CONDITIONS MAP -</i>
	<i>NATURAL FEATURES</i>
<i>C1.1.1</i>	<i>NFP CODE ANALYSIS - WETLANDS</i>
	<i>AND WATER RESOURCES</i>
<i>C1.1.2</i>	<i>NFP CODE ANALYSIS - FLOODPLAINS,</i>
	<i>TREES, AND WOODLANDS</i>
<i>C1.1.3</i>	<i>NFP CODE ANALYSIS - TREES AND</i>
	<i>WOODLANDS</i>
<i>C1.1.4</i>	<i>NFP CODE ANALYSIS - SLOPES,</i>
	<i>NATURAL HERITAGE AREAS</i>
<i>C1.1.5</i>	<i>NFP CODE ANALYSIS - SITE</i>
	<i>DEVELOPMENT STANDARDS & ADMIN.</i>

Project Summary:

The subject properties are undeveloped and owned by Kalamazoo Community Housing Choices and located in Kalamazoo, in the Edison Neighborhood, along Stockbridge Avenue and Lake St. The parcels are either split-zoned Community Commercial (CC) and Industrial (M-1) zone districts, Commercial Neighborhood (CN-1) and Community Commercial (CC) or solely zoned Community Commercial (CC). The applicant is proposing to redevelop the site by combining parcels into one parent parcel and constructing a 4-story mixed use building having 36 residential units and ground floor non-residential space, parking, and a paved path connecting the building to the sidewalk on Lake Street.

The project started the site plan process in 2021 and proposed a more intensive development with two buildings. The 2023 site plan documents show one building instead of two, perimeter greenspace and an added path connecting to Lake Street which has been moved to mitigate impacts to wetlands and the floodplain. The funding structure of this project also required alternations to stay out of the floodplain.

Example 2: Administrative Approval

Project Address:

209 E Stockbridge Ave (including 205 E Stockbridge and 210, 216, 220, 302, 302 Rear, 308, 308 Rear, & 316 Lake St)

Natural Features:

Wetlands

Trees

Woodland

Applicable NFP Standards:

Wetlands

Protected Tree

Woodland

Landscaping

Stormwater

Project Summary:

The subject properties are undeveloped and owned by Kalamazoo Community Housing Choices and located in Kalamazoo, in the Edison Neighborhood, along Stockbridge Avenue and Lake St. The parcels are either split-zoned Community Commercial (CC) and Industrial (M-1) zone districts, Commercial Neighborhood (CN-1) and Community Commercial (CC) or solely zoned Community Commercial (CC). The applicant is proposing to redevelop the site by combining parcels into one parent parcel and constructing a 4-story mixed use building having 36 residential units and ground floor non-residential space, parking, and a paved path connecting the building to the sidewalk on Lake Street.

The project started the site plan process in 2021 and proposed a more intensive development with two buildings. The 2023 site plan documents show one building instead of two, perimeter greenspace and an added path connecting to Lake Street which has been moved to mitigate impacts to wetlands and the floodplain. The funding structure of this project also required alternations to stay out of the floodplain.

In this project, NFP development standards helped inform a less intensive design and pushed to mitigate disturbances to natural features.

Example 3: Variance Request from NFP

Project Address:

209 E Stockbridge Ave (including 205 E Stockbridge and 210, 216, 220, 302, 302 Rear, 308, 308 Rear, & 316 Lake St)

Natural Features:

Wetlands

Trees

Woodland

Applicable NFP Standards:

Wetlands

Protected Tree

Woodland

Landscaping

Stormwater

Project Summary:

The subject properties are undeveloped and owned by Kalamazoo Community Housing Choices and located in Kalamazoo, in the Edison Neighborhood, along Stockbridge Avenue and Lake St. The parcels are either split-zoned Community Commercial (CC) and Industrial (M-1) zone districts, Commercial Neighborhood (CN-1) and Community Commercial (CC) or solely zoned Community Commercial (CC). The applicant is proposing to redevelop the site by combining parcels into one parent parcel and constructing a 4-story mixed use building having 36 residential units and ground floor non-residential space, parking, and a paved path connecting the building to the sidewalk on Lake Street.

The project started the site plan process in 2021 and proposed a more intensive development with two buildings. The 2023 site plan documents show one building instead of two, perimeter greenspace and an added path connecting to Lake Street which has been moved to mitigate impacts to wetlands and the floodplain. The funding structure of this project also required alternations to stay out of the floodplain.

In this project, NFP development standards helped inform a less intensive design and pushed to mitigate disturbances to natural features.

Example 4: Residential Development

Project Address:

209 E Stockbridge Ave (including 205 E Stockbridge and 210, 216, 220, 302, 302 Rear, 308, 308 Rear, & 316 Lake St)

Natural Features:

Wetlands

Trees

Woodland

Applicable NFP Standards:

Wetlands

Protected Tree

Woodland

Landscaping

Stormwater

Project Summary:

The subject properties are undeveloped and owned by Kalamazoo Community Housing Choices and located in Kalamazoo, in the Edison Neighborhood, along Stockbridge Avenue and Lake St. The parcels are either split-zoned Community Commercial (CC) and Industrial (M-1) zone districts, Commercial Neighborhood (CN-1) and Community Commercial (CC) or solely zoned Community Commercial (CC). The applicant is proposing to redevelop the site by combining parcels into one parent parcel and constructing a 4-story mixed use building having 36 residential units and ground floor non-residential space, parking, and a paved path connecting the building to the sidewalk on Lake Street.

The project started the site plan process in 2021 and proposed a more intensive development with two buildings. The 2023 site plan documents show one building instead of two, perimeter greenspace and an added path connecting to Lake Street which has been moved to mitigate impacts to wetlands and the floodplain. The funding structure of this project also required alternations to stay out of the floodplain.

In this project, NFP development standards helped inform a less intensive design and pushed to mitigate disturbances to natural features.

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CITY OF KALAMAZOO NATURAL FEATURES PROTECTION REVIEW BOARD
241 West South Street
Kalamazoo, Michigan 49007
269-337-8026

2025 NFP Annual Meeting Schedule

All meetings to be held the fourth Tuesday of each month, at 4pm, in City Hall Commission Chambers unless otherwise specified with justification.		
Day	Date	Board Work Session Topic - Draft
Tuesday	January 28, 2025 →	Annual Report
Tuesday	February 25, 2025 →	NFP Guide Draft
Tuesday	March 25, 2025 →	Invasive Species
Tuesday	April 22, 2025 →	Enforcement + Permitting
Wednesday	May 28, 2025 →	Landscaping (Cultivars vs Nativars vs Natives)
Tuesday	June 24, 2025 →	Prohibited and Recommended Planting Lists Updates
Tuesday	July 22, 2025 →	Stormwater Management / Improvements + NFP Standards (BMPs)
Tuesday	August 26, 2025 →	NFP Review Bodies and Processes
Tuesday	September 23, 2025 →	MNFI Data Update Schedule
Tuesday	October 28, 2025 →	Propose Recommended NFP Ordinance Edits
Tuesday	November 25, 2025 →	Joint Board Training (PC, ZBA)? Other?